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A Study of FDI In India

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ABSTRACT

FDI has been one of the most distinguished factors for financial aid and growth for developing countries. The paper examines the present and future status of FDI in India. The methodology used in the paper is divided into two parts: first, determining the effect of FDI (equity inflow) on total FDI inflow through regression analysis, F – Test, and test of auto correlation through Durbin-Watson test, and the second part studies the trend of FDI inflow and forecast of the inflow till 2016 through trend analysis. The paper interprets that the FDI equity inflow is a significant determinant of total FDI inflow in India. The paper provides a composite view of the present status of India in world FDI flow, examines the situation of FDI retailing (single brand and multi brand) in India and determines the advantages and drawbacks of FDI flow on Indian economy.

Key Words: FDI, retailing, sectoral analysis, regression analysis, auto correlation, trend analysis.

INTRODUCTION

India's ruling congress party had one of the most shocking political victory on 5 Dec. 2012, when lower house of parliament voted (254 votes) in favour of allowing foreign supermarket chains in India. The heated debate for approval of India allowed a total foreign participation in aviation retail up to 49%, broadcast sector up to 74%, multi brand retail up to 51% and single brand retail upto100%. However, the choice of allowing FDI in multi brand retail up to 51% has been left on the choice of states by making necessary reforms in the Foreign Exchange Management Act. India followed a conductively cautious approach of foreign investment, through the enactment of Foreign Exchange Regulation Act, 1973, wherein foreign equity holding in joint venture was allowed up to 40% only in export oriented businesses, high tech and high priority areas. However with a shift embarked after 1991 for growth potentials saw a series of measures taken towards liberalising foreign investment through FEMA, 1991:

i. Introduction of dual route of approval of FDI – RBI's automatic route and government approval (SIA/FIPB) route. Permission to NRI's and OCB's to invest up to 100% in high priority sectors
ii. Automatic permission of technology agreements in high priority industries and removal of restrictions of FDI in low technology areas as well as liberalisation of technology imports.
iii. Hike in the foreign equity participation limits to 51% for existing companies and liberalisation of the use of foreign brands name.

Insert table I here

FDI – THE INTERNATIONAL PERSPECTIVE

MNC's consider FDI as an important means to reorganise their production activities across borders in accordance with their corporate strategies and competitive advantage of host countries. According to preliminary estimates global FDI continued to shrink in 2nd quarter of 2012 and declined by 10% around US$ 303 billion. Total world FDI decreased from US$ 1982.7 billion in 2007 to US$ 1632.7 billion in 2011, with a total inflow of India which increased from 25.5% in 2007 to 34.2% in 2011. However the flow decreases from 12.4% in second quarter of 2011 to 6.2% in second quarter of 2012. Total FDI outflow of world also decreased from US$ 2167.1 in 2007to US$ 1591.1 in 2011 with India contributing 17.3% in 2007 to 12.4% in 2011, its quarterly participation also decreased from 3.1% to 2%.

The economy breakdown and European market crisis of 2009 directly affected the FDI flows worldwide. Its inflows declined by 37% and outflows by 43%. However, global FDI Quarterly Index removed dynamism in first quarter of 2010 with total inflow of US$ 478349 million in 2010. The graph below represents a quarterly FDI inflow and outflow in major trading blocs of world.

Insert graph 1 here

Insert graph 2 here

The top leading country investing in India for past 10 years is Mauritius, with cumulative inflow of US$ 64169, and a total inflow of US$ 9942 million in 2011-2012. Singapore has a continuous investment interest for past decade with cumulative inflow of US$ 17153 million with 10% share in total inflow. UK made an investment for US$ 9257 million in the form of equity in 2011-12, with a cumulative inflow of US$ 15896 million and share of 9%. Japan stands at fourth position with inflow of US$ 2972 million in 2011-12 and cumulative index of US$ 12313. USA made a total investment of US$ 1115 million in 2011-12, with inflows of US$ 10564 million for 2000-12 cumulating to 6% share. Netherlands has made investments for US$ 7109 million for 2000-12 with 4% share and individual share of US$ 1409 million in 2011-12. Cyprus on the other hand made an investment of US$ 1587 million in 2011-12 and total inflow for period 2000-12 was US$ 6400 million for a share of 4%. Germany did an investment in equity for US$ 1622 million in 2011-12, and a share of 3% standing for US$ 4621 million. France and UAE stand at 9th and 10th position with total cumulative inflow of US$ 2927 million and US$ 2242 million for a share of 2% and 1% respectively. Their contributions for 2011-12 were US$ 6632 million and US$ 353 million. Total FDI inflow in the equity market increased from US$ 25834 million in 2009-10 to US$ 19427 million in 2010-11 and further to US$ 36504 million in 2011-12 with a constant strong cumulative inflow of US$ 170407 for 2000-2012.

