Investigating the Determinants of Foreign Institutional Investment in India

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ABSTRACT

The Indian financial market has been an attractive investment destination for the investors across the globe for a quite long period of time. The strong fundamentals of the Indian stock market has made it a most preferred investment hub for both domestic and foreign investors. The unparalleled and buoyant growth of Foreign Institutional Investments (FII) has enabled them to occupy a key position and become a major determining factor in the Indian stock market. The increasing participation of Foreign Institutional Investors (FIIs) certainly adds impetus to the domestic investment, helps in securing greater degree of liquidity, efficient price discovery mechanism, market transparency and performance. But on the other side, FII investments are highly volatile compared to other forms of investment flows. Any unfavourable movement in FII investments will definitely have a huge setback on Indian stock market.

Given the huge volume of these inflows and their potential impact on the share market in particular and the economy in general, it is very essential to understand the determinants of FII flows to India. FII inflows is dependent on a number of macroeconomic variables such as the GDP of the country, the Index of Industrial Production, rate of inflation, interest rates, exchange rates, the stock market returns, etc. This paper is an attempt to study the impact of the major macroeconomic variables such as the Index of Industrial Production, rate of inflation (as represented by the Wholesale Price Index), interest rates, and exchange rates. The study proposes to apply different statistical tools such as Compounded Annual Growth Rate (CAGR), Correlation Analysis, Regression Analysis, Granger Causality Test, Durbin Watson Test, etc. to validate the findings.

Keywords: Foreign Institutional Investment, Index of Industrial Production, Wholesale Price Index, Exchange rate, interest rate.

INTRODUCTION:

Capital markets have taken an important place in the financial system of the developing countries during the last two decades. The most important measure taken in this regard by developing countries was the opening of their respective stock markets to international investors in the late 1980s or early 1990s. It resulted in historically high level of portfolio investment in the emerging markets by global and regional funds. In developing countries like India, there is a great need of foreign capital not only to increase productivity of labour but also to build foreign exchange reserve to meet trade deficits. After opening up the borders for capital movement in 1991, foreign investment in India have grown enormously. The remarkable economic growth during the past two decades in most of the emerging countries had been stimulated by foreign capital inflows from developed countries. Most of the developing countries opened their capital markets to foreign investors mainly on account of inflationary pressures, widening current account deficits, exchange depreciation, increase in foreign debt and as a result of economic policy. There was a surge in capital inflows into India too since 1992 as in India, the
purchase of domestic securities by FIIs was first allowed in September 1992 as part of the liberalization process that followed the balance of payment crisis in 1990-91. Nowadays, a significant portion of Indian corporate sector’s securities are held by Foreign Institutional Investors (FIIs), such as pension funds, mutual funds and insurance companies. These investors are often viewed as sophisticated investors as these institutional investors are better informed and better equipped to process information than individuals. As the share of foreign investors in emerging markets has risen, they have influenced the assets prices considerably. Consequently, policymakers have become increasingly concerned about the factors determining international investment, the performance of foreign capital investments, and the impact of foreign investment on local turnover and on the volatility of stock markets.

Foreign Institutional Investors (FIIs) have been a key part of India’s growth story in the last two and a half decades. The term FIIs is generally used to refer to the companies that are established outside India and are investing in Indian financial markets by registering themselves with the Securities & Exchange Board of India (SEBI). Foreign Institutional Investors have been a major source of funds into the Indian Capital Markets in the past few years. Foreign Institutional Investors are defined under SEBI Regulations as “an institution that is a legal entity established outside India which propose to make investments in India only in securities.” FIIs include mutual funds, banks, investment trusts, overseas pension funds, asset management companies, university funds, endowments, foundations, institutional portfolio managers, nominee companies, charitable trusts, charitable societies, a power of attorney holder or a trustee incorporated or established outside India which propose to make portfolio investments on behalf of a broad-based fund (i.e., a fund having more than 20 investors with a limit of maximum 10% of the shares or units of the fund held by any single investor). Foreign Institutional Investment is basically short-term in nature and mostly made in the financial markets. Foreign Institutional Investors (FIIs) are allowed to invest in the primary and secondary capital markets in India through the Portfolio Investment Scheme (PIS) administered by the Reserve Bank of India (RBI). Under this scheme, FIIs can purchase shares/debentures of Indian companies through stock exchanges.

