



**Indian Stock Exchanges & Foreign Institutional Investor,  
healthy Indicators for Indian economy**

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**Abstract**

The introductory aspect of the paper covers the introduction of the Indian capital market and the in brief describes the various development that has taken place in the Indian capital market. The paper is based on the empirical research which aims to find out how significant relationship is there between the Foreign Institutional Investors inflow of money and the movement of index which is taken as sensex. The paper has 72 observations which are from January 2005 to December 2010 (6 years and each month so  $12 \times 6 = 72$ ). The paper comprises of various statistical tests have been carried out on the data. The test includes the correlations, regression, the F –test and the T –test. The analysis has been using the SPSS software version 13. All the findings of the various tests have been explained. The regression equation has also been explained which explains what is the impact of the 1% change in the FII inflow on the closing of the month end index. The monthly net investment vs Monthly closing of the Sensex has been the main area of the analysis. We have tried to analyse how the movement of capital from FII after the volatility of the index.

**JEL CODE : FINANCE**



## **1. Introduction**

Indian capital markets have assumed significant importance in the view of the new economic policies undertaken by the Government. Capital markets are now not only used as a barometer for the economy but also an indicator about the corporate sectors acceptance or rejection about the economic policies of the Government. The FII were allowed to invest in the Indian capital market in the year 1992. Since then the FII have become a major player in the Indian capital market. FII have been investing in the Indian markets through two methods. One is the direct registration where the identity of the end user is known to the regulator SEBI. The another method of investment is the P notes which is the Participatory notes. In this method, the identity of the end user is not known. So the regulator SEBI is not in a position to known who is the end beneficiary of the gains which takes place through the trading done by FII. In October 2007, SEBI had put ban on P notes on the assumption that it is the hot money of Indian politicians which is coming into the Indian markets.

This led to the opportunity to the SGX nifty in Singapore Exchange who immediately took the benefit of the situation and agreed for the same. The SGX nifty charges around 2% margin while the Indian exchanges are taking around 20 %. The FII had called for panic selling in the October 2007 and make the index go sharply down. In January 2008 also, the FII were responsible for making index touch 10% downside circuit. When the Dr.Man Mohan Singh government was formed in May 2009, Markets touched upper circuit 2 times in one hour time. The notable thing in that upper circuit was that the market had volumes only of Rs. 400 crores when it first closed after 13 seconds of trade. This showed the power of FII that if they want they can take the index to any level. The October 2008 was another event when the FII showed their muscle with selling of Rs. 14000 crores shares in only one month. This was after the Lehman brother filed for bankruptcy. During the year 2008, FII were net sellers to the tune of Rs. 52000 crores which took the Indian markets low of 7697 on October 24, 2008.



## 2. History of Indian Capital Market

The Indian stock market is not a new concept. It has a history of about 299 years old. It was in early 18th Century, the main institution that is dealing in the trading of shares and stocks is the East India Company. Later by around 1830's the main dealing in the shares and stocks (mainly in bank and cotton) was initiated in Bombay. However, the items in which the trading took place increased tremendously by the end of 1839. There after the concept of broker business was started which show momentum in the mid 18th century. This concept has attracted number of people to indulge in the trading of items. By 1860, the number of brokers who are dealing in the trading of items goes up to 60 in number. Further, the number of brokers increased from 60 to 250 in around 1862-1863.

However, around 1980-61 there is no supply of cotton from America as there was civil war that took place in America. Due to this, there is a concept of Share Mania that took place in India. This is the era of 1980 in which the Indian market had the initial flavor of the trading in items and the concept of Stock market. Thereafter, it has shown significant changes both in the pre-independence era and post independence era.

### **Pre-Independence Era**

The concept of stock market place was not a very systematic system. People who needs to trade generally gathered on the streets which was popularly known as the DALAL STREET and the trading and the transaction used to take place from the Dalal street. It was in year 1875 that the first stock exchange was formulated in the name of "The Native Share and Stock Brokers Association" which is presently known as the "Bombay stock exchange".



### **Post-Independence Era**

There was shutdown of various stock exchanges in India due to the depression that took place after Independence. It was under the Securities Contracts (Regulations) Act, 1956 that various stock exchanges has got a recognition as a recognized stock exchange such as Bombay, Delhi, Hyderabad, Indore etc. there are several other stock exchanges that were established post independence. After 1990, there is mainly two stock exchanges innovated 1) National Stock exchange and 2) Bombay Stock Exchange.