The top companies attracting FDI equity inflows from 2000-2012 have been: Idea Cellular ltd. in collaboration with TMI Mauritius ltd. from Mauritius for telephone communication services worth US$ 1600.95. Re-logistics Infrastructure Pvt. Ltd. with Priometrix Marketing Pvt. ltd. from Singapore collaborated for bottling of natural gas and LPG worth US$ 458.99 million. Essar steel ltd. with Essar Logistics holding ltd. partnered for steel manufacturing worth US$ 451.97 million from USA. From UK, Cairn (F) ltd. came together with Cairan UK Holding for business services worth US$ 1492.82 million. Horizon India B.V. collaborated with EMAAR MGF LAND Pvt. ltd. from Netherlands made inflow worth US$ 281.44 million indulged in construction of residential buildings. Anchor electrical Pvt. ltd has inflow of US$ 341.85 million from Matsushitae electric works ltd. for electrical products hailing from Japan. Tata Capital ltd. in collaboration with Travorto Holdings ltd. for financial leasing company's activities has inflow of US$ 291.35 million. Micro Inks ltd. manufacturing printing inks is in collaboration with MHM Holding GMBH from Germany worth US$ 190.95 million. France based company Parficim has made investment of US$ 324.65 million in Bharathi Cement Corporation Ltd. for manufacturing of cement, lime and plaster. Adani Power ltd. attracted FDI equity inflow from various NIRS, of UAE worth US$ 243.98 million in business of generation and transmission of electric energy.

REVIEW OF LITERATURE

1. Singh Kr. Arun and Agarwal P.K., (2012) "Foreign direct investment: The big bang in Indian retail". In this article they have studied the relation of foreign investment and Indian retail business. The study is based on different literatures, case studies and analysis of organised retail market. The author discusses the policy development for FDI in the two retail categories: single brand and multi brand. The author concludes that FDI in multi brand retail should be considered, better technology and employment. The paper also concludes that openness of FDI in India would help India to integrate into worldwide market.
2. Dr. Mamata Jain and Mrs. Meenal Lodhana Sukhlecha, (2012), "FDI in multi brand retail: Is it the need of the hour?" The paper studies the need of the retail community to invite FDI in retailing. The study is under taken through analysis of positive and negative impacts of reforms. The study shows various advantages of FDI, which suggests for foreign participation in retailing, but the author also suggests that the ceiling should not exceed 51% even for single brands to ensure check and control on business operations.
3. Rajalakshmi K. and Ramachandran F., (2011), "Impact of FDI in India's automobile sector with reference to passenger car segment." The author has studied the foreign investment flows through the automobile sector with special reference to passenger cars. The research methodology used for analysis includes the use of ARIMA, coefficient, linear and compound model. The period of study is from 1991 to 2011. This paper is an empirical study of FDI flows after post liberalisation period. The author has also examined the trend ad composition of FDI flow and the effect of FDI on economic growth. The author has also identified the problems faced by India in FDI growth of automobile sector through suggestions of policy implications.

4. Bose Kanti Tarun, (2012), "Advantages and disadvantages of FDI in India and China". The study has been done on evaluation of advantages and disadvantages of FDI in China and India based on literature review. The study was based on two major companies: Wal-Mart operations in China and Hyundai operations in India. The study concludes that both China and India has been a hotspot for foreign investment due to its unsaturated market conditions, cheap labour, demographic factors, consumer behaviour, etc.
5. Dr. S N Babar and Dr. B V Khandare, (2012), "Structure of FDI in India during globalisation period". The study is mainly focused on changing structure and direction of India's FDI during globalisation period. The study is done through analysis of benefits of FDI for economic growth. The study has been done through sect oral analysis of FDI participation, as well as through study of country wise flow of foreign inflow in India till 2010.
6. Chakraborty Chandana and Basu Parantap, (2002), "FDI and growth in India: a co integration approach". The study is explored through a structural co integration model with vector error correction mechanism, by a two way link between FDI and long run relationship exists between FDI and GDP, i.e. unit labour cost and import duty in total tax revenue.
7. Park Jongsoo, (2004), "Korean Perspective on FDI in India: Hyundai Motors Industrial Cluster". The article studies the flow of FDI in India through industrial cluster: with special reference to Hyundai Motors. The article concludes that the attitude of Indian government towards foreign investment has shown a drastic change after 1991. The new reforms of FEMA have been attracting the FII's but the article also concludes that two principal deterrents to investment in India are bureaucracy and showing pace of reforms. The article suggests that the growth of India has increased through joint ventures and Greenfield investments.

From the above literature review it has been found that FDI has been beneficial for India and its economic growth. Although the studies are more theoretical rather than analytical, still they have been of immense help in forming the base for the following work.

OBJECTIVE

The objective of this paper is to represent the present and future scenario of FDI in India. The other objectives are:

1. Study the present situation of FDI in retailing.
2. Study the effect of FDI (equity inflow) on total FDI flow in India.
3. Forecasting the trend of FDI flow in India up to 2016.

