



ANALYSIS OF FOREIGN DIRECT INVESTMENT (FDI) IN INDIA AND CHINA: A COMPARATIVE STUDY

Prof. Sibghat Ullah Farooqui*

Abstract: *This paper examines a comparative picture of the foreign Direct Investment (FDI) trend of India and China and provides a bilateral trend of FDI of both countries. The Findings of the study shows that bilateral FDI of India and china are not significantly differ, because the policy of china and India are strategic to each other and want to win the race of growing economy. However the FDI Inward and Outward are significantly differ, the analysis exhibits that china received more FDI from all over the world as compared to India and also outward Investment of china are well ahead as compared to India. It implies that foreign direct investment (FDI) has had a significant positive bearing on the Chinese economy and a noticeably more moderate effect on that of India. The economists and the planners opine alike that one of the ways for the development and growth of an economy is the steady and sustainable promotion and the growth of Foreign Direct Investment (FDI). It is said that FDI has to play a novel role in the world economy. The role of FDI has now transformed from a tool to solve the financial crisis to a modernizing force.*

Keywords: *Bilateral, Inward, Outward, FDI, China and India.*

*Department of commerce, Aligarh Muslim University, Aligarh, UttarPradesh, India



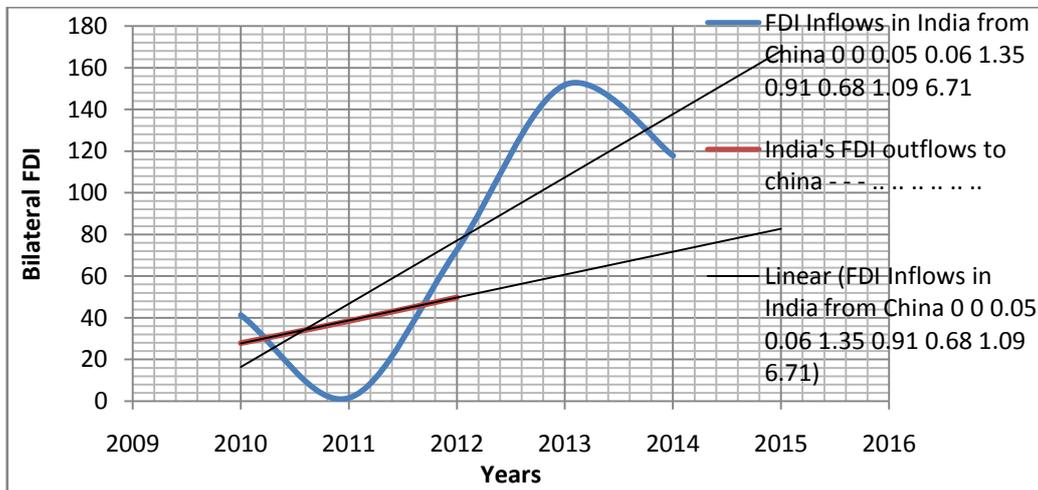
1. INTRODUCTION

In present situation, it is clear that India want to achieve rapid growth by attracting foreign direct investment (FDI) in a top priority. Foreign Direct Investment in India increased by 5035 USD Million in October of 2015. Foreign Direct Investment in India averaged 1110.40 USD Million from 1995 until 2015, reaching an all time high of 5670 USD Million in February of 2008 and a record low of -60 USD Million in February of 2014.¹ Foreign direct investment; net inflows (% of GDP) in India was last measured at 1.66 in 2014, according to the World Bank. Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. The two giants' India and China of Asia also moves to increase bilateral FDI which accelerate economic growth of both countries, (Chart 1) illustrate the comparative bilateral FDI of both countries. According to a new World Bank report, India lags behind China in terms of attracting FDI Inflows in the country, in spite of having high-tech industries and adept workforce. The main cause behind this drawback is that India is not skilled enough to adopt the technological advancements at a fast pace. FDI Inflows only contributes to 0.8 percent of India's GDP as compared to 3.5 percent of the same in China. India's high-tech industries claim for 2.3 percent of Gross Domestic Product whereas the high-tech industries in China contribute to around 7.9 percent in the GDP of the country. India did not open much of economic activities to the foreign players as compared to other developing nations except liberalizing trade and foreign investments.² However on the other hand foreign direct investment; a net inflow (% of GDP) in China was last measured at 3.76 in 2013, according to the World Bank. Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. (See Chart 2) exhibits the FDI inward in India and china for the last twenty four years. While when we compared it to the outflows, foreign direct investment; net outflows (% of GDP) from India was last measured at 0.47 in 2014. Foreign direct investment; net outflows (% of GDP) from China was last measured at 1.76 in 2013, according to the World Bank. (see Chart 3) depicts the FDI outward of India and china for last twenty four years. India acquired ninth slot in the top 10 countries attracting highest FDI



