Projected FDI Inflows to BRICS Members

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ABSTRACT

Foreign Direct Investment (FDI) is an investment that is made by foreign countries directly into financial assets and infrastructure. FDI is made by the home country in the host country into products and services. In order to bridge the gap between domestic saving and investment required, Foreign Direct Investment plays a very important role in overall capital formation. The objective of the study is to analyze FDI inflows in BRICS from 2000 to 2016 and to make projections for the next 12 years using the least square method. Further Analysis is to be made between the member countries (BRICS) about inflows of foreign direct investment. Finally, a comparison was made between the member countries and policy formulation for more Foreign Direct inflows among the BRICS member countries to bring about the development and growth in BRICS. In the end, some common FDI policy changes were recommended so that BRICS could attract higher FDI inflows.

Keywords: *BRICS countries, capital, FDI, investment, infrastructure.*

INTRODUCTION

BRICS is a club of five fastest growing economies Brazil, Russia, India, China & South Africa with the aims and objectives of (1) promote technological information exchange among member country (2) improve education of BRICS nations (3) Economic cooperation (4)bridging the gap between developed and developing countries(5) climate change and cultural tie-ups and assistance in projects, finances, trade extension etc.

BRICS Economies holds 41.1% of the world population with two highly populated economies of India and China with 17.1% and 18.5% of the world Population. While the share of BRICS economies in the world territory is only 29.6% with 2.1% for India and 7.1% for China.

With the Share of 41.1% of the world population, on one hand, BRICS economies are homes of the population deprived of basic needs and on the other hand, with the fastest growing middle class. BRICS is a club of economies with common and significant similarities in terms of geographic size, market size and huge population.

Foreign Direct Investment (FDI) is defined as an investment that involves a long-term relationship, interest, and management influence by a resident of one economy (foreign direct investor/parent enterprise) in an enterprise residing in an economy other than that of the foreign direct investor. Various studies on FDI inflow reveals that rate and share of BRICS in FDI inflows in BRICS nations are very small relating to the market size and potential of these countries and impact negligibly in terms of development. From the growth potential of BRICS economies, it is clearly indicated that BRICS nations

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are in a better position to attract FDI at a very large scale in the coming years. Low-cost labor, growing economy, diversified social-economic position and globalised trade incentives are the factors likely to attract foreign investors in these regions.

According to the UN report 2012, India China Brazil and South Africa are emerging as the most favored investment destination for FDI inflow. FDI being regarded as the major driving force for the development and growth of a country, the present study analyzes the FDI inflows to the BRICS Economies

From the data, it is observed that India, Russia and China have the highest growth in FDI inflow of from 2000-2016 and slowest growth is seen in South Africa and Brazil. Even after with the highest growth rate there is a vast potential of increase in growth rate in India, Brazil and South Africa. Countries in the BRICS should start intensive efforts by providing more liberalized policies to attract more foreign direct investment

Apart from the individual efforts of the economies, BRICS members should come forward and draft a common Foreign direct investment policy to attract more FDI inflow in BRICS

REVIEW OF LITERATURE

Foreign Direct Investment has been among the one of the most interesting and prominent issue of research among the academicians, researchers and economist in the area of international business. Considerable researches have been done on the working and performance of foreign direct investment (FDI) in BRICS. Impact of FDI on the BRICS, trends of foreign financial flows and identifying determinants of FDI has been the major areas of past researches undertaken in the name of FDI. Many works of literature have been available on foreign direct investment and its related pros & cons to any economy. It is a universally accepted fact that the host economy is benefitted by FDI inflows. UNCTAD (1999) stated that Transnational Corporations (TNCs) can enhance local development efforts by (i) pumping in more financial resources for development; (ii) uplifting export competitiveness; (iii) strengthening the skill base and generating employment; (iv)safeguarding the environment by fulfilling commitment towards social responsibility; and (v) augmenting technological capabilities through transfer, diffusion and generation.

A few of major reviews are discussed herewith-

To study the relationship between various factors like GDP, Market size, employment rate, trade openness and infrastructure, Muhammad et al. [MUHA2010] used log-linear regression model to estimate the effect of various economic factors on FDI inflow into India, Pakistan and Indonesia. Results were more not into a trend with the three countries and different factors affect FDI inflow individually which suggest different FDI policies at different Countries.