## **3. Significance of Stock Exchanges in India**

Stock Exchanges play a crucial role in the consolidation of a national economy in general and in the development of industrial sector in particular. It is the most dynamic and organised component of capital market. Especially, in developing countries like India, the stock exchanges play a cardinal role in promoting the level of capital formation through effective mobilisation of savings and ensuring investment safety.

### **1. Effective Mobilisation of savings**

Stock exchanges provide organised market for an individual as well as institutional investors. They regulate the trading transactions with proper rules and regulations in order to ensure investor's protection. This helps to consolidate the confidence of investors and small savers. Thus, stock exchanges attract small savings especially of large number of investors in the capital market.

### **2. Promoting Capital formation**

The funds mobilised through capital market are provided to the industries engaged in the production of various goods and services useful for the society. This leads to capital



formation and development of national assets. The savings mobilised are channelised into appropriate avenues of investment.

### **3. Wider Avenues of investment**

Stock exchanges provide a wider avenue for the investment to the people and organisations with investible surplus. Companies from diverse industries like Information Technology, Steel, Chemicals, Fuels and Petroleum, Cement, Fertilizers, etc. offer various kinds of equity and debt securities to the investors.

### **4. Liquidity of investment**

Stock exchanges provide liquidity of investment to the investors. Investors can sell out any of their investments in securities at any time during trading days and trading hours on stock exchanges. Thus, stock exchanges provide liquidity of investment. The on-line trading and online settlement of demat securities facilitates the investors to sellout their investments and realise the proceeds within a day or two. Even investors can switch over their investment from one security to another according to the changing scenario of capital market.

### **5. Investment priorities**

Stock exchanges facilitate the investors to decide his investment priorities by providing him the basket of different kinds of securities of different industries and companies. He can sell stock of one company and buy a stock of another company through stock exchange whenever he wants. He can manage his investment portfolio to maximise his wealth.

### **6. Investment safety**

Stock exchanges through their by-laws, Securities and Exchange Board of India (SEBI) guidelines, transparent procedures try to provide safety to the investment in industrial



securities. Government has established the National Stock Exchange (NSE) and Over The Counter Exchange of India (OTCEI) for investors' safety. Exchange authorities try to curb speculative practices and minimise the risk for common investor to preserve his confidence.

### **7. Wide Marketability to Securities**

Online price quoting system and online buying and selling facility have changed the nature and working of stock exchanges. Formerly, the dealings on stock exchanges were restricted to its head quarters. The investors across the country were absolutely in dark about the price fluctuations on stock exchanges due to the lack of information. But today due to Internet, on line quoting facility is available at the computers of investors. As a result, they can keep track of price fluctuations taking place on stock exchange every second during the working hours.

### **8. Financial resources for public and private sectors**

Stock Exchanges make available the financial resources available to the industries in public and private sector through various kinds of securities. Due to the assurance of liquidity, marketing support, investment safety assured through stock exchanges, the public issues of securities by these industries receive strong public response (resulting in oversubscription of issue).

### **9. Funds for Development Purpose**

Stock exchanges enable the government to mobilise the funds for public utilities and public undertakings which take up the developmental activities like power projects, shipping, railways, telecommunication, dams & roads constructions, etc. Stock exchanges provide liquidity, marketability, price continuity and constant evaluation of government securities.



#### **10. Indicator of Industrial Development**

Stock exchanges are the symbolic indicators of industrial development of a nation. Productivity, efficiency, economic-status, prospects of each industry and every unit in an industry is reflected through the price fluctuation of industrial securities on stock exchanges. Stock exchange sensex and price fluctuations of securities of various companies tell the entire story of changes in industrial sector.

#### **11. Barometer of National Economy**

Stock exchange is taken as a Barometer of the economy of a country. Each economy is economically symbolized (indicators) by its most significant stock exchange. New York Stock Exchange, London Stock Exchange, Tokyo Stock Exchange and Bombay Stock Exchange are considered as barometers of U.S.A, United Kingdom, Japan and India respectively. At both national and international level these stock exchanges represent the progress and conditions of their economies. Thus, stock exchange serves the nation in several ways through its diversified economic services which include imparting liquidity to investments, providing marketability, enabling evaluation and ensuring price continuity of securities.

### **4. Meaning of Foreign Institutional Investment**

**“Foreign Institutional Investor”** means an institution established or incorporated outside India, which proposes to make investment in India in securities.