**REVIEW OF LITERATURE:**

Trivedi, Pushpa and Nair, Abhilash (2003) in their paper entitled, “Determinants of FII investment inflow in India” found that the relationship between the FII investment and the economic development were highly debatable. The authors also found that both returns on S&P 500 and on MSCI world index did not significantly explain FII inflow to India, which seems to be a pointer to the absence of informational disadvantage to FIIs. They concluded that, variance of the Indian markets did not emerge as a decisive factor in explaining FIIs inflows to the Indian share markets. This phenomenon might be attributed to a change in the attitude of FIIs as a result of Asian crisis. They did not seem to look at Indian markets as an avenue to diversify their portfolio risk. Such behaviour on the part of FIIs was also suggested by the lack of significance of the beta of Indian share markets in driving the FII investment inflows to the Indian markets.

Singh Bhupinder (2005) examined in his paper entitled, “Inter-Relation between FII, Inflation and Exchange Rate” the effects of significant macro-economic variables, inflation and exchange rate on the inflows of Foreign Institutional Investment in India. He suggested that the strength of the financial system of the country is gauged by the quality of foreign capital inflows. The financial system should be strong enough to ward off any adverse impact arising from the volatility of capital flows. It must be equipped with adequate support measures like forex reserves, comfortable balance of payments position to negate the impact of volatile capital flows. Only then that the adverse impact of contemporary global developments like oil prices hike, terrorist attack, etc. can be minimized.

Saini Rohit (2005) in his paper, “Foreign Institutional Investment in India- A study of issue, facts and determinants” opined that the rate of return on stock as captured from the stock price index and domestic exchange rate had boosted the FII investment while inflation in domestic country had a negative impact on it. The author also used Granger’s Casualty test and it appeared that FI investment was a result of return on stock rather than causing it. The test between inflation and FI investment revealed that a higher inflation in domestic country resulted in retardation of inflow of FI Investment. However, casualty between rate of exchange and FI investment could not be confirmed.

Sikdar Soumyen (2006) held on the basis of his work entitled, “Foreign Capital Inflow into India: Determinants and Management”, Indian economy could not fully utilize the synergy provided by the FIIs. In other words the surge in inflows had not been matched by a corresponding growth in the absorptive capacity of the Indian economy. The major reason was the persistent slowdown of industrial activity since 1997. Also, the Reserve
Bank of India (RBI) had been reluctant to let the rupee find its market-clearing level under the circumstances. This had resulted in steady accretion to our foreign exchange reserves (FOREX) over the last few years. According to the author, the problems of Foreign Capital are widening of current account deficit, monetization, appreciation of real exchange, etc.

Bhattacharya Basabi and Mukherjee Jaydeep (2008), investigated the nature of the casual relationship between stock returns, net foreign institutional investment (FII) and exchange rate in India. To test this, the author employed the methodology of Granger non causality for the sample period Jan 1993 to March 2005. It was found that a bidirectional causality existed between stock price and net foreign institutional investments thus implying that the market informational efficiency hypothesis could be rejected for BSE sensitive index with respect to the FII. Uni-directional causality runs from change in exchange rate to stock returns (at 10% level of significance), not vice versa implying that the exchange rate movement lead the BSE sensitive index; and no casual relationship exists between exchange rate and net investment by FIIs implying that the inter linkages between stock price and exchange rate is prominent not due to the presence of foreign institutional investors alone, but attributed to other factors as well. They also suggested that the authorities can focus on domestic economic policies to stabilize the stock market.

