

Understanding The Relation Between FII and Stock Market

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Abstract— Indian financial market has seen an extraordinary volatility in the last few years. Since year 2002, Indian market has grown from a much volatile conditions to growth phenomena, from a SENSEX point of 5500 in December 2003 to 13,787 in December 2006 and crossed the mark of 20,000 in the year 2007 and again in 2013. Due to various reasons the stock market has also experienced drastic decline to even less than 8,000 points in 2008. It is not because of only the domestic market but also the international investors. There are many other variables which contribute to the positive growth of the stock market. FIIs investment is considered to be one of the biggest push after the economic fundamentals. There is no doubt that the liberalisation of the FII flows into the Indian Capital Market since 1993 has had a considerable impact on Indian stock market. The present paper is an attempt to explore the FIIs investment behaviour and its relationship with SENSEX and NIFTY movement.

This paper makes an attempt to develop an understanding of the dynamics of the trading behaviour of FIIs and effect on the Indian equity market. The study is conducted using daily data on BSE Sensex and Nifty and FII activity over a period of 10 years spanning from Jan 2003 to September 2013. It provides the evidence of significant positive correlation between FII activity and effects on Indian Capital Market. The analysis also finds that the movements in the Indian Capital Market are fairly explained by the FII net inflows.

Keywords-BSE;NSE;FII;SENSEX;NIFTY

I. INTRODUCTION

Institutional Investor is any investor or investment fund that is from or registered in a country outside of the one in which it is currently investing. Institutional investors include hedge funds, insurance companies, pension funds and mutual funds. The growing Indian market had attracted the foreign investors, which are called Foreign Institutional Investors (FII) to Indian equity market, and in this paper, we are trying a simple attempt to explain the impact and extent of foreign institutional investors in Indian stock market. Role of FII has increased and changed the face of Indian Stock Market. It has brought both qualitative and quantitative change. It had also increased the breadth and depth of market. Although the Foreign institutional investors (FIIs), whose investments are often called 'hot money' because they can be pulled out at any time, have been blamed for large and concerted withdrawals of capital from the country at the time of recent financial crisis, they have emerged as important players in the Indian capital market. With over 20 million shareholders, India has the third largest investor base in the world after the USA and Japan.

Over 9,000 companies are listed on the stock exchanges, which are serviced by approximately 7,500 stockbrokers. The Indian capital market is significant in terms of the degree of development, volume of trading and its tremendous growth potential.

II. LITERATURE REVIEW

Kishore C. Samal, "Economic and Political Weekly, Vol. 32, No. 42 (Oct. 18-24, 1997)"The main emerging feature of India's equity market is its gradual integration with the global market and its consequent problems due to the hot money movement by Foreign Institutional Investors (FIIs).

Dornbusch and Park (1995), Radelet and Sachs(1998)The stock market shows more reaction to foreign investment as the economy liberalizes. A concern with the entry of FIIs is that they are positive feedback traders—traders who buy when the market increases and sell when the market falls. This acts as destabilizing factor because the sales by FIIs lead the stock market to fall further and their buys increase the stock market as concluded by. Not only this, these trades push the stock-prices away from the fundamentals as revealed by studies on contemporaneous relation between FIIs investments and equity returns based on monthly data **.Bohn and Tesar (1996), Berko and Clark (1997)**.

Gordon and Gupta (2003)It was found observed that FIIs act as market makers and book profits by investing when prices are low and selling when they are high. Hence, there are contradictory findings by various researchers regarding the causal relationship between FII net inflows and stock market capitalization and returns of BSE/ NSE. Therefore, there is a need to investigate whether FIIs are the cause or effect of stock market fluctuations in India

Agarwal (1997), Chakrabarti (2001) and Nair and Trivedi (2003)Most of the existing literature on FIIs in India found that the equity return has a significant and positive impact on the FIIs and stock returns are strongly correlated in India. But, given the huge volume of investments, foreign investors could play a role of market makers and book their profits, i.e. they can buy financial assets when the prices are declining, thereby jacking-up the asset prices and sell when the asset prices are increasing

Anand Bansal and J.S. Pasricha (2009) studied the impact of market opening to FIIs on Indian stock market behaviour. They empirically analyse the change of market return and volatility after the entry of FIIs to Indian capital market and found that while there is no significant change in the Indian stock market average returns; volatility is significantly reduced after India unlocked its stock market to foreign investors. In the next section we are discussing the data sources and methodology of the study.