#### **INSTITUTIONS ELIGIBLE TO SEEK REGISTRATION AS FIIs:**

The following entities / funds may apply to SEBI for registration as FIIs:

1. Pension Funds
2. Mutual Funds
11. Foreign Central Banks
12. Sovereign Wealth Funds



3. Insurance/Reinsurance Companies
4. Investment Trusts
5. Banks
6. University Funds
7. Endowments
8. Foundations
9. Charitable Trusts/  
Charitable Societies
10. Foreign Governmental Agencies
13. International Organizations
14. Broad Based Funds

### **5. Impact Of GAAR On Foreign Institutional Investors**

The Government proposal to apply the General Anti Avoidance Regulations which is popularly known as the “GAAR” provisions would have severe impact on the overall business prospects of the Indian capital market. The GAAR provisions which have been made applicable from April 1<sup>st</sup> 2012 requires that FII will have to prove the Indian tax officials that they have a legitimate business place in Singapore and Mauritius to claim the zero tax benefit. Now this is really absurd since everyone knows including the government that FII money comes through these routes since there is no tax. FII flows have already started dropping keeping the GAAR provisions in mind. The average flow of FII in future and options segment in March 2012 was Rs. 50,000 crore per day which has come down to Rs. 28000 crore per day in April 2012. Also FII like Macquarie has clearly made it clear that they would wind up all their open positions on Indian Nifty and shift their trades to Singapore Exchange SGX which has all the benefits of taxation. This step is very clear indication that FII are in no mood to shell out any tax. As the volumes in the Indian stock market have gone down and with low FII participation the impact cost in the market would





rise making the overall market unattractive for the FII investments and also for Indian retail investors. The broking houses which are facing one of the worst times since 2011 are in desperate situation since the retail participation has simply run away from the Indian stock market. The falling retail participation with rising cost has forced broking houses to shut some of their branches, reduce the employees, salary cuts and other painful activities. The broking industry may also witness consolidation with respect to the weak and small players being acquired by large and big broking houses.

The current uncertain environment created by the GAAR ruling has sent shivers in the Indian stock markets which is already passing through worst of phases. With the Foreign Institutional Investors trying to find out alternative investment destinations and the retail investors running away from the markets, brokers are facing tough times managing their break even points. The brokers especially who are having only retail investors as their customer base are the worst hit since the retail participation has already fallen drastically.

The current uncertainty created by GAAR has only added to the problems of the brokers. The FII buying in Jan 2012 and February 2012 was Rs. 44000 crores which came down only to Rs. 8000 crores in March 2012 which is visible since the markets have become range bound and is not performing.

The recent regulation which is government is keen on passing in the parliament announced in Budget Feb 2012 would have an adverse effect on the working of the FII in India. The GAAR (General Anti Avoidance Regulation) would supersede all the earlier regulations related to FII and Foreign assets transaction even if they were carried out outside India. The GAAR would affect the FII investing through the P Notes and also through the Singapore route. Current around 17% of the FII money comes to P notes. Participatory notes are offshore derivatives instruments. The identity of the end investor is not known under P notes and so this method is always under suspicion by SEBI. In 2007 October, also SEBI had put ban on P notes and as a result 40 % of the FII business



## 6. Future mood of FII

The year 2011 was the worst year for the Indian equities markets with the SENSEX giving negative 25 % with the FII selling Rs. 2700 crores in the year. The rise in the repo rate from 3.25% to 8.5 % made the cost of borrowing very high for the Indian corporate sector and as result, the net profit of Corporate India came down by 34.9%. The rise in the interest cost made the return on equity less attractive and resulted in a general slowdown in the economy with the IIP going to -5.1% in October 2011. But the year 2012 started on the positive note with the Inflation showing signs of receding and coming down to 6.55% which is near to comfort level of RBI. Also the reduction in the CRR of first 50 basis points and then and then 75 basis point led to the infusion of Rs. 80,000 crores into the system. This has resulted into creation of some positive sentiment that interest rates cut would be on the cards.