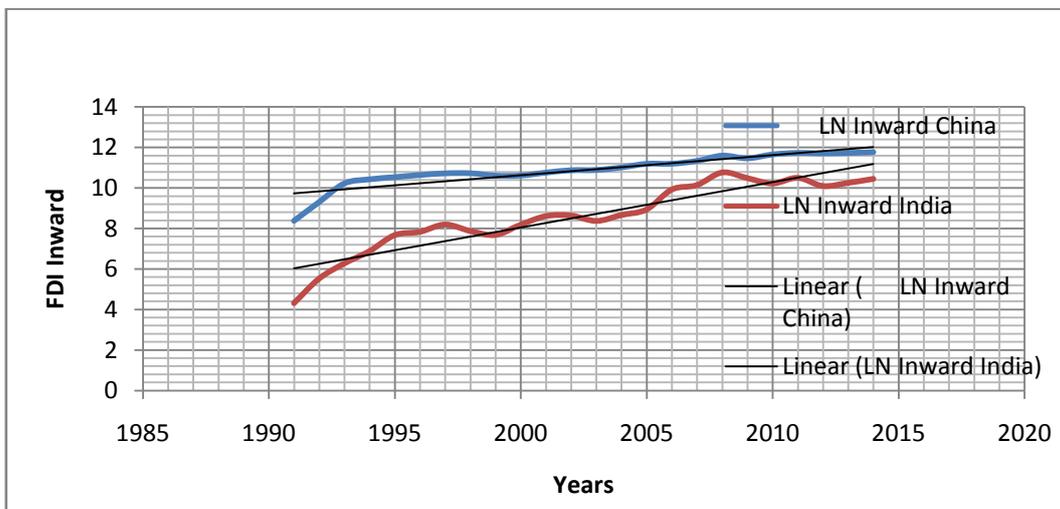
in 2014 as compared to 15th position last year. The report also mentioned that the FDI inflows to India are likely to exhibit an upward trend in 2015 on account of economic recovery. India also jumped 16 notches to 55 among 140 countries in the World Economic Forum’s Global Competitiveness Index that ranks countries on the basis of parameters such as institutions, macroeconomic environment, education, market size and infrastructure among others. India will require around US\$ 1 trillion in the 12th Five-Year Plan (2012–17), to fund infrastructure growth covering sectors such as highways, ports and airways. This would require support from FDI flows. During 2014, foreign investment was witnessed in sectors such as services, telecommunications, computer software and hardware, construction development, power, trading, and automobile, among others.³

Chart 1: Comparative Bilateral FDI between India and China



Source: Appendix 1

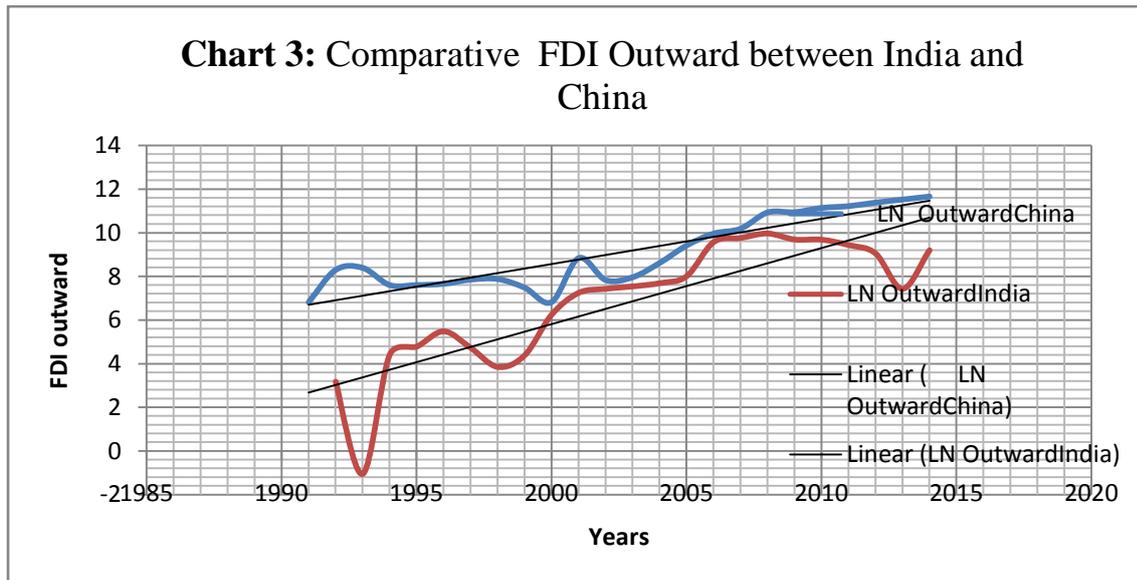
Chart 2: Comparative FDI Inward between India and China



Source: Appendix 2



Chart 3: Comparative FDI Outward between India and China



Source: Appendix 2

2. REVIEW OF LITERATURE

Virmani, Arvind (2002)⁴ observed that the emerging markets possess a lot of potential for Foreign Direct Investment (FDI). FDI in India is on the increase but the country has not experienced a rapid growth of FDI inflow. Theories of FDI suggest that firm size, profitability, trade, interest rate, economy and primary and secondary education in the next decade or so, and if we open our minds to the best and latest knowledge from all over the world. A competitive, wisely-regulated media, both print and electronic, has an important role to play in this process.