III. OBJECTIVES OF THE STUDY

- To get the knowledge of stock market.
- To analyse graphically, Net purchases and sales by FIIs in the sampling period.
- To analyse the trend in FII investment in India during the sample period
- To analyse the relationship between Nifty and FIIs
- To know the volatility of BSE SENSEX due to FIIs
- To study the behavioural pattern of FIIs during the period 2002 to 2012

IV. SCOPE AND NEED OF STUDY

Scope of the study is very broader and covers both the stock indices and its comparison with foreign institutional investments. But, study is only going to cover foreign investments in form of equity. The time period is limited from 2002 to 2012 as it will give exact impact in both the bullish and bearish trend. The study will provide a very clear picture of the impact of foreign institutional investors on Indian stock indices. It will also describe the market trends due to FIIs inflow and outflow. The study would be helpful for further descriptive studies on the ideas that will be explored. Moreover, it would be beneficial to gain knowledge regarding foreign institutional investments, their process of registration and their impact on Indian stock market.

V. RESEARCH METHODOLOGY

The research has been carried out by collection of secondary data with the use of primarily the internet, books on banking and finance, various business magazines, journals, newspapers. No primary data has been used here like face to face interviews or telephonic interviews, questionnaires etc.

Correlation: This analysis tool and its formulas measure the relationship between two data sets that are scaled to be independent of the unit of measurement.

For FII Correlation tool has been used to determine whether two ranges of data move together — that is, how the Sensex, Foreign exchange reserves and exchange rates are related to the FII which may be positive relation, negative relation or no relation. For the purpose of comparison between Stock market and FII the raw data has been arranged into a table for better observation and then this numerical data has been incorporated

into bar charts and line charts. These are statistical tools used to read their pattern and conduct trend analysis.

VI. LIMITATIONS

Limitations are conditions that restrict the scope of the study period or may affect the results of the research. It cannot be controlled by the researchers and can even affect the analysis of research adversely. One of the limiting factors of this study was that only three variables have been taken for a time period of about seven to ten years for analysis due to time constraints. Since the sample size is small so the results can be different from actual facts and may not give an appropriate judgement. Also all the data have been collected from secondary sources. Information collected first hand from professionals and scholars through interviews would have given the report a larger perspective.

VII. EXPLANATION

Overview of Indian Stock market

The working of stock exchanges in India started in 1875. BSE is the oldest stock market in India. The history of Indian stock trading starts with 318 persons taking membership in Native Share and Stock Brokers Association, which we now know by the name Bombay Stock Exchange or BSE in short. In 1965, BSE got permanent recognition from the Government of India. National Stock Exchange comes second to BSE in terms of popularity. BSE and NSE represent themselves as synonyms of Indian stock market. The history of Indian stock market is almost the same as the history of BSE. The 30 stock sensitive index or Sensex was first compiled in 1986. The Sensex is compiled based on the performance of the stocks of 30 financially sound benchmark companies. In 1990 the BSE crossed the 1000 mark for the first time. It crossed 2000, 3000 and 4000 figures in 1992. The reason for such huge surge in the stock market was the liberal financial policies announced by the then financial minister Dr. Manmohan Singh. Many foreign institutional investors (FII) are investing in Indian stock markets on a very large scale. The liberal economic policies pursued by successive Governments attracted foreign institutional investors to a large scale. Global investors now ardently seek India as their preferred location for investment. Once viewed with scepticism, stock market now appeals to middle class Indians also. Many Indians working in foreign countries now divert their savings to stocks. This recent phenomenon is the result of opening up of online trading and diminished interest rates from banks. The stockbrokers based in India are opening offices in different countries mainly to cater the needs of Non Resident Indians. The time factor also works for the NRIs. They can buy or sell stock online after returning from their work places.

