# Interstate Distribution and Sectoral Composition of FDI Inflows in India

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### Abstract

Foreign direct investment (FDI) refers to obtaining the ownership in a foreign business entity. It can also be attributed that FDI circulates capital across national boundaries. It can be defined as an investor based in one country (home country), acquires an asset in another country (host country), with the intention to manage it. It is this dimension of management that distinguishes FDI from portfolio investment in foreign stocks and other financial instruments. For a terribly populated country like India, a good quantum of resource is needed to fund its various developmental needs, which the country does not have. To strengthen its infrastructure, expertise and knowledge base, FDI is inevitable. Realizing these facts, the government is now moulding a robust business environment to smoothen the flow of FDI. An interstate comparison of FDI in India makes it quite apparent that there exists huge variations in the inflow of FDI to different states. While some regions like Delhi, Bombay, etc. receive soaring flow of FDI, it is very stumpy in regions like Patna, Guwahati, etc. An overview on the sectoral distribution of foreign investment discloses the wide disparity in the distribution of foreign capital among various sectors. While some sectors like service, construction, etc. receive elevated flow of foreign capital, others lie fully ignored by the foreign investors.

#### JEL Classification: F21, F23, F63, O10

#### Keywords

FDI, interstate variation, sectoral composition, technology transfers, economic development

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### Introduction

Foreign direct investment (FDI) is an integral part of an open and effective international economic system. It reinforces economic development. But the benefits of FDI will do not appear alike across countries, sectors and local communities.

National policies and international investment infrastructure matter for attracting FDI to a large number of developing countries, and for reaping the full benefits of FDI.

The ideology of FDI evolved primarily for supplementing the inadequate domestic capital formation of developing and underdeveloped economies. During the past two decades, developing countries, principally those in Asia, have been recognizing a massive flow of FDI. Even though India arrived late to the FDI panorama compared to other East Asian countries, our substantial market potential and liberalized policy framework is maintaining the country as a favourable target of foreign investors.

The concept of FDI refers to the setting up of an overseas operation or the acquisition of an existing enterprise located within another economy. Through FDI, the investor can exert a substantial degree of influence in the management of the enterprise resident to the host country. FDI plays a multidimensional role in the holistic advancement of the host economies. It may produce benefits through bringing in non-debt-creating foreign capital resources, technological improvement, skill enhancement, new employment and spill-overs. While FDI is estimated to create positive outcomes, it may also generate negative effects on the host economy.

Monopolistic attitude, exploitation of host country resources, etc. are some of its shortcomings. Much of the obtainable pragmatic facts on FDI put forward that the constructive outcomes counteract negatives, thus providing net economic benefits for the host economies. For an immensely populated country like India, a good quantum of resource is needed to fund its various developmental needs, which the country does not have. To strengthen its infrastructure, expertise and knowledge base, FDI is inevitable. Realizing these facts, the government is now moulding a robust business environment to smoothen the flow of FDI. As a result, from April 2000 to October 2014, FDI worth ₹1,148,459 crores has flowed to different sectors of the country. The small island nation Mauritius (36%) is the prime investor in India. Similarly, service sector is the zone which could fetch a huge amount of FDI compared to all other sectors. Among India's states and union territories, Mumbai zone (which includes Maharashtra, Dadra and Nagarhaveli, Daman and Diu) attracted more FDI (30%). Investment of South Korea-based Posco steel company (world's fifth largest steel maker) in 2005 is regarded as the biggest FDI deal in India. By hiking the cap of FDI in defence sector and single and multi-brand retailing, India has put a step ahead, again. This study is only an attempt to depict the interstate condition of FDI inflows to India

### Objectives

- 1. To identify the interstate distribution in the inflow of FDI to India.
- 2. To distinguish the sectoral distribution of FDI in India.

