

ABSTRACT

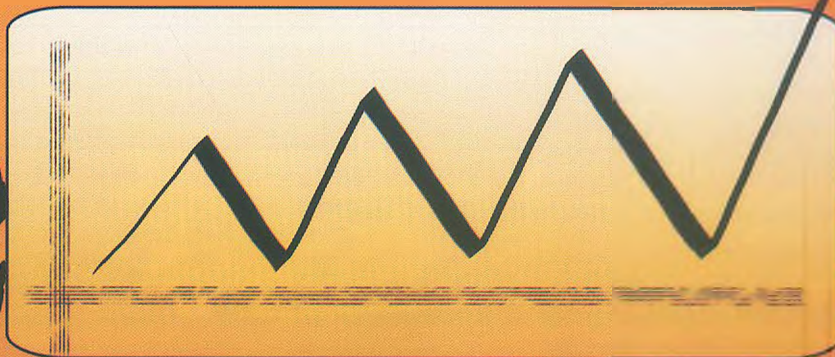
The emergence of the FIIs in stock market has been a debatable issue. Beside others, the above may be attributed to the absence of adequate empirical evidence about the impact of FIIs on the volatility and return of the underlying stock market. Since, India is not an exception of the above, in this paper we have made an attempt to review the existing studies on the subject under reference with the aim to conclude this debatable issue. The findings reveal that according to the results of around fifty percent of the studies reviewed here in the volatility of the underlying stock market has increased significantly. The remaining all studies (except one), however, indicate no impact on the volatility. About the impact on returns, the majority of the research studies find that FIIs arrival increased the return in the host country market.

Keywords: Foreign Institutional Investors (FIIs), Volatility, Stock Market, Indian Stock Market.

Impact Of Foreign Institutional Investors On Underlying Stock Market:

A Survey Of The Existing Literature

Dr. B.s.bodla, Mr. Ashish Garg



INTRODUCTION

Foreign institutional investors have become the hot issue of the discussion in India, especially from the beginning of the twenty first century. India opened its stock market to foreign institutional investors in September 1992 and since then the net portfolio investments from the foreigners in equities have been positive in every year except 1998-99 when due to Pokhran Nuclear explosion test by India, foreigners withdrew portfolio investment. Table 1, which portrays the trend and progress of FII activities in Indian equity market from the year 1992-93 to 2006-07 reveals that more than three hundred percent increase has been experienced in purchase and sale of the equity securities by the FIIs over the last five years, in case of India. Hence, the portfolio investment has become a dominant path of foreign investment in Indian economy.

In order to trade in the Indian equity market, foreign corporations need to register with the Securities and Exchange Board of India (SEBI) as foreign institutional investors. India allows only authorized foreign investors to invest such as pension funds, investment trusts, asset management companies, university funds, endowment funds, foundations, charitable interests and charitable societies that have a track record of five years and which are registered with a statutory authority in their own country of incorporation or settlement. It is also possible for foreigners to trade in Indian securities without registering as an FII but such cases require approval from the Reserve Bank of India (RBI) or the Foreign Investment Promotion Board (FIPB). Foreign institutional investors generally concentrate on the secondary market.

Table 1
FIIs Investment in India

Securities and Exchange Board of India (SEBI) Data					
Year	Gross in Rupees Crore		Net		
	Purchase	Sale	Rupees Crore	Millions of Dollars	Cumulative In millions of US \$
1992-93	17	4	13	4	4
1993-94	5,592	466	5,126	1,634	1,638
1994-95	7,631	8,835	4,796	1,528	3,166
1995-96	9,694	2,752	6,942	2,036	5,202
1996-97	15,554	6,979	8,575	2,432	7,634
1997-98	18,695	12,737	5,958	1,650	9,284
1998-99	16,115	17,699	-1,584	-386	8,898
1999-2000	56,855	46,734	10,121	2,339	11,237
2000-01	74,051	64,116	9,935	2,159	13,396
2001-02	49,920	41,165	8,755	1,846	15,242
2002-03	47,061	44,371	2,690	562	15,804
2003-04	1,44,858	99,094	45,765	9,950	25,755
2004-05	2,17,911	1,71,696	46,215	10,248	36,008
2005-06	3,46,978	3,05,512	41,466	9,332	45,340
2006-07*	3,62,438	3,38,471	23,967	5,163	50,503

Source: Report of the Ministry of Finance, Govt. of India on Encouraging FII Flows Nov. 2005 and data for later period is updated by the RBI website.