RESEARCH METHODOLOGY

The study is analytical in nature and covers a period of 12 years (2000-2012), to have a clear picture of the status of FDI in India. The study is divided into 8 parts: Introduction, literature review, an overview of FDI in India, FDI in retailing, FDI- as an international perspective, investment scenario of companies, analysis and interpretation and conclusion. The data is secondary in nature and is collected from RBI annual publications, website of Department of Industrial Policy and Promotion, Government of India, UNCTAD publications, etc. The analysis of the hypothesis: effect of FDI equity inflow on FDI flow has been done with the help of various statistical tools: regression analysis; trend is measured through analysis of time series; and the presence of auto correlation is tested through Durbin – Watson test.

1. Regression analysis is calculated through the following formulae:

$$\mathbf{Y = a+bX}$$

Where, parameters a and b is calculated through simultaneous equations:

$$\mathbf{\Sigma Y = Na+b\Sigma X}$$

$$\mathbf{\Sigma XY = a\ \Sigma X + b\ \Sigma X^2}$$

Regression coefficient of Y on X: $\mathbf{r\ \sigma_y/\sigma_x = \Sigma xy/\Sigma x^2}$

2. Trend analysis is calculated on the basis of second degree parabola as the series is affected through correlation, calculated as below:

$$\mathbf{Y_c = a + b\ X + c\ X^2}$$

3. Autocorrelation is tested through Durbin-Watson test, discussed as below:

$$\mathbf{d = \Sigma\ (e_t - e_{t-1}) / \Sigma\ e_t^2}$$

There are two limits to test the autocorrelation, i.e. an upper limit (d_u) and a lower limit (d_L). If the d value < d_L, then positive autocorrelation of first order is present. If the d value > (4 - d_L) there is negative autocorrelation of first order. If d_u<d< (4 - d_u), there is no autocorrelation. If d_L<d< d_u, the test is inconclusive.

HYPOTHESES

The study tests the following hypotheses:

H_O = FDI Equity inflow does not affect the flow of FDI in India.

H_1 = FDI Equity inflow affects the flow of FDI in India.

AN OVERVIEW OF FDI IN INDIA

UNCTAD ranked India at 3rd position in 2010 as the attractive destination for FDI, which further rose to second most attractive destination for FDI in 2012, as ranked by A.T. Kearney FDI Confidence Index. As a direct investment in to production or business in India, by purchasing the stocks or buying a company or expanding the business. The investment is done either through purchase of shares or purchase of stocks or through participation in management and working. India allows FDI through mergers and acquisitions, joint ventures, Greenfield investment, etc. The major participation of foreign institutional investors or flow of foreign capital is seen in SEZ's, EPZ's, and sectors which are lucrative for higher returns.

Insert table II here

SECTORAL ANALYSIS

Insert table III here

Insert table IV here

The sectoral analysis determines that service sector (financial and non financial), has been the hotspot for past decade (2000-2012), with a total average inflow of 19%, followed by telecommunication, construction activities, software and real sectors with cumulative average inflow rate of 7%. All kind of foreign investments in any sector has been freely permitted in India except for those which have pre defined ceiling rates. However the prohibited areas in which investments of any kind of foreign nature not allowed are: business of chit funds, Nidhi Company, lottery business, gambling and betting, atomic energy, manufacturing of cigars, cigarettes, tobacco items, construction of farm houses, etc.

PRESENT STATUS QUO

When the bill for free foreign participation up to 49% in aviation sector was passed in September 2012 at the parliament session of India, it became a topic of debate with roaring objections from the opposition parties to obstruct any further FDI reforms. However the leading congress party won the retail FDI battle on 5 December 2012 with 253 votes, where PM Manmohan Singh quoted, **"The policy will introduce new technology and investment in marketing agricultural produce and will create revenue model for farmers."** The present ceilings on investment in various sectors are: Hotel and tourism - 100% (AR)*, Private sector NBFC's - 49% (AR), Insurance – 49% (AR), Telecommunications - 49% (AR), Trading business – 51% (AR), Power and electricity – 100% (AR), Drugs and pharmaceuticals – 100%(AR), Roads and transport – 100% (AR), Pollution control and management – 100% (AR), Call centres and BPO – 100% (AR), Pension industry – 26 % (AR), Commodity exchange – 26% FDI and 23% FII, Mining (titanium) – 100%, etc. the sectoral investment of various countries and the key indicators attracting the maximum flow of FDI in a country has been shown in the tables V and VII.