Nilofer in (2011) studied that FDI inflow in India was highly volatile over the period and had shown fluctuating trends from 1991 to 2009. In the study results focused on a high degree of correlation between economic factors and FDI inflow.

Sapna (2011) in her study focused on trends and patterns on FDI inflow and the effects of various factors on FDI inflow using regression analysis. Her finding suggests that in spite of world economic crisis India was a favorite destination for the FDI inflow due to liberalized economic policies.

Sisili et al. [SISI2013] tested the effect of three basic economic variables (Market size, growth of market and exchange rate of country). In the study, the impact of three factors on FDI flow was checked on SAARC nations and it was found that market size and growth of market had a positive impact on FDI inflow but exchange rate had a negative impact.

Narayanmurthy et al. [NARA2010] in his studies focused on FDI determinants in BRICS using panel analysis for a period 1975-2007. Findings of the study were that market size labor cost infrastructure, capital formation are the key determinants of FDI inflow of BRICS while economic stability, trade openness and growth prospects seemed to be insignificant variable in FDI Inflow in BRICS.

Jha (2003) in his studies focused on trends in FDI inflow in India. Findings of the study suggest that in spite of the Indian Potential and performance, FDI inflow in insignificant and a change in FDI figures was observed as after the government revised its calculation of FDI figures in accordance with the best international practices.

Nandi (2012) in his studies focused on the effects of emerging BRICS economies on the FDI policies of worldwide nations and to investigate the effect on past present and future FDI policies.

Bose (2012) in his studies attempted to gauge the FDI trends in emerging economies of Asia, he did a descriptive and explorative research on the positive and negative effects of the FDI while they go in for direct investments in India and China

A study by Chaturvedi on FDI (2011) analyzed that the sector and country wise FDI inflow to India had come up with the countries from Mauritius, Singapore, USA and UK and these countries are keen to invest in India with service sector, computer hardware and telecommunication sectors receiving highest FDI inflows.

Jyoti et al. [JYOT2017] attempted to forecast the FDI inflow in India which showed a positive trend. The study also revealed that BRICS nations had potential and performance for an increased level of FDI inflow but they are far behind from the expectation.

In a study Uduak et al.[UDUA2014] "Determinants of Foreign Direct Investment in Fast-Growing Economies: A Study of BRICS and MINT" focuses on to examine the determinants of foreign direct investment (FDI) in Brazil, Russia, India, China, and South Africa (BRICS) and Mexico, Indonesia, Nigeria, and Turkey (MINT) using data for eleven years i.e. 2001 – 2011. Results of the studies show that market size, infrastructure availability, and trade openness play the most significant roles in attracting FDI to BRICS and MINT.

OBJECTIVES OF THE STUDY

Following are the objectives of the study:

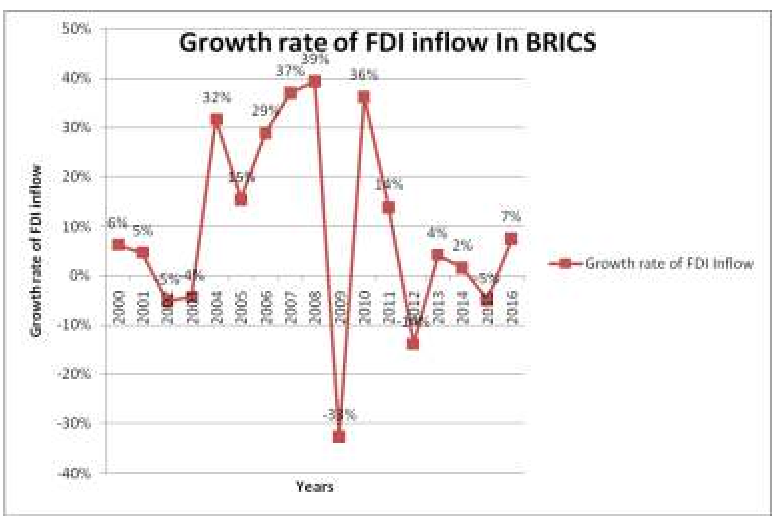
(1) To Study the Trend and Pattern of FDI Inflow into BRICS.
(2) To Compare the Intercountry FDI Inflow into BRICS Economies.
(3) To Study FDI inflows and make a prediction of FDI inflows from 2018 to 2028.with a special reference to India

