

Global FDI Inflows in India: An Analysis

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Abstract: In this research article, an effort has been made to evaluate the Global (Foreign Direct Investment) FDI flows in India. The key analytical and policy question examined in this paper is whether global FDI need to be regulated to enhance their potential contribution to world welfare. Flow of FDI has grown faster over recent past. Higher flows of FDI in India from the world reflect a better economic environment in the presence of economic reforms and investment-oriented policies. The Researchers used One Way ANOVA (Scheffe Method) for fulfilling the objectives of the study. The country wise Analysis of FDI Inflow in India reveals that a maximum FDI inflow comes from Mauritius followed USA and Singapore.

Keywords: FDI, Global Inflows, Economic Development, ANOVA, Scheffe.

I. INTRODUCTION

In today's world, Foreign Direct Investment (FDI), as a strategic component of investment and is a need for India to achieve the economic reforms and to maintain the pace of growth and development of the economy. A high level of FDI inflows is an indicator of economic health of a country. The planners have been formulating such economic policies that can assure maximum flow of FDI in the country. There is a clear strong worldwide competition for attracting FDI.

With globalization and liberalization, the world economy has been opened for foreign investment and has created competition amongst the host countries for attraction of FDI as a means of acquiring long-term capital, technology, skills and access to international markets. Due to intensive competition among host countries for attraction of FDI, investors are focusing on countries with strong capabilities, lower labour cost and strong complementary factors for international productions, such as infrastructure. Further FDI has an impact on country's trade balance, improving labor skills and standards, optimum utilization of human abilities and natural resources, making industry globally competitive, opening up export markets, providing backward and forward linkages and access to international quality goods and services and augmenting employment opportunities. For all these reasons, FDI is regarded as an important vehicle for economic development particularly for developing economies. FDI flows are usually preferred over other forms of external finance because they are non-debt creating, non-volatile and their returns depend on the performance of the projects financed by the investors. Invest in India is an initiative to market, India as an investment destination all over the globe, to provide a networking platform to the Indian businesses at a global level and to provide information to the international investors about investment opportunities in India. It is the policy of the Government of India to attract and promote productive Foreign Direct Investment (FDI) from non-residents in activities which significantly contribute to industrialization and socio-economic development.

FDI is considered to be the most attractive type of capital flows for emerging economies as it is expect to bring latest technology and enhance production capabilities of the economy. The rate of FDI inflow in India was initially low due to regulatory policy framework but there is a sharp rise in investment from 2005 onwards because of the new policy [1]. The country has seen major global economic crises, a succession of coalition governments, an IT and outsourcing revolution and further fragmentation of its political landscape. During this period, India has remained open for business and has offered opportunities to global companies who have bet on its growth story [2]. Despite the turbulence from 2008 global financial crisis and recent policy uncertainty, India's long term drivers have remained attractive for international companies. Its growth of middle class consumers will continue to attract both at first-time, as well as in serial acquirers of

more companies looking to capture a piece of the market which increases the FDI flows in India[3]. The road to foreign direct investment (FDI) recovery is bumpy. Global FDI fell by 18 per cent to \$1.35 trillion in 2012. But India's FDI inflows have increased from 3.3 billion \$ in 2001 to 19.8 billion \$ in 2013. The recovery will take longer than expected, mostly because of global economic fragility and policy uncertainty [4]. Foreign direct investment in India has increased 35 per cent to USD 13.6 billion during the first half of 2013 with merger and acquisitions accounting for the bulk of inflows, says an UNCTAD report, In the beginning of 2014, India has not seen negative FDI flows for Q1 FY14 net FDI inflows were \$ 6.5 billion[5]. Foreign direct investment refers to building new facilities, reinvesting profits earned from overseas operations and intra company loans. So Mergers and acquisitions is a successful strategy for investment [6].

II. REVIEW OF LITERATURE

Singh, Gurmeet and Paul, Justin (2014) [7] analyzed the trends and pattern of FDI in India. They examined the structure of IFDI in India in the past 21 years (1990-2012) data was collected from various published sources. They concluded that GDP, OFDI and Export have positive significant effect on IFDI in India. On the other hand, the import was not significant in determining the IFDI in the country. It was found that developing nations like India are able to attract IFDI on par with the developed countries while their overseas investment (FDI outflow) is far lesser than the developed countries.

Nayak, Ranjan Kumar (2013)[8] has examined the growth patterns and changing nature of Indian inward Foreign Direct Investment, with an emphasis on the post liberalization period, since FDI, along with trade, has been an important mechanism which was brought about a greater integration of Indian economy with world economy. Mahmood, Haider and Chaudhary, A. R. (2012) [9] evaluated the impact of sector specific FDI on sector-specific labor productivity in Pakistan. They used the data of the primary, secondary and tertiary sectors and data is taken from 1972 to 2010 for analysis. Their results showed that the long-run relationships exist in the labour productivity model of all sectors. The short-run relationship exists in case of the secondary sector labour productivity model. The short-run relationships do not exist in case of primary and tertiary sector labor productivity models.

Mahanta, Devajit (2012) [10] tried to find out how FDI seen as an important economic catalyst of Indian economic growth by stimulating domestic investment, increasing human capital formation and by facilitating the technology transfers. He concluded that Foreign Direct Investment (FDI) as a strategic component of investment is needed by India for its sustained 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 and D) etc.

Roy, Samrat (2012)[11] examined dynamics between economic growth and foreign direct investment for a selected group of Asian economies namely India, China, Singapore, Hong Kong, Malaysia, Indonesia, South Korea, Japan, Thailand and Philippines covering the period from 1975 to 2009. Finally, they concluded that the host governments should pursue selective policy on FDI requirements, if necessary. Their paper explored the short run and long run dynamics of economic growth versus investment among the selected Asian countries classified in terms of industrialisation experience.