Insert table V here

Insert table VI here

FDI IN RETAILING

For Indian government retailing first began in 1980's, with textile sector companies like Bombay Dyeing, Raymond's, Grasim, etc. being followed by companies like Titan, Food World, Planet M, Crossword and

Fountainhead, Shopper's Stop, Westside, Giant and Big Bazaar, Tanishq, etc. India's retail industry is approximately worth US$ 411.28 billion whose further growth is expected to reach US$ 804.06 billion in 2015. Since 1995 India took active participation in retailing by adopting the norms and guidelines of WTO General Agreements on Trade in Services. In December 2011, it removed 51% cap on single brand retail and allowed 100% participation of foreign investors. An ASSOCHAM report states that India's overall retail sector is expected to rise to US$ 833 billion in 2013 to 1.3 trillion by 2018 with CAGR of 10%.

With the growing opportunities galore, improved technology, urbanization, credit availability, demographical changes, expansion of education, living standard, improved logistics, and rising consumer demands, retail has been the most lustrous investment area. So, with the changing trend, Indian government in December 2012 brought one of the major changes in FEMA regulation by lifting the ceiling on multi brand retailing to 51%. The D – day of multi brand retailing noticed a huge opposition from other parties. However the other part of the economy gave a warm welcome of the decision by quoting it to be a new path to growth. Along with the approval from DIPP following proposals were made:

1. Retail sales outlets may be set up in those states which agreed in future to allow FDI in MBRT under the policy. The establishment will be in compliance of applicable state laws and regulations.
2. It may be set up only in cities with a population of more than 10 lakhs as per 2011 census and may also cover an area of 10 kms around municipal areas an agglomeration limit of such cities. Retail locations will be restricted to conforming areas as per the master/zonal plans of the concerned cities and provisions will be made for requisite facilities such as transport connectivity and parking. In states/union territories not having population of more than 10 lakhs as per 2011 census, retail outlet may be set up in cities of their choice as per zonal plans.
3. At least 50% of total FDI brought in shall be invested in backend infrastructure within 3 years of the induction of FDI, where backend infrastructure would include investment made towards processing, manufacturing, distribution, design improvement, quality control, etc.
4. A high level group under the Ministry of Consumer Affairs may be constituted to examine various issues concerning internal trade and make recommendations for internal trade reforms.

As soon as the news for multi brand FDI came, global retail giant WAL-MART made all its preparations to make a grand entry into the highly lustrous Indian market. However, the entry of WAL-MART has faced a disputed drama in shape of lobbying made for US$ 25 million (about Rs. 125 cr.) to Indian government since 2008. Also in the aviation sector King Fisher Airlines (KFA) has allowed 3% capital on foreign investment in their company.

ANALYSIS AND DISCUSSION

The data used for interpretation is based on secondary sources: website of DIPP, UNCTAD and RBI. The analysis is done in two parts:

- The first part, analyses whether the FDI equity inflow affects the total FDI inflows into India for a period of 12 years (2000-2012).
- The second part, is an examination of the trend of FDI flows into India, as well as forecasting the future trend till 2016: calculated on the basis of time series analysis.

PART I – EFFECT OF EQUITY INFLOW ON FDI

The equity inflow considered is the total inflow of equity through FIPB's Route/ RBI's Automatic Route and acquisition route as well as the equity flow into unincorporated bodies. The FDI inflow is divided into 3 major parts as per international standards of WTO: equity, reinvestment earnings and other capital.

The analysis is done by using the regression analysis. However, as it can be seen that the series is not constant, so Durbin-Watson test has been applied to check the autocorrelation or serial correlation present in the series.

Insert table VII here

With the analysis of auto correlation, the d statistics obtained is 0.049, which is less than $d_L = 0.971$ (lower limit) and $d_u = 1.331$ (upper limit) and shows that a high degree of positive auto correlation exists in the series. The measure of first order linear autocorrelation coefficient is

$$\mathbf{r_{et\ et-1} = 1.27}$$

This is an estimate of the true auto correlation coefficient (population parameter). The presence of serial correlation can be attributed to economic growth variables and cyclical movements influencing the FDI flow.

Further to test the H_o = flow of FDI equity does not affect total FDI flow, regression analysis is used which is represented in the form of an ANOVA table.

Insert table VIII here

Since $F_{value} > F_{0.05}$, the H_o (null) hypothesis is rejected and the alternative hypothesis (H_1 = flow of FDI equity affects FDI flows), showing that regression analysis at 5% level of significance and FDI equity inflow is a significant explanatory factor of variations in total FDI inflows in India.