Nature and Source of Data

In this study, Secondary sources of data have been used for purpose of analysis. For the study, relevant secondary data had been collected from reports of UNCTAD on FDI inflow, BRICS Joint statistical publications, and reports from central banks of Member countries of BRICS Economies.

Illustration 1 : FDI Inflow and Growth in BRICS From Year 2000-2016 (US $ in Millions)

Year	FDI Inflow in BRICS	Annual growth in FDI inflow
1999	75854	--
2000	80620	6%
2001	84405	5%
2002	79957	-5%
2003	76458	-4%
2004	100635	32%
2005	116116	15%
2006	149618	29%
2007	204916	37%
2008	285537	39%
2009	191837	-33%
2010	261204	36%
2011	297438	14%
2012	256120	-14%
2013	266867	4%
2014	271090	2%
2015	257528	-5%
2016	276803	7%



From the Above table and graph, it can be seen that the growth rate of FDI inflow in BRICS was highest upto 39% in 2008 but there was a sudden decrease in inflow upto -33% this decline was due to the economic crisis of 2007-08. There was again increase in growth rate in 2010 but gradually effect of economic crisis can be seen over the FDI inflow in BRICS and there is a continuous downfall in the FDI growth rate. This decline in growth rate of BRICS is due to the poor performance of some of the member countries of BRICS.

Illustration 2 : Country Wise FDI Inflow (US $ in Millions)

Year	Brazil	China	India	Russian Federation	South Africa
2000	32779	40715	3588	2651	887
2001	22457	46878	5478	2808	6784
2002	16590	52743	5630	3425	1569
2003	10144	53505	4321	7755	734
2004	18146	60630	5778	15284	798
2005	15066	72406	7622	14375	6647
2006	18822	72715	20328	37442	311
2007	34585	83521	25350	54922	6538
2008	45058	108312	47102	75856	9209
2009	25949	95000	35634	27752	7502
2010	83749	114734	27417	31668	3636
2011	96152	123985	36190	36868	4243
2012	76098	121080	24196	30188	4559
2013	53060	123911	28199	53397	8300
2014	73086	128500	34582	29152	5771
2015	64267	135610	44064	11858	1729
2016	58680	133700	44486	37668	2270

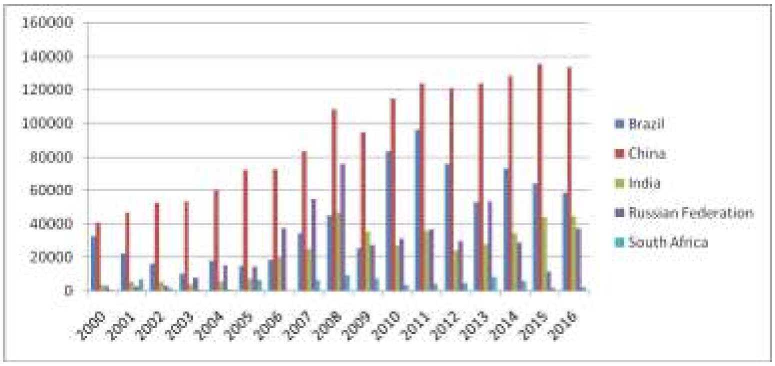


Illustration 3

Year	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Brazil	15	-31	-26	-39	79	-17	25	84%	30%	-42%	223%	15%	-21%	-30%	38%	-12%	-9%
China	1%	15%	13%	1%	13%	19%	0%	15%	30%	-12%	21%	8%	-2%	2%	4%	6%	-1%
India	65%	53%	3%	-23%	34%	32%	167%	25%	86%	-24%	-23%	32%	-33%	17%	23%	27%	1%
Russia	-19%	6%	22%	126%	97%	-6%	160%	47%	38%	-63%	14%	16%	-18%	77%	-45%	-59%	218%
South Africa	-41%	665%	-77%	-53%	9%	733%	-95%	2002%	41%	-19%	-52%	17%	7%	82%	-30%	-70%	31%

