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Role of FDI in Economic Development of India: Sectoral Analysis

Ila Chaturvedi

chaturvediila@yahoo.com

Jaipuria Institute of Management, Ghaziabad

FDI plays an important role in the development process of a country. It has potential for making a contribution

to the development through the transfer of financial resources, technology and innovative and improved

management techniques along with raising productivity. Developing countries like India need substantial

foreign inflows to achieve the required investment to accelerate economic growth and development. It can act as

a catalyst for domestic industrial development. Further, it helps in speeding up economic activity and brings

with it other scarce productive factors such as technical knowhow and managerial experience, which are

equally essential or economic development.

1. FDI

FDI is generally defined as "A form of long term international capital movement, made for the purpose of

productive activity and accompanied by the intention of managerial control or participation in the management

of foreign firm."

2. Policy on FDI

India has among the most liberal and transparent policies on FDI among the emerging economies. FDI up to

100% is allowed under the automatic route in all the sectors except the following, which require prior approval

of Government:

 Sectors prohibited for FDI.

 Activities that require industrial license.

 Proposals in which the foreign collaborator has an existing financial/technical collaboration in India in

the same field.

 Proposals for acquisition of shares in an existing Indian Company in financial service sector and where

SEBI regulations, 1997 is attracted.

 All proposals falling outside notified sectoral policy in which FDI is not permitted.

3. Industrial Sectors of India

India has been a major recipient of FDI Inflows in the majority of sectors. There has been an unnerving upsurge

in the economic developments of the country. In the liberalization era, India is known to have attracted a

quantum amount of Foreign Direct Investment, especially after the liberalization. The huge market for computer

hardware in India, coupled with the availability of skilled workforce in this sector has boosted the inflow of

FDI. High growth prospects, in terms of increased consumption in the India as well as increasing demand for

exports are expected to lead to more Foreign Direct Investments in this sector.

FDI opportunities in the telecommunication sector in India exist in the areas of Ecommerce, Manufacturing of

equipments and components, Tele-education, Telebanking, Exports of telecom equipment and services, Telemedicine, Setting up a national long distance bandwidth capacity in the country. Construction projects which

have received the maximum FDI include, housing, commercial premises, hotels, resorts, hospitals, educational

institutions, recreational facilities, city and regional level infrastructure. FDI Inflows in the construction industry

in India are permissible under automatic route to ensure flexibility in construction activities which will boost the

Indian economy. In the real estate sector, the foreign investors are not allowed to sell undeveloped land, such as,

lands which do not have proper facilities of roads, water, electricity, drainage and all other basic requirements

for inhabitation.

The huge size of the market in the power sector in India and high returns on investment are important factors

in boosting FDI inflows to power. There are huge opportunities of FDI in power sector in India. Opportunities

of Foreign Direct Investment (FDI) in the Power Sector in India exist in Hydro Projects, Captive Power, Ultra

Mega Power Projects, Nuclear Power, National Grid Program, Rural Electrification, Trading, Renewable etc.

Important factors which are conductive to FDI Inflows to Electronics are the availability of low-cost, efficient,

and technically skilled workforce, opportunities for the manufacturing of consumer electronic goods and mobile

handsets are high given the growing demand in the domestic electronics market, electronics hardware is

growing leaps and bounds globally, large-scale manufacturing units of electronics hardware will be set up in the

special economic zones with a total exemption of duties and taxes, India has high chances to acquire a size USD

11 billion in terms of contract manufacturing out of USD 500 billion by 2010, Designing of electronics will

touch USD 7 billion by 2010, component exports will touch USD 5 billion by 2010, Nokia and Elcoteq Network

are planning to set up manufacturing operations in India.

4. Nature and Source of Data

The present study is of analytical nature and makes use of secondary data. The relevant secondary data are collected from various publications of Government of India, Reserve Bank of India and World Investment

Report 2009 Published by UNCTAD etc.

5. Literature Review

Cheng, (1993) noted the growing importance of cross-border R & D activities and suggested that additional

research on FDI should be done on why firms internationalize their R & D.

Dijkstra (2000), Tybout (2000) and Vachani (1997) found that investment policy liberalisations have major

impacts on firms in less developed countries (LDCs) where the pre-liberalisation level of protection was high.

Not all firms are affected equally; some will be losers while others will be winners, depending on their

characteristics.

Nagesh Kumar (2001) analyses the role of infrastructure availability in determining the attractiveness of

countries for FDI inflows for export orientation of MNC production.

Anand Virmani and Susan Collins (2007) studied empirically India's economic growth experience during

1960-2004 focussing on the post 1973 acceleration. The analysis focuses on the unusual dimensions of India's

experience. They find that India will need to broaden its current expansion to provide manufactured goods to the

world market and jobs for its large pool of low skilled workers.