Value of regression coefficient (r_{yx}) = **1.135**

Value of coefficient of determination (r^2) = **1.288**

The variances present in the analysis and series are valued below:

Variance of error term **(σ^2_u)** = **81546566**

Variance of explanatory variables **(b) = 0.000458**

Standard error of **(b) = 0.0214**

t statistic = **61.68**

PART II – TREND OF FDI FLOW

The trend of FDI flow into India has been calculated with the help of time series analysis. Along with the trend forecast of the FDI flow has been calculated up to 2016. The method used for forecasting and trend analysis is the second degree parabola of least square method as the series is having autocorrelation, where the equation formed is:

$$\mathbf{Y_c = a+bX+cX^2}$$

The trend values of FDI flow has been explained in the table

Insert table IX here

Trend value for 2013 = US$ 55375.125

Trend value for 2014 = US$ 62466.73

Trend value for 2015 = US$ 69948.845

Trend value for 2016 = US$ 77821.47

The trends are plotted on the graph below

Insert graph 3 here

The graph 3 shows two lines:

- ✓ The grey lines shows the trend values
- ✓ The dark line shows the actual values.

DISCUSSION

From the above analysis it can be interpreted that there is a high degree of autocorrelation (d= 0.049) present in the series which states the flow of FDI (equity inflow), in any particular year is affected by the flow of FDI (equity inflow) in the previous year i.e. flow of equity in the year 2012 (US$ 36504) which is being highly affected by the flow of equity in 2011 (US$ 19427) and so on. The inter correlation present in the series shows that the volume of the flow of equity in any previous year will determine the flow in the next year. The regression coefficient tested at 5% level of significance (4.96) through F-test shows that flow of FDI (equity) is one of the major explanatory factors of variations in total FDI inflow in India, besides the cyclical fluctuations.

The analysis in the second part determines an upward trend (forecasted till 2016). The analysis of trend value determines the flow of FDI in 2013 as **US$ 55375.125, 2014 = US$ 62466.73, 2015 = US$ 69948.845 and 2016 = US$ 77821.47,** which clearly shows that FDI is going to flourish in the near future, thereby increasing the economic growth.

CONCLUSION

The study of FDI in India concludes that India should welcome FDI as it has huge benefits for the Indian economy. FDI participation always brings prosperity for any emerging country. Various benefits which India can entice by liberalising FDI are use of advanced technology, expertise, better infrastructural developments, widened product basket, improving standard of living, uplifting the brand quality, improving competitiveness, better foreign relations, boosting exports, and providing India with a global platform.

The debated views of FDI in multi brand have certainly hindered the flow in retailing. However, the government has tried to encounter all the obstructions and ease the investment norms for foreign investors. As the analysis shows that India will have an upward trend in FDI flow for next 5 years, yet the government should revise its regulations under FEMA, to watch the barriers and protect the domestic companies and equity holders. Recent changes done to allow free of FDI through equity are:

- Subscription of warrants and partly paid up shares issued by company's under automatic route, through FIPP.
- Easy and fast clearances for investment in various sectors.
- Subscription of shares in return of machineries exported/imported to companies.
- Overseas banking facilities for partly paid up shares has been allowed for private companies.
- Issuance of equity shares against non-cash transactions against import of approved goods.
- Removal of conditions of prior approval in case of existing JV's/technical collaborations in same field.

The recent up gradations in various sectors have provided an open gateway for all grades of foreign investors. However Indian government should liberalise agricultural, insurance and media sectors as it will be helpful for the economy to compete globally and have a stand of its own in the global market.

FDI though being beneficial and having an increasing trend always brings huge threat for domestic and small scale companies and retailers. India should formulate policies which will diverse the threats and channel the benefits, so that the economy may prosper globally FDI always faces problems in form of red-tapism, bureaucracy, lobbying, non availability of credits, and rigid taxation policies. India has tried to assist FDI by allowing low corporate tax, tax holidays, preferential tariffs, removing the sectoral caps, removing restrictions of customs, lowering the depreciation rate, etc.

Being politically controversial, FDI has to be accepted in India, to overstep the sluggish growth. As FDI will always provide long term benefits, the public should hold their patience to encash them, and utilise it for their profit.

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TABLES

Table I

Sector Specific Limits of Foreign Investment in India

Sector	**FDI Cap/Equity**	**Entry Route**	**Other Conditions**
Agriculture 1. Floriculture, Horticulture, Development of Seeds, Animal Husbandry, Pisciculture, and Aquaculture, Cultivation of vegetables & mushrooms and services related to agro and allied sectors. 2. Tea sector, including plantation #	100% 100%	Automatic FIPB	
Industry 1. Mining covering exploration and mining of diamonds & precious stones; gold, silver and minerals. 2. Coal and lignite mining for captive consumption by power projects, and iron & steel, cement production. 3. Mining and mineral separation of titanium bearing minerals.	100% 100% 100%	Automatic Automatic FIPB	
Manufacturing 1. Alcohol- Distillation & Brewing 2. Coffee & Rubber processing & Warehousing. 3. Defence production 4. Hazardous chemicals and isocyanates 5. Industrial explosives -Manufacture 6. Drugs and Pharmaceuticals 7. Power including generation **(except Atomic energy)**; transmission, distribution and power trading. ##	100% 100% 26% 100% 100% 100% 100%	Automatic Automatic FIPB Automatic Automatic Automatic Automatic	
Services 1. Civil aviation (Greenfield projects and Existing projects) 2. Asset Reconstruction companies 3. Banking (private) sector	100% 49% 74% (FDI+FII). FII not to exceed 49%	Automatic FIPB Automatic	s.t.