According to Kaur and Dhillon (2010) Host Country (India) stock market returns (returns on Sensex) have positive and significant impact whereas home country (US) returns (returns on S&P 500 Index) had negative but insignificant influence on FIIs investment inflows in long-run as well as in short run. Similarly, market capitalization and stock market turnover of India had positive and insignificant influence on FIIs investment in long-run but positive and significant influence on FIIs investment in short-run. Thus it is understood that risk and return characteristics of Indian capital market were prominent factors being considered by FIIs both in long-run and short-run whereas other characteristics such as market capitalization and stock market turnover were significant only in short-run. Among macroeconomic determinants of FII investment to India, economic growth of India represented by IIP had significant and positive impact both in short run and long run. However, all other macroeconomic factors such as inflation in home country represented by US Producer Price Index (PPI) had significant and positive influence only in the long run, while inflation in India represented by Wholesale Price Index (WPI) had negative and significant influence on FIIs investment. This is in support of the hypothesis that when there is an increase in the inflation rate in home country, the purchasing power of funds invested there declines and consequently FIIs will withdraw from home (US) country and invest in host (Indian) stock market. This implies that foreign inflation leads to increase in FIIs investment inflows to Indian capital market. The reverse will happen when the inflation rate increases in the host country. Thus, host country inflation has an adverse impact on FIIs investment. The study concluded that FIIs inflows were determined by stock market characteristics regarding risk-return, market capitalization, stock market turnover, macroeconomic factors like economic growth, interest rate, inflation and liberalization policies.

Manjinder Kaur Sharanjit S. Dhillon (2010), in their study entitled “Determinants of Foreign Institutional Investors’ Investment in India”, aims at exploring the determinants of Foreign Institutional Investors’ (FIIs) investment in India. Results reveal that the returns on Indian stock market have positive impact whereas US stock market returns have no significant influence on FIIs investment to India. Stock market risk has negative influence on FIIs inflows to India. Market capitalization and stock market turnover of India have significant positive influence only in short-run. Among macroeconomic determinants, economic growth of India has positive impact on FII investment both in long-run and short-run. But all other macroeconomic factors have significant influence only in long-run like inflation in US has positive influence whereas inflation in India has negative influence on FIIs investment. Further, US interest rate has adverse impact on FIIs investment while liberalization policies of India exhibited significant contribution to FIIs inflows. Study concludes that FIIs inflows in India are determined by both stock market characteristics and macroeconomic factors.

Srinivasan P, Kalaivani M (2013), observed in their study on “Determinants of Foreign Institutional Investment in India: An Empirical Analysis” that exchange rate has significant negative impact on FII inflows both in the short-run and long-run, implying that depreciation of currency adversely affects the FII flows into India. Moreover, the Indian equity market returns has negative short-run and positive long-run effects on FII inflows to India. This confirms the evidence of positive and negative feedback trading hypothesis in the short-run and long-run, respectively. The US equity market returns has positive and significant influence on FII flows in the long-run but positive and insignificant influence on FII flows in the short-run. It is concluded that FII inflows to India are essentially determined by exchange rate, domestic inflation, domestic equity market returns, returns and risk associated with US equity market.

Amita (2014), in her paper “Determinants of FIIs: Evidence from India”, identified the determinants of Foreign
Institutional Investment established a relationship between them. The economic variables used are Foreign Exchange Rates, BSE Sensex, Exchange Rates, and Inflation. Secondary data has been used for a period of 12 years from 2001-02 to 2012-13. The data was obtained on monthly basis. Econometric tools like Augmented Dickey Fuller test and Granger Causality Test are used to analyse the data. The correlation coefficient between FIIs and Sensex, FIIs and FERs, FERs and Sensex, and WPI and Sensex were found positive. However, exchange rates and Inflation was found having negative relationship with FIIs. The results of Granger Causality Model indicated bidirectional causality between FII and Sensex, and FII and Exchange rate. However, no causality was found between FII and Foreign Exchange Reserves.

T Mohanasundaram, P Karthikeyan, V Krishnamoorthy (2015), studied about the determinants of Foreign Institutional Investments (FII) in India in their paper “Macroeconomic Dynamics of Foreign Institutional Investments in India”, using monthly time series data for the period from April 2001 to March 2014. Correlation and Autoregressive Distributed lag (ARDL) bounds testing approach have been used. The authors have found that FII flows are having positive relationship with Exchange Rate, Producer Price Index of USA, Return on S&P 500, Return on Nifty, and Market Capitalization of NSE and having negative relationship with Wholesale Price Index of India. The result of ARDL model shows that the US 3-month T-bill rate (USTBR) representing foreign interest rate has significant and negative impact on FIIs investment in host (Indian) stock market and Producer Price Index (PPI) of USA has significant and positive influence on FIIs flows in the Indian stock market at long run. It is concluded that FII inflows to India are primarily determined by macroeconomic factors.