Kulwinder Singh (2005) has analyzed FDI flows from 1991-2005. A sectoral analysis in his study reveals that

while FDI shows a gradual increase has become a staple of success in India, the progress is hollow. The

telecommunication and power sector are the reasons for the success of infrastructure. He finds that in the

comparative studies the notion of infrastructure has gone a definitional change.FDI in sectors is held up

primarily by telecommunication and power is not evenly distributed.

In their study on FDI and its economic effects in India, Chandand Chakroborty and Peter Munnen Kamp

(2006) assess the growth implications of FDI in India by subjecting industry specific FDI and output to causality

tests.

Jaya Gupta (2007) in his paper made an attempt to review the change in sectoral trends in India due to FDI

Inflows since liberalization. This paper also examines the changed policy implications on sectoral growth and

economic development of India as a whole.

Jayashree Bose (2007) in his book studied the sectoral experiences faced by India and China in connection

with FDI inflows. This book provides information on FDI in India and China, emerging issues, globalization,

foreign factors, trends and issues in FDI inflows, FDI inflows in selected sectors. A comparative study has also

been conducted on FDI outflows from India and China. This book also revealed the potential and opportunities

in various sectors in India that would surpass FDI inflows in India as compared to China.

Tanay Kumar Nandi and Ritankar Saher (2007) in their work made an attempt to study the Foreign Direct

Investment in India with a special focus on Retail Trade. This paper stresses the need of FDI in India in retail

sector and uses the augment that FDI is allowed in multiple sectors and the effects have been quite good without

harming the domestic economy. The study also suggests that FDI in retail sector must be allowed.

6. Objectives

The main objective of the study is to analyze the FDI inflows in India with special reference to Sector –wise

inflows. The other objectives are:

- To analyze the FDI flows as to identify country wise approvals of FDI inflows to India.

- To explore the Sector wise distribution of FDI inflows in order to point out the dominating sector, which has attracted the major share.

 To rank the sectors based upon highest FDI inflows.

 To find out the co relation between FDI and Economic Development.

7. Nature and Source of Data

The present study is of analytical nature and makes use of secondary data. The relevant secondary data has been

collected from reports of the Ministry of Commerce and Industry, Department of Industrial Promotion and

Policy, Government of India, Centre for Monitoring Indian Economy, Reserve Bank of India, World Investment

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8. Analysis of Country-wise Inflows of FDI

It is proposed to analyze the country-wise share of foreign direct investment in India from 2006-2010.The data

relevant to the analysis is presented in Table 1.

Table 1 Country–wise FDI Inflows - Top 10 Countries (From 2007-2010) (Amount Rupees in Crores)

Rank Country

2007-08

(AprilMarch)

2008-09

(AprilMarch)

2009-10

(AprilMarch)

(for

April

‘10)

Cumulative Inflows

(April ‘00 to April

‘10)

%age to

Total

Inflows

1 Mauritius 44483 50794 49633 2528 213434 43

2 Singapore 12319 15727 11295 1933 47080 9

3 USA 4377 8002 9230 404 37593 7

4 UK 4690 3840 3094 265 26263 5

5 Netherlands 2780 3922 4283 312 20438 4

6 Japan 3336 1889 5670 1455 18350 4

7 Cyprus 3385 5983 7728 123 17900 4

8 Germany 2075 2750 2980 102 12571 3

9 France 583 2098 1437 184 7102 1

10 UAE 1039 1133 3017 31 7054 1

Total FDI Inflows 98664 123025 123378 9854 526357 83%

Source Government of India (GOI) (2009). FDI Statistics, Ministry of Commerce & Industry, Department of Industrial

Policy and Promotion

India’s 83% of cumulative FDI is contributed by nine countries while remaining 17 per cent by rest of the

world. The analysis of country wise inflows of FDI in India indicates that during 2007-2010, the total amount of

Rs 526537 of FDI was received from 113 countries including NRI investments.

India’s perception abroad has been changing steadily over the years. This is reflected in the ever growing list

of countries that are showing interest to invest in India. Mauritius emerged as the most dominant source of FDI

contributing 44 % of the total investment in the country. Singapore was the second dominant source of FDI inflows with 9% of the total inflows. However, USA slipped to third position by contributing 7% of the total

inflows. They maintained continuous increasing trend under the period of study. UK occupied fourth position

with 5%followed by Netherlands with 4%, Japan with 4%, Cyprus with 4%, Germany with 3%, France with

1%, UAE with 1%.

It has been observed that some of the countries like Israel, Thailand, Hong Kong, South Africa and Oman

increased their share gradually during the period under study. It is also interesting to note that some of the new

countries such as Hungary, Nepal, Virgin Islands, and Yemen are making significant investments in India.

