

# A Study on Relationship between FDI and International Trade in India

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**Abstract**—Foreign direct investment is considered as an important tool for the growth of an economy. In developing countries it plays a vital role in many contexts such as capital formation, transfer of technology, and many more. In the present study, the objectives are to analyse the impact of foreign direct investment on international trade of India from 2004-05 to 2013-14. The selected parameters are imports, exports and balance of trade. The study is descriptive cum analytical in nature. Correlation and regression analyses have been applied to establish the relationship between the foreign direct investment and each selected parameters. Foreign direct investment is taken as the Independent variable and each of economic variables is taken as dependent variable. The study period is taken of 10 year from 2004-05 to 2013-14. The study described the positive or negative relationship between foreign direct investment and different variable.

**Keywords:** Foreign direct investment, Imports, Exports and Balance of trade.

## 1. INTRODUCTION

Foreign Direct Investment (FDI) is fund flow between the countries in the form of inflow or outflow by which one can able to gain some benefit from their investment whereas another can exploit the opportunity to increase the productivity and find out better position through performance (Devajit, 2012). It plays an important role in the overall development of the host country. FDI may generate benefits through bringing in non-debt-creating foreign capital resources, technological, up gradation, skill enhancement, new employment, spill-over effects. FDI plays a complementary role in overall capital formation by filling the gap between the domestic saving and investment. (Rani and Dhanda, 2011)

Now, it is known to all that capital and investments are the essential pillars of economic development of every developing country. Savings, capital and investment along with human resources are the essential hub of development. But the short supplies of domestic capital, limits the growth of developing countries. Low GDP keeps the savings and investment rates low, which in turn, limit growth. So FDI is the main source to increase investment in developing countries like India.(Bhanagade and Shah, 2011)

## 1.2 FDI and International Trade

FDI plays a crucial role in the capital formation and investment inflows. Due to this there is positive impact on GDP and employment. Any government either of under develop or developing country think the FDI will help them in reducing imports and increasing exports. The government provides more facilities to establish exports intensive and imports substitute industries. Because it will help the government to make the balance of trade favourable.

## 2. REVIEW OF LITERATURE

**Matusz and Tarr (1999)**, studied the impact of globalization on employment in the developing countries. It was concluded that in the Pre and Post liberalization period trade and FDI has positively affected to labour in the developing countries.

**Laura (2003)**, examined the various determinants between FDI financial market and economic growth during the period (1975-1991). The study explored that developed financial market exploit the FDI easily. It was found that there is a significant relationship between the foreign direct investment and financial market.

**Saiyed (2012)**, analyzed the impact of FDI on economic growth during the period (1990-91 to 2011-12). The study pointed out that FDI accelerated the growth of GDP of the economy. It was found that there a positive correlation between the FDI and economic growth.

**Mahanta (2012)** explored that research and development as an attractive sector for foreign direct investment in India. It was suggested that Indian government should be provide friendly and liberal tax system for international investors.

**Nidhi (2013)** studied the impact of FDI on developing Indian country. It was found that in long term FDI investment badly effect on the small farmer and small retail store. However, it was also found that after the liberalization FDI is an important factor to increase the Exports and economy growth. It was suggested that India government should liberalize the FDI policy.

**Rani and Dhanda (2011)** examined that both the positively and negatively impact effect of FDI on the host country. It was showed that foreign direct investment increase the employment rate, GDP and economic growth and in the term of negative impact it causes increase the inflation rate and uneven distribution of FDI.

### 3. OBJECTIVE OF THE STUDY

- To study the trends of FDI inflow in India during the study period.
- To establish the relationship between FDI and Exports.
- To establish the relationship between FDI and Imports.
- To establish the relationship between FDI and Balance of Trade.

### 4. RESEARCH METHODOLOGY

This is a descriptive cum analytical study in nature. Following are the important points of research methodology:-

#### A. Research Design

Descriptive research design is used to achieve the objective of the study.

#### B. Research Tool

Yearly growth rate is calculated to explain the trends of different variables. Correlation and regression analyses have been applied to establish the relationship between the foreign direct investment and each selected parameters.

#### C. Data Collection

The present study is based on the secondary data collected from the publication of government of India and DGCIS (Directorate General of Commercial Intelligence and Statistics) Kolkata.

### 5. DATA ANALYSIS AND FINDINGS

First of trends of different variable is shown with the help of table. The data is presented of last 10 year from 2004-05 to 2013-14.

#### 5.1 Trends of FDI in India

The trends of FDI inflow in India are presented in Table 1

**Table 1: FDI Inflows in India (Amount US\$ million)**

| Years   | FDI Inflows | Yearly Growth % |
|---------|-------------|-----------------|
| 2004-05 | 6051        |                 |
| 2005-06 | 8961        | 48.09           |
| 2006-07 | 22826       | 154.73          |
| 2007-08 | 34843       | 52.65           |
| 2008-09 | 41873       | 20.18           |
| 2009-10 | 37745       | -9.86           |
| 2010-11 | 34847       | -7.68           |
| 2011-12 | 46556       | 33.60           |

|         |       |        |
|---------|-------|--------|
| 2012-13 | 34298 | -26.33 |
| 2013-14 | 36396 | 6.12   |

Source: Fact Sheet on FDI in India, August 2014, GOI.

FDI inflows have shown very unusual trends. Up to 2008-09 the annual growth rate has been positive. But there has been the presence of the growth at a decreasing rate. The absolute figure showed that the amount of FDI is increased approximate 6 times. There is negative growth rate in the year of 2009-10, 2010-11 and 2012-13. The highest growth rate was in the year of 2006-07 followed by the year 2005-06.