Goel, Shashank et al. (2012) [12] revealed that with the initiation of new economic policy in 1991 and subsequent reforms process, India has witnessed a change in the flow and direction of foreign direct investment (FDI) into the country. They concluded that FDI is a significant factor influencing the level of economic growth in India. The results of Economic Growth Model and Foreign Direct Investment Model show that FDI plays a crucial role in enhancing the level of economic growth in the country. The positive sign of exchange rate variables depicts the appreciation of Indian Rupee in the international market. Singh Y., Bhatnagar A. (2011) [13] found after the comparative analysis of FDI in India and china that both enjoy healthy rates of economic growth but FDI inflow in china is higher than India. Khan A.Q. and Siddiqui Ahmad Tafeeque (2011) [14] studied the impact of FDI on Indian economy and a comparison with China and USA. The paper has also been ventured into carving out set of strategies to deal with the issues and problems in attracting FDI for promotion and growth of international trade. The double log model has been used to find elasticity between different factors in this paper. They also highlight the impact of FDI on employment. Agarwal G., and Khan M. A. (2011) [15] analyzed the Impact of FDI on GDP through Comparative Study of China and India and they found that 1% increase in FDI would result in 0.07% increase in GDP of China and 0.02% increase in GDP of India. We also found that China growth is more affected by FDI, than India's growth. Singh S., Singh M. (2011) [16] they examined the trend of FDI inflow to India, during 1970-2007 using time series data. Singh J. (2010)[17] analyzed Economic Reforms and Foreign Direct Investment in Indian Policy, Trends and Patterns in the context of increasing competition among nations and sub

national entities to attract Foreign Direct Investment (FDI) and suggest that the FDI inflows, in general, show an increasing trend during the post-reform period.

Balasubramanyam V.N and Sapsford David (2007)[18] found that India may not require increased FDI because of the structure and composition of India's manufacturing, service sectors and her endowments of human capital. The optimum level of FDI, which generates substantial spillovers, enhances learning on the job, and contributes to the growth of productivity, is likely to be much lower in India than in other developing countries including China. The country may need much larger volumes of FDI than it currently attracts if it were to attain growth rates in excess of 10 per cent per annum. Finally, they concluded that the country is now in a position to unbundle the FDI package effectively and rely on sources other than FDI for its requirements of capital. Ramkishan S. Rajan (2005) [19] stated that the Global Environment was characterized by an intense "Global Race" for FDI. Hence, FDI policy intervention ought not to be sectorally biased. Instead, intervention ought to focus on improving the host country's general capability to benefit from FDI by improving the quality of the labor force and infrastructure in a country, develop local skills, technology and local learning, and ensure a stable and conducive overall macroeconomic and regulatory environment. Sandeep Kapur (2005) [20] observed that the economic reforms of 1991 opened the Indian economy for foreign players. For FDIs, India has now become a hot destination because of its vast potential. The Indian investment setting is constantly changing and the country has become the third most preferred destination for investors after China and US. P.V. Sharma (2005) [21] concluded that China and India have a commanding lead in attracting FDI compared to other Latin American countries. There was a continuous reduction in the gap between the FDI flow in developed and developing countries globally. But compared to India, China is having an edge over India in attracting more FDI. A study report by UNCTAD expects a rise in the FDI flow to India if the government continues with the economic reforms with a commitment to attract more FDI. Sumit K. Majumdar (2005) [22] pointed out that Foreign Direct Investment flows in a country only when there is a competitive advantage for firms. Hence, to make India competitive a grassroots had reform in bureaucratic processes is one of the most important steps to be taken by the Government of India. A. Srujan (2005)[23] studied the "Emerging Trends in FDI" and observed that Foreign Direct Investment (FDI) has evolved as a vital resource for the economic development of different countries could have been due to the factors like global economic trends, liberalization activities and stock market cycles within the different regions and countries. Kulwinder Singh (2005) [24] explored the uneven beginnings of FDI in India and examined the developments (economic and political) relating to the trends in two sectors: industry and infrastructure. He concluded that the impact of the reforms in India on the policy environment for FDI presents a mixed picture.

H. Saranga (2005) [25] observed that the change of Intellectual Property Protection (IPP) from a softer process patenting to a stronger product patenting in Indian Pharmaceutical Industry (IPI) is attracting many global drug manufacturers to establish their production units in India, which is the fourth largest producer of pharmaceuticals in the world. He further studied that how various Indian Pharmaceutical Industries with different business strategies are competing well and with meeting the challenges of a dynamic Business Environment by using Data Envelopment Analysis (DEA).

Pradhan R. P. (2005) [26] found that during the early nineties, domestic appliances, finance, food and dairy products, were important sectors attracted FDI but in the latter half of the nineties service sector and computers have shown an increasing trend. Then, it can be concluded that there has been substantial sectorialwise diversification.

Kumar, Nagesh (2005) [27] examined the trend and patterns in FDI inflows during the 1990s and found that magnitude of FDI inflows has increased into service sector and soft technology consumer goods industries and the share or manufacturing and technology intensive sectors has gone down as against the East Asian countries. He observed that FDI was allowed in almost all sectors, engineering, services, electronics and electrical equipments, computers etc. except where the sector policy does not permit FDI beyond a ceiling. Singh and Kulkarni (2006) [28] highlighted in detail the increasing role of FDI in the economic development of a developing country like India. The main findings were that total inflow of FDI is short of the expected target, the SEZs should be developed as the most competitive destination for export related FDI in the world and infrastructure development.