National Stock Exchange

In order to lift the Indian stock market trading system on par with the international standards. On the basis of the recommendations of high powered Pherwani Committee, the National Stock Exchange was incorporated in 1992 by Industrial Development Bank of India, Industrial Credit and Investment Corporation of India, Industrial Finance Corporation of India, all Insurance Corporations, selected commercial banks and others. NSE provides exposure to investors in two types of markets, namely: Wholesale debt market and Capital market.

Trading at NSE

- Fully automated screen-based trading mechanism.
- Strictly follows the principle of an order-driven market.
- Trading members are linked through a communication network.
- This network allows them to execute trade from their offices.

Bombay Stock Exchange

Bombay Stock Exchange is the oldest stock exchange in Asia. What is now popularly known as the BSE was established as "The Native Share & Stock Brokers' Association" in 1875. Over the past 135 years, BSE has facilitated the growth of the Indian corporate sector by providing it with an efficient capital raising platform. Today, BSE is the world's number 1 exchange in the world in terms of the number of listed companies (over 4900). It is the world's 5th most active in terms of number of transactions handled through its electronic trading system. And it is in the top ten of global exchanges in terms of the market capitalization of its listed companies (as of December 31, 2009). The companies listed on BSE command a total market capitalization of USD Trillion 1.28. The BSE Index, SENSEX, is India's first and most popular Stock Market benchmark index. Exchange traded funds (ETF) on SENSEX, are listed on BSE and in Hong Kong. Futures and options on the index are also traded at BSE.

FOREIGN INSTITUTIONAL INVESTMENT (FII)

Background

Indian Markets have been one of the most attractive investment places for the FII's. India being a developing nation attracts the foreign flows looking at the growth potential in the Indian Economy. The FII's contribute a major chunk of volumes on the Indian bourses and this in turn impacts the market moves. In case of recession in the world economies, the foreign investors look for safer bets and India with a rising GDP where other nations' GDP / Growth is shrinking has always offered greater investment avenues. Indian Markets have been the clear outperformers vis-a-vis the global markets in the past years.

Foreign Institutional Investment

As defined by the **European Union**, Foreign Institutional Investment is an investment in a foreign stock market by the specialized financial intermediaries managing savings collectively on behalf of investors, especially small investors, towards specific objectives in terms of risk, return and maturity of claims.

SEBI's Definition of FIIs presently includes foreign pension funds, mutual funds, charitable/endowment/university funds, asset management companies and other money managers operating on their behalf in a foreign stock market. Foreign institutional investment is liquid nature investment, which is motivated by international portfolio diversification benefits for individuals and institutional investors in industrial country.

HISTORY OF FOREIGN INSTITUTIONAL INVESTORS

Since 1990-91, the Government of India embarked on liberalization and economic reforms with a view of bringing about rapid and substantial economic growth and move towards globalization of the economy. As a part of the reforms process, the Government under its New Industrial Policy revamped its foreign investment policy recognizing the growing importance of foreign direct investment as an instrument of technology transfer, augmentation of foreign exchange reserves and globalization of the Indian economy. Simultaneously, the Government, for the first time, permitted portfolio investments from abroad by foreign institutional investors in the Indian capital market. The entry of FIIs seems to be a follow up of the recommendation of the Narsimhan Committee Report on Financial System. While recommending their entry, the Committee, however did not elaborate on the objectives of the suggested policy. The committee only suggested that the capital market should be gradually opened up to foreign portfolio investments. From September 14, 1992 with suitable restrictions, Foreign Institutional Investors were permitted to invest in all the securities traded on the primary and secondary markets, including shares, debentures and warrants issued by companies which were listed or were to be listed on the Stock Exchanges in India. While presenting the Budget for 1992-93, the then Finance Minister Dr. Manmohan Singh had announced a proposal to allow reputed foreign investors, such as Pension Funds etc., to invest in Indian capital market.

ROLE OF FOREIGN INSTITUTIONAL INVESTORS IN CAPITAL MARKET IN INDIA

Volatility:

Foreign institutional investment is certainly volatile in nature and its volatility has certainly posed some threats to the Indian stock market considering its influence on the market. Given the presence of foreign institutional investors in Sensex companies and their active trading behaviour, small and periodic shifts in their behaviour lead to market volatility. Such volatility is an inevitable result of the structure of India's financial markets as well. Markets in developing countries like India are thin or shallow in at least three senses. First, only stocks of a few companies are actively traded in the market.