## **Review of Literature**

Motteleb (2007) made some significant findings regarding the influential factors determining FDI inflow to nations. His key intentions were to recognize the prominent factors determining FDI inflows to developing countries and also to discover the association between economic growth and FDI. He carried out his study essentially using secondary data drawn from the databases of agencies like UNCTAD, World Bank, etc. to study about 60 lower and lower-middle income countries. He used regression analysis for interpreting data. He found that FDI makes positive impact on the economy of a country. Also, factors like large domestic market and high GDP growth rate, better infrastructure and business friendly environment attract FDI to a particular country.

Alfaro, Chanda, Ozcan and Sayek (2006) learnt 'How does FDI promote economic growth?'. They proposed a novel mechanism which emphasizes the role of local financial markets in enabling FDI to promote growth through backward linkages. The results showed that the same quantity of FDI produced three times additional augmentation in financially grown nations.

Vetter (2014) carried out a study on recent trends in FDI activity in Europe. Vetter states that European Union has lost its leading position as the world's most important recipient of FDI, and the main reason pointed by him for such an occurrence was the global and European financial crisis.

Malhotra (2014) learnt the trends and pattern of FDI inflows in the country and evaluated the impact of FDI on Indian economy. She relied on secondary data and considered FDI inflows as a percentage of GDP, for 21 years ranging from 1991 to 2012, thus measuring the influence exerted by FDI on the Indian economy. To attract more FDI, she advises to adapt measures like optimum utilization of host country resource, balanced regional growth and applying proper federal and political strategies.

Goyal and Jain (2014) performed their study with more or less similar objectives as Malhotra (2014). To draw inference, they analysed the trend and pattern of FDI for 13 years from 2000 to 2013. They could find high variation in the FDI inflows and opined that major contribution of FDI is towards service sector, and 32 per cent of total FDI lies in the Mumbai zone.

Bose (2012) endeavoured to find out answers for two research questions as 'what are the advantages and disadvantages of FDI in China and what are the advantages and disadvantages of FDI in India'. He could identify several advantages added by FDI in China. He points out that the immense size and growth of the Chinese economy and its bright prospects occurred due to the FDI flows. He made

quite a few remarks on the FDI scenario in India. In his outlook, the huge market size and fast-developing Indian economy will be an exalt to foreign investors.

Devajit (2012) ascertained the impact of FDI on the Indian economy. He brought to a close that FDI is desirable for India as a strategic component of investment for its continued economic growth and development through creation of jobs, expansion of existing manufacturing industries, short- and long-term project in the field of healthcare, education, research and development (R&D), etc. As per his view, FDI will facilitate to raise the output, productivity and export at the sectoral level of the Indian economy.

Regional variation in the inflow of FDI within the same country has turned to be a matter of discussion today.

Mukherjee (2011) makes an attempt to explore why regional differences occur in FDI inflows to India. He found that factors like market size, industry base and service sector of regions have positive impact on FDI, and suggested to reshape our FDI policy to attract more FDI to laggard states. He used fixed effect pooled least square method and regression analysis for data interpretation.

In a similar study conducted by Chatterjee, Mishra and Chatterjee (2013), it is revealed that infrastructure of a particular state has no serious bearing upon attracting FDI, instead profit variations of existing firms has considerable influence on FDI inflows. Numerous studies are ongoing based on different aspects of FDI, and it still remains as an argumentative topic among authors, as they could not reach at a consensus regarding the real impact of this matter.

#### Analysis and Interpretation

Table 1 and Figure 1 make it clear that there exists huge variation in the interstate FDI inflows in India. RBI's Mumbai regional office has received the greatest FDI inflow in India. Twenty-nine per cent of the total FDI has gone to the Mumbai region. Mumbai is known as the commercial capital of India. Mumbai accounts for 25 per cent of the industrial output and 5 per cent of India's GDP, it is considered as the centre of trade, business and industries. Factors like R&D intensity, intensity of domestic investment, transportation and communication infrastructure, power supply, educational and health infrastructure, intensity of investment risk, etc. have played a role in augmenting the foreign investment scale of Mumbai. The capital territory of India, New Delhi, occupies the second place in terms of foreign investment. All the aforementioned factors have played a key role there as well. Similarly, regions like Chennai, Bangalore and Ahmedabad have established their own position in attracting FDI.

