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Foreign Institutional Investment and its relationship with BSE Sensex and S&P CNX Nifty

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ABSTRACT

Indianstock market has grown phenomenally after the financial liberalization in the year 1991, this growth has been attributed to domestic as well as foreign investments. Second phase of financial liberalization took place in 1996-97 when foreign investment restrictions were eased and easy flow of foreign funds was enabled. Both these reforms collectively increased the foreign participation in the Indian stock market. The staggering growth in the number of the FII's post 1991, indicate the confidence and as well the financial efficacy of the Indian economic system. This study tried to understand role of foreign institutional investment and its relationship against the volatility of the major Indices such BSE Sensex and S & P CNX Nifty. Strong positive relationship between FII and major indices was observed with the study period being 2005- 2015. Analysis construe that Foreign Institutional Investments are one of the prime movers of the stock market and effect the financial health of Indian Capital Market.

In 1991, financial liberalization opened up the Indian stock market for foreign funds in a big way. Foreign investors who were looking for emerging economies found India, a safe bet.

With the conversion of SEBI to a statutory body in the year 1992, NSE became operational in the same year and the depositories act was passed which led to the establishment of NSDL and CDSL, thus triggering the revolution in the IT and telecom sector which enabled the common man enter into trading.

KEYWORDS : Foreign Institutional Investment, Foreign Direct Investment, BSE SENSEX, S&P CNX Nifty.

FOREIGN INSTITUTIONAL INVESTORS

Investors who have organized themselves into an entity that invests as an entity in financial market of a foreign country are generally referred as foreign institutional investment.

Laying the 2013 Union Budget, the then finance minister of the country Mr. P Chidambaram cleared the ambiguity of 'What is FDI and what is FII?' by stating "an investor who has a stake of 10% or less in a company it will be treated as FII and an investors who has a stake of 10% or more in a company it will be treated as FDI".

In September 1992, Indian capital market was opened up for foreign funds in equities. the financial liberalization brought dynamic changes in the capital market which led to the beginning of pool of funds from foreign country.

GROWTH OF FOREIGN INSTITUTIONAL INVESTORS

Foreign institutional investors who had to register with SEBI in order to invest in Indian capital market grew enormously from 1991 onwards.

Numerical statement provided below mirrors this fact as it can be observed a mere 3 FII's in the year 1993-94 grew to an astonishing number of 1414 by the end of the year 2015

Table I: Year wise registered FII

YEAR	Registered FII
1993-94	3
1994-95	156
1995-96	353
1996-97	439
1997-98	496
1998-99	450
1999-00	506
2000-01	527
2001-02	490
2002-03	502
2003-04	540
2004-05	685
2005-06	882
2006-07	997
2007-08	1,319
2008-09	1,635
2009-10	1,713
2010-11	1,722
2011-12	1,765
2012-13	1,757
2013-14	1,710
2014-15	1,414

Source : SEBI

FII's SHARE IN INDIAN CAPITAL MARKET

Every developing economy in the world experiences huge inflow of foreign funds which come with an expectation of greater return than that could be realized by investing in the parent country.

NSE enjoys almost 14% of the contribution from FII's and this has been growing rapidly over the years.

This paper takes the liberty to classify the scope of the research into 3 phases namely

a) Boom phase (2005-2008)
b) Recession phase (2008-2009)
c) Distress selling phase (2011)

The boom phase indicates the GDP of the country hitting an all time high of 9% during these years with economy expanding to cater greater demand and supply balance.

The recession phase contemplates the reason of the subprime crises being the major reason for the record net outflow in the year 2008. The Eurozone crises along with the downgrade rating of Standard's & poor's are led to bulk selling in the stock market.

REVIEW OF LITERATURE:

Prasanna P. K[1], in his study titled, " Foreign Institutional Investors: Investment Preferences in India" , (Journal of Administration and Governance, Vol 3, No.2, pp. 40-51), examined investment preference of FII's and concluded that Foreign Investors preferred Stocks with greater volume of shares owned by general public. The paper also inferred that there exists inverse proportionality relationship between the promoter's holding and Foreign Investment.

