



GROWTH OF FDI IN INDIA AND DEVELOPING NATIONS – A COMPARATIVE STUDY

Bipin N. Bandekar*

Dr. K. G. Sankaranarayanan**

*Associate Professor (Research Scholar), Narayan Zantye College of Commerce, (Affiliated to Goa University) Goa.

**Associate Professor, Department of Commerce, Narayan Zantye College of Commerce, (Affiliated to Goa University), Goa.

Abstract

Foreign Direct Investment is an important source of finance for economic development of developing countries. Developing nations are becoming increasingly investment destinations. In the era of globalization, world's FDI inflows are increasing at a faster rate, which is very much true in case of India and developing nations as well. Recently, FDI Report 2016, declared India as world's topmost FDI destination surpassing China. This study aims to analyse the trend and growth of FDI inflows in India and developing nations and to examine the relationship between flow of FDI in India and developing nations. The study covers the data set of 1991-2012 and 153 developing nations including India. The correlation matrix, Regression statistics and ANOVA brought out the findings that with the base year 1991, FDI growth rate of India and developing nations shows increasing trend where as it is decreasing when the growth rate is computed based on previous year. In 2012, India's FDI growth rate has reached four hundred times and developing nations reached eighteen times of growth rate in 1991. FDI growth rate of India ranges from 236% to -40% and developing nations ranges from 54% to -28% during last twenty two years. The statistical analysis also proved that there is strong positive relationship between growth of FDI inflows into India and developing nations. The only difference is growth of FDI inflows into India is faster than the growth of FDI inflows into developing nations.

Key Words: FDI, Growth, India, Developing Nations.

Introduction

Capital is considered an engine of economic growth. In recent years, besides other sources, FDI (Foreign Direct Investment) as a source of funds has gained very high importance. FDI is a direct investment into production or business in a country, by a company in another country, either by buying a company in the target country or by expanding operations of an existing business in that country. FDI is in contrast to portfolio investment, which is a passive investment in securities of another country such as stocks and bonds.

Globalization has opened the doors almost all over the world for utilizing international financial flows. Foreign direct investment has grown at a phenomenal rate since the early 1980s, and the world market for it has become more competitive. Since early 1980s, world FDI flows, have grown rapidly—faster than either world trade or world output. During 1980–97, global FDI outflows increased at an average rate of about 13 percent a year, compared with average rates of 7 percent both for world exports of goods and nonfactor services and for world GDP during 1980–96. In 1998, global FDI inflows increased for the seventh consecutive year to reach nearly \$440 billion. (Source: UNCTAD, World Investment Report 1998: Trends and Determinants, Table I.1, p. 2.)

FDI has become an important source of private external finance for developing countries and developing countries use this fund for their development. Developing countries are becoming increasingly attractive investment destinations. FDI thus contributes towards the country's development objectives. In view of Globalization, FDI flows have been expanding at a faster rate. The statistical data indicates that world's FDI inflows are increasing at a rapid rate, which is also true in case of developing countries. According to FDI Report 2016, India has emerged as top FDI destination of the world surpassing China for the year 2015.

Thus, this paper aims to study the trend and growth of FDI flows to India and developing nations and further to examine the relationship between flow of FDI into India and developing nations.

Literature Review

The various empirical studies conducted so far give an insight to understand the trend of flow of FDI in India and Developing nations. **Mallampallya & Sauvant, (1999)** noted that FDI has become an important source of private external finance for developing countries. Since the early 1980s, world FDI flows, have grown rapidly and the world market for it has become more competitive and developing countries are becoming increasingly attractive investment destinations to accelerate their development efforts. In 1998, global FDI inflows increased for the seventh consecutive year to reach some \$430–440 billion. Developing countries' share in total FDI inflows rose from 26 percent in 1980 to 37 percent in 1997. **Nagaraj, (2003)** documented the trends in FDI in India in the 1990's and compares them with those in China. In 1991, India gets a greater



share of world's FDI. **Kishore, (2003)** expressed that FDI has helped in accelerating the economic growth more in case of developing countries, which require capital, technology and better management for faster economic growth. **Bhati, (2006)** analysed the state- wise approvals of cumulative FDI from 1991 to 2004, which shows that only 5 states i.e. Maharashtra, Delhi, Tamilnadu, Karnataka and Gujarat have accounted for 52.80% of total FDI inflows in India. The author analysed the trends of FDI inflows in India according to sector, industry and country and tested five determinants of FDI inflows to India. The analysis regarding sectors wise break up of FDI revealed that in 1984 one – third of all FDI was in primary sector, the pattern of FDI in India in terms of industry and sector has changed over the recent years.