But, regions like Chandigarh, Kochi, Jaipur, Bhopal, Patna, Kanpur, Bhubaneswar and Guwahati have attracted very low FDI (less than 1%). This fact shows that we have severe imbalance in the regional inflow of FDI, which ultimately causes imbalance in the regional economic development. This fact prevents the states with low FDI to harvest the major advantages of FDI like:

lable I. Stat	I able 1. State-wise FUI Intiow	ws to India	а									
		2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-	Cumulative Percentage	Percentage	
RBI's—		2009	2010	2011	2012	2013	2014	2015	2016		to Total	
Regional	State	(April-	(April-	(April-	(April-	(April-	(April-	(April-	(April-	(in terms of		Standard
Office2	Covered	March)	March)	March)	March)	March)	March)	March)	March)	₹ in crores)	of US\$)	Deviation
Mumbai	Maharashtra,	57,066	39,409	27,669	39,409 27,669 44,664	47,359	20,595	38,933	62,731	415,753	29	13,997.5
	Dadra and											
	Nagar Haveli,											
	Daman and Diu											
New Delhi	Delhi, Part	7,943		46,197 12,184	37,403	17,490	38,190	42,252	83,288	332,312	22	24,147.87
	of UP and Harvana											
Chonnei	Tamil Nadu	7757	2 252	2     E	1174	15757	17 595	175 56		119 547	α	9 775 871
	Pondicherry		n	) - ()		2,272		00,04	0,74	20,00	þ	10.011
Bangalore	Karnataka	9,143	4,852	6,133	7,235	5,553	11,422	21,255	26,791	108,912	7	7,674.511
Ahmedabad	Gujarat	12,747	3,876	3,294	4,730	2,676	5,282	9,416	14,667	68,464	ß	4,859.347
Hvderahad	Andhra	5 406	5 710	5 753	4 039	6 290	4 0 2 4	8 376	10315	59 556	4	2118 205
	Pradesh	2	2			0,10		0,00	2.0.0		-	694-00
Kolkata	West Bengal,	2,089	531	426	1,817	2,319	2,659	I,464	6,220	20,847	_	1,932.808
	Sikkim, Andomon											
	and Nicohar											
	Islands											

Table I. State-wise FDI Inflows to India

(Table I Continued)

<ul> <li>2014- 2015- Cumulative Percentage</li> <li>2015 2016 Inflows to Total</li> <li>(April- (April- (in terms of (in terms Standard</li> <li>March) March) ₹ in crores) of US\$) Deviation</li> </ul>	562 234 177 6,538 0.5 645.9852	233 3,237 332 7,126 0.5 546.5921	411 1,418 589 6,739 0.5 716.4381	708 601 518 6,614 0.5 661.531	103 211 117 3,984 0.3 505.0576	50 679 524 2,968 0.2 238.6627	288 56 36 1,997 0.1 237.6401	9 68 66 447 0.03 44.70538
2012- 2013- 2013 2014 (April- (April- March) March)	255	714	390	I,208	47	167	285	27
2011– 2012 (April– March)	624	161	2,274	569	181	635	125	123
2010– 2011 (April– March)	1,892	230	167	2,093	1,376	5 4	68	25
2009– 2010 (April– March)	I,038	149	606	255	808	227	702	0
2008– 2009 (April– March)	0	I,656	355	209	134	0	42	0
State Covered	Chandigarh, Punjab, Haryana, Himachal Pradesh	Rajasthan	Kerala, Lakshadweep	Madhya Pradesh, Chhattisgarh	Goa	Uttar Pradesh, Uttaranchal	ır Orissa	Bihar, Iharkhand
RBI's— Regional Office2	Chandigarh	Jaipur	Kochi	Bhopal	Panaji	Kanpur	Bhubaneshwar Orissa	Patna