9. FDI Inflows in India - Sectoral Analysis of Top 10 Sectors

 Sector-wise FDI Inflows in India from April 2010-Dec 2010

Table 2 Sector–wise FDI Inflows (Rupees in Crores)

Sector

2007-08

(AprilMarch)

2008-09

(AprilMarch)

2009-10

(AprilMarch)

2010-11

(for April

‘10)

Cumulative

Inflows

(April ’00 -

April ‘10)

% age to

Total

Inflows

(In terms

of US$)

Services Sector (financial & nonfinancial)

26,589 28,411 20,958 1,581 106,992 21 %

Computer Software & Hardware 5,623 7,329 4,350 765 44,611 9 %

Telecommunications (radio paging,

cellular mobile, basic telephone

services)

5,103 11,727 12,338 1,914 42,620 8 %

Housing & Real Estate 8,749 12,621 13,586 246 37,615 7 %

Construction Activities (including

roads & highways)

6,989 8,792 13,544 345 36,066 7 %

Power 3,875 4,382 6,908 547 21,466 4 %

Automobile Industry 2,697 5,212 5,609 187 20,864 4 %

Metallurgical Industries 4,686 4,157 1,935 404 13,845 3 %

Petroleum & Natural Gas 5,729 1,931 1,328 522 12,026 2 %

Chemicals (other than fertilizers) 920 3,427 1,707 115 11,390 2 %

Graph Showing Top Ten Sectors attracting FDI Inflows in India since April 2000- Dec 2010

 Ranking of Sector wise FDI inflows in India since April 2000- Dec 2010

Table 3 Rank of Sector–wise FDI Inflows

Industrial Sector Rank

Service Sector 1

Computer Hardware & Software 2

Telecommunication 3

Housing and Real Estate 4

Construction Activities 5

Power 6

Automobile Industry 7

Metallurgical Industry 8

Petroleum and Natural Gas 9

Chemicals 10

Source Fact Sheets on FDI, DIPP

10. Analysis

The Sector wise Analysis of FDI Inflow in India reveals that maximum FDI has taken place in the service sector

including the telecommunication, information technology, travel and many others. The service sector is

followed by the computer hardware and software in terms of FDI. High volumes of FDI take place in

telecommunication, real estate, construction, power, automobiles, etc.

The rapid development of the telecommunication sector was due to the FDI inflows in form of international

players entering the market and transfer of advanced technologies. The telecom industry is one of the fastest

growing industries in India. With a growth rate of 45%, Indian telecom industry has the highest growth rate in

the world.

FDI inflows to real estate sector in India have developed the sector. The increased flow of foreign direct

investment in the real estate sector in India has helped in the growth, development, and expansion of the sector.

FDI Inflows to Construction Activities has led to a phenomenal growth in the economic life of the country.

India has become one of the most prime destinations in terms of construction activities as well as real estate

investment.

The FDI in Automobile Industry has experienced huge growth in the past few years. The increase in the

demand for cars and other vehicles is powered by the increase in the levels of disposable income in India. The

options have increased with quality products from foreign car manufacturers. The introduction of tailor made

finance schemes, easy repayment schemes has also helped the growth of the automobile sector. The basic

advantages provided by India in the automobile sector include, advanced technology, cost-effectiveness, and

efficient manpower. Besides, India has a well-developed and competent Auto Ancillary Industry along with

automobile testing and R&D centres. The automobile sector in India ranks third in manufacturing three wheelers

and second in manufacturing of two wheelers. Opportunities of FDI in the Automobile Sector in India exist in

establishing Engineering Centres, Two Wheeler Segment, Exports, Establishing Research and Development

Centres, Heavy truck Segment, Passenger Car Segment.

The increased FDI Inflows to Metallurgical Industries in India has helped to bring in the latest technology to

the industries. Further the increased FDI Inflows to Metallurgical Industries in India has led to the development,

expansion, and growth of the industries. All this has helped in improving the quality of the products of the

metallurgical industries in India.

The increased FDI Inflows to Chemicals industry in India has helped in the growth and development of the sector. The increased flow of foreign direct investment in the chemicals industry in India has helped in the development, expansion, and growth of the industry. This in its turn has led to the improvement of the quality of the products from the industry.

Based upon the data given by department of Industrial Policy and Promotion, in India there are sixty two (62) sectors in which FDI inflows are seen but it is found that top ten sectors attract almost seventy percent (70%) of FDI inflows. The cumulative FDI inflows from the above results reveals that service sector in India attracts the maximum FDI inflows amounting to Rs. 106992 crores, followed by Computer Software and Hardware amounting to Rs. 44611 crores. These two sectors collectively attract more than thirty percent (30%) of the total FDI inflows in India. The housing and real estate sector and the construction industry are among the new sectors attracting huge FDI inflows that come under top ten sectors attracting maximum FDI inflows.