**The first two months of 2012** that is January and February saw net inflow of Rs. 44000 crores into the Indian stock markets. This made the SENSEX give return of 19% which made Indian markets the best performing markets in the world. After June 2012, it is widely seen as the RBI would start reducing the Repo rate which is the key instruments for the interest rates in the economy. Once the Repo rate starts coming down, it would result into the lower interest rates and this would bring down the cost of capital for the corporate Indian. The profitability of the corporate India would rise and this makes the shares of Indian companies more attractive for the FII. The FII would starting pouring in more liquidity as the quarterly results of companies improve and this would make them invests more in the Indian stock market. Also in 2011, when the world economy was problems from Eurozone crisis, Indian economy has relatively performed well and has been able to maintain growth rate of around 7 %. The world economy is likely to come out of woods as the Eurozone and the US



seems to be stabilizing. The US economy in 2011 consumed \$ 10.7 trillion which is 70 % of GDP by the way of US consumers. The recovery in the US and Euro would ensure that again FII money which cannot avoid Indian Economy would again start pouring back their money into our country.

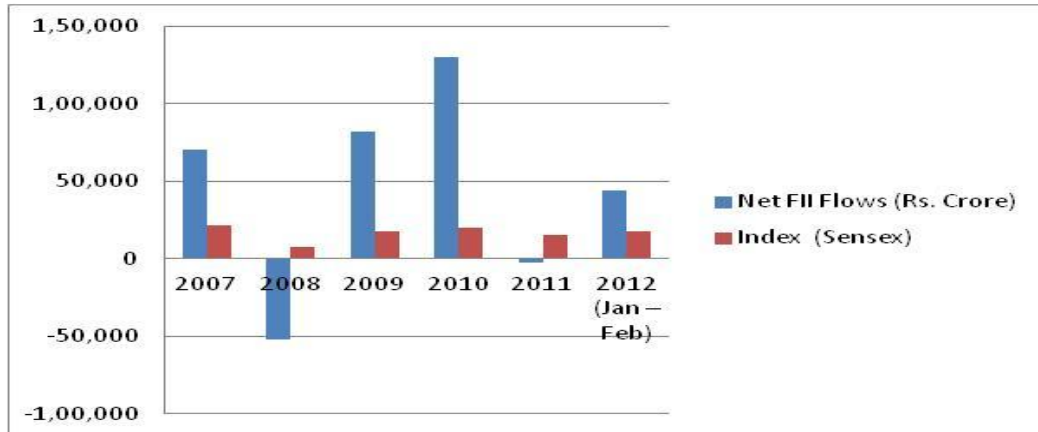
**CURRENT SCENARIO OF FII INVESTMENTS**

<b>Year</b>	<b>Net FII Flows (Rs. Crore)</b>	<b>Index (Sensex)</b>
<b>2007</b>	<b>+ 70,000</b>	<b>21206</b>
<b>2008</b>	<b>- 52000</b>	<b>7697</b>
<b>2009</b>	<b>+ 82000</b>	<b>18000</b>
<b>2010</b>	<b>+ 1,30,000</b>	<b>20000</b>
<b>2011</b>	<b>- 2700</b>	<b>15560</b>
<b>2012 (Jan – Feb)</b>	<b>+ 44000</b>	<b>18000</b>

**Source:- Different articles figures from Economic Times**



CHART – 1



## 7. Analysis

The above table clearly shows the relationship between the FII flows and the movement of the SENSEX. The year 2007 was the best year for the Indian markets since the index touched all time high of 21206 which was touched on 10<sup>th</sup> January 2008 with FII investing Rs. 70,000 crores into the Indian stock market. The year 2008 which was the year of “Global Financial Crisis” saw the same FIIs selling Indian stocks worth Rs. 52000 crores which bought the SENSEX down from 21206 in January 2008 to 7697 level in October 2008. But as Indian Economy was able to register GDP growth of 6.3% vs global GDP growth of around 1 to 2 %, FII faith in Indian Economy was renewed and they invested Rs. 82000 crores in 2009 which took the index back to 18000 levels making index give 75 % in 2009. The year 2010 saw record FII flows of Rs. 1,30,000 crores which was record inflow of FII money since 1992 when we allowed FII to invest in the Indian markets. The year 2009 and 2010 together saw 50 % of the total FII flows into the Indian market from 1992 to 2010. Out of Rs. 4,43,000 crores which is the total amount which came in that period, the year 2009 and 2010 together saw Rs. 2,15,000 crores coming into the Indian markets.



## **8. Research Methodology**

The research design used in the paper is based on conclusive whereby an attempt has been made to know the effect of FIIs inflow on the movement of the stock market index particularly the Bombay Stock Exchange index called the SENSEX.