4. NBFCs: underwriting, portfolio management services, investment advisory services, financial consultancy, stock broking, asset management, venture capital, custodian, factoring, leasing and finance, housing finance, forex broking, etc.	100%	Automatic	minimum capitalisation norms
5. Broadcasting a. FM Radio b. Cable network; c. Direct to home; d. Hardware facilities such as up-linking, HUB. e. Up-linking a news and current affairs TV Channel	a.20% b,c,d.49% (FDI+FII) e.100%	FIPB	
6. Commodity Exchanges	49% (FDI+FII) (FDI 26 % FII 23%)	FIPB	
7. Insurance, pension	49%, 26%	Automatic	
8. Petroleum and natural gas : Refining	49% (PSUs). 100%(Pvt. Companies)	FIPB (for PSUs). Automatic (Pvt.)	Clearance from IRDA
9. Print Media a. Publishing of newspaper and periodicals dealing with news and current affairs	26%	FIPB	S.t. Guidelines by Ministry of Information & broadcasting
b. Publishing of scientific magazines/speciality Journals/periodicals.	100%	FIPB	
10. Telecommunications a. Basic and cellular, unified access services, national/international long-distance, V-SAT, public mobile radio trunked services (PMRTS); global mobile personal communication services (GMPCS) and others.	74% (including FDI, FII, NRI, FCCBs, ADRs/GDRs, convertible preference shares, etc.	Automatic up to 49% and FIPB beyond 49%.	

SOURCE: RESERVE BANK OF INDIA- http://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=2513

#(FDI is not allowed in any other agricultural sector /activity). #(FDI is not permitted for generation, transmission & distribution of electricity produced in atomic power plant/atomic energy since private investment in this activity is prohibited and reserved for public sector.)

TABLE II

FOREIGN DIRECT INVESTMENT

F.Y. (April-March) 2000-12	FIPB Route/ RBI"s Automatic Route/	Equity capital of unincorporated bodies	Re-invested earnings	Other capital	Total FDI Flows	%age growth over pr.yr (in US$)	Investment by FII"s Fund (net)
2000-01		61	1,350	279	4,029	-	1847
2001-02	3904	191	1645	390	6130	+52%	1505
2002-03	2574	190	1833	438	5035	-18%	377
2003-04	2197	32	1460	633	4322	-14%	10918
2004-05	3250	528	1904	369	6051	+40%	8686
2005-06	5540	435	2760	226	8961	+48%	9926
2006-07	15585	896	5828	517	22826	+146%	3225
2007-08	24573	2291	7679	292	34835	+53%	20328
2008-09	31364	702	9032	776	41874	+20%	-15017
2009-10(P) (+)	25506	1540	8668	1931	37745	-8%	29048
2010-11 (P) (+)	21376	874#	11939	658	34847	+34%	29422
2011-12 (P) (from April, 2011 to March, 2012)	34833	1020	8200	2794	46847	-	16813
TOTAL (April, 2000 to March, 2012)	**173,141**	**8,760**	**62,298**	**9,303**	**253,502**	**-**	**117,078**

Source: 1. RBI"s Bulletin May 2012 dt. 10.05.2012 (Table No. 44 – FOREIGN INVESTMENT INFLOWS).

1. # Figures for equity capital of unincorporated bodies for 2010-11 are estimates.

2. (P) all figures are provisional

3. "+" Data in respect of Re-invested earnings & Other capital" for the years 2009- 10, 2010-11 are estimated as average of previous two years.

4. RBI had included Swap of Shares of US$ 3.1 billion under equity components during December 2006.

5. Figures updated by RBI up to March, 2012

6. All the amounts are in US$.

7. FIPB ROUTE + EQUITY CAPITAL OF UNINCORPORATED BODIES = EQUITY FUND FLOW

TABLE III

Equity FDI Inflows to India (SECTOR WISE)

(Percent value)

Sectors	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	
Manufactures	1.6	3.7	4.8	5.1	4.8	
Services	5.38.0	8.0 10.2	10.2 5.3	7.4 7.4	8.0 4.5 4.5	10.2
Constrctn, Realestate & mining	1.4	4.3 4.3	4.2	6.0 6.0	2.6 2.6	
Others	0.93.3	3.3 3.4	3.4	4.0 4.0	3.0 3.0	
Total Equity FDI	**9.3**	19.4	22.7	22.5	14.9	

SOURCE: RESERVE BANK OF INDIA- http://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=2513