Thus the sector wise inflows of FDI in India shows a varying trend but acts as a catalyst for growth, quality maintenance and development of Indian Industries to a greater and larger extend. The technology transfer is also seen as one of the major change apart from increase in operational efficiency, managerial efficiency, employment opportunities and infrastructure development.

11. FDI and Economic Development

FDI is considered to be the life blood and an important vehicle of for economic development as far as the developing nations are concerned. The important effect of FDI is its contribution to the growth of the economy.

FDI has an important impact on country's trade balance, increasing labour standards and skills, transfer of technology and innovative ideas, skills and the general business climate. FDI also provides opportunity for

technological transfer and up gradation, access to global managerial skills and practices ,optimal utilization of

human capabilities and natural resources, making industry internationally competiteve,opening up export

markets,aceess to international quality goods and services and augmenting employment opportunities.

Table 4 FDI and GDPFC

Year	FDI (Crores)	GDPFC
2000-01	12645	1925017
2001-02	19361	2097726
2002-03	14932	2261415
2003-04	12117	2538171
2004-05	17138	2877706
2005-06	24613	3275670
2006-07	70630	3790063
2007-08	98664	4303654
2008-09	85700	3635496

The reliance on FDI is rising heavily due to its al round contributions to the growth of the economy. FDI to

developing countries since 1990’s is the leading source of external financing. The rise in FDI volume is

accompanied by marked change in its composition.

Correlation Value

The value of Karl Pearson co relation(r) is found to be +.89. It means that there is high degree positive

correlation between the FDI and Economic Development.

12. FDI Issues and Policy Recommendation

- FDI can be instrumental in developing rural economy. There is abundant opportunity in Greenfield Projects. But the issue of land acquisition and steps taken to protect local interests by the various state governments are not encouraging. MOU Arecelor-Mittal controversy is one of the best examples of such disputes.

- India has a huge pool of working population. However, due to poor quality primary education and higher there is still an acute shortage of talent. This factor has negative repercussion on domestic and foreign business. FDI in Education Sector is less than 1%. Given the status of primary and higher education in the country, FDI in this sector must be encouraged. However, appropriate measure must be taken to ensure quality. The issues of commercialization of education, regional gap and structural gap have to be addressed on priority.

- Indian economy is largely agriculture based. There is plenty of scope in food processing, agriculture services and agriculture machinery. FDI in this sector should be encouraged. The issue of food security, interest of small farmers and marginal farmers need cannot be ignored for the sake of mobilization of foreign funds for development.

- India has a well developed equity market but does not have a well developed debt market. Steps should be taken to improve the depth and liquidity of debt market as many companies may prefer leveraged investment rather than investing their own cash. Looking for debt funds in their own country invites exchange rate risk.

- In order to improve technological competitiveness of India, FDI into R&D should be promoted. Various issues pending relating to Intellectual Property Rights, Copy Rights and Patents need to be addressed on priority. Special package can be also instrumental in mobilizing FDI in R&D.

- Though service sector is one of the major sources of mobilizing FDI to India, plenty of scope exists. Still we find the financial inclusion is missing. Large part of population still doesn’t have bank accounts, insurance of any kind, underinsurance etc. These problems could be addressed by making service sector more competitive. Removal of sectoral cap in insurance is still awaited.

13. References

1. Asher, M.G. (2007). “India’s Rising Role in Asia”, http://www.spp.nus.edu.sg/wp/wp0701b.pdf.

2. Athreye, S. and S. Kapur (2001). “Private Foreign Investment in India: Pain or Panacea?” The World Economy, 24, pp. 399-424.

3. Agosin, M. and R. Mayer (2000). “Foreign investment in Developing Countries: Does it Crowd in Domestic Investment?” Discussion Paper No. 146, UNCTAD, Geneva.

4. Blomström, M. and A. Kokko (2003). “The Economics of Foreign Direct Investment Incentives”, Working. Paper No. 9489, NBER.

5. Borensztein, E., J. De Gregorio and J. Lee (1995). “How does Foreign Direct Investment Affect Growth”, Journal of International Economics, 45, pp. 115-135.

6. Blomström, M., R. Lipsey and M. Zejan (1994). “Host Country Competition and Technology Transfer by Multinationals”, Weltwirtschaftliches Archiv, 130, pp. 521-533.

7. Daisuke, H. (2008). “Japan’s Outward FDI in the Era of Globalization”, in R.S. Rajan, R. Kumar and N. Vargill, eds. (2008) “New Dimensions of Economic Globalization: Surge of Outward FDI from Asia”, World Scientific Press, Chapter 4.

8. Dua, P. and A.I. Rasheed (1998). “Foreign Direct Investment and Economic Activity in India”, Indian Economic Review, 33, pp. 153-168.

9. Foreign Direct Investment Policy (2006), department of Industrial policy and promotion, Ministry of Commerce and Industry, Government of India.