Mahajan, (2008) investigated that US FDI Inflows have shown upward trend in India. FDI inflows have shown a steep increase from 1991 to 2007. Annual growth rate of FDI has been impressive except the years 1998, 1999 and 2003, when it turned negative. **Pradeep, (2011)** in his study inferred that overall inflow of FDI in India witnessed an increasing trend during the period 1991-92 to 2008-09. **Omojevwe, A, & C, (2012)** determine the growth rate and compound growth rate of FDI and the factors affecting inflow in India and Nigeria. The study showed that the growth rate and compound growth rate of FDI into India was much higher than that of Nigeria for the period 1961-2010. India attracted more FDI than Nigeria due to its large GDP, higher real interest rate and trade openness and currency depreciation. **P. Chengalrayulu, (2013)** analysed FDI inflow into India during 2000-2001 and revealed that year wise inflow of FDI shows highly fluctuating trend, service sector receives highest FDI, petroleum and natural gas sector receives least FDI, Mauritius accounts the highest percentage of the total FDI and U.A.E. represents the lowest share and Mumbai RBI region tops in the country. **Bandekar, (2014)** in his study over a period 1991-2012 found that the trend and growth of FDI inflows in India is increasing except the years 1998, 1999, 2003, 2009, 2010 and 2012 when it turned negative. India's share in world FDI inflow was 2.93% in 2009. India's share in FDI inflow of developing economies was in the range of 1 to 3 % till 2005 which increased to 7% in the year 2008. **Chawla & Sharma, (2014)** in their study witnessed many ups and downs in growth of Indian economy since its liberalization in 1991, FDI has increased continuously since 1990-91 to 2010-11 and major investment of FDI in India has been in service sector. It is also found that there exist a relation between macroeconomic variables and inflow of foreign investment in India.

Objectives of the Study

1. To study the Trend and Growth of FDI inflows into India.
2. To study the Trend and Growth of FDI inflows of Developing Nations.
3. To examine the relationship between the Growth of FDI inflows of India and Developing Nations.

Hypotheses

H₀ There is no significant relationship between Growth of FDI inflows of India and developing nations.

H₁ There is significant relationship between Growth of FDI inflows of India and developing nations.

Research Methodology

The main aim of this study is to analyse the trend and growth of FDI inflows of India and compare it with the Developing Nations and further to investigate whether there is any relationship between the Growth of FDI inflows of India and Developing Nations. The data set used for the study consists of yearly observations for the period 1991-2012 i.e. 22 years. The number of developing nations covered for the study are 153 including India. The required data has been obtained from UNCTAD statistics. Tabular and graphical presentations are used to analyse the trend of FDI whereas correlation and simple regression method is applied to study the relationship between the growth of FDI inflows in India and developing nations.

Analysis and Discussion

A) Trend and Growth of FDI Inflows to India

The growth rate of FDI Inflows in India as per Fixed Base Index shows increasing trend since 1991 (Table 1a and Graph 1a). With the base year 1991, FDI growth rate is continuously increasing with few ups and downs and has reached four hundred times of FDIs in 1991. In 2009, FDI growth rate was 474 times, where as in 2011, it was highest i.e. 481 times of what it was in 1991.

The growth rate of FDI inflows in India as per Chain Base Index shows decreasing trend (Table 2 and Graph 2). As per Chain Base Index i.e. growth rate over previous year, in base year 1992, the growth rate was 236%, the second highest growth rate was 166% in 2006. In between 1992 and 2005 and after 2006 till 2012, FDI growth rate was decreasing. It reached even negative in the years 1998, 1999, 2003, 2009, 2010 and 2012.