Rashmi Banga (2003)⁵ highlighted that the last two decades had witnessed an extensive growth in foreign direct investment (FDI) flows to developing countries. This had been due to an increase in competition amongst the developing countries to attract FDI, resulting in a rise in fiscal incentives offered by the host governments, removal of restrictions and signing of bilateral and regional investment agreements. Further she argued that fiscal incentives could not have any significant impact on aggregate FDI but the removal of restrictions attracted for. However, FDI is attracted to different selective policies. While lowering of restrictions attract FDI from developed countries, fiscal incentives and lower tariffs attract FDI from developing countries.

Naga Raj(2003)⁶ studied the trends in FDI in India in the 1990s and compared with China. The study raised some issues on the effects of FDI on domestic economy. Based on the



analytical discussion and comparative experience, the study concluded that a realistic foreign investment policy⁷ is required for attracting FDI in India as well as in China. **Gol (2003)**⁸ pointed out in his report that the 1990s had witnessed a sustained rise in annual inflow of FDI in India. It was grown from a rather small figure of \$0.129 billion in 1991 to \$3.557 billion in 1997-98 in actual terms. In fact the annual inflows of FDI during 1998-2000 were between \$2 and \$3 billion. The inflows of FDI again increased to a high of \$3.904 billion in 2001-02 and this abrupt increase in FDI inflows has achieved due to the liberalized economic policy of India.

Chandan, Chakraborty and Peter Nunnenkamp (2004)⁹ assessed the economic growth implications of FDI in India. It was found that the growth effects of FDI varied widely across sectors. FDI stocks and output are mutually reinforcing in the manufacturing sector. Most strikingly, they found only transitory effects of FDI on output in the service sector, which attracted the bulk of FDI in the post-reform era. These differences in the FDI-Growth relationship suggested that FDI is unlikely to work wonders in India if only remaining regulations were relaxed and still more industries opened up to FDI.

Ramkishan S. Rajan (2005)¹⁰ 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)**¹¹ observed that the economic reforms of 1991 opened the Indian economy for foreign players. For FDI, 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)¹² 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)**¹³ 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. If these micro-macro reforms are not put in place, India's ability to attract FDI will remain as limited as it is today. **K. Seethapathi and Arindam Banerjee (2005)**¹⁴ revealed that majority of the economics all over the world have opened their door to Foreign Direct Investment (FDI). The FDI extended a number of benefits to the host countries in terms of economic development, employment generation and technology transfers. At the same time there are some negative sides to the FDI flow like increased level of competition in the economy and concentration of investment in selected sectors. **A. Srujan (2005)**¹⁵ 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)¹⁶ 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. The industrial reforms had gone far, though they need to be supplemented by more infrastructure reforms, which are a critical missing link. **Pradhan R. P. (2005)**¹⁷ 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 sectoral wise diversification.

Kumar, Nagesh (2005)¹⁸ 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. **Balasubramanyam V.N and Sapsford David (2007)**¹⁹ 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 requirements of managerial and organizational skills of these industries are much lower than that of labour intensive industries such as those in China. Also, India has a large pool of well – Trained engineers and scientists capable of adapting and restructuring imported know – how to suit local factor and product market condition all of these factors promote effective spillovers of technology and know- how from foreign firms to locally own firms. 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. **Basu P., Nayak N.C, VaniArchana (2007)**²⁰ intended to study the qualitative shift in the FDI inflows in India in-depth in the last fourteen years. It was observed that the country is not only cost – effective but also hot destination for R&D activities. The study also found that R&D as a significant determining factor for FDI inflows for most of the industries in India. The software industry is showing intensive R&D activity, which has to be channelized in the form of export promotion for penetration in the new markets. The study also revealed strong negative influence of corporate tax on FDI inflows. To sum up, it can be said that large domestic market, cheap labour, human capital, are the main determinants of FDI inflows to India, however, its stringent labour laws, poor quality infrastructure, centralize decision making processes, and a very limited numbers of SEZs make India an unattractive investment location.

Rusko and Sasikumar (2007)²¹ examined that in the late 1950s, relations between India and China fraught with tension and conflict and the two countries have recently enjoyed a significant improvement in bilateral relations. The study explored the potential economic reasons for this rapprochement in Sino-Indian relationship. The study examined the economic factors undergirding this improvement in bilateral relations. The analysis showed that the first two economic mechanisms were very weak, under current conditions, to have brought about the current significant rapprochement. The concentration on general economic development and global economic integration by both countries is having a mostly positive effect on their bilateral relationship. **Basu and Datta (2007)**²² in their paper