STATEMENT OF THE PROBLEM:

The degree of financial integration of an economy with the rest of the world is a key determinant of many of its important macroeconomic properties. The phenomenon of globalization thus attracted much attention to the capital flows across nations because of various reasons which need to be considered by policy makers and development thinkers. During the past three decades private capital inflows to developing economies have led to an almost equal increase in domestic investment. They have strengthened productivity growth over time. On the other hand capital flow volatility significantly dampens economic growth and it contributes to widening of income differentials between developing countries. In an economy like India which has huge potential for development but remains non tackled due to the financial constraints, the inflow of FII has serious implications. Though the Indian economy moves congruent with the rest of the world it exhibits certain trends and patterns of its own. Hence it is important to understand the determinants of FII flows to India. Though there are many macro economic factors affecting their flows, this study specifically focuses on the impact of the most important variables such as the Country’s economic growth (as represented by the Index of Industrial Production), rate of inflation (as represented by the Wholesale Price Index), and exchange rates.

OBJECTIVES OF THE STUDY:

The study is conducted with the following objectives.
1. To study the trend and pattern of Foreign Institutional Investment inflows into India.
2. To examine the influence of Index of Industrial Production, Wholesale Price Index and Real Effective Exchange Rate on the FII flows to India in the short run.

HYPOTHESES:

To fulfil the objectives of this study, the following hypotheses have been set:
1. H0: There is no significant relationship between the FII inflows and IIP of India
   H1: There is a significant relationship between the FII inflows and IIP of India
2. H0: There is no significant relationship between the FII inflows and REER of India
   H1: There is a significant relationship between the FII inflows and REER of India
3. H0: There is no significant relationship between the FII inflows and WPI of India
   H1: There is a significant relationship between the FII inflows and WPI of India

RESEARCH METHODOLOGY:

Type of Research: This is an analytical research as it aims to study the relationship between the selected variables and FII inflows.
Type of data: The objectives of this study are satisfied by collecting and analyzing the secondary quarterly time
Sources of data: The data for this study has been collected from various secondary sources like Handbook of Statistics on the Indian economy published by RBI, DIPP, SEBI, Ministry of Commerce, Ministry of Statistics and Programme Implementation, CSO, BSE India and other online publications.

Statistical Tools used: Descriptive Statistics, CAGR, Correlation analysis, Regression Analysis

Period of the study: The study is conducted for a period of five financial years starting from 2012-13 to 2016-17.

Variables used in this study:
- Foreign Institutional Investment inflows (FII)
- Index of Industrial Production (IIP)
- Inflation (WPI)
- Real Effective Exchange Rate (REER)

BENEFITS OF FII:

The major arguments in support of FII are based on the benefits from such capital flows.

Finances current account deficit without creating debt:
Since most of the developing countries have chronic current account deficits, financing these deficits is a major macro economic challenge faced by these countries. Financing the deficits through borrowing creates the burden of external debt and the burden of servicing it. This brings us to FDI and FII as the means of financing deficits in current accounts. FII has a great advantage that it does not create debt. The return for FII is the return generated by the market and this does not put any burden on government finances.

Supplements domestic savings and augments investment:
Developing countries suffer from the problem of low savings, low investment and low growth. This low level cumulative causation can be broken only by supplementing domestic savings with foreign savings. A strong argument favouring FII is that it is foreign savings, and it supplements domestic savings. Higher savings push up investment and economic growth.

Reduces the interest rate and facilitates investment and growth:
Interest rate is essentially a function of money supply. FII, by increasing money supply, reduces interest rate. A low interest rate regime is favourable to economic growth. Low interest rates, by increasing aggregate demand, facilitate increased investment. Also, low interest rate, by reducing the cost of capital, encourages investment in the economy.

Reduces the cost of capital for corporates:
One of the most important determinants of investment by corporates is the cost of capital. Cost of capital depends on the required rate of return, which in turn is influenced by stock prices. FII, by increasing the demand for stocks, pushes up stock prices. This, in turn, reduces the required rate of return and thereby the cost of capital.

Benefits to investors:
FII by increasing the demand for stocks increases stock prices. Even though there is some controversy whether FII is a cause or effect of increased stock prices, the fact remains that it is correlated with stock prices. Increase in stock prices benefits millions of investors. Also, this indirectly helps in economic growth through the wealth effect. The surge in stock indices and the buoyancy in the market capitalisation will actually help the investors to grab maximum benefits.