Table 1a: Trend and Growth of FDI Inflows to India (Fixed Base Index)

Year	FDI Growth over 1991	FDI Growth Rate (Over 1991) (Fixed Base Index) (%)	Year	FDI Growth over 1991	FDI Growth Rate (Over 1991) (Fixed Base Index) (%)
1991	0	0	2002	5555	7406.67
1992	177	236	2003	4246	5661.33
1993	457	609.33	2004	5703	7604
1994	899	1198.67	2005	7547	10062.67
1995	2076	2768	2006	20253	27004
1996	2450	3266.67	2007	25275	33700
1997	3544	4725.33	2008	47064	62752
1998	2558	3410.67	2009	35582	47442.67
1999	2093	2790.67	2010	21050	28066.67
2000	3513	4684	2011	36115	48153.33
2001	5403	7204	2012	25468	33957.33

Source: UNCTAD Statistics.

Note: 1. FDI Inflow (In USD Millions)

2. Growth over 1991 (Change over 1991) (In USD Millions)

3. Annual Growth Rate Fixed Base Index (%) (Growth /Inflow of 1991 * 100)

Graph 1a: Trend and Growth of FDI Inflows to India (Fixed Base Index)

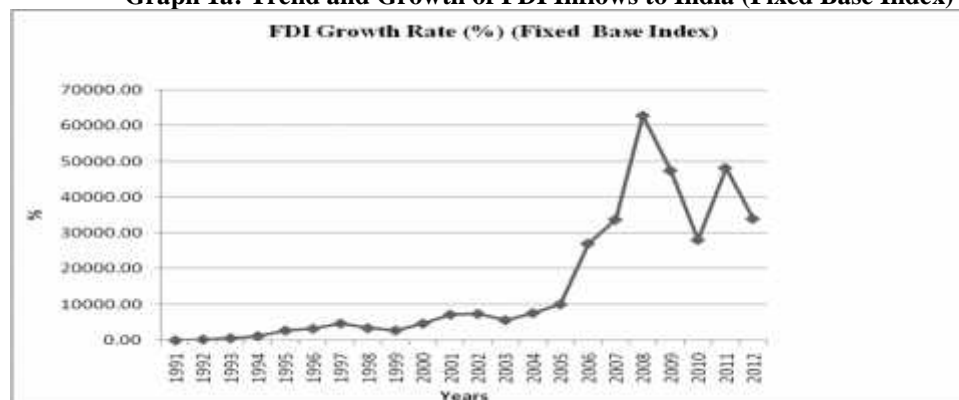


Table 1b: Trend and Growth of FDI Inflows to India (Chain Base Index)

Year	FDI Growth over P.Y.	FDI Growth Rate (Over P.Y.) (Chain Base Index)	Year	FDI Growth over P.Y.	FDI Growth Rate (Over P.Y.) (Chain Base Index)
1991	0	0	2002	152	2.77
1992	177	236	2003	-1309	-23.25
1993	280	111.11	2004	1457	33.72
1994	442	83.08	2005	1844	31.91
1995	1177	120.84	2006	12706	166.7
1996	374	17.39	2007	5022	24.7
1997	1094	43.33	2008	21789	85.95
1998	-986	-27.25	2009	-11482	-24.36
1999	-465	-17.66	2010	-14532	-40.75
2000	1420	65.5	2011	15065	71.31
2001	1890	52.68	2012	-10647	-29.42

Source: UNCTAD Statistics.