*Data is upto 31 December 2006

In the absence of adequate empirical evidence, the emergence of FIIs in stock market has been a debatable issue over the push lobby of the parliament to common men. While it is generally held that FII flows benefit the economies of recipients' countries, policy makers worldwide have been more than a little uneasy about such investment. FII flows often referred, as "hot money" is notoriously volatile compared to other forms of capital flows. Investors are known to pull back portfolio investments at the slightest hint of trouble in the host country often leading to disastrous consequences to its economy. They have been blamed to lead economic problems in a country by making large and concentrated withdrawals at the first sign of economic weakness. They have also been held responsible for spreading financial crises- causing 'contagion' in international financial market while some of the economists have some other view about the impact of FII flows in the economy. The theories relating to impact of FII investment on underlying stock market have been advanced explaining contradictory conclusion.

The two main bodies of theories exist in the literature about the relationship between FIIs investment and underlying stock market and both are contradictory to each other.

These are:

A 'Destabilizing forces' hypothesis, that predicts increased volatility due to the FIIs inflows.

A 'Non-destabilization' hypothesis that FIIs has no impact on stock market volatility.

Even about the impact of the FIIs flows on return, there are two views:


A 'Positive Feed Back Trading' hypothesis that says FIIs enter in the market when there are some positive signals of higher stock return and withdraws when they perceive some negative information.

A 'Base broadening' hypothesis suggests that the expansion of the investor base by including foreign investors leads to increased diversification followed by reduced risk and consequently lowering the required risk premium. Thus there is a permanent increase in the equity share price through risk pooling which is the signal of higher returns.

In the above mentioned both cases, the former hypothesis states that the FIIs enter in the foreign market to reap the benefits and there after they withdraw their money and that increases the volatility in the underlying stock market. The later hypothesis in each case is based on the belief that introduction of the FIIs leads to more complete market, enhance information flow and thus improves the investment choices for investors, enhances the transparency in the market, put no impact on the volatility and due to low cost of investment the return increases.

Because of the above stated interpretations about the impact of FIIs on the underlying stock market, various studies have been carried out to lay at rest the debate of which hypothesis are held in reality. In this paper, we have made an attempt to reexamine the results offered by the existing studies regarding the impact of FIIs on the underlying stock market so as to draw a conclusion near to the reality.


ETHODOLOGY OF THE STUDY



The present paper aims to provide a comprehensive review of the empirical studies conducted to show the impact of entry of FIIs on the return and volatility of underlying stock market. Purposively, majority of the studies reviewed here in are such where in Indian stock market and remains as the underlying market. The prime sources of the studies reviewed herein include various websites, selected referred national and international journals, published and unpublished theses on the subject under reference etc. For the purpose some reputed libraries such as ICSSR (Delhi), Ratan Tata Library (Delhi School of Economics), National Institute of Financial Management (Fridabad), Management Development Institute (Gurgoan), GJUS&T (Hisar) were visited. As many as 39 research studies (32 concerning Indian Market and 7 emerging stock markets) conducted between 1992 to 2006 have been considered for review. It is expected that the study would be increasingly useful for policy makers, regulators of the capital market (SEBI, Finance Ministry), researchers, investors and security analysts. Moreover, the study would open new vistas of research in the underlying field.

Besides introduction, the present paper is divided into three sections. Section II outlines the methodology of the study. While Section III presents the comprehensive review of relevant literature, Section IV concludes the paper.

REVIEW OF PREVIOUS STUDIES



Several Economists, Financial Analysts, Professionals and Journalists have conducted research or written articles on the subject impact of FIIs on underlying stock market. They have analyzed trends in the

growth, importance and impact of FIIs on Indian stock market. Table-2 gives a summary of the studies reviewed in this paper. Following pages of this section present a comprehensive review of these studies in descending chronological order.