S. Majumder (2006) [29] pointed out that the Government of India is very much invested in the dual Telecommunication, Issuance, Finance, Banking, Retail Trade and Real Estate. But the Indian investors may not have the financial strength to make the large investments in these sectors. Hence, India has encouraged Foreign Direct Investment in private sector as well as public sector through globalization policy. He further quoted the statement of George Bush, US President who said that India should lift the cap on foreign investments, make rules transparent, continue reducing its tariffs and open the

market for American agricultural products. Nirupam Bajpai and Jeffrey D. Sachs (2006) [30] attempted to identify the issues and problems associated with India's current FDI regimes, and more importantly the other associated factors responsible for India's unattractiveness as an investment location. The conclusion of the study is that a restricted FDI regime, high import tariffs, exit barriers for firms, stringent labor laws, poor quality infrastructure, centralized decision making processes, and a very limited scale of export processing zones make India an unattractive investment location. S. Majumder (2006) [31] has observed that India did not offer any special incentive to foreign investors in export-oriented industries. It merely provided some duty exemption schemes, subject to export obligations while China being able to attract foreign investor, to accelerate it. Kamlesh Gabhar (2006) [32] pointed out that Foreign Direct Investment in India, scope of investment in Indian companies and various collaborations merges, acquisition and joint ventures were the results of liberalized economy policy of India. Sahoo, Pravakar (2006) [33] revealed that All five South Asian countries (India, Pakistan, Bangladesh, Sri Lanka and Nepal) have been following consistent economic reform policy measures emphasizing the market economy and aimed at integrating their economies with the rest of the world. He concluded that FDI and all its potential determinants have a long-run equilibrium relationship. The major determinants of FDI in South Asia are market size, labor force growth, infrastructure index and trade openness.

III. RESEARCH GAP

It is seen that, most of the works have been done on service, retail, Industrial sector, issues, challenges and their structural framework, while aspect Global FDI in India have not give due importance, which is needed to be investigated. The present study would go to investigate the detail of Global FDI with greater focus on the developing nation India.

Objectives of the Study

1. To analyze the overall Global FDI inflows in India since 2000.
2. To examine the Global FDI inflows in India across the selected countries.

Hypothesis of the Study

H₀ (Null Hypothesis) = There is no significant difference between FDI inflows in India across the selected countries.

Research Methodology

The study is an empirical work based on the secondary data collected from various sources for the fulfillment of truthfulness of analysis and interpretation and to ensure the quality of research study.

Collection of Data

The secondary data for the study have been collected from various secondary source of information such as periodicals, journals, relevant books, research papers, published theses, articles, news dailies and different websites are also consulted by the researcher for better referencing. The publications and review bulletins of regulatory bodies and institutions, such as RBI are also taken into reference for holding up the analysis. The major sources includes World Bank , UNCTAD, RBI Bulletins, Annual Reports and Handbook of statistics on Indian economy, Department of Industrial Policy and Promotion (DIPP), SIA Newsletter, Fact sheets, books, journals and the like.

Statistical Tools

The statistical tools that have been used for the analysis and interpretation are mean standard deviation, F- Test and Anova Scheffe Test has been done depending upon the objectives of the study.

IV. ANALYSIS AND INTERPRETATION

The results reveal that foreign direct investment (FDI) as international capital flows in which a firm in one country creates or expand a subsidiary in another. It involves not only a transfer of resource but also the acquisition of control. Since the 1990s, FDI has been a source of economic growth for different countries, believing that besides needed capital, FDI brings in several benefits. The most important benefit for a developing country like Mauritius, Singapore, UK, Japan, USA, Netherlands, is that FDI could create more employment. In addition, technology transfer is another benefit for the host countries. When the foreign factories are set up in their countries, they will expose to higher technology production

and efficiency in management. Once in future, they able to produce goods and services as competitive as foreigners do. Nevertheless, insufficient funds for investment are the main reason to seek FDI.

The rise of FDI in developed countries mainly in Mauritius showed a highest investment during the year 1991-02 amounting to Rs. 27446 crores and the second leading country USA showing an investment of Rs. 12248 crores. Beside the rest, inflow of FDI in countries showing low investment trend are Japan (Rs. 5099 crores), UK (Rs. 4263 crores), Netherlands (Rs. 3865 crores), Germany (Rs. 3455 crores), and lowest of all are South Korea (Rs. 2189 crores), Singapore (Rs. 1997 crores), France (Rs. 1947 crores) and Switzerland (Rs. 1200 crores) with negative trend for all the countries. In this group, the 2003-04 increase in FDI flows was no longer driven by Mauritius, Singapore, UK, Germany, France, Switzerland and South Korea which saw a decline of -31 per cent, -4 per cent, -52 per cent, -43 per cent, -67 per cent, -53 per cent and -41 per cent respectively further more when seen Japan it fell down by -82 per cent, but USA and Netherlands increased by 10 per cent and 169 per cent respectively). UAE, the region with the least investment continued its decline in FDI inflows.

FDI flows to developed countries rose by 97 per cent in Mauritius (Rs. 5141 crores), 378 per cent in Singapore (Rs 822 crores) as compared to the previous years, 59 per cent in Japan (Rs. 575 crores), 84 per cent in USA (Rs. 3055 crores), 78 per cent in Germany (Rs. 663 crores), and huge increment in Japan with 61 per cent (Rs. 925 crores), 71 per cent in Switzerland (Rs. 353 crores). Moreover, fluctuations appear to be driven by negative trend in different countries like -40 per cent in UK and -46 per cent in Netherlands for the year 2004-05. Looking forward, FDI flows rose moderately in 2005-06 in countries like Mauritius, Singapore, UK, USA, Netherlands, France and UAE. However, the downward trend in FDI projects in countries like Japan, Cyprus and Germany indicates that the risks and uncertainties for further FDI growth in 2006-07 remain in place.

In the year 2005-06, FDI estimate rose moderately in Mauritius with 123 per cent, by 48 per cent in Singapore, 925 per cent in Japan and further FDI flow rose in Germany by 103 per cent. However, the downward trend in FDI inflow was seen by countries like UK (-40 per cent, amounting to Rs.769 crores to Rs. 458 crores in 2004-05 and further grew to 154 per cent in 2005-06), USA (-28 per cent amounting to Rs.3055 crores to Rs. 2210 crores), Netherlands (-72 per cent amounting to Rs.1217 crores to Rs.340 crores), France (-85 per cent amounting to Rs.537 crores to Rs. 82 crores). Further Switzerland and South Korea showed the highest fluctuations inflow of FDI for the year 2004-05.