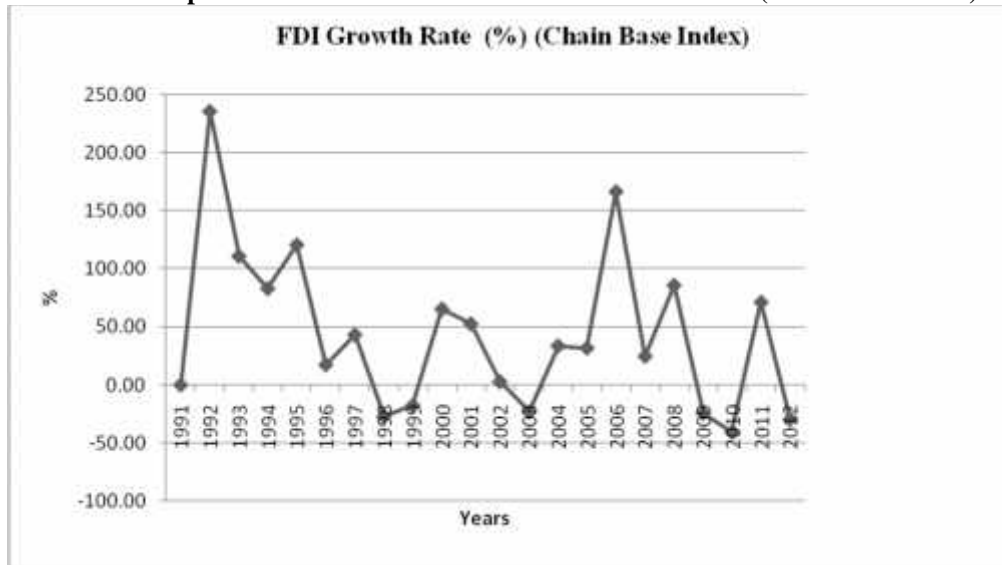
Note: 1. FDI Inflow (In USD Millions)

2. Growth over P.Y. (Change over Previous Year.) (In USD Millions)



3. Annual Growth Rate Chain Base Index (%) (Growth/Inflow of P.Y. * 100)

Graph 1b: Trend and Growth of FDI Inflows to India (Chain Base Index)



B) Trend and Growth of FDI Inflows to Developing Nations

The growth rate of FDI Inflows to Developing Nations as per Fixed Base Index shows increasing trend since 1991 (Table 2a and Graph 2a). With the base year 1991, FDI growth rate is continuously increasing with exceptions in the year 2001, 2002, 2003, 2009 and 2010. In 2008, FDI growth rate was highest nearly twenty times of what it was in 1991. In 2012, it has reduced and reached at eighteen times of FDIs in 1991.

The growth rate of FDI inflows to Developing Nations as per Chain Base Index shows decreasing trend (Table 2b and Graph 2b). As per Chain Base Index, in base year 1992, the growth rate was 54.56 %, the second highest growth rate was 45.36% in 1993. Since then till 2012, FDI growth rate is decreasing year by year. It reached even negative in the years 1998, 2001, 2002, 2009 and 2012.

Table 2a: Trend and Growth of FDI Inflows to Developing Nations (Fixed Base Index)

Year	FDI Growth over 1991	FDI Growth Rate (Over 1991) (Fixed Base Index) (%)	Year	FDI Growth over 1991	FDI Growth Rate (Over 1991) (Fixed Base Index) (%)
1991	0.00	0.00	2002	144163	406.60
1992	19344	54.56	2003	166870	470.64
1993	44200	124.66	2004	242305	683.40
1994	63993	180.49	2005	341074	961.96
1995	82735	233.35	2006	441563	1245.38
1996	113421	319.89	2007	601773	1697.24
1997	153744	433.62	2008	706042	1991.32
1998	151557	427.45	2009	491887	1387.32
1999	180607	509.38	2010	572910	1615.83
2000	218855	617.26	2011	683563	1927.92
2001	188602	531.93	2012	651268	1836.83

Source: UNCTAD Statistics.