Note: (Data in %age)

If we look into the probable reasons for the falling rate of FDI inflow into BRICS then we have to study the pattern of FDI inflow and the growth of its member countries individually. From the Given Data table and chart it is very much clear that In the BRICS economies, China is performing consistently from the Year 2000 to 2016 and there is continuous growth in FDI inflow except the Year 2009 which was due to the economic recession in the world economy. In the chart Second Place is occupied by India, there is tremendous growth in FDI inflow but it is the form of a roller coaster. In spite of good growth in FDI inflow in India, its value is much lower than Brazil, Russia and China. Brazil, Russia and South Africa performance is not consistent and it is poor. In spite of vast Potential of growth and development, there is no consistent inflow of FDI. In the last 4 years from 2013 to 2016, India and China both the economies have a positive growth rate in FDI but it is negative in case of Brazil, Russia and South Africa and these countries are contributing low rate of FDI inflow into BRICS. To increase the FDI flow into BRICS all member countries would need to work together to increase the more inflow of FDI for development and for gaining strength at the international level equal to other economic groups like G-7, ASEAN, SAFTA and Eurozone etc.

Projection of FDI inflow into BRICS from 2018-2028

The trend in FDI inflows for next 10 years i.e. 2017-2028 has been predicted after studying the quantum of FDI inflows to BRICS, from 2000- 2016. The estimation of FDI inflows to the country is approximated by using least square method. The equation of a straight line is as follows:

$Y = a+bx$

Where Y = dependent variable (FDI)

a = intercept

b = slope

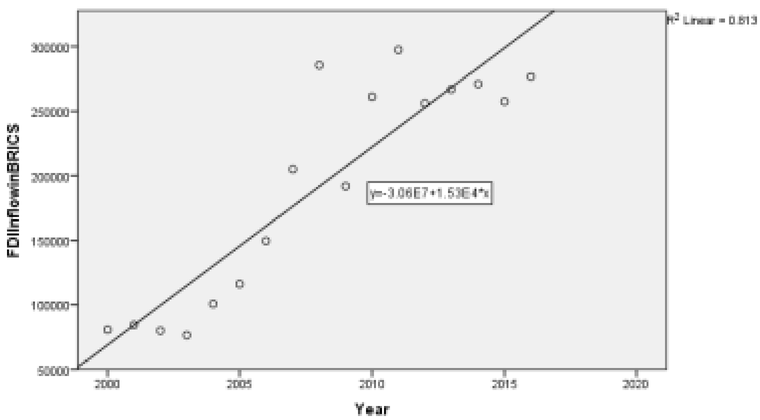
x = independent variable (time)

The normal equations are

$\Sigma y = na + b\Sigma x$

$\Sigma xy = a\Sigma x + b\Sigma x2$

Illustration 4



Descriptive Statistics

	Mean	Std. Deviation	N
FDI Inflow in BRICS	191597.00	85901.367	17

Correlations

		FDI Inflow in BRICS	Year
Pearson Correlation	FDI Inflow in BRICS	1.000	.901
	Year	.901	1.000
Sig. (1-tailed)	FDI Inflow in BRICS	.	.000
	Year	.000	.
N	FDI Inflow in BRICS	17	17
	Year	17	17

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901[a]	.813	.800	38413.767

a. Predictors: (Constant), Year

This table provides the R and R2 values. The R value represents the simple correlation and is 0.901, which indicates a high degree of correlation. The R2 value indicates how much of the total variation in the dependent variable, FDI inflow can be explained by the independent variable, year, In this case, 81.3% which is very large, it means model fits your data

Illustration 5 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95930454735.022	1	95930454735.022	65.010	.000[b]
	Residual	22134262190.978	15	1475617479.399		
	Total	118064716926.000	16			

a. Dependent Variable: FDI Inflow in BRICS
b. Predictors: (Constant), Year

This table indicates that the regression model predicts the dependent variable significantly well. This indicates the statistical significance of the regression model that was run. Here, $p < 0.0005$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data). The Coefficients table provides us with the