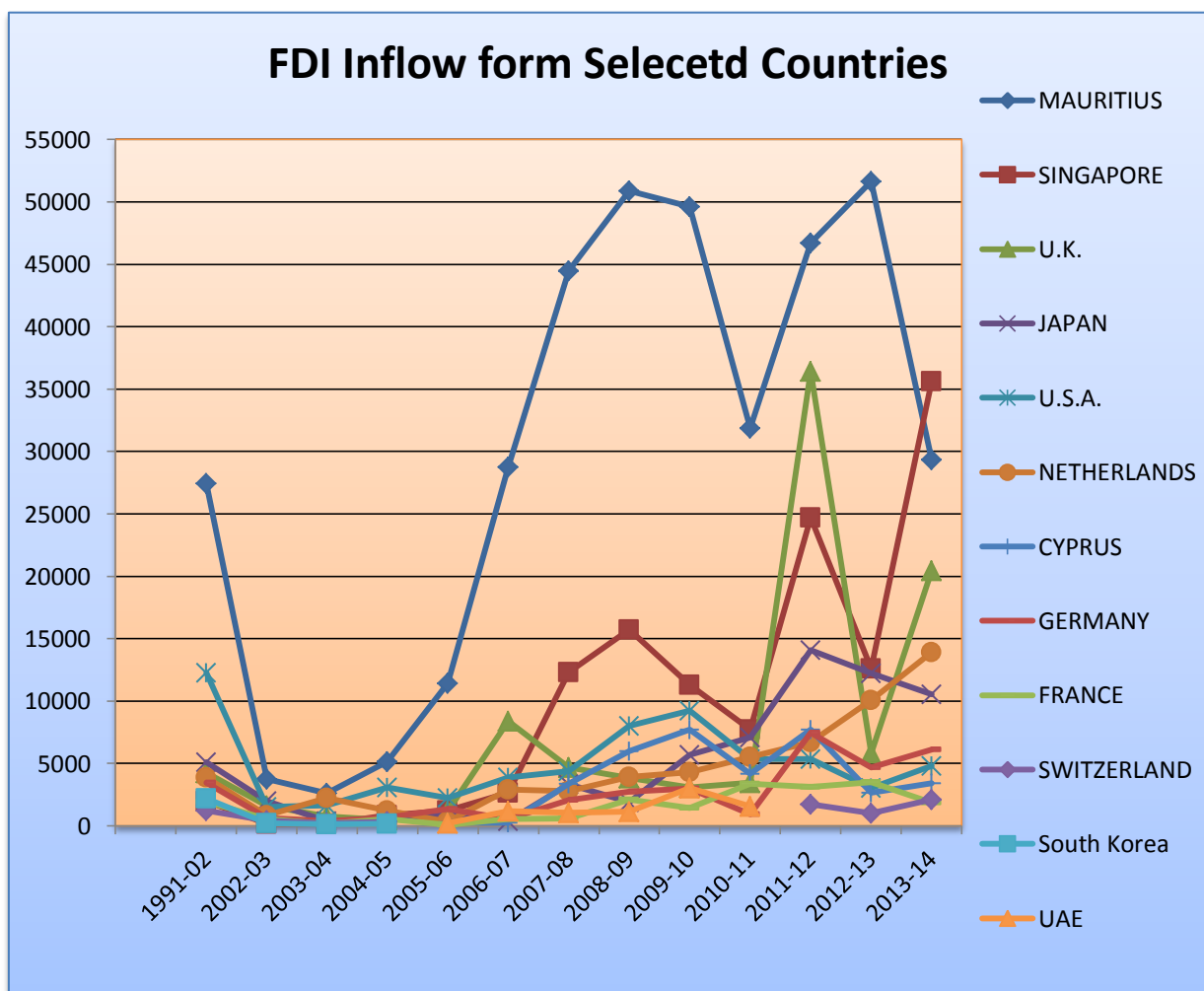
Year 2005-06 saw a moderate change in FDI inflow. Countries like Mauritius, Singapore, UK, USA and Germany showed a growth by 123 per cent, 48 per cent, 621 per cent, 75 per cent and 103 per cent respectively. While other showed negative trend of growth by -28 per cent in USA, -72 per cent in Netherland and -85 per cent in France. On the other hand, Switzerland, UAE and South Korea, had no investment inflow of FDI since last two years.

Mauritius shows a good trend when seen the precious year's growth of FDI inflow. Now, for the year 2007-08, it further grew by 55 per cent amounting from Rs.28759 crores in 2006-07 to Rs.44483 crores. Singapore, on the other hand, grew from Rs.2662 crores to Rs.12319, a huge growth trend, while USA, Netherlands, Cyprus, Germany, UAE and France grew FDI inflow moderately as compared to other countries. And countries like Japan showed a negative growth by -59 per cent amounting to Rs.925 crores to Rs.382 crores in 2006-07 (see figure 1). Year 2008-09 and 2009-10 was a huge year of fluctuations moderately inflow of FDI investment for almost all the countries. These two years showed a negative growth trend of FDI inflow in Mauritius, Singapore, UK, USA, Cyprus, Germany and UAE. Furthermore, next two years, 2010-11 and 2011-12, showed a moderate trend.

At the end of 2008-09, Mauritius had the biggest share (14 per cent) of Rs. 50899 crores FDI investment. It alone accounted for 151 per cent (Rs. 11441) of total investment, with further growth of 55 per cent in 2006-07 compared with a fluctuation of -2 per cent 2009-10. The main growth of FDI investment in Mauritius were Rs. 31855 crores (47per cent) in 2011-12. Singapore was the second most important location for FDI positions at the end of 2004-05, accounting for 378 per cent of Rs. 172 crores to Rs. 822 crores, the main activity being financial intermediation.