analyzed the reasons behind persistent bilateral trade deficit of Bangladesh with India. It finds that the Bangladesh has export similarity with India and hence faces high export competitiveness. The lack of match between Bangladesh export and Indian import also generates a constraint of complementarity. The paper uses different trade-related indices like RCA and Cosine measures to examine the extent of trade similarity and complementarity in inter-industry bilateral trade. The possibility of intra-industry trade between the two countries is also studied with the help of G-L indices. Finally, an econometric time series analysis is done to identify the determinants of Bangladesh bilateral export and trade deficit. Export has been found to be of random nature and trade deficit has a perverse relation with exchange rate, driven by flow of remittances. The paper suggests that Bangladesh should pursue an appropriate exchange rate policy and aim at increased diversification in her export structure in order to avoid Dutch disease and to reduce the bilateral trade deficit. **Amita Batra (2007)**²³ in his article used an augmented gravity model equation has been used to analyze the world trade flows using a sample of 146 countries. The coefficients thus obtained are then used to predict trade potential for India. Ordinary Least Squares with cross-section data for the year 2000 have been used for estimation. The results show that all three traditional “gravity” effects are intuitively reasonable, with statistically significant t-statistic often exceeding 50 in absolute value. Alternative measures of gross national product (GNP) dollar value and purchasing power parity do not alter either the sign or significance of different explanatory variables. Historical and cultural similarities also impact positively upon bilateral trade. As concerns India's trade potential, the model shows that there is tremendous potential with China and trade can more than double if barriers and constraints are removed. Our estimates also indicate a huge potential, of the order of US\$6.5 billion, with Pakistan. **Bajpai and Sachs's (2009)**²⁴ attempted to identify the issues and problems associated with India's current FDI regime and more importantly the other associated factors responsible for India's unattractiveness as an investment location. They found that despite India offering a large domestic market, rule of law, low labor costs, and a well working democracy, her performance in attracting FDI flows has been far from satisfactory level.

Bajpai and Sachs's (2009)²⁵ attempted to identify the issues and problems associated with India's current FDI regime and more importantly the other associated factors responsible for



India's unattractiveness as an investment location. They found that despite India offering a large domestic market, rule of law, low labor costs, and a well working democracy, her performance in attracting FDI flows has been far from satisfactory level. **Singh J. (2010)**²⁶ 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.

Khan A.Q. and Siddiqui Ahmad Taufeeque (2011)²⁷ studied the impact of FDI on Indian economy and a comparison with China & USA. The paper has also been ventured into carving out set of strategies to deal with the issues & problems in attracting FDI for promotion & growth of international trade. The double log model has been used to find elasticity between different factors in their paper. They also highlight the impact of FDI on employment. They discussed that FDI helps in boosting growth of GDP a country.

Bhanagade D.B, Shah A. Pallavi (2011)²⁸ examined in their paper that the impact of FDI on Indian Economy where they also emphasize on the investments, sectors attracting highest FDI inflows and FDI leads to Generation of Employment opportunities. Therefore the growth of inflow of FDI would lead to positive growth of Gross capital formation. In India, the growth of GDP is largely influenced by FDI.

Chaturvedilla (2011)²⁹ in his paper, analyze the FDI inflows with special reference to sector wise inflows in India. The paper also explored the sector wise distribution of FDI in order to know the dominating sector which has attracted the major share of FDI in India. And to find out the correlation between FDI and Economic Development, It reveals that there is high degree of significance between FDI and economic development. **Agarwal G., and Khan M. A. (2011)**³⁰ 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. They found that China growth is more affected by FDI, than India's growth.

Singh S., Singh M. (2011)³¹ they examined the trend of FDI inflow to India, during 1970–2007 using time series data. **Sirari, Singh Arjun and Bohra, Singh Narendra (2011)**³² described that FDI is a tool for economic growth through its strengthening of domestic capital, productivity and employment. FDI also played a vital role in the up gradation of



technology, skills and managerial capabilities in various sectors of the economy. They attempted to analyze significance of the FDI Inflows in Indian service sector since 1991 and relating the growth of service sector FDI in generation of employment in terms of skilled and unskilled. They observed that at the sectoral level of the Indian economy, FDI has helped to raise the output, productivity and employment in some sectors especially in service sector. Indian service sector is generating the proper employment options for skilled worker with high perks. **Rajalakshmi, K. and Ramachandran, T. (2011)**³³ revealed that FDI Inflows to Automobile Industry have been at an increasing rate as India has witnessed a major economic liberalization over the years in terms of various industries. The automobile sector in India is growing by 18 percent per year. 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 centers. The automobile sector in India ranks third in manufacturing three wheelers and second in manufacturing of two wheelers. They investigated countries like Mauritius (mainly routed from developed countries), USA, Japan, UK, Germany, the Netherlands and South Korea. They concluded that FDI inflows have shown significant growth in the post liberalization period. The compound annual growth rate of Actual FDI inflows during this period comes out to be as high as 29.56 percent. The analysis of structure of FDI in India revealed that after liberalization there definitely has been a shift in favor of service sector and a steep fall in the share of manufacturing sector. However, this trend matches the trend of change in the structure of FDI inflows to the developing countries and even the world. **Ray, Sarbapriya.**³⁴ (2012) attempted to analyze the causal relationship between Foreign Direct Investment (FDI) and economic growth in India and tries to analyze and empirically estimate the effect of FDI on economic growth in India, using the co-integration approach for the period, 1990-91 to 2010-11. The empirical analysis on basis of ordinary Least Square Method suggests that there is positive relationship between foreign direct investment (FDI) and GDP and vice versa. She found that FDI has not contributed much to the economic growth in India for the time period 1990-91 to 2010-11, therefore it is imperative for the government of India to make a policy for attracting FDI in such a way that it should be more growth enhancing than growth retarding. Moreover, despite the tremendous potential of FDI in economic development, it



does not provide answers to all developmental problems. Public policies need to be in place to support the poorer segments of society.