Thus, although there are more than 8,000 companies listed on the stock exchange, the BSE Sensex incorporates just 30 companies, trading in whose shares is seen as indicative of market activity. Second, of these stocks there is only a small proportion that is routinely available for trading, with the rest being held by promoters, the financial institutions and others interested in corporate control or influence. And, third the number of players trading these stocks is also small. In such a scenario investment by the foreign institutional investors leads to a sharp price increase this provides incentives to FII investment and enhances investment and when the correction in the stock prices begins it would have to be a pull out by the FII and can result in sharp decline in the prices.

Price Building Mechanism:

With the increasing participation of the institutional investors in the capital market, it has also helped the different companies to raise funds for their use through the capital market in India. Earlier the companies use to go for debt financing which a cost has attached to it and also in those days the cost of issuing an IPO was higher as compared to the funds that were being generated by the companies. With the help of FII the market has become more competitive fair value of their.

Role of speculation:

The effect of foreign speculative activity in emerging markets can be particularly beneficial if in the emerging market, liquidity is poor first, the potential of market manipulation is acute in small emerging markets and liquidity is often poor. Although there are many policy initiatives that could increase liquidity and reduce the degree of collusion among large traders, there may not be a sufficient mass of domestic speculators to ensure market liquidity and efficiency. Second, opening the market to foreign speculators may increase the valuation of local companies, thereby reducing the cost of equity capital

IMPACT OF FIIs ON INDIAN STOCK MARKET

FIIs have played a very important role in building up India's forex reserves, which have enabled a host of economic reforms. FIIs are now important investors in the country's economic growth despite sluggish domestic sentiment. According to The Morgan Stanley Report, FII strongly influence short-term market movements during bear markets. However, the correlation between returns and flows reduces during bull markets as other market participants raise their involvement reducing the influence of FIIs.

The correlation between foreign inflows and market returns is high during bear and weakens with strengthening equity prices due to increased participation by other players. The equity return has a significant and positive impact on the FII. But given the huge volume of investments, foreign investors could play a role of market makers and book their profits, i.e., they can buy financial assets when the prices are declining thereby jacking-up the asset prices and sell when the asset prices are

increasing. Hence, there is a possibility of bi-directional relationship between FII and the equity returns. India opened its doors to foreign institutional investors in September, 1992. This event represents a landmark event since it resulted in effectively globalizing its financial services industry.

Table 1.2 and 1.3 shows the Net Investment made by Foreign Institutional Investors in India

FII investment behaviour during the events indicates that these events did affect the investments of foreign institutional investors but for a short time period. Another two cases:

(i) Stock market scam 2001 and

(ii) Black Monday 2004 although,

FIIs were net sellers but still BSE Sensex saw a small decline. All the facts show that though there was a net outgo but there was also a comeback in the next very month as a net positive inflow. On the basis of above analysis, we can It is further argue that FIIs tend to support stock market purely to ensure stability and safety of their own investments and supports the broad base hypotheses, which suggest that FIIs add liquidity to the local market and reduce volatility.

DIVERGENT VIEWS ON FIIs

FIIs inducing instability to Stock Markets

Many experts consider FIIs to be "Fair Weather Friends", who come in bulk when there is money to be made and leave abruptly at the first sign of impending trouble in the host country, thereby inducing undesirable risk and uncertainty into markets. A good recent example is evident from FII behaviour in last eighteen months itself. Better fundamentals of Indian economy as compared to the western economies, attracted and prompted FIIs to invest aggressively here, raising the total to a astronomical figure of \$ 20 billion. This almost single handily took the Sensex to touch the 20,000 mark again. However, come November 2010, few local factors like inflation, lower IIP and internal political drama, resulted in major square off of FII positions in no time, thereby pushing the market into a sluggish and corrective mode.