Traditionally, FDI was a phenomenon that primarily concerned highly developed economies. Developed countries still attract a higher share of world-wide FDI than developing countries. In recent years, however, the increase in FDI flows to developing countries turned out to be higher than the increase in FDI flows to developed countries. Average annual FDI flows to developing countries soared eight-fold.

In UK, the main location for FDI stocks accounting for almost Rs. 36428 crores, 961 per cent in 2011-12. In Japan, the main investment destination for FDI was in the years 2009-10 (Rs 5670 crores), 2010-11 (Rs 7063 crores), and 2011-12 (Rs 14089 crores). The United States thus maintained its position as the major FDI stocks holder, having invested, as of the end of 2011, mostly in the financial services sector, followed by manufacturing; one third of the latter was in the manufacture of petroleum, chemical, pharmaceutical, rubber and plastic products, and another third in the manufacture of food products, beverages and tobacco products. The Germany saw fluctuations with decline in investment in the years 1991-02 (Rs 3455 crores with growth rate -80 per cent), 2002-03 (Rs 684 crores with growth rate -42 per cent), 2005-06 (Rs 1345 crores with growth rate -60 per cent), 2009-10 (Rs 2980 crores with growth rate -70 per cent) and 2011-12 (Rs 7452 crores with growth rate -37 per cent) of total FDI inward stocks. Again at the end of 2012, the United States saw fluctuations with decline in investment in the years 2004-05 (Rs 3055 crores with growth rate -28 per cent), 2009-10 (Rs 9230 crores with growth rate -42 per cent), 2010-11 (Rs 5353 crores with growth rate 0 per cent) and 2011-12 (Rs 5347 crores with growth rate -43 per cent) of total FDI inward stocks. 2012-13 (Rs 12243 crores) and 2013-14 (Rs 10550 crores) showed negative growth of -13 per cent during the year 2012-13 for Japan. Similar to the ranking for FDI outward positions, Netherlands showing biggest FDI stock holder in the in recent years 2012, with stocks valued at Rs. 10054 crores and Rs. 13920 crores, 50 per cent more than at the end of 2013 are given in table 1 and 2.



Source: Table 1 and 2.

Figure 1: FDI inflows from the selected countries in India over the years from 1991-02 to 2013-14

Developing and transition economies continued to absorb half of global FDI inflows in 2011, though with a somewhat smaller share than in the previous year. FDI flows to developed countries– the principal driver of the dynamic rise of developing and transition economies – decelerated as the region suffered from the protracted crisis.

Table: 1- FDI flows in India from various countries along with percentage growth over previous year

	MAURITIUS	LNM AURI TIOUS		SINGAPORE		LNSI NGA PUR E	U.K.		LNU K	JA PAN		LNJ APA N	U.S. A.		LNU SA	NETHE RLAND S		LNNET HERLA ND
	Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%	
1991-02	27446		10.21998	1997		7.599401	4263		8.357728	5099		8.5368	12248		9.413118	3856		8.257386
2002-03	3766		8.233769	180		5.192957	1617		7.388328	1971		7.586296	1504		7.315884	836		6.728629
2003-04	2609	-30.72225	7.866722	172	-4.44444	5.147494	769	-52.443	6.645091	360	-81.7352	5.886104	1658	10.239362	7.413367	2247	168.7799	7.717351
2004-05	5141	97.048678	8.545003	822	377.907	6.71174	458	-40.442	6.126869	575	59.7222	6.35437	3055	84.258142	8.024535	1217	-45.8389	7.104144
2005-06	11441	122.54425	9.344959	1218	48.17518	7.104965	1164	154.148	7.059618	925	60.8696	6.829794	2210	-27.659574	7.700748	340	-72.06245	5.828946
2006-07	28759	151.36789	10.26671	2662	118.555	7.886833	8389	620.704	9.034677	382	-58.7027	5.945421	3861	74.705882	8.258681	2905	754.41176	7.974189
2007-08	44483	54.675058	10.70286	12319	362.7724	9.418898	4690	-44.093	8.453188	3336	773.298	8.112528	4377	13.364413	8.384119	2780	-4.302926	7.930206
2008-09	50899	14.423488	10.8376	15727	27.66458	9.663134	3840	-18.124	8.253228	1889	-43.3753	7.543803	8002	82.819283	8.987447	3922	41.079137	8.274357
2009-10	49633	-2.487279	10.81241	11295	-28.1808	9.332115	3094	-19.427	8.03722	5670	200.159	8.642944	9230	15.346163	9.130214	4283	9.2044875	8.362409
2010-11	31855	-35.81891	10.36895	7730	-31.5626	8.952864	3434	10.989	8.141481	7063	24.5679	8.862625	5353	-42.004334	8.585412	5501	28.438011	8.612685
2011-12	46710	46.633182	10.75171	24712	219.6895	10.11504	36428	960.804	10.50309	14089	99.4761	9.55315	5347	0.1120867	8.584291	6698	21.75968	8.809564
2012-13	51654	10.584457	10.85232	12594	-49.0369	9.440976	5797	-84.086	8.665096	12243	-13.1024	9.41271	3033	43.276604	8.017308	10054	50.104509	9.215726
2013-14	29360	-43.16026	10.28739	35625	182.8728	10.4808	20426	252.355	9.924564	10550	-13.8283	9.263881	4807	58.489944	8.477828	13920	38.452357	9.541082

Source: Compiled and Calculated Through Fact Sheet of FDI, Department of Industrial Policy and Promotion

Table: 2- FDI flows in India from various countries along with percentage growth over previous year