Illustration 6 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-30598558.235	3818755.165		-8.013	.000
	Year	15333.743	1901.765	.901	8.063	.000

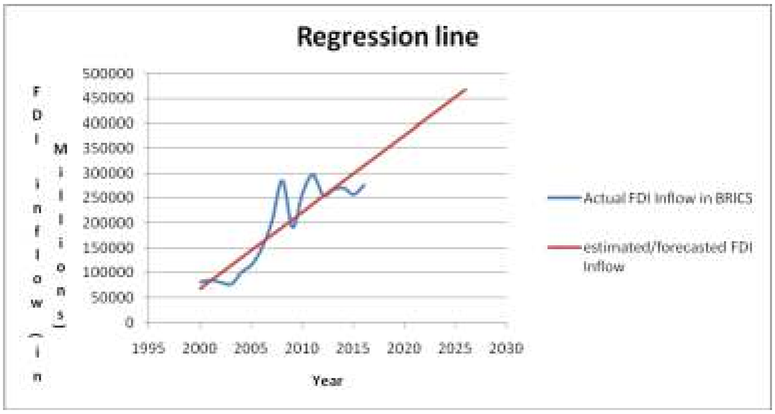
a. Dependent Variable: FDI Inflow in BRICS

necessary information to predict FDI inflow from Period, as well as determine whether FDI inflow contributes statistically significantly to the model. Equation for the model is:

Illustration 7 : FDI Inflow = -30598558+15333.74* FDI inflow

Year	FDI Inflow in BRICS	Estimated/Forecasted FDI Inflow
2000	80620	68927.06
2001	84405	84260.8
2002	79957	99594.54
2003	76458	114928.3
2004	100635	130262
2005	116116	145595.8
2006	149618	160929.5
2007	204916	176263.3
2008	285537	191597
2009	191837	206930.7
2010	261204	222264.5
2011	297438	237598.2
2012	256120	252932
2013	266867	268265.7
2014	271090	283599.5
2015	257528	298933.2
2016	276803	314266.9
2017		329600.7
2018		344934.4
2019		360268.2
2020		375601.9
2021		390935.7
2022		406269.4
2023		421603.1
2024		436936.9
2025		452270.6
2026		467604.4
2027		498271.9
2028		513605.6

Illustration 8



From the graph and table of estimated FDI inflow, it is clear that the trend of increasing FDI inflow will continue over a period of time and trends favor a positive FDI flow in the future.

FINDINGS

From the above projection of FDI inflow, we can see that growth of FDI in BRICS is going to be tremendous and BRICS can use this increased inflow of FDI to the development of the economies of member countries and can emerge as a strong economic grouping among the existing system and can challenge the supremacy of Most industrialist Group of G-7 and other groupings of developed nations. But to achieve this goal BRICS member should come together and sketch out a plan to attract more FDI into member countries and also from other countries. They should frame a policy of equal development of the member nations and should increase cooperation not only in the form of financial investment but also in the form of FDI in technology, managerial know-how and resource mobilization. Joint efforts of the fastest growing and developing economies can bring them into the stage of developed economies so cooperation would be needed in policy framework and policy formulation and implementation. Member countries can help each other by providing expertise, natural resources and technical know-how.

CONCLUSION

The world has, for all the good reasons, witnessed a marked change with respect to geopolitics, economics and production distribution. For reasons galore, Brazil, Russia, India and China (BRIC) emerge as major economies that played a major role in the world economy as producers of goods and services. BRIC countries have the common attribute of the huge population which in turn led to larger capital inflows owing to their large potential consumer market. Despite having any trade or integrated economic union BRIC countries are indexed as emerging economies. Tough competition among the countries forced them to cooperate and jointly prepare a common policy on FDI flow by relaxing their norms pertaining to entry regulations, taxes, environmental clearances, and stipulations on working conditions to attract higher FDI inflows so that BRICS can emerge as a strong and powerful economic force

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