Helps solve balance of payments problem:
A major problem that developing countries face is the Balance of Payments Problem caused by unfavourable trade and current accounts. FII play a major role in managing this crisis without creating additional debt burden on the countries.

Improves knowledge flows:
FII are known for best practices and systems. They promote modern market ideas and innovations such as modern trading systems, new financial products such as derivatives, new systems of holding securities such as
depositories. Furthermore, they increase competition in financial intermediation benefiting the market at large. Many reforms introduced in the Indian capital market since 1992 were in fact necessitated by FII. For instance, FII would have been impossible in the absence of depositories. Similarly many of the best practices introduced in the Indian capital market such as the establishment of institutions like SEBI, happened due to these knowledge flows. SEBI was constituted on the lines of the SEC (Securities Exchange Commission) of the USA.

**Improves corporate governance:**
It is a global experience that sound corporate governance leads to improved efficiency and higher shareholder value. FIIs, as they are used to advanced systems of corporate governance in developed countries, choose for their portfolios only companies known for their sound corporate governance. Higher stock prices caused by FII selection is a major attraction for companies since it reduces their cost of capital. Also, getting included in the FII portfolio has become a much sought after status symbol for companies. This has created a situation where companies are competing to improve corporate governance. Thus, FII leads to enhancement of corporate governance.

**Improves market efficiency:**
FII, by increasing the trading volume, reduces the transaction costs and thereby improves market efficiency. It also imparts greater liquidity to the market. Modern Online trading systems and depositories have substantially reduced the transaction costs in the Indian capital market. Introduction of derivatives trading has increased liquidity and turnover ratio in the market by a wide margin compared to the previous system. It is a remarkable fact that, in all these, FII played a prominent role.

**Imparts stability to the market:**
FIIs are often criticized for destabilizing the markets through herding and positive feedback strategy. Of course, there is merit in this criticism. But, there are also instances of FIIs stabilizing the markets by buying stocks when domestic institutional investors and retail investors sell. Domestic institutions and investors are more sensitive to bad news such as reports of a poor monsoon. It is quite possible that under such circumstances, globally diversified portfolio managers can take a more dispassionate view of the prospects for Indian economy and engage in stabilizing trades. Again, FIIs do not panic and sell like retail investors or domestic institutions acting under redemption pressure, during crisis periods. For instance, during the market melt down caused by the 2000 scam, FIIs were net buyers to the tune of $ 8.38 billion during November 2000 to March 2001.

**COSTS OF FII:**
FII has some negative implications also.

**Volatility in ‘hot money’ flows:**
FII, unlike FDI, is regarded as hot money, i.e., highly sensitive money that flows in and out very fast. Hot money is only a fair weather friend and can leave at the slightest hint of trouble. In the modern age of electronic fund transfer, millions of dollars can be transferred at the click of a mouse. FDI, which is investment in plant and machinery, cannot be transferred that easily. FIIs have often been accused of herding (many FIIs acting together) and pursuing ‘positive feedback strategy’ (buying when prices are going up and selling when prices are going down) in trading. These practices aggravate volatility leading to serious crisis.

**Vulnerability to balance of payments:**
Quick and sharp inflows and outflows can render the Balance of Payments position vulnerable, with devastating consequences. Developing countries with meagre foreign exchange reserves will be more prone to such vulnerability. Sharp depreciation in the currency caused by such outflows can lead to hyper inflation in countries which are dependent on oil imports.

**Foreign take over of domestic companies:**
A major concern about FII is that sometimes the dividing line between FII and FDI will disappear and foreign funds acting in cohort with foreign companies will take over domestic companies. Critics argue that such takeovers can be part of the strategy of neo colonialists and that it can adversely impact India’s industrialization and harm her national interests. This will appear to be a genuine concern, particularly during the present time when FIIs are the major shareholders in many of India’s blue chip companies like Infosys, TCS, HDFC, or Bharti. However, appropriate legislation can prevent such takeovers.
ANALYSIS AND INTERPRETATION:

To Study the Trend and Pattern of Foreign Institutional Investment Inflows into India:

Table 9.1.1: Foreign Institutional Investment in India

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>INR Crores</th>
<th>Total</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equity</td>
<td>Debt</td>
<td></td>
</tr>
<tr>
<td>2000-01</td>
<td>10207</td>
<td>-273</td>
<td>9933</td>
</tr>
<tr>
<td>2001-02</td>
<td>8072</td>
<td>690</td>
<td>8763</td>
</tr>
<tr>
<td>2002-03</td>
<td>2527</td>
<td>162</td>
<td>2689</td>
</tr>
<tr>
<td>2003-04</td>
<td>39960</td>
<td>5805</td>
<td>45765</td>
</tr>
<tr>
<td>2004-05</td>
<td>44123</td>
<td>1759</td>
<td>45881</td>
</tr>
<tr>
<td>2005-06</td>
<td>48801</td>
<td>-7334</td>
<td>41467</td>
</tr>
<tr>
<td>2006-07</td>
<td>25236</td>
<td>5605</td>
<td>30840</td>
</tr>
<tr>
<td>2007-08</td>
<td>53404</td>
<td>12775</td>
<td>66179</td>
</tr>
<tr>
<td>2008-09</td>
<td>-47706</td>
<td>1895</td>
<td>-45811</td>
</tr>
<tr>
<td>2009-10</td>
<td>110221</td>
<td>32438</td>
<td>142658</td>
</tr>
<tr>
<td>2010-11</td>
<td>110121</td>
<td>36317</td>
<td>146438</td>
</tr>
<tr>
<td>2011-12</td>
<td>43738</td>
<td>49988</td>
<td>93726</td>
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<tr>
<td>2012-13</td>
<td>140033</td>
<td>28334</td>
<td>168367</td>
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<tr>
<td>2013-14</td>
<td>79709</td>
<td>-28060</td>
<td>51649</td>
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<tr>
<td>2014-15</td>
<td>111333</td>
<td>166127</td>
<td>277461</td>
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<tr>
<td>2015-16</td>
<td>-14172</td>
<td>-4004</td>
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<tr>
<td>2016-17</td>
<td>55703</td>
<td>-7292</td>
<td>48411</td>
</tr>
</tbody>
</table>

CAGR: 37.57%

Source: Compiled from SEBI Annual Report 2016-17

From the above table, it is seen that the Foreign Institutional Investment inflows into India has increased from Rs.9933 crores in 2000-01 to Rs.48411 crores in 2016-17. From the observation made by the researcher, there is no particular pattern found in the FII inflows. There is mixed trend in the FII inflows. From the calculated % of increase or decrease, it is seen that the highest increase % is in the year 2014-15 at 439%. Compounded Annual Growth Rate is calculated to be 37.57% for the period under study. This means the FII inflows have increased on an average of 37.57% year after year for seventeen years. On the whole there is a gradual increase in the FII inflows into India.

To examine the influence of Index of Industrial Production, Wholesale Price Index and Real Effective Exchange Rate on the FII flows to India in the short run, the researcher has collected quarterly data of these variables during the period 2012-13 to 2016-17.