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539	37	333,945	123,023 123,120 88,519 173,948 121,907 147,518 189,107 262,322 1,495,326	533	123,023         123,120         88,519         173,948         121,907         147,518         189,107         262,322         2,991,184           : sheet on FDI of Department of Industrial Policy and Promotion (DIPP) - various issues.
272	Ξ	25,886	262,322	0	<b>.62,322</b> us issues.
29	25	37,544 25,886	189,107 2	0	<b>189,107</b> 2
4	_	50,283	147,518	0	<b>147,518</b> omotion (D
<del>4</del> 	0	18,300 15,056 20,543 62,652 21,833 50,283	121,907	0	121,907 olicy and Pr
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37	0	20,543	88,519	0	88,519 rtment of
51	0	15,056	123,120	0	<b>123, 120</b> DI of Depa
176	0	18,300	123,023	0	I 23,023 ct sheet on Fl
Assam, Arunachal Pradesh, Manipur, Meghalaya, Nizoram, Nagaland, Tripura	Jammu & Kashmir				ted from the fa
Guwahati	Jammu	Region not indicated	Sub total	RBI's-NRI Schemes (from 2000 to 2002)	Grand total         123,023         123,120         88,519         173,948         121,907         147,518         189,107         262,322           Source: Calculated from the fact sheet on FDI of Department of Industrial Policy and Promotion (DIPP) – various issues.

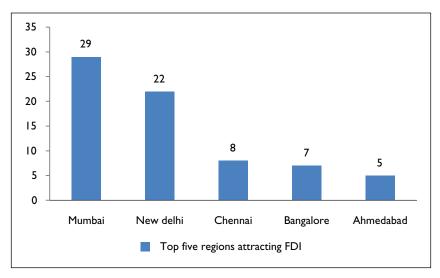


Figure 1. Top Five Regions Attracting FDI in India (in percentages)

Source: The authors.

- 1. Flow of money into the economy which in turn stimulates the economic activity.
- 2. Outward shifting of long run aggregate supply.
- 3. Outward shifting of aggregate investment as investment is a component of aggregate demand.
- 4. FDI may give domestic investors an incentive to become more efficient.

The figures of standard deviation makes it clear that region of New Delhi has the greatest standard deviation among all others. The high standard deviation shows that the data are widely spread (less reliable) around the average.

# Sectoral Distribution of FDI

The sectoral composition of FDI inflows in India has been portrayed in Table 2. The details of top ten sectors which attracted FDI for the period ranging from April 2000 to March 2016 have been depicted in Figure 2. The sectoral distribution of FDI makes us understand that majority of the sectors have less than 1 per cent FDI inflow to them. Flow of FDI is higher to some sectors such as service, construction, computer software, telecom, etc., as they may fetch higher returns.

# **Conclusion and Policy Recommendations**

FDI is regarded as an inevitable form of capital flow by India, specifically after the liberalization measures of the 1990s. India is on the edge of swift development nowadays. Simultaneously, we face capital deficiency also. Hence, FDI can be

SI No.	Sectors	Percentage of Total Inflows
I	Service Sector	17.6
_	Construction Development: Townships, housing, built-up	
2	infrastructure and construction-development projects	8.38
3	Computer Software & Hardware	7.28
4	Telecommunications	6.37
5	Automobile Industry	5.22
6	Drugs & Pharmaceuticals	4.8
7	Chemicals (other than fertilizers)	4.12
8	Trading	4.12
9	Power	3.63
10	Hotel & Tourism	3.2
11	Metallurgical Industries	3.08
12	Construction (Infrastructure) Activities	2.76
13	Food Processing Industries	2.36
14	Petroleum & Natural Gas	2.31
15	Information & Broadcasting (including Print Media)	1.73
16	Non-conventional Energy	1.52
17	Electrical Equipment	1.5
18	Industrial Machinery	1.41
19	Hospital & Diagnostic Centres	1.25
20	Consultancy Services	1.16
21	Cement and Gypsum Products	1.08
22	Miscellaneous Mechanical & Engineering Industries	1.06
23	Fermentation Industries	0.82
24	Mining	0.77
25	Rubber Goods	0.72
26	Sea Transport	0.69
27	Textiles (including dyed, printed)	0.64
28	Agriculture Services	0.64
29	Ports	0.57
30	Electronics	0.57
31	Prime Mover (other than electrical generators)	0.5
32	Education	0.44