Year	CY PR US		LN CY PR US	GER M AN Y		LN GE RMA NY	FRAN CE		LN FR ANCE	SWIT ZERL AND		LN SW ITZ	South Korea		LN SK OR EA	UA E		LN UAE
	Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%		Rupees (in crore)	%	
1991-02				3455		8.147578	1947		7.574045	1200		7.090077	2189		7.6912			
2002-03				648		6.473891	534		6.280396	437		6.079933	188		5.236442			
2003-04				373	-42.4	5.921578	176	-67.0412	5.170484	207	-52.6316	5.332719	110	-41.48936	4.70048			
2004-05				663	77.7	6.496775	537	205.1136	6.285998	353	70.5314	5.866468	157	42.727273	5.056246			
2005-06	310		5.736572	1345	103	7.204149	82	-84.73	4.406719							219		5.389072
2006-07	266	-14.1935	5.583496	540	-59.9	6.291569	528	543.9024	6.269096							1174	436.073	7.068172
2007-08	3385	1172.556	8.127109	2075	284	7.637716	583	10.41667	6.368187							1039	-11.499	6.946014
2008-09	5983	76.75037	8.696677	2750	32.5	7.919356	2098	259.8628	7.64874							1133	9.04716	7.032624

2009-10	772 8	29.1 6597	8.9526 05	2980	8.36	7.9996 79	1437	- 31.506 2	7.2703 13							301 7	166. 284	8.01201 8
2010-11	417 1	- 46.0 274	8.3359 11	908	- 69.5	6.8112 44	3349	133.05 5	8.1164 17							156 9	- 47.9 95	7.35819 4
2011-12	772 2	85.1 3546	8.9518 29	7452	721	8.9162 38	3110	- 7.1364 6	8.0423 78	1728		7.4 547 2						
2012-13	265 8	- 65.5 789	7.8853 29	4684	- 37.1	8.4519 08	3487	12.122 19	8.1567 97	987		- 42. 881 9	6.8 946 7					
2013-14	340 1	27.9 5335	8.1318 25	6093	30.1	8.7148 96	1842	- 47.175 2	7.5186 07	2084	111 .14 49	7.6 420 44						

Source: Compiled and Calculated Through Fact Sheet of FDI, Department of Industrial Policy and Promotion

V. HYPOTHESIS TESTING

H_0 (Null Hypothesis) = There is no significant difference between FDI inflows in India across the selected countries.

Table 3: In Descriptive Statistics, the highest mean of FDI inflows from Mauritius is 9.9300 with standard deviation 1.06608. The mean for the FDI inflows from U.S.A is 8.3302 along with Singapore is 8.2344 followed by Mauritius. The standard deviation for the U.S.A is 0.63647 along with Singapore is 1.78190. The lowest mean of FDI inflows are from South Korea and Switzerland are 5.6711 and 6.6229. The standard deviation for the FDI inflows for South Korea and Switzerland are 1.36503 and .87123. The mean of FDI inflows in India from UK, Japan, Netherland and France are 8.1992, 7.8870, 8.0274 and 6.8545. The standard deviations for the FDI inflows are 1.22434, 1.30525, 1.01508, and 1.17337. When 13 years of data undertaken. The mean of FDI inflows in India from Cyprus and Germany are 7.8224 and 7.4605 with standard deviations are 1.28145 and .99182.

Table: 3 Descriptive statistics of FDI inflows of selected countries in India.

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
MAURITIUS	13	9.9300	1.06608	.29568	9.2858	10.5743	7.87	10.85
SINGAPORE	13	8.2344	1.78190	.49421	7.1576	9.3112	5.15	10.48
U.K.	13	8.1992	1.22434	.33957	7.4594	8.9391	6.13	10.50
JAPAN	13	7.8870	1.30525	.36201	7.0982	8.6757	5.89	9.55
U.S.A.	13	8.3302	.63647	.17653	7.9456	8.7148	7.32	9.41
NETHERLANDS	13	8.0274	1.01508	.28153	7.4140	8.6408	5.83	9.54
CYPRUS	9	7.8224	1.28145	.42715	6.8374	8.8074	5.58	8.95
GERMANY	13	7.4605	.99182	.27508	6.8612	8.0599	5.92	8.92
FRANCE	13	6.8545	1.17337	.32543	6.1454	7.5635	4.41	8.16
SWITZERLAND	7	6.6229	.87123	.32929	5.8172	7.4287	5.33	7.64
South Korea	4	5.6711	1.36503	.68251	3.4990	7.8432	4.70	7.69
UAE	6	6.9677	.86602	.35355	6.0589	7.8765	5.39	8.01
Total	130	7.8866	1.45959	.12801	7.6333	8.1399	4.41	10.85

Source: Table 1 and 2

Table: 4 shows that the Levene's test for Homogeneity of variance with a significance value of .032 indicates that variances in FDI from selected countries are significantly different from each other. Note that above the selected countries a narrow variance for U.S.A of (.63647)² to much wider variance of (1.78190)² for Singapore.

Table 4: Test of Homogeneity of Variances FDI inflows by various or selected countries in India

Levene Statistic	df1	df2	Sig.
2.017	11	118	.032

Source: Table 1 and 2

The key interpretative element of interest in the original ANOVA table 5 that, base on $p=0.00$ which is significantly difference (or differences) exist within comparison of FDI inflow in India among selected countries. The results reveals that mean difference between the selected countries of FDI inflows in India are statistically significant.

Table 5: Result of ANOVA by analyzing FDI inflows by various or selected countries in India

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	112.067	11	10.188	7.386	.000
Within Groups	162.755	118	1.379		
Total	274.822	129			

Source: Table 1 and 2

The mean value (FDI inflows) for each of the 12 countries is listed in the multiple comparison (see appendix1), the result reveals that there are only one pair of group whose mean are significantly differ at the ($P < 0.05$ level) from each other. According to the data, the result reveals that only Mauritius in each group are significantly differ from each other.

The result shows that mean of FDI from Mauritius are statistically significant differ than other. Note associative significance value is 0.00. The fact that overall ANOVA result show significantly difference ($P= 0.00$). The output for the Scheffe post hoc test is presented in table 7. The result from the above table shows that no countries are significantly differ, the only Mauritius group significantly different.