Rajput, Namita et al.³⁵ (2012) analyzed the trends of Inflows during 1991-2011 in India and tried to know about the global scenario and examined the relationship of liberalized regime pursued by the countries with the level of FDI stock. Their study would give more insights about the policy framework to be followed by the countries to increase the flow of FDI inflows especially in the developing countries as for them this is the engine for economic growth. They concluded that FDI is as an engine of capital, technology, managerial skills, technological progress & capacity, access to foreign markets and in maintaining economic growth and development for developing countries, where as for developed countries it is considered as a tool for accessing the market of emerging economies. There is a clear indication from the data that foreign investors showed keen interest in Indian economy because of liberalized regime pursued and followed by Indian economy. There was a constant upsurge in FDI equity flows reaching the peak in 2008-09, showing a decline in 2010 and 2011 and showing slight signs of recovery in January 2012 taking the cumulative equity inflows of FDI to a record level of 243055 US Dollars. **Mahanta, Devajit.³⁶ (2012)** 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. The main purpose of his study was to investigate the impact of FDI on economic growth in India. 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 & D) etc. Government should design the FDI policy such a way where FDI inflow can be utilized as means of enhancing domestic production, savings and exports through the equitable distribution among states by providing much freedom to states, so that they can attract FDI inflows at their own level. FDI can help to raise the output, productivity and export at the sectoral level of the Indian economy.

Roy, Samrat.³⁷(2012) 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. Further they studied whether foreign investment crowds out domestic investment or not in the long run followed by causality between economic growth and foreign direct investment in the short run. 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 and also recommended the above policies. An appropriate policy mix is required to satisfy both domestic and external fronts. **Aggarwal, Shalini et al.³⁸ (2012)** said that Foreign direct investment played an important role in the economic development of the country. It helped in transferring of financial resources, technology and innovative and improved management techniques along with raising productivity. An Indian company may receive Foreign Direct Investment either through automatic route or government route. They tried to study the need of FDI in India, to exhibit the sector-wise & year-wise analysis of FDI's in India, to rank the sectors based upon highest FDI inflows. They found that Mauritius is the country that has invested highly in India followed by Singapore, Japan, and USA and so on. It also shows that there has been a tremendous increase in FDI inflow in India during the year 2000 to 2011.

Goel, Shashank et al.³⁹(2012) 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. This is mainly due to the removal of restrictive and regulated practices. As far as growth trend of FDI is concerned, there has been quite impressive growth of FDI inflow into the country during this period. However, negative growth rate is noticed during the period 1998-2000 primarily due to falling share of major investor countries, steep fall of approval by 55.7% in 1998 compared to 1997 and slackening of fresh equity. They investigated that the FDI flows in the country and also discussed the direct proportionate of the economic growth of 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. This appreciation in the value of Indian Rupee provides an opportunity to the policy makers to attract FDI inflows in Greenfield projects rather than attracting FDI inflows in Brownfield projects. **Singh, Gurmeet. and Paul, Justin.⁴⁰(2014)** revealed that Foreign Direct Investment (FDI) plays an important role in the growth process of a country. There are two types of FDI: Inward Foreign Direct Investment (IFDI) and Outward Foreign Direct Investment (OFDI). They 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 were collected from various published sources. The trend in India's Foreign Direct Investment after the economic reforms, was assessed to analyze the impact of IFDI on the economic growth of the country in terms of GDP. 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.

3. RESEARCH GAP

The review of literature reveals that numerous studies have been conducted to assess Trade relation between India and China. Moreover, several research articles have raised the significant issues with regard to FDI and growth also. Many of the prior studies that had discussed the relation between India and China were theoretical in nature. There are few study available that have investigated or adequately explored on the Bilateral FDI of India and china. Therefore this study makes an earnest attempt to fill the gap.

4. OBJECTIVES OF THE STUDY

To study the FDI Flows in India and China

To analyze the Bilateral FDI flow between India and China.

To examine the difference between FDI inward and Outward of India and China

5. HYPOTHESES OF THE STUDY

H₀1 (Null Hypothesis) = There is no significant difference between the Bilateral FDI in India and China.

H₀2 (Null Hypothesis) = There is no significant difference between the FDI Inward of India and China.



H₀₃ (Null Hypothesis) = There is no significant difference between the FDI Outward of India and China.

6. RESEARCH METHODOLOGY

To achieve the aforesaid objectives, secondary data were collected from various sources such as periodicals, journals, relevant books, research papers, published theses, articles, news dailies and different websites for better referencing. The publications and review bulletins of regulatory bodies and institutions, such as RBI, World Bank, UNCTAD, annual reports and handbook of statistics on Indian economy, Department of Industrial Policy and Promotion (DIPP), SIA newsletter, Fact sheets, books and journals etc. for testing the hypotheses the researcher used Independent sample t-test.

7. ANALYSIS AND INTERPRETATIONS

H₀₁ (Null Hypothesis) = There is no significant difference between the Bilateral FDI in India and China.

Table 1: indicates the descriptive statistics, where the fourteen years of FDI in India from china had a mean of 28.2950 and the twelve year FDI in China from India had a mean of 9.6667. The standard deviation for FDI in India from china is 50.21370 and for FDI in China from India are 18.10742. Levene's test for equality of variances indicates that variances for India and China TATR do differ significantly from each other. (note: $p=.014$). Therefore unequal variance results are used for t-test. Table: 2 shows that the t -statistics is 1.293 and the p -value is .213 which is more than 0.05, which leads to acceptance of Null Hypothesis. Hence, there is no significant difference between the Bilateral FDI in India and China.