Patra, Bannerjee, Bhattacharya and Dash[2] in their study " Impact of FII inflow on the BSE SENSEX and NIFTY", (ManojkananSaboo, MBA) 2010, Studied the relationship of FII inflow with BSE SENSEX and NIFTY and concluded that there exists no significant relation between the SENSEX and NIFTY with FII inflow during the majority years of study with an exception of the years 2003 and 2004.

Gupta, Ambuj, (2011)[3] " Does the stock market fall or rise due to FII's in india", International research journal, Vol , (No.2, pp.99-107) Categorically concluded that the rise and fall of SENSEX AND NIFTY can be attributed to impact of the FII activities. Thus establishing a positive correlation between SENSEX and NIFTY with FII.

Khan, Rohit, Goyal Ranjan And Agarwal (2010)[5] in their paper, " Investigation of Casualty between FII's investment and stock market return", International Research Journal for Finance and Economics, Vol.40, pp.100-112 inferred from their investigation that a positive relationship exist between FII and NIFTY.

Barot and Sapovadia[6], in their paper, " Testing Index volatility of Indian Stock Market in the context of Foreign Institutional Investor's Investment" studied the impact of FII on Indian stock market and interpreted that there exists a positive correlation between FII with SENSEX and NIFTY.

STATEMENT OF THE PROBLEM

Increasing participation of Foreign investors in Indian stock market after the financial liberalization of 1991 has resulted in various dimensional analysis of the Indian stock market with regard to net flow of FII's.

The study aims to understand and analyze the impact of FII on Indian stock market.

RESEARCH GAP

Several studies have been undertaken to give perspective on the volatility of Indian stock market.

Contradictions due to several factors have resulted in space for deeper research in this field.

SCOPE OF STUDY

- Though the increase in FII's participation after 1991 financial liberalization has been staggering,
- This study considers 10 years data I.e. from 2005-2015.
- Reasons being India registered phenomenal growth during 2005-07 and subprime crisis resultedin the record outflow of FII in the year 2008.
- Then, Eurozone crisis along with Std& poor's rating led to enormous selling in the year 2011.
- Red tapism and Bottlenecks delayed projects clearance thereby affecting macroeconomic structure from 2011 to 2014.
- Therefore, we find this period pertinent to study the volatility of Indian stock market under the influence of FII.

OBJECTIVES

1) To study the concept of Foreign Investment and its role in Indian economy.
2) To contemplate the role of Foreign Institutional Investment in Indian stock market.
3) To understand and analyze the impact of FII on Major Indian capital market major Indices during the period of years 2005 to 2015.

HYPOTHESIS

Testing index volatility of BSE SENSEX with FII investment

Hypothesis Ho: FII investment has no impact on the volatility of BSE SENSEX.

Hypothesis Ha: FII investment has significant impact on the volatility of BSE SENSEX.

Testing index volatility of S&P CNX Nifty with FII investment

Hypothesis Ho: FII investment has no impact on the volatility of S&P CNX Nifty.

Hypothesis Ha: FII investment has significant impact on the volatility of S&P CNX Nifty.

RESEARCH METHODOLOGY

Secondary data sources such as Handbook of statistics released by SEBI (Stock Exchange Board of India) and as well as the reports of the major Indian capital market indices such as S&P CNX Nifty and BSE Sensex have been considered. Official websites of Reserve Bank of India and the Securities Exchange Board of India has also been considered for the statistical analysis.

HYPOTHESIS TESTING

Hypothesis testing is carried on the basis of correlation and regression which requires two variables namely, an independent variable that is FII in this respective research and the dependent variable which are the BSE SENSEX and S & P CNX Nifty.

There are many other factors that affect the Indian capital market but for the purpose of this study, we are considering only the Foreign Investment to the two major Indices of the capital market.

EMPIRICAL ANALYSIS

This part of the analysis is classified with regard to each year data observed. Hence the table II provides the details of net change in the BSE Sensex with regards to the net flow of FII in the respective year.