TABLE IV

SECTORAL ANALYSIS

Sector	**2009-10 (April-March)**	**2010-11 (April-March)**	**2011-12 (April- March)**	**Cumulative Inflows**	**% age to total Inflows (US$)**
SERVICES SECTOR **(financial & non-financial)**	19,945 **(4,176)**	15,053 **(3,296)**	24,656 **(5,216)**	145,764 **(32,351)**	**19 %**
TELECOMMUNICATIONS **(radio paging, cellular mobile, basic telephone services)**	12,270 **(2,539)**	7,542 **(1,665)**	9,012 **(1,997)**	57,078 **(12,552)**	**7 %**
CONSTRUCTION ACTIVITIES **(including roads & highways)**	13,469 **(2,852)**	4,979 **(1,103)**	13,672 **(2,796)**	52,253 **(11,433)**	**7 %**
COMPUTER SOFTWARE & HARDWARE	4,127 **(872)**	3,551 **(780)**	3,804 **(796)**	50,118 **(11,205)**	**7 %**
HOUSING & REAL ESTATE	14,027 **(2,935)**	5,600 **(1,227)**	3,443 **(731)**	49,717 **(11,113)**	**7 %**
CHEMICALS (OTHER THAN FERTILIZERS)	1,726 **(366)**	1,812 **(398)**	36,227 **(7,252)**	47,904 **(9,844)**	**6 %**
DRUGS & PHARMACEUTICALS	1,006 **(213)**	961 **(209)**	14,605 **(3,232)**	42,868 **(9,195)**	**5 %**
POWER	6,138 **(1,272)**	5,796 **(1,272)**	7,678 **(1,652)**	33,214 **(7,299)**	**4 %**

AUTOMOBILE INDUSTRY	5,893 **(1,236)**	5,864 **(1,299)**	4,347 **(923)**	30,785 **(6,758)**	**4 %**
METALLURGICAL INDUSTRIES	1,999 **(420)**	5,023 **(1,098)**	8,348 **(1,786)**	26,936 **(6,041)**	**4 %**

SOURCE: http://dipp.nic.in/English/Publications/FDI_Statistics/2012/india_FDI_March2012.pdf Amt in parentheses are in US$ million, rest are in Rupees crore.

TABLE V

Investing Across Borders – Sector wise Caps – 2009

Country	Mining, oil & gas	Agriculture and forestry	Light manufacturing	Telecommunications	Electricity	Banking	Insurance	Transportation	Media	Construction, tourism and retail	Health care & waste mgt.
Argentina	100	100	100	100	100	100	100	79.6	30	100	100
Brazil	100	100	100	100	100	100	100	68	30	100	50
Chile	100	100	100	100	100	100	100	100	100	100	100
China	75	100	75	49	85.4	62.5	50	49	0	83.3	85
India	**100**	**50**	**81.5**	**74**	**100**	**87**	**26**	**59.6**	**63**	**83.7**	**100**
Indonesia	97.5	72	68.8	57	95	99	80	49	5	85	82.5
Korea,	100	100	100	49	85.4	100	100	79.6	39.5	100	100
Malaysia	70	85	100	39.5	30	49	49	100	65	90	65
Mexico	50	49	100	74.5	0	100	49	54.4	24.5	100	100
Philippines	40	40	75	40	65.7	60	100	40	0	100	100
Russian	100	100	100	100	100	100	49	79.6	75	100	100
South	74	100	100	70	100	100	100	100	60	100	100
Thailan	49	49	87.3	49	49	49	49	49	27.5	66	49

SOURCE: RESERVE BANK OF INDIA- http://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=2513

TABLE VI

Investing Across Borders – Key Indicators 2009

Country	Starting a Foreign Business			Accessing Industrial Land						Arbitrating Commercial Disputes		
Argentina	50	18	65	79.3	100	44.4	85	48	112	63.5	72.2	55.1
Brazil	166	17	62.5	85.7	100	33.3	75	66	180	84.9	45.7	57.2
Chile	29	11	63.2	85.7	100	33.3	80	23	93	94.9	62.8	74.8
China	99	18	63.7	96.4	n/a	50	52.5	59	129	94.9	76.1	60.2
India	**46**	**16**	**76.3**	**92.9**	**87.5**	**15.8**	**85**	**90**	**295**	**88.5**	**67.6**	**53.4**
Indonesia	86	12	52.6	78.6	n/a	21.4	85	35	81	95.4	81.8	41.3
Korea	17	11	71.1	85.7	100	68.4	70	10	53	94.9	81.9	70.2
Malaysia	14	11	60.5	78.5	87.5	23.1	85	96	355	94.9	81.8	66.7
Mexico	31	11	65.8	81.3	100	33.3	90	83	151	79.1	84.7	52.7
Philippines	80	17	57.9	68.8	n/a	23.5	87.5	16	n/a	95.4	87	33.7
Russian	31	10	68.4	85.7	100	44.4	90	62	231	71.6	76.1	76.6
South	65	8	-	84.5	100	47.4	85	42	304	82.4	79	94.5
Thailand	34	9	60.5	80.7	62.5	27.8	70	30	128	84.9	81.8	40.8