H₀₂ (Null Hypothesis) = There is no significant difference between the FDI Inward of India and China.

Table: 3 indicates that the mean for FDI Inward of India is 8.6029 and the mean for FDI Inward of China. is 10.8769 along with the standard deviation for India is 1.69823 and for China is .79401. Levene's test for equality of variances indicates that variances for FDI Inward of India and China do differ significantly from each other. (note: $p=.003$). Therefore unequal variance results are used for t-test.

Table: 4 exhibits that the t -statistics is 5.943 when taken into account twenty four years of data are used for the study. But the mean did differ significantly at the $P < 0.5$ level (note: p



= 0.000) which leads to the rejection of Null hypothesis. Hence, there is significant difference between the FDI Inward of India and China.

H₀₃ (Null Hypothesis) = There is no significant difference between the FDI Outward of India and China.

Table: 3 exhibit the analysis of FDI Outward of India and China. The mean of FDI outward for India is 6.5679 and the mean for the China 9.0826. The standard deviation for India is 3.05578 and for the China 1.64329. Levene's test for equality of variances indicates that variances for India and China FDI outward do differ significantly from each other. (note: $p=.010$). Therefore unequal variance results are used for t-test. Table: 4 shows that the t-value is 3.551 and the p -value is .001 which is less than 0.05 and leads to rejection of Null Hypothesis. Therefore the relation is statistically significant. Hence, there is significant FDI Outward between India and China.

Table (1): Group Statistics

	BILATERALFDI	
	GROUP3	
	FDIININDIAFROMCHINA	FDIINCHINAFROMINDIA
N	14	12
Mean	28.2950	9.6667
Std. Deviation	50.21370	18.10742
Std. Error Mean	13.42018	5.22716

Source: Appendix 1

Table (2): Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
BILATERALFDI	Equal variances assumed	6.983	.014	1.216	24	.236	18.62833	15.31751	-12.98544	50.24211
	Equal variances not assumed			1.293	16.787	.213	18.62833	14.40224	-11.78711	49.04378

Source: Appendix 1



Table (3): Group Statistics

	LNFDIINWARD		LNFDIOUTWARD	
	GROUP4		GROUP4	
	CHINA	INDIA	CHINA	INDIA
N	24	24	24	24
Mean	10.8769	8.6029	9.0826	6.5679
Std. Deviation	.79401	1.69823	1.64329	3.05578
Std. Error Mean	.16208	.34665	.33543	.62376

Source: Appendix 2

Table (4): Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
LN FDI INWARD	Equal variances assumed	10.011	.003	5.943	46	.000	2.27404	.38267	1.50377	3.04431
	Equal variances not assumed			5.943	32.597	.000	2.27404	.38267	1.49513	3.05295
LN FDI OUTWARD	Equal variances assumed	7.173	.010	3.551	46	.001	2.51470	.70823	1.08911	3.94030
	Equal variances not assumed			3.551	35.276	.001	2.51470	.70823	1.07732	3.95209

Source: Appendix 2

8. CONCLUSION

The results of the study shows that the importance of foreign direct investment as a source of capital in developing world has increased significantly over the last couple of decades. The bilateral FDI are not significantly differ, however the FDI Inward and Outward are significantly differ, the analysis reveals that china received more FDI from all over the world as compared to India and also outward Investment of china are well ahead as compared to India. It implies that foreign direct investment (FDI) has had a significant positive bearing on the Chinese economy and a noticeably more moderate effect on that of India. The increase in FDI is undoubtedly related to the globalization of the world economy not by policy of both countries. At present, almost all developing countries are adopting liberal policies towards FDI. So, there is myth of changes in the foreign investment policy of two Asian



giants India and China so that they can develop the country rapidly. The analysis illustrates that there is a clear strong worldwide competition for attracting FDI because it has been accepted worldwide that FDI can boost efforts for development in several ways, for instance boosting export; creating new employment opportunities; increasing technological capabilities and increasing total financial resources for overall development of the economy. India has registered tremendous growth in FDI inflows during the last decade. But when it is compared with other countries like China the figures of FDI inflows are not encouraging, indeed situation is miserable. Whatever FDI India is receiving, it is not able to enjoy full benefits of that also. Poor infrastructure, excessive bureaucracy and interdepartmental squabbling are main reasons for the situation. India requires having huge financial resources to attain and maintain double digit growth rate and overall economic development of the country. For achieving this goal, FDI can play vital rolls. We need to have comprehensive development strategy, which should include openness for trade and favorable business environment for FDI.