Table II – BSE Sensex & FII Net Flow

YEAR	BSE (Net change) Y1	FPI/FII (Net Flow) X	Cost of 1 point of SENSEX in Rs (Cr)
2005	2771.44	47181.1	17.02403805
2006	4364.42	36539.7	8.372177746
2007	6459.22	71486.5	11.06735798
2008	-10677.96	-52987	4.962277439
2009	7744.26	83423.9	10.77235268
2010	3035.64	133266	43.90046251
2011	-5054.09	-2714.3	0.537050191
2012	3908.79	128359.8	32.83875573
2013	1589.79	113136	71.16411602
2014	6358.94	97054	15.26260666
2015	-1390	17808	-12.81151079

Source : SEBI hand book (statistic)

Graph I: BSE Sensex & FII Net Flow

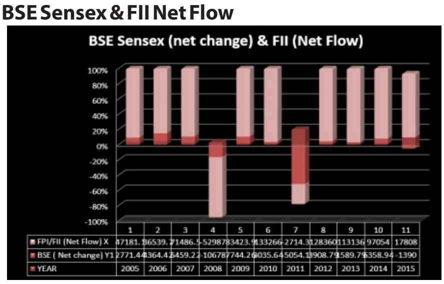
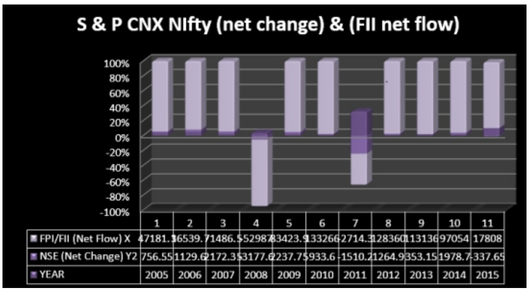


Table III- S & P CNX Nifty – FII Net Flow

YEAR	NSE (Net Change) Y2	FPI/FII (Net Flow) X	Cost of 1 point of NIFTY in Rs (Cr)
2005	756.55	47181.1	62.36349217
2006	1129.6	36539.7	32.34746813
2007	2172.35	71486.5	32.90745046
2008	-3177.6	-52987	16.67516365
2009	2237.75	83423.9	37.28025919
2010	933.6	133266	142.7442159
2011	-1510.2	-2714.3	1.797311614
2012	1264.9	128359.8	101.4782196
2013	353.15	113136	320.3624522
2014	1978.7	97054	49.04937585
2015	-337.65	17808	-52.741004

Source : SEBI Statistics hand book

Graph II: S & P CNX Nifty – FII Net Flow



This table shows as observed earlier as well that that when the economy was growing at an annual rate of 8% in the years of 2005-06 & 2006-07, the Net flow of foreign Investment has been positive and the third column in the table refers to the amount in crores that required the Index to move up or down by 1 point.

During the first three years of the observation, when the macroeconomic conditions was quite favorable, foreign investors destined their funds to one the high growing economies of the world.

It can also concluded that the stable investment with high growth economy. This phase of investment into the capital market system can termed as the most favorable phases for investment.

In the year 2008, the Subprime crises jolted the word economy and no country in the world was spared of the economic wrath it unleashed. As a result of which Foreign Investors who were the net buyers during the growth period considered the crises thus becoming the net sellers in the year 2008 as shown in the table.

Subprime crises caused economic havoc which led to collapse of almost all major economies of the world thus triggering cyclic chain of reducing the demand led growth which were primarily helping the emerging countries such India. This led to standstill of manufacturing and service sector thus Indian capital market being an economic indicator showcased this statement as a fact with collapsing with a negative net change of 10,677.96 points in BSE Sensex and 3,177.60 points in Nifty.

Fundamentals of the mixed economy such as India being strong, it took 2 years to start making progress on the recovery path and thus establish itself again on the world map as the major hub for hot money with greater returns expected for shorter period, the Foreign Investors with the backing of the Fiscal stimulus of the Federal Bank of the USA, started investing again back to the emerging economies. We must remember that even during these years of recovery India didn't entirely collapse as many expected due to strong resilient measures taken by Reserve Bank of India and as the Finance Ministry.