Table 2. Sector-wise FDI Equity Inflows from April 2000 to March 2016

#### (Table 2 Continued)

SI No.	Sectors	Percentage of Total Inflows
33	Soaps, Cosmetics & Toilet Preparations	0.39
34	Medical and Surgical Appliances	0.38
35	Paper and Pulp (including paper products)	0.38
36	Air Transport (including air freight)	0.32
37	Machine Tools	0.29
38	Diamond, Gold Ornaments	0.27
39	Ceramics	0.26
40	Railway-related Components	0.25
41	Vegetable Oils and Vanaspati	0.2
42	Printing of Books (including Litho printing industry)	0.2
43	Fertilizers	0.2
44	Retail Trading	0.19
45	Glass	0.17
46	Agricultural Machinery	0.15
47	Commercial, Office & Household Equipment	0.12
48	Earth-moving Machinery	0.12
49	Sugar	0.07
50	Scientific Instruments	0.06
51	Leather, Leather Goods and Pickers	0.06
52	Timber Products	0.05
53	Boilers and Steam-generating Plants	0.05
54	Tea and Coffee (processing & warehousing coffee & rubber)	0.04
55	Dye-stuffs	0.03
56	Industrial Instruments	0.03
57	Photographic Raw Film and Paper	0.02
58	Glue and Gelatin	0.01
59	Coal Production	0.01
60	Mathematical, Surveying and Drawing Instruments	0
61	Defence Industries	0
62	Coir	0
63	Miscellaneous Industries	3.38
64	Sub total	100

Source: Fact sheet on FDI of DIPP from April 2000 to March 2016.

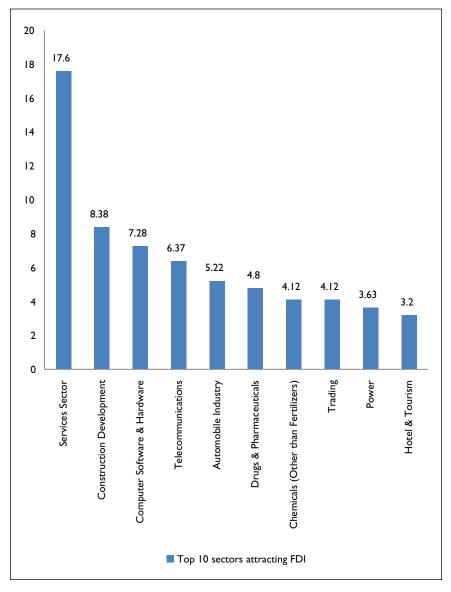


Figure 2. Top 10 Sectors Attracting FDI (in percentages) Source: The authors.

seen as a valuable object in order to meet the ends of capital deficiency and development. An interstate comparison of FDI in India makes it quite apparent that there exists huge variations in the inflow of FDI to different states. While some regions like Delhi and Bombay receive soaring flow of FDI, it is very stumpy in regions like Patna, Guwahati, etc. As FDI is a major source of capital and technology, these states which experience low inflow of FDI may lag behind the other regions in terms of industrial development. This may create a distinct imbalance in the economic development of the country, or may add momentum to the imbalanced regional growth.

An overview on the sectoral distribution of foreign investment discloses the wide disparity in the distribution of foreign capital among various sectors. While some sectors like service, construction, etc. receive elevated flow of foreign capital, others are fully ignored by the foreign investors. The rationale behind this should be explored out immediately so that we can avoid a future distress in our economy.

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