There are other disturbing instances when the FIIs became the agents triggering a blood bath at Dalal Street. On 16th Oct, 2007 Finance Minister Mr. P. Chidambaram made a statement expressing his apprehensions over the usage offshore derivative instrument: P-notes, through which the FIIs made about 60% of their investment in India. Little did the market analysts or the Finance Minister knew that this seemingly ordinary statement would have the potential to inflict a deadly free fall of the market indices. The markets crashed by a staggering 9% within few hours, registering one of the biggest absolute fall in Indian stock market history. The consequences were so severe that the markets had to be closed down for an hour and Mr. Chidambaram had to call a press conference to rephrase his statements. It was yet another alarming call to the domestic investors that woke them up to the rising dominance and influence of the FIIs on Indian Stock Markets.

The Alternate View

There is another set of experts who believe that FIIs are life blood for an emerging economy like India. They augment

domestic saving without increasing foreign debt, provide vital liquidity to Indian companies to sustain road to growth, reduce cost of equity capital and help reduce deficit of Balance of payments (BOP). Also these experts believe that FIIs, like any other investors buy or sell according to prevailing sentiments in the market, rather than creating any sentiments that drive the markets. Hence there lies a conflict between the pros and cons of FIIs and the all important question regarding the role of FIIs in deciding the fate of our stock markets

NIFTY AND FII

FIIs pulling money from the market has resulted in a fall :

There were only two instances in the last decade where FIIs pulled out money from the stock market and at both these times the stock market went down. The pullout was fairly severe in 2008, and the market fall was very bad as well. You may argue that just two years aren't enough to form a conclusion but I'd say that it is fairly safe to say that if FIIs were to pull out money then the stock market will go down.

Net positive investments by FIIs don't guarantee an upmarket :

The market fell in 2001 and FIIs were actually net buyers in that year so that also shows that the market can fall even if FIIs pump in money, so just positive net investments from FIIs don't guarantee an up market.

Biggest up moves don't coincide with biggest FII inflows :

One thing that struck about this chart is that the biggest bars don't coincide with sharp up-movements in the line. The biggest percentage gains in the Nifty weren't always in the same year when FII investments were at a peak.

If you look at 2003, the market went up quite a bit, and there were healthy inflows as well, but if you look at 2004, there were bigger inflows but the market didn't rise up as much that year.

Similarly, 2009 and 2010 follow the same pattern. This can be explained with the high base effect since the market rose so much in 2003 and 2009 that there wasn't as much room to grow in 2004 and 2010.

VII. FINDINGS

BSE SENSEX AND FII INVESTMENT CORRELATION

On the basis of above discussion and data analysis, It is clear that the FIIs are influencing the Sensex movement to a greater extent. Further it is evident that the Sensex has increased when there are positive inflows of FIIs and there were decrease in Sensex when there were negative FII inflows. The Pearson correlation values indicate positive correlation between the foreign institutional investments and the movement of Sensex (Pearson's correlation value is 0.746424196).

Correlation between Closing Price of BSE and FII.

From the charts (*appendix 1.4*) it is clear that net FII investments at BSE show a similar pattern to the Yearly average closings. The blue bars denoting the net FII can be called a volatile from the chart as there are sudden sharp drops and sharp rises. It has no fixed pattern. The net FII started declining from 2007-08 till the middle of 2008-09 which caused a sharp fall in Sensex also which went below the 10000 level in 2007-08 falling by almost 52% as compared to the previous year. But the FIIs started pouring in again from the end of 2009 after the governments abroad started providing bail-out packages, sops and various other incentives to the ailing companies. The Sensex also rises sharply from 2008-09 after the FIIs turned into net buyers and hence a similar pattern can be found between these two.

SENSEX and FII

The table (*appendix 1.5*) shows that there is a positive correlation between FII investment & Sensex. It shows that the rise of Sensex in 2007 was largely fuelled by the money pumped in by the FIIs which led to the market touching 20,000, but in 2008, with the global economy in doldrums, the FIIs were net sellers and took the market down. Again in 2010, Sensex touched 20,000 when FII were at its peak.