Table 9.2.1: Quarterly Data on Selected Variables

<table>
<thead>
<tr>
<th>Period</th>
<th>FII</th>
<th>IIP</th>
<th>WPI</th>
<th>REER</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2012</td>
<td>-494.3</td>
<td>102.3</td>
<td>105.3</td>
<td>101.3</td>
</tr>
<tr>
<td>Sept 2012</td>
<td>44616.7</td>
<td>99</td>
<td>107.6</td>
<td>105.59</td>
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<tr>
<td>Dec 2012</td>
<td>55876.6</td>
<td>107.1</td>
<td>107.1</td>
<td>105.83</td>
</tr>
<tr>
<td>Mar 2013</td>
<td>68365</td>
<td>115.2</td>
<td>108.6</td>
<td>108.08</td>
</tr>
<tr>
<td>June 2013</td>
<td>-5276</td>
<td>101.3</td>
<td>110.1</td>
<td>103.25</td>
</tr>
<tr>
<td>Sept 2013</td>
<td>-26440</td>
<td>105.7</td>
<td>114.3</td>
<td>99.32</td>
</tr>
<tr>
<td>Dec 2013</td>
<td>25637</td>
<td>110.9</td>
<td>113.4</td>
<td>102.99</td>
</tr>
<tr>
<td>Mar 2014</td>
<td>57727</td>
<td>118.5</td>
<td>114.3</td>
<td>103.82</td>
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<tr>
<td>June 2014</td>
<td>64901</td>
<td>109.7</td>
<td>115.2</td>
<td>109.36</td>
</tr>
<tr>
<td>Sept 2014</td>
<td>79152</td>
<td>110.2</td>
<td>116.4</td>
<td>109.09</td>
</tr>
<tr>
<td>Dec 2014</td>
<td>54433</td>
<td>115.3</td>
<td>112.1</td>
<td>108.74</td>
</tr>
<tr>
<td>Mar 2015</td>
<td>78975</td>
<td>121.3</td>
<td>109.9</td>
<td>113.16</td>
</tr>
<tr>
<td>June 2015</td>
<td>-547</td>
<td>110.8</td>
<td>111.8</td>
<td>111.32</td>
</tr>
</tbody>
</table>
Table 9.2.2: Summary of Descriptive Statistics for FII and its Determinants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Mean</th>
<th>Std.Deviation</th>
<th>Coefficient of variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FII</td>
<td>79152</td>
<td>-76813</td>
<td>26385</td>
<td>41956.72</td>
<td>1.59</td>
</tr>
<tr>
<td>IIP</td>
<td>133.2</td>
<td>99.00</td>
<td>111.05</td>
<td>8.76</td>
<td>0.077</td>
</tr>
<tr>
<td>WPI</td>
<td>116.40</td>
<td>105.30</td>
<td>111.05</td>
<td>2.94</td>
<td>0.0265</td>
</tr>
<tr>
<td>REER</td>
<td>117.57</td>
<td>99.32</td>
<td>108.93</td>
<td>5.08</td>
<td>0.0466</td>
</tr>
</tbody>
</table>

The above table shows that the average FII inflow into India for the period of study is Rs.26385 crores. The Coefficient of variation for FII inflows is found to be the highest and hence it is more volatile or inconsistent than the other variables under study.

Correlation analysis:

Table 9.3.1: Correlation coefficients of FII and its determinants

<table>
<thead>
<tr>
<th></th>
<th>FII</th>
<th>IIP</th>
<th>WPI</th>
<th>REER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significance</td>
<td>0.082</td>
<td>0.732</td>
<td>0.183</td>
<td>0.439</td>
</tr>
</tbody>
</table>

The above table shows that the p value of all variables are greater than 0.05 and therefore the null hypotheses set for these variables are accepted at 0.05 level of significance. It means that there is no significant relationship between FII and the independent variables chosen for the study, ie, the IIP, WPI and REER.

Regression analysis:

A simple linear regression is done to further identify the relationship between the variables.

Table 9.4.1: Regression Equations of FII and its Determinants

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Regression equation</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>FII</td>
<td>-18293.938 + 0.082 IIP</td>
<td>0.082</td>
</tr>
<tr>
<td>FII</td>
<td>-264635.195 + 0.183 WPI</td>
<td>0.034</td>
</tr>
<tr>
<td>FII</td>
<td>5.093 + 0.029 REER</td>
<td>0.029</td>
</tr>
</tbody>
</table>

The regression analysis shows that there is no significant relationship between FII and the independent variables. The R Square explains the percentage of variation in FII explained by the dependent variables. It is very less for all the variables chosen for study.

SUMMARY OF FINDINGS:

- The Foreign institutional investments inflows into India are found to be volatile for the study period.
- The CAGR for FII inflows is worked out to be 37.57%, which means the FII inflows have increased at the rate of 37.57% approximately year after year for the past seventeen years.
- The correlation and regression analysis suggest that there is very little association between FII and the independent variables, IIP, WPI and REER.
- The movement in FII may be better explained with other macro economic variables.
CONCLUSION:

Foreign capital is considered to be a vital component for the economic growth of a developing country. Since 1990’s to this date the Government of India has eased its foreign capital policies and norms and many initiatives to attract foreign capital has been implemented. It is found that the FII inflows have increased for the period under study and exhibits an upward trend. But the study failed to find significant association between FII and the macroeconomic independent variables selected for the study, ie, IIP, WPI and REER.

REFERENCES:

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