Note: 1. FDI Inflow (In USD Millions)

2. Growth over 1991 (Change over 1991) (In USD Millions)

3 Annual Growth Rate Fixed Base Index (%) (Growth /Inflow of 1991 * 100)



Graph 2a: Growth Rate of FDI Inflows into Developing Nations (Fixed Base Index)



Table 2b: Trend and Growth of FDI Inflows to Developing Nations (Chain Base Index)

Year	FDI Growth over P.Y.	FDI Growth Rate (Over P.Y.) (Chain Base Index) (%)	Year	FDI Growth over P.Y.	FDI Growth Rate (Over P.Y.) (Chain Base Index) (%)
1991	0.00	0.00	2002	-44439	-19.83
1992	19344	54.56	2003	22707	12.64
1993	24856	45.36	2004	75435	37.28
1994	19793	24.85	2005	98769	35.56
1995	18742	18.85	2006	100489	26.69
1996	30686	25.96	2007	160210	33.59
1997	40323	27.08	2008	104269	16.36
1998	-2187	-1.16	2009	-214155	-28.88
1999	29050	15.53	2010	81023	15.36
2000	38248	17.70	2011	110653	18.19
2001	-30253	-11.90	2012	-32295	-4.49

Source: UNCTAD Statistics.

Note: 1. FDI Inflow (In USD Millions)

2. Growth over P.Y. (Change over Previous Year.) (In USD Millions)

3. Annual Growth Rate Chain Base Index (%) (Growth/Inflow of P.Y. * 100)

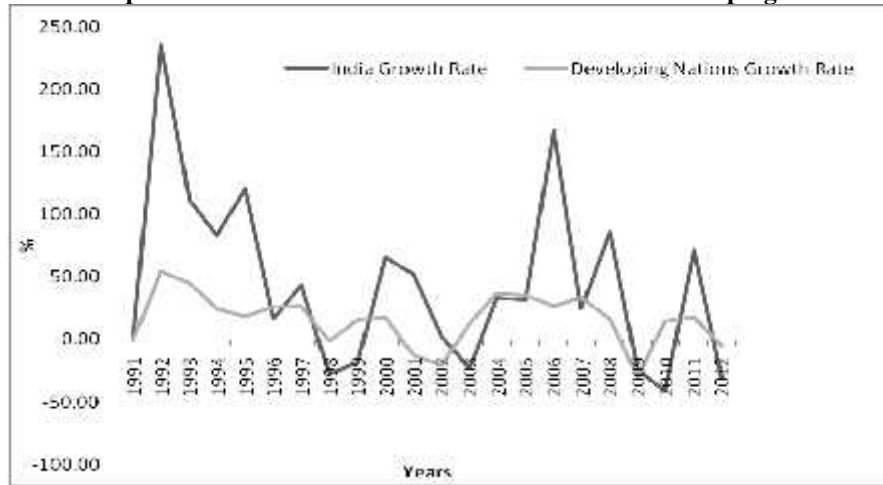
Graph 2b: Growth Rate of FDI Inflows to Developing Nations (Chain Base Index)





C) Growth of FDI Inflows of India and Developing Nations

Graph 3: Growth Rates of FDI flows in India and Developing Nations



The comparison of growth rates of FDI inflows, over the previous years, in India and developing nations (Graph 3) highlights that, in India, FDI growth rate had reached at greater height above 100% i.e. 236% in 1992, 111% in 1993, 120% in 1995 and 166% in 2006. It is also seen that India's FDI rates are mostly above the FDI rates of developing nations barring few years. The range lies from 236% to -40% showing decreasing trend over the years. On the other hand, FDI growth rates of developing nations were in the range of 54% to -28% showing decreasing trend similar to India. The only difference is FDI growth rate of India has been consistently very much higher than that of developing nations.

Testing of Hypothesis

The expected relationship between the growth of FDI inflows of India and Developing Nations is positive. Table 3a exhibits the result of correlation analysis. The correlation coefficient ($r=0.930973$) explains that there exist strong positive relationship between the growth of FDI inflows to India and Developing Nations. It means that flow of FDI in India and flow of FDI in developing nations are related to each other and they are growing but at different rates.