9. REFERENCES

- [1] 'Foreign Direct Investment in India', Reserve Bank of India retrieved from <https://www.rbi.org.in/>
- [2] 'Foreign Direct Investment' Retrieved from <http://www.tradingeconomics.com/>
- [3] 'Foreign Direct Investment' Retrieved from <http://www.ibef.org/economy/foreign-direct-investment.aspx#sthash.VUnolAg9.dpuf>
- [4] Arvind Virmani, "Media in the FDI Arena", *Business Standard*, 24th June, 2002.
- [5] Rashmi Banga, "impact of Government policies and investment agreements on FDI inflows to Developing countries: An Empirical Evidence", *Indian the Financial Express*", 24th September 2003.
- [6] Nagaraj R, "Foreign Direct Investment in India in the 1990s: Trends and Issues", *Economic and Political Weekly*, pp. 1701-1712. (2003):
- [7] Nagaraj R., "Foreign Direct Investment in India in the 1990s: Trends and Issues", *Economic and Political Weekly*, pp. 1701-1712. (2003):
- [8] 'GOI', "Report of the steering Group on Foreign Direct Investment", *Planning Commission of India, Government of India*, New Delhi. (2003),



-
- [9] Chandan Chakraborty, 'Peter Nunnenkamp "Economic Reforms, FDI and its Economic Effects in India', www.iipmthinktank.com/publications/archieve. (2006):
- [10] Ramkishen S Rajan, "Foreign Direct Investment and the Internationalization of Production in the Asia Pacific Region Issues and Policy Conundrums Asia Pacific Trade and Investment Review, 1st April 2005.
- [11] Sandeep Kapur, "FDI in India: recent Trends and Prospects", *Treasury Management*, the ICAI University Press, August 2005.
- [12] P.V. Sharma, "FDI in India and China", *Treasury Management, the ICAI University Press*, August 2005.
- [13] Sumit K. Manjumdar, "FDI Needs Micro Macro Reforms", *Financial Daily- the Hindu Group of Publications*, 2nd August 2005.
- [14] K.Seethapathi and Arindam Banerjee, "The Other Side of FDI", *Treasury Management, The ICAI University Press*, August 2005.
- [15] A.Srujan, "Emerging Trends in FDI: Empirical Evidence", *Treasury Management, The ICAI University Press*, August 2005.
- [16] Kulwinder Singh, "Foreign Direct Investment in India: A Critical analysis of FDI from 1991-2005", papers.ssrn.com/sol3/papers.cfm_id_822584.
- [17] Pradhan, R.P., "Foreign Direct Investment in India: Trends, Problems and Prospects", in V.B. Jugale, ed., *WTO and Economic Reforms, Serials Publications*, New Delhi. (2005)
- [18] Kumar N., "Liberalization, Foreign Direct Investment Flows and Development, Indian Experience in the 1990s" *Economic and Political Weekly*, April 2, pp. 1459-1469. (2005)
- [19] Balasubramanyam V.N, Sapsford David, "Does India need a lot more FDI", *Economic and Political Weekly*, pp.1549-1555. (2007)
- [20] Basu P., Nayak N.C, Archana, "Foreign Direct Investment in India: Emerging Horizon", *Indian Economic Review*, Vol. XXXXII. No.2, pp. 255-266. (2007)
- [21] Rusko, C. J., & Sasikumar, K., 'India and China: from trade to peace?' , *Asian Perspective*, 99-123. (2007).
- [22] Basu, S., & Datta, D., 'India-Bangladesh Trade Relations: Problem of Bilateral Deficit', *Indian Economic Review*, 111-129. (2007)
-



- [23] Batra, A. 'India's global trade potential: The gravity model approach', *Global Economic Review*, 35(3), 327-361. (2006).
- [24] Nirupam Bajpai and Jeffry D. Sachs, "FDI in India: Issues and Problems": *Haward University*, Development Discussion paper no. 759. (2000)
- [25] Nirupam Bajpai and Jeffry D. Sachs, "FDI in India: Issues and Problems", *Haward University*, Development Discussion paper no. 759 (2000) Retrieved from <http://www.learningace.com/doc/118493/b8728515f4fc4bfa6db17950cad0f46d/759>
- [26] Singh, Jatinder, "Economic Reforms and Foreign Direct Investment in India: Policy, Trends and Patterns", *The IUP Journal of Financial Economics*, (2010), Retrieved from <http://www.scribd.com/doc/211220491/7>
- [27] Khan.A.Q and Siddiqui Ahmad, Taufeeque, "Impact of FDI on Indian Economy: A Comparison with China & USA". *International Journal of Business & Information technology*, vol-1 no 1 2011
- [28] Bhanagade, D.B and Shah, Pallavi .A, "Study of Impact of FDI on Indian Economy", *International Referred Research Journal*vol-II. (2011)
- [29] Chaturvedi, Illa , "Role of FDI in Economic Development of India: Sectoral Analysis", *International Conference on Technology & Business* (2011),
- [30] Agarwal, Gaurav and Khan M. A., "Impact of FDI on GDP: A Comparative Study of China and India", *International Journal of Business and Management* Vol. 6, No. 10; October (2011)retrieved from file:///G:/fdi/10596-37451-1-PB.pdf
- [31] Singh S., Singh M., "Trends and prospects of FDI in India", *Economic Affairs*, Volume (56), Issue (1) (2011)
- [32] Sirari, Singh Arjun and Bohra, Singh Narendra (2011), "Foreign Direct Investment (FDI) in India Service Sector" *International Journal of Economics and Research*, Vol.2, Issue 2, pp 10-18 retrieved from [http://www.ijeronline.com/documents/volumes/Vol2issue2/ijer20110202\(2\).pdf](http://www.ijeronline.com/documents/volumes/Vol2issue2/ijer20110202(2).pdf)
- [33] Rajalakshmi, K. and Ramachandran, T, "Impact of Foreign Direct Investment on India's Automobile Sector-With Reference to Passenger Car Segment" *The International Journals, Research Journal of Science and IT Management*, Vol. 01, pp 22-41 (2011)
- [34] Ray, Sarbapriya. (2012), "Impact of Foreign Direct Investment on Economic Growth in India: A Co integration Analysis" *Advances in Information Technology and*