Thus the table shows enormous funds entering the Indian capital market during the recovery years of 2009 and 2010.

The prominent data that needs to be observed in the table is the cost effect on the indices. The turbulent year of 2008 registered a 1 point dip for a mere 4.96 crore FII net flow. But during the recovery years, it required a mammoth 11.5 crore and 34.94 crore amount of FII for the same 1 point change on the index radar. This is attributed to the other macro and micro economic factors affecting the financial health of the economy.

Then in the year 2011, the Euro crises emerged, along with came the downgraded Standard and Poor's rating which eventually led to the collapse of the wall street. This started the distress selling in the Indian capital market.

The year registered 20% decline in the major Indices and the reasons are attributed to Policy Paralysis and Inflation. This year recorded highest ever selling in the major indices in the entire Asia and foreign investors were no alien to the issue. Therefore, it can be observed that the mere 0.68 crore from BSE Sensex and 2.26 crore from CNX Nifty as correlation for the change of those Indices.

Year 2012 observed little recovery but it cost too much as can be seen in the table that it took almost 32 crores in BSE Sensex to alter it by 1 point. This provides enough material to infer that the high cost required represents the poor performance of the other economy movers. Mainly it can be attributed to internal stagnancy in policy and implementation.

There on, the economy can be referred to as a slow growing economy where in lot of discrepancies have resulted on macro and micro front which have led to the inconsistency in the stock market. Thus, it is observed that in the year 2013, 2014 we had low morale and investors' confidence being the major deciding factor.

Year 2015, was followed by structural changes which is not reflected with quantitative data, and also FII contributing in big way for the 1 point change as observed in the table.

This is the year on analysis of the change or movement in the BSE Sensex and S & P CNX Nifty with regard to FII net flow.

RESULT and ANALYSIS based on Hypothesis

KARL PEARSON'S CORRELATION COEFFICIENT, r	REMARK	
SENSEX	0.772	Strong Positive Correlation
NIFTY	0.773	Strong Positive Correlation

This research considers correlation and regression techniques to analyze the impact of FII on Sensex and Nifty. Karl Person's Correlation co efficient will dictate the relationship one variable establishes with another variable for the data collected on the annual basis of the study period of the research.

Before contemplating on the scale of co efficiency, it is pertinent to note that the Correlation coefficient of Both BSE Sensex and NSE Nifty confine to similar result of 0.77, which in turn exhibit a strong positive relationship between the FII which is the independent variable and the market Indices namely Sensex and Nifty that dependent variables.

The strong positive liner relationship of FII's impact on BSE Sensex and CNX Nifty can be understood as the FII carries 77% change in the indices with its unit respective change.

CONCLUSION

Foreign institutional Investment that is considered 'Hot Money' establishes its meaning in the same respect twice during the study period which year 2008 and 2011. FII with their major established post financial liberalization are playing a pivotal role in the volatility in the Indian stock market.

Positive correlation established mirrors the expectations followed by the financial efficacy of foreign investors.

Analyses proved how macro factors led to the volatility in the stock market whether it is the subprime crises of 2008 or Euro Zone crises of 2011 along with rising inflation and policy paralysis. It must be noted that FII command great share in the volatility of the Indian capital market, hence any drastic change will have sweeping effect on stock market.

Finally, we can conclude that over enthusiastic buying and distress selling are the major trends of FII that has swallowed the capital market in the years observed.

SUGGESTIONS

It is imperative from the done analysis that FII is indeed one of the prime reasons behind the volatility of Indian Stock market. Thus, the risk of Hot money needs to abated by bringing better regulations which not only achieves the above objective, also inject confidence in the domestic investors. It must be remembered that FII being prime movers, may affect stock market on a large scale, it is important to protect the interest of the domestic investors who expect certain level of the protection from the Hot Money fury during the distress selling phase in particular.

Also, policy paralysis had been the major block during several years which made foreign investors look for other destinations for better returns. This issue needs to be resolved at the governance level.
Stable growth with acceptable inflation range would propel better GDP numbers which in turn would boost the economic health thus creating a better investment destination for foreign funds.

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