VIII. RECOMMENDATIONS

After the analysis of the project study, following recommendations can be made:

- Simplifying procedures and relaxing entry barriers for business activities and providing investor friendly laws and tax system for foreign investors.
- Allowing foreign investment in more areas. In different industries indices the FIIs should be encouraged through different patterns.
- We have to modernize and also have to save our culture. Similarly the laws should be such that it protects domestic investors and also promote trade in country through FIIs.
- Encourage industries to grow to make FIIs an attractive junction to invest

IX. CONCLUSION

Compared to security markets in developed economies, Indian markets being narrower and shallower, allows foreign investors with access to significant funds, to become the dominant player in determining the course of markets. Because of their over sensitive investment behaviour and herding nature, FIIs are capable of causing severe capital out flight abruptly, tumbling share prices in no time and making stock markets unstable and unpredictable. In the process, more often than not, the domestic individual investors are on the

receiving end, losing their precious savings in such outrageous speculative trading.

India as an emerging economic power cannot afford to be intimidated down by the FIIs every now and then. We need formidable Domestic Investors which can pump in liquidity even during cash crunch circumstances thereby fuelling the development. With savings to the tune of roughly 35% of GDP, India can use this to its strength by formulating policies which ensure that domestic funds like Pension Funds, Provident Funds & other Large Corpus Funds have a greater exposure to the equity market. The foreign investment in India should be encouraged, but only from a strategic long term perspective. Derivative instruments which facilitate long term foreign investment with specified lock in periods should be introduced. Sustained long term foreign investments would not only contribute to India's growth but also help in curbing volatility, maintaining currency stability and creating environment for inclusive economic development.

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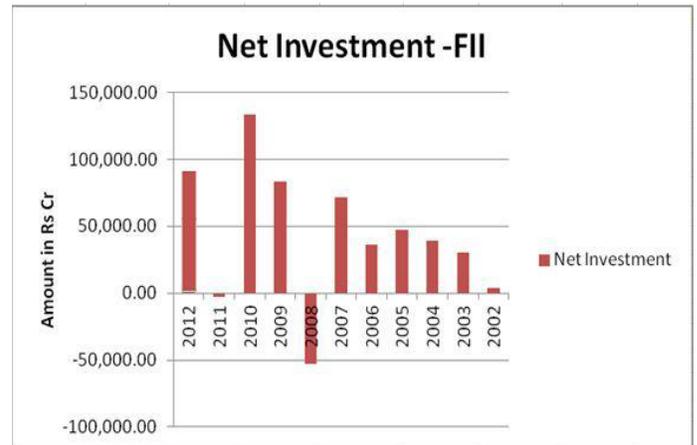
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APPENDIX

TABLE 1.1



The data presented above is compiled on the basis of reports submitted to SEBI by custodians and constitutes trades conducted by FIIs on and up to the previous trading day(s).

Table 1.2 FII Behaviour during Market scam 2001

Month	BSE Index for the month	FII Investments (Rs. Crore)
November 2000	3928.10	1090.11
December 2000	4081.42	-461.78
January 2001	4152.39	3971.58
February 2001	4310.13	1574.14
March 2001	3807.64	2204.80

Table 1.3 FII Behaviour around Black Monday 2004

Month	BSE Index for the month	FII Investments (Rs. Crore)
May 2004	5204.65	-3151.29
June 2004	4823.87	511.00
July 2004	4972.88	1292.83

Table 1.4 BSE Closing Prices and Net FII

Year	Net FII Investment	BSE Closings
2005	47181.9	9397.93
2006	36540.2	13786.91
2007	71486.3	20286.99
2008	-52987.4	9647.31
2009	83424.2	17464.81
2010	133266.8	20509.81
2011	2714.2	15454.9
2012	42263.3	16950

Relation Between FII Investment And Stock Market

Year	Sensex	FII (Rs. in Crores)
2000	3972	6678.6
2001	3262	12474.1
2002	3377	3653.8
2003	5839	35083.7
2004	6603	39707.2
2005	9398	49232.3
2006	13787	38285.9
2007	20287	70361.5
2008	9647	-53309.7
2009	17465	84262.6
2010	20509	131552.8
2011	18503	125085
2012 July 20	17159	51248