TABLE VII

Year (t)	FDI Equity inflow (X)	Total FDI flows (Y)	Estimated FDI flow (Y”)	Error (e_t) Y-Y”	$e_t - e_{t-1}$
2001	2463	4,029	5631.44	-1602.44	-
2002	4065	6130	7746.08	-1616.08	13.64
2003	2705	5035	5950.88	915.88	700.2
2004	2188	4322	5268.44	-946.44	-30.56
2005	3219	6051	6629.36	-578.36	368.08
2006	5540	8961	9693.08	-732.08	-153.72
2007	12492	22826	18869.72	3956.28	4688.36
2008	24575	34835	34819.28	15.72	-3940.56
2009	31396	41874	43823	-1949	-1964.72
2010	25834	37745	36481.16	1263.84	3212.84
2011	19427	34847	28023.92	6823.08	5559.24
2012	36504	46847	50565.56	-3718.56	-10541.64

$d = \Sigma (e_t-e_{t-1})^2/\Sigma e_t^2 = (-2088.84)^2/89214955.04 = 0.049$

TABLE VIII

ANOVA TABLE

SOURCE OF VARIATION	SUM OF SQUARES	DEGREE OF FREEDOM	MEAN OF SQUARE (MSE)	F-value
X_1	Σ Y” =8454783426	K-1=1	SSE/1=8454783426	
RESIDUAL	$\Sigma\ e^* = 81546566$	N-K=10	SSE/10=815465.66	1036.80
TOTAL	Σy^2=8536329992	N-1=11		$F_{0.05}$=4.96 with $var._1$=1 with $var._2$=10

*Σ e= Σy^2- Σ Y”

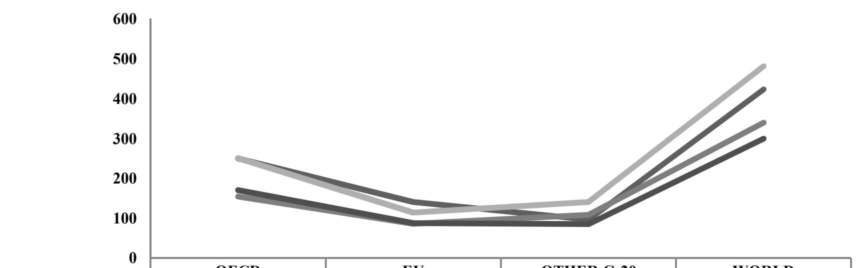
TABLE IX

TREND VALUES

Year (X)	Total FDI flows (Y) (US$)	TRENDVALUES (US$)
2001	4,029	735.64
2002	6130	3141.13
2003	5035	5937.125
2004	4322	9123.63
2005	6051	12700.64
2006	8961	16668.17
2007	22826	21026.2
2008	34835	25774.75
2009	41874	30913.8
2010	37745	36443.37
2011	34847	42363.445
2012	46847	48674.03
2013	48674.03	55375.125
2014	55375.125	62466.73
2015	62466.73	69948.845
2016	69948.845	77821.47

GRAPH 1

FDI INFLOW

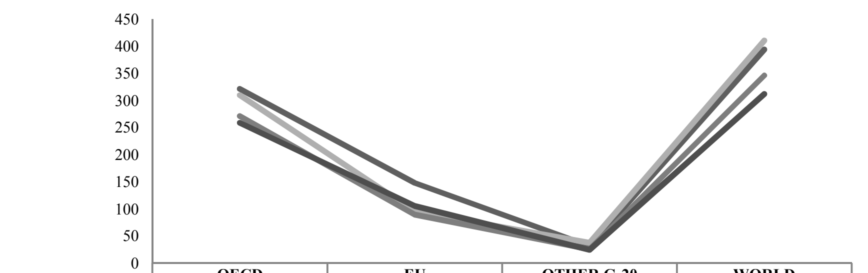


	OECD	EU	OTHER G-20	WORLD
Q3 (2011)	249.2	140.3	96.5	423.3
Q4 (2011)	250.3	113.5	140	480.6
Q1 (2012)	153.9	85.6	108.3	339.5
Q2 (2012)	169.7	87.1	84.9	299

SOURCE: http://www.oecd.org/daf/internationalinvestment/FDI%20in%20figures.pdf

GRAPH 2

FDI OUTFLOW



	OECD	EU	OTHER G-20	WORLD
Q3 (2011)	321	147.4	31.2	393.6
Q4 (2011)	309.5	95.2	37	410.2
Q1 (2012)	270.7	89	25.3	346.2
Q2 (2012)	258.6	105.2	24.2	311.8

SOURCE: http://www.oecd.org/daf/internationalinvestment/FDI%20in%20figures.pdf

GRAPH 3

TREND VALUES