#### 5.2 Trends of Exports, Imports and Balance of Trade in India

**Table 2: Trends of Exports, Imports and Balance of Trade in India (Amount US\$ million)**

| Year    | Exports | % Growth | Imports | % Growth | BOT     | % Growth |
|---------|---------|----------|---------|----------|---------|----------|
| 2004-05 | 375340  |          | 501065  |          | -125725 |          |
| 2005-06 | 456418  | 21.60    | 660409  | 31.80    | -203991 | 62.25    |
| 2006-07 | 571779  | 25.27    | 840560  | 27.28    | -268781 | 31.76    |
| 2007-08 | 655864  | 14.71    | 1012312 | 20.43    | -356448 | 32.62    |
| 2008-09 | 840755  | 28.19    | 1374436 | 35.78    | -533681 | 49.72    |
| 2009-10 | 845534  | 0.57     | 1363736 | -0.78    | -518202 | -2.90    |
| 2010-11 | 1142922 | 35.17    | 1683467 | 23.45    | -540545 | 4.31     |
| 2011-12 | 1465959 | 28.26    | 2345463 | 39.32    | -879504 | 62.71    |
| 2012-13 | 1634319 | 11.48    | 2669162 | 13.80    | 1034843 | 17.66    |
| 2013-14 | 1894182 | 15.90    | 2714182 | 1.69     | -820000 | -20.76   |

Data Source: DGCIS, Kolkata, annual Report 2013-14

The trends shows that there is ups and down in the growth rate of exports, imports and balance of trade. The highest growth rate (35.17) in exports was in the year of 2010-11 followed by the year 2011-12 and the lowest (0.57) in the year of 2009-10. The same picture is presented by imports as highest growth rate (39.32) in the year 2011-12 and lowest growth rate (-0.78) in 2009-10. The growth rate of balance of trade is highly unequal. The highest growth rate (62.71) is in the year of 2011-12 and lowest (-20.76) in the year of 2013-14.

#### 5.3 Correlation between FDI and International Trade

Table 3 shows that there is positive correlation between the FDI and Exports it means if FDI increased then there is significantly increase in exports. The P. Cor value is 0.76 shows the strong relationship between FDI and Exports. There is positive correlation (0.8) between the FDI and Imports in

the country. There is negative correlation (-0.442) between the FDI and the Balance of trade. The p value is significant in case of both imports and exports. But in case of balance of trade the p value is not significant at 5% significant level.

**Table 3; Correlation between FDI and Selected Economic Indicators**

| Variables        |         | FDI    | Exports | Imports | Balance of Trade |
|------------------|---------|--------|---------|---------|------------------|
| FDI              | P. Cor. | 1      |         |         |                  |
|                  | Sig.    | ----   |         |         |                  |
| Exports          | P. Cor. | 0.76   |         |         |                  |
|                  | Sig.    | 0.011  |         |         |                  |
| Imports          | P. Cor. | 0.80   | 0.78    |         |                  |
|                  | Sig.    | 0.006  | 0.008   |         |                  |
| Balance of Trade | P. Cor. | -0.442 | 0.16    | -0.74   | 1                |
|                  | Sig.    | 0.201  | 0.67    | 0.015   | ----             |

**Table 4: Regression Results**

| Variables        | R2    | Constant | B     |
|------------------|-------|----------|-------|
| Exports          | 0.578 | 53415.86 | 0.760 |
| Imports          | 0.637 | 51130.01 | 0.78  |
| Balance of Trade | 0.196 | 2285.85  | -0.49 |

Regression analysis has given the relationship between FDI and each of the selected economic factors of international trade for the period 2004-05 to 2013-14. Here FDI is considered as an independent variable and each of indicators as a dependent variable. The regression results are discussed separately.

In relation to exports the value of coefficient of determination is 0.578 which implies that the change in FDI account for 57.8 % of the systematic variation in exports along with other factor during these 10 year.

$$\text{Exports} = 53415.86 + 0.76 \text{ FDI}$$

In relation to imports the value of coefficient of determination presented by symbol  $R^2$  is 0.637 which implies that the change in FDI account for 63.7 % of the systematic variation in imports along with other factor during these 10 year.

$$\text{Imports} = 51130.01 + 0.78 \text{ FDI}$$

Coefficient of determination of balance of trade is 0.196 which implies that the change in FDI account for 19.6 % of

the systematic variation in exports along with other factor during these 10 year.

$$\text{Balance of Trade} = 2285.85 + (-0.49) \text{ FDI}$$

## 6. CONCLUSION

The trends of exports, imports and FDI are in approximate same direction. The results of the study described that there is strong positive relationship of FDI with exports and Imports. If the FDI increased in some specified units, the import and exports also increased. But there is negative relationship of FDI and balance of trade. It means there is positive impact on balance of trade. With the regression analysis one can predict the amount of exports, imports and balance of trade. In 2013-14 the growth rate of balance of trade is -20.76 which a good sign for the economic development. The present government lead by Prime Minister Narendra Modi permitted FDI in many sector such as in defense, railway infrastructure, insurance etc. It will help India to have more investment in the country. On the basis of this India may be able to reduce its imports and increase its exports. So that objective of a favourable balance of trade can be achieved. In nut shell the effects of FDI are in positive manner and we can utilize it in favourable sense.

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