- Management (AITM), Vol. 2, No. 1, 2012, ISSN 2167-6372, World Science Publisher, United States
- [35] Rajput, Namita et al. (2012), "Trends and Patterns of Flow of FDI in Developed Countries and Developing Countries: A Comparison" International Journal of Social Science & Interdisciplinary Research, Vol.1.
- [36] Mahanta, Devajit. (2012), "Impact of Foreign Direct Investment on Indian economy" Research Journal of Management Sciences, Vol.I (2), pp 29-31
- [37] Roy, Samrat.(2012), "Empirical Evidence on the Relationship between Foreign Direct Investment and Economic Growth: A Cross-Country Exploration in Asia" Seoul Journal of Economics Volume25 No 4. ISSN 1225-0279
- [38] Aggarwal, Shalini et al. (2012), "Foreign Direct Investment in India" International Journal of Computational Engineering & management, Vol. 15, Issue 5, September 2012
- [39] Goel, Shashank et al. (2012), "Trends and Patterns of FDI in India and Its Economic Growth" Asian Journal of Research in Business Economics and Management, Vol.2, Issue 4, April 2012
- [40] Singh, Gurmeet. and Paul, Justin.(2014), "Foreign Direct Investment in India- Trends, Pattern and Linkage" SMART Journal of Business Management Studies, Vol. 10, No.1, Jan to June 2014, pp 19-29

Appendix (1): Exhibits the data of FDI Inflows in India from China and India's FDI outflows to china.

Years	FDI Inflows in India from China	India's FDI outflows to china
2001	0	-
2002	0	-
2003	0.05	-
2004	0.06	-
2005	1.35	-
2006	0.91	-
2007	0.68	-
2008	1.09	-
2009	6.71	-
2010	41.36	28
2011	1.56	38
2012	72.69	50
2013	151.86	
2014	117.81	
2015		-

Source: Unctad



Appendix (2): Exhibits the data of Inward, Outward FDI of India and China with converted figure of Natural log

YEAR	Inward China	Inward India	LN Inward China	LN Inward India	Outward China	Outward India	LN Outward China	LN Outward India
1991	4366.34	75	8.38168	4.317488114	913	-11	6.81673588	
1992	11007.51	252	9.306333	5.529429088	4000	24	8.29404964	3.17805383
1993	27514.95	532	10.22248	6.276643489	4400	0.350641	8.38935982	-1.04799237
1994	33766.5	974	10.42722	6.881411304	2000	82	7.60090246	4.406719247
1995	37520.53	2151	10.53264	7.673688129	2000	119	7.60090246	4.779123493
1996	41725.52	2525	10.63887	7.833996342	2114	240	7.65633717	5.480638923
1997	45257.04	3619	10.72011	8.193953024	2562.49	113	7.84873472	4.727387819
1998	45462.75	2633	10.72465	7.875879159	2633.807	47	7.87618561	3.850147602
1999	40318.71	2168	10.60457	7.681560363	1774.313	80	7.48116858	4.382026635
2000	40714.81	3587.989747	10.61435	8.185347366	915.777	514.4454136	6.81977289	6.243089454
2001	46877.59	5477.637624	10.7553	8.608429197	6885.398	1397.43655	8.83715822	7.242394801
2002	52742.86	5629.671078	10.87318	8.635806296	2518.407	1678.039428	7.83138184	7.425381384
2003	53504.7	4321.076437	10.88752	8.371259825	2854.65	1875.779518	7.95670452	7.536779595
2004	60630	5777.8072	11.01255	8.661779513	5497.99	2175.366588	8.61213785	7.684952476
2005	72406	7621.768707	11.19004	8.938763736	12261.17	2985.487528	9.41419264	8.001518339
2006	72715	20327.76392	11.1943	9.919742911	21160	14284.98907	9.95986789	9.56696455
2007	83521	25349.89177	11.33285	10.14052974	26510	17233.75697	10.1852773	9.754625354
2008	108312	47102.41727	11.59277	10.7600796	55910	21142.47115	10.9314985	9.959039147
2009	95000	35633.93949	11.46163	10.48105382	56530	16057.781	10.9425267	9.683948809
2010	114734	27417.07666	11.65037	10.21892133	68811	15947.42543	11.1391189	9.67705268
2011	123985	36190.45603	11.72792	10.49655072	74654	12456.16071	11.2206194	9.429970616
2012	121080	24195.76692	11.70421	10.09393298	87804	8485.695383	11.3828623	9.046137129
2013	123911	28199.44604	11.72732	10.24705761	101000	1678.742777	11.5228758	7.425800445
2014	128500	34416.75953	11.76368	10.44629892	116000	9848.443192	11.6613455	9.19506867

Source: Unctad