Table 6: Homogeneous Subsets of FDI Inflows By Various Or Selected Countries In India (Scheffe Method)

Countriesgroup	N	Subset for alpha = 0.05		
		1	2	3
South Korea	4	5.6711		
SWITZERLAND	7	6.6229	6.6229	
FRANCE	13	6.8545	6.8545	
UAE	6	6.9677	6.9677	
GERMANY	13	7.4605	7.4605	
CYPRUS	9	7.8224	7.8224	7.8224
JAPAN	13	7.8870	7.8870	7.8870
NETHERLANDS	13	8.0274	8.0274	8.0274
U.K.	13		8.1992	8.1992
SINGAPORE	13		8.2344	8.2344
U.S.A.	13		8.3302	8.3302
MAURITIUS	13			9.9300
Sig.		.080	.546	.198

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.331.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Source: Table 1 and 2

VI. CONCLUSIONS

It can be observed from the above analysis that the foreign direct investment in India comes across the world. The main points of the analyses were that the FDI inflows from different countries in India are statistically significant. The results of the study reveal that Mauritius emerged as the most dominant country of FDI in India followed by U.S.A, Singapore, UK, Netherland and Japan. The Anova table shows that the mean differences between the across the selected countries of FDI inflows in India are statistically significant at the p-value is 0.00 which is less than 0.05 at 5% level of significance The FDI inflows are significantly differ across the selected country, only Mauritius has significantly FDI in India. The countries like Singapore, UK, Japan also have high FDI inflows in India but statistically not significant.

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APPENDIX - 1

Multiple Comparisons FDI inflows by various or selected countries in India (Scheffe method)

(I) Countriesgroup	(J) Countriesgroup	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
MAURITIUS	SINGAPORE	1.69563	.46065	.274	-.3940	3.7852
	U.K.	1.73078	.46065	.242	-.3588	3.8204
	JAPAN	2.04307	.46065	.063	-.0465	4.1327
	U.S.A.	1.59980	.46065	.370	-.4898	3.6894
	NETHERLANDS	1.90259	.46065	.123	-.1870	3.9922
	CYPRUS	2.10766	.50927	.121	-.2025	4.4178
	GERMANY	2.46952*	.46065	.005	.3799	4.5591
	FRANCE	3.07555*	.46065	.000	.9859	5.1652
	SWITZERLAND	3.30708*	.55058	.001	.8095	5.8046
	South Korea	4.25894*	.67150	.000	1.2128	7.3050
UAE	2.96235*	.57964	.011	.3330	5.5917	
SINGAPORE	MAURITIUS	-1.69563	.46065	.274	-3.7852	.3940
	U.K.	.03516	.46065	1.000	-2.0545	2.1248
	JAPAN	.34745	.46065	1.000	-1.7422	2.4371
	U.S.A.	-.09583	.46065	1.000	-2.1854	1.9938
	NETHERLANDS	.20697	.46065	1.000	-1.8826	2.2966

	CYPRUS	.41203	.50927	1.000	-1.8981	2.7222
	GERMANY	.77390	.46065	.992	-1.3157	2.8635
	FRANCE	1.37993	.46065	.624	-.7097	3.4695
	SWITZERLAND	1.61145	.55058	.661	-.8861	4.1090
	South Korea	2.56331	.67150	.219	-.4828	5.6094
	UAE	1.26672	.57964	.938	-1.3626	3.8961
U.K.	MAURITIUS	-1.73078	.46065	.242	-3.8204	.3588
	SINGAPORE	-.03516	.46065	1.000	-2.1248	2.0545
	JAPAN	.31229	.46065	1.000	-1.7773	2.4019
	U.S.A.	-.13098	.46065	1.000	-2.2206	1.9586
	NETHERLANDS	.17181	.46065	1.000	-1.9178	2.2614
	CYPRUS	.37687	.50927	1.000	-1.9333	2.6870
	GERMANY	.73874	.46065	.995	-1.3509	2.8283
	FRANCE	1.34477	.46065	.664	-.7448	3.4344
	SWITZERLAND	1.57630	.55058	.693	-.9213	4.0739
	South Korea	2.52815	.67150	.239	-.5180	5.5743
	UAE	1.23156	.57964	.949	-1.3978	3.8609
JAPAN	MAURITIUS	-2.04307	.46065	.063	-4.1327	.0465
	SINGAPORE	-.34745	.46065	1.000	-2.4371	1.7422
	U.K.	-.31229	.46065	1.000	-2.4019	1.7773
	U.S.A.	-.44327	.46065	1.000	-2.5329	1.6463
	NETHERLANDS	-.14048	.46065	1.000	-2.2301	1.9491
	CYPRUS	.06458	.50927	1.000	-2.2456	2.3747
	GERMANY	.42645	.46065	1.000	-1.6632	2.5161
	FRANCE	1.03248	.46065	.926	-1.0571	3.1221
	SWITZERLAND	1.26401	.55058	.913	-1.2336	3.7616
	South Korea	2.21586	.67150	.460	-.8302	5.2620
	UAE	.91927	.57964	.995	-1.7101	3.5486
U.S.A.	MAURITIUS	-1.59980	.46065	.370	-3.6894	.4898
	SINGAPORE	.09583	.46065	1.000	-1.9938	2.1854
	U.K.	.13098	.46065	1.000	-1.9586	2.2206
	JAPAN	.44327	.46065	1.000	-1.6463	2.5329
	NETHERLANDS	.30279	.46065	1.000	-1.7868	2.3924
	CYPRUS	.50785	.50927	1.000	-1.8023	2.8180
	GERMANY	.86972	.46065	.979	-1.2199	2.9593
	FRANCE	1.47575	.46065	.512	-.6139	3.5654
	SWITZERLAND	1.70728	.55058	.568	-.7903	4.2048
	South Korea	2.65914	.67150	.170	-.3870	5.7052
	UAE	1.36254	.57964	.898	-1.2668	3.9919
NETHERLANDS	MAURITIUS	-1.90259	.46065	.123	-3.9922	.1870
	SINGAPORE	-.20697	.46065	1.000	-2.2966	1.8826
	U.K.	-.17181	.46065	1.000	-2.2614	1.9178
	JAPAN	.14048	.46065	1.000	-1.9491	2.2301
	U.S.A.	-.30279	.46065	1.000	-2.3924	1.7868
	CYPRUS	.20506	.50927	1.000	-2.1051	2.5152
	GERMANY	.56693	.46065	1.000	-1.5227	2.6565
	FRANCE	1.17296	.46065	.834	-.9166	3.2626
	SWITZERLAND	1.40449	.55058	.833	-1.0931	3.9021
	South Korea	2.35634	.67150	.352	-.6898	5.4024
	UAE	1.05975	.57964	.984	-1.5696	3.6891