Table 3a: Correlation Analysis

Correlation matrix		
	India	Developing Nations
India	1	
Developing Nations	0.930973	1

The null hypothesis "There is no significant relationship between Growth of FDI inflows of India and Developing Nations" is tested using regression method and ANOVA (Table 3b and 3c). The null hypothesis is rejected and alternate hypothesis is accepted since the P value is 3.32693E-10 i.e. 0.00 which is less than 0.01 and ANOVA value ($F = 130.04$). This implies that variation brought into FDI inflows of India and Developing Nations is significant at 1% level. The value of Coefficient of determination ($R^2 = 0.86$, Adjusted $R^2 = 0.86$) explains 86% of variations of FDI inflows in India and developing nations. Thus, it is proved that there is significant relationship between growth of FDI inflows of India and of Developing Nations.

Table 3b: Regression Analysis

Regression Statistics	
Multiple R	0.930973
R Square	0.86671
Adjusted R Square	0.860046
Standard Error	5251.437

Table 3c: ANOVA

ANOVA			
	df	F	Significance F
Regression	1	130.0489256	3.32693E-10
Residual	20		
Total	21		



Conclusion

Developing nations are in need of foreign capital since they do not have sufficient domestic capital. FDI is one of the easiest ways to get foreign capital. FDI has emerged as an important source for the economic development of the developing nations. This study on comparison of growth of FDI inflows in India and Developing Nations has brought out the findings that with the base year 1991, growth rate of FDI inflows in India is continuously increasing with few ups and downs and has reached four hundred times of FDIs in 1991 whereas growth rate of FDI inflows over previous years shows decreasing trend. It showed even negative growth in few years.

As far as developing nations are concerned, with the base year 1991, growth rate of FDI inflows is also increasing with the exception of few years and has reached eighteen times of FDIs in 1991 whereas growth rate of FDI inflows over previous years is decreasing year by year reflecting negative growth in some of the years.

The comparison of growth rates of FDI inflows, over the previous years, inferred that, in India, FDI growth rates reached at greater height above 100% during some of the years. On the other hand, growth rates of developing nations were below 60% showing decreasing trend similar to India.

Thus, there is strong positive relationship between growth of FDI inflows in India and developing nations. The only difference is growth of FDI inflows into India is faster than the growth of FDI inflows to developing nations.

References

1. Bandekar, B. N. (2014). Foreign Direct Investment in India - Trends and Issues. *International Research Journal of Commerce, Business and Social sciences*, II (11 (VI)), 29-32.
2. Bhati Usha (2006), Foreign Direct Investment - Contemporary Issues, Deep and Deep Publications Pvt. Ltd, New Delhi.
3. Chawla, S., & Sharma, P. (2014). A Macroeconomic Approach to Foreign Investment Flows in India. *Indian Journal of Finance*, 8 (5), 42-49.
4. FDI Report 2016, www.fdiintelligence.com
5. Kishore Nawal (2003), FDI in post globalised Era Indian Strategy and Prospects, *Business Perspectives*, Vol-5, No.2 (July- Dec), pp. 59-72.
6. Mallampallya, P., & Sauvant, K. P. (1999). Foreign Direct Investment in Developing Countries. *Finance and Development*, 36 (1).
7. Nagaraj R, (2003) Foreign Direct Investment in India in the 1990's – Trends and Issues, *Economic and Political weekly*, April 26.
8. Omojevwe, E., A, Z., & C, S. (2012). Comparison of the Economic Factors That Influence Foreign Direct Investment Growth In Nigeria and India. *Journal of Agriculture and Social Research*, 12 (1), 99-107.
9. P, C., G, S., & K, R. (2013). Foreign Direct Investment in India: A Descriptive Study. *Indian Journal of Social Science Research*, 1 (2), 122-131.
10. Pradeep (Thesis 2011), Foreign Direct Investment and Industrial Development in India, Department of Commerce, Maharshi Dayananad University.
11. Sahni P. (2012), Trends and Determinants of Foreign Direct Investment in India: An Empirical Investigation, *International Journal of Marketing and Technology*, Volume 2, Issue 8 ISSN: 2249-1058.
12. UNCTAD. (2012). *World Investment Report*. New York, Geneva: UNCTAD.
13. UNCTAD. (1998). *World Investment Report: Trends and Determinants*. *World Investment Report*.