## **9. Null Hypothesis (Ho)**

There is no significant relationship between the FII inflow and movement of the sensex.

## **10. Alternate Hypothesis (H1)**

There is significant relationship between the FII inflow and the movement of the sensex.

## **11. Software used for Analysis**

The Microsoft Excel has been used to analyze the data.

## **12. Data taken for Analysis**

The monthly data for the inflow of FIIs and the month end index has been taken from January 2005 to December 2010.

## **13. Number of Observations**



72 observations have been taken for both FII inflows and the month end sensex from January 2005 to December 2010.

#### **14. Variables taken for study**

Two variables have been taken for study which are FII inflow and the month end index values. FII inflow is the independent variable and the month end index is the dependent variable.

#### **15. Statistical Operations Performed**

The main statistical Operations that have been performed on the data are as follows:-

#### **16. Correlation**

The coefficient of correlation shows that upto what extent the two variables are correlated. The range for this coefficient is from -1 to +1 which means that if -1 is there then there is perfect negative correlation which means that if one variable increased the other would decrease. If  $r = +1$  then there is perfect positive correlation whereby if one variable increases the other also increases and vice versa. If  $r = 0$  then there is no relation between the two variables. **Here our correlation coefficient is 0.31 which means that it has less than partial positive correlation between the FII inflows and the month end index.**

#### **17. Analysis of Variance using F – Test**

The F – test has been performed on the data to find out the significance of the variances between FII and the month end sensex. The calculated value of F-Test comes to 5.27 while



the table value at 5% level of significance is about 1.96 which means that Null Hypothesis is rejected. This means that at the alternate hypothesis is accepted which states that there is significant relationship between the FII inflows and the month end value of the sensex.

### **18. Analysis Using One independent sample T – Test**

In case of T Test, the calculated value has been about 2.36 whereas the table value at 5% level of confidence comes at 1.96 which means that the Null Hypothesis is rejected that is acceptance of the Alternate Hypothesis which states that there is significant relationship between FII inflows and the month end value of the index (sensex).

### **19. Alpha Coefficient**

The Alpha coefficient which is a constant has been arrived at 12896 which means that if there is no FII inflow then the sensex value would have been 12896 where current value of the SENSEX has 16500. The year 2011 saw FII being net sellers to the tune of Rs. 2700 crores and the SENSEX had given negative return of 24.62 %. This shows that without FII flows the Sensex has not been able to give positive return.

### **20. Forecasting Index Value**

The index which is dependent variable in this study while the FII flows are the independent variable. We have taken the independent variable of FII flows to \$ 4000 million which would make the SENSEX at 15485 levels. If the flows dry up like what has happened in 2011 then the SENSEX could fall back to lower levels.

### **21. Conclusions**



From the above statistical inferences it is clear that there is significant relationship between FII inflows and the month end value of the index. All the statistical Test proves that null hypothesis is rejected whereas the Alternate Hypothesis is accepted which tells that there is significant relationship between the two. The theoretical aspect and the data provided in the tables also shows that FII have significant command over the Indian markets.

## 22. Suggestions for more scope for FII investments

The following suggestions would probably help to control the impact of FIIs on the market which would give the Indian markets stability.

1. **No Cap on FIIs investments :-** There should not be any cap on the overall FII investments made in the Indian equities market in case of individual companies. The listed companies should be allowed to have default FII limit up from 24 % of paid up capital to 74 % of paid up capital. This would ensue that more FII participation comes into the market and there is better price discovery.
2. **Domestic retail investors should be attracted :-** Domestic retail investors who are the backbone of the financial markets should be attracted by schemes like the Rajiv Gandhi Equity Linked Saving Scheme where the investor gets 50 % of the Rs. 50,000 which he would invest in the markets and have a lock in period of 3 years. This would give the investors more reasons
3. **Mutual funds should be allowed to trade in derivatives :-** Mutual funds should be allowed to trade in the derivatives market so that they can act as a counter force to the FII. Apart from hedging which they are currently doing, they should also be allowed to trade in the Mutual funds segment.





4. **P-Notes should be freely allowed :-** There should not be any restriction on the use of P-Notes as this is the route preferred by the FII as they do not have to disclose the identity of the end users. Singapore Nifty has gained prominence only because it has allowed P-notes in October 2007 when SEBI had put a ban on that which ultimately sent wrong signals to the FII.

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