CYPRUS	MAURITIUS	-2.10766	.50927	.121	-4.4178	.2025
	SINGAPORE	-.41203	.50927	1.000	-2.7222	1.8981
	U.K.	-.37687	.50927	1.000	-2.6870	1.9333
	JAPAN	-.06458	.50927	1.000	-2.3747	2.2456
	U.S.A.	-.50785	.50927	1.000	-2.8180	1.8023
	NETHERLANDS	-.20506	.50927	1.000	-2.5152	2.1051
	GERMANY	.36187	.50927	1.000	-1.9483	2.6720
	FRANCE	.96790	.50927	.978	-1.3423	3.2780
	SWITZERLAND	1.19943	.59186	.964	-1.4854	3.8842
	South Korea	2.15128	.70574	.596	-1.0501	5.3527
	UAE	.85469	.61898	.999	-1.9531	3.6625
GERMANY	MAURITIUS	-2.46952*	.46065	.005	-4.5591	-.3799
	SINGAPORE	-.77390	.46065	.992	-2.8635	1.3157
	U.K.	-.73874	.46065	.995	-2.8283	1.3509
	JAPAN	-.42645	.46065	1.000	-2.5161	1.6632
	U.S.A.	-.86972	.46065	.979	-2.9593	1.2199
	NETHERLANDS	-.56693	.46065	1.000	-2.6565	1.5227
	CYPRUS	-.36187	.50927	1.000	-2.6720	1.9483
	FRANCE	.60603	.46065	.999	-1.4836	2.6956
	SWITZERLAND	.83756	.55058	.997	-1.6600	3.3351
	South Korea	1.78941	.67150	.786	-1.2567	4.8355
	UAE	.49282	.57964	1.000	-2.1365	3.1222
FRANCE	MAURITIUS	-3.07555*	.46065	.000	-5.1652	-.9859
	SINGAPORE	-1.37993	.46065	.624	-3.4695	.7097
	U.K.	-1.34477	.46065	.664	-3.4344	.7448
	JAPAN	-1.03248	.46065	.926	-3.1221	1.0571
	U.S.A.	-1.47575	.46065	.512	-3.5654	.6139
	NETHERLANDS	-1.17296	.46065	.834	-3.2626	.9166
	CYPRUS	-.96790	.50927	.978	-3.2780	1.3423
	GERMANY	-.60603	.46065	.999	-2.6956	1.4836
	SWITZERLAND	.23153	.55058	1.000	-2.2660	2.7291
	South Korea	1.18338	.67150	.988	-1.8627	4.2295
	UAE	-.11321	.57964	1.000	-2.7426	2.5162
SWITZERLAND	MAURITIUS	-3.30708*	.55058	.001	-5.8046	-.8095
	SINGAPORE	-1.61145	.55058	.661	-4.1090	.8861
	U.K.	-1.57630	.55058	.693	-4.0739	.9213
	JAPAN	-1.26401	.55058	.913	-3.7616	1.2336
	U.S.A.	-1.70728	.55058	.568	-4.2048	.7903
	NETHERLANDS	-1.40449	.55058	.833	-3.9021	1.0931
	CYPRUS	-1.19943	.59186	.964	-3.8842	1.4854
	GERMANY	-.83756	.55058	.997	-3.3351	1.6600
	FRANCE	-.23153	.55058	1.000	-2.7291	2.2660
	South Korea	.95186	.73611	.999	-2.3873	4.2910
	UAE	-.34474	.65339	1.000	-3.3087	2.6192
South Korea	MAURITIUS	-4.25894*	.67150	.000	-7.3050	-1.2128
	SINGAPORE	-2.56331	.67150	.219	-5.6094	.4828
	U.K.	-2.52815	.67150	.239	-5.5743	.5180
	JAPAN	-2.21586	.67150	.460	-5.2620	.8302
	U.S.A.	-2.65914	.67150	.170	-5.7052	.3870
	NETHERLANDS	-2.35634	.67150	.352	-5.4024	.6898

	CYPRUS	-2.15128	.70574	.596	-5.3527	1.0501
	GERMANY	-1.78941	.67150	.786	-4.8355	1.2567
	FRANCE	-1.18338	.67150	.988	-4.2295	1.8627
	SWITZERLAND	-.95186	.73611	.999	-4.2910	2.3873
	UAE	-1.29659	.75809	.991	-4.7355	2.1423
UAE	MAURITIUS	-2.96235*	.57964	.011	-5.5917	-.3330
	SINGAPORE	-1.26672	.57964	.938	-3.8961	1.3626
	U.K.	-1.23156	.57964	.949	-3.8609	1.3978
	JAPAN	-.91927	.57964	.995	-3.5486	1.7101
	U.S.A.	-1.36254	.57964	.898	-3.9919	1.2668
	NETHERLANDS	-1.05975	.57964	.984	-3.6891	1.5696
	CYPRUS	-.85469	.61898	.999	-3.6625	1.9531
	GERMANY	-.49282	.57964	1.000	-3.1222	2.1365
	FRANCE	.11321	.57964	1.000	-2.5162	2.7426
	SWITZERLAND	.34474	.65339	1.000	-2.6192	3.3087
	South Korea	1.29659	.75809	.991	-2.1423	4.7355

*. The mean difference is significant at the 0.05 level.

Source: Table 1 and 2.