Banerjee, Sarkar (2006), have attempted to model and forecast stock return volatility in the index returns of the NSE, using high frequency intra-day data covering a period from June 2000 through January 2004 by using the GARCH model. Main findings of this study are: (a) existence of volatility clustering in the Indian stock market; (b) evidence of leverage effect on volatility; (c) the change in volume of trade positively affecting market volatility; and (d) participation of FIIs in the Indian stock market not resulting in significant increase in market volatility.

Biswas, Jaydeep (2006), evaluated the impact of financial liberalization on the growth, development and efficiency of Indian stock market vis-à-vis other selected Asian markets by analyzing the data for the period from 1991 to 2005. He found that financial liberalization by introducing FIIs has had a beneficial impact on the growth and development of the Indian stock market. He brought out that the market has developed substantially since 1991-92, in terms of trading volume, market capitalization, no. of listed companies, increased efficiency and liquidity. The authors expressed that expansion of the Indian stock market in the post-liberalization decade was truly impressive but in term of the quality there has been a regress.

Karmakar, Madhusudan (2006), measured the volatility of daily market return in the Indian stock market over the period from 1961 to 2005 by using the GARCH Model and observed that the market is tranquil and volatile. The level of the volatility was modest for the first two decades of the 1960s and 1970s. Almost from the beginning of 1980s there were indications of change in the mood of the market. Volatility touches new high from 1985 and during the year 1992, it surpassed all previous records and continued to increase till the end of the decade. During last two years volatility has declined and this period is accompanied by increasing price rise fuelled partly by the investments made by FIIs.

Mohan, T.T.Ram (2006), conclude in his research that FII flow into Indian stock market have conferred several benefits on the economy. They have helped augment capital flows at a time when the balance of payment situation was not comfortable. They allowed Indian firms to access overseas capital at a cost that was lower than the domestic cost of capital. They ushered in major reforms in the working of securities markets and in corporate governance. He also commented that volatility in FII flows does not pose systematic risk. The study suggest to derive the benefits of FII flows without having to put up with the uncertainties created by the PN component. Eliminating the uncertainties that go

with PNs will also help to reduce or eliminate the cost of sterilization incurred in the process of having to deal with potentially volatile FII flows.

Table 2:
Results of Previous Studies on the Theme Impact of FIIs on Volatility and Return

Author	Market	Impact on Volatility	Impact on
Banerjee and Sarkar(2006)	NSE	No Impact	Increase Return
Biswas, Jaydeep(2006)	INDIA	No Impact	Increase Return
Karmakar, Madhusudan(2006)	S & P CNX NIFTY	Increase	—————
Mohan, T.T.Ram (2006)	INDIA	No Impact	Increase Return
Porwal and Gupta (2006),	NSE S & P CNX	Increase	—————
Rakshit, Mihir (2006),	INDIA	No Impact	Decrease Return
Upadhyay, Saroj(2006)	INDIA	Increase	Increase Return
Ahmad, Ashif and Ahmed(2005)	NSE Nifty	Increase but little	—————
Badhani(2005)	INDIA	—————	Increase Return
Bhattacharya and Jaydeep(2005)	BSE	Increase	Increase Return
Biswas, Joydeep(2005)	BSE	Increase	Increase Return
Pal, Parthapratim (2005)	BSE	Increase	Feedback Trading
Panda, Chkradhara(2005)	BSE AND NSE	—————	Feedback Trading
K. Lakshmi (2004)	NSE S & P CNX	—————	Increase Return
Mazumdar (2004),	INDIA	No Impact	—————
Rai and Bhunumurthy (2004),	BSE	Increase	Feedback Trading
Singh, Sharwan Kumar (2004),	BSE	Increase	No Impact
Ananthanarayanan, Krishnamurthi and Sen (2003),	BSE AND NSE	No Impact	Increase Return
Batra (2003),	BSE	No Impact	Feedback Trading
Chakrabarti (2003),	INDIA	—————	Increase Return
Khanna, Sushil (2002),	INDIA	—————	No Impact
Mukherjee, Paramita (2002),	BSE & NSE	Increase	Feedback Trading
Srivastva, Madhuri (2002),	INDIA	—————	No Impact
Chakrabarti (2001),	BSE	—————	Feedback Trading
Froot, O'Connell and Seasholes (2001)	BSE & NSE	Increase	Increase Return
Pasricha and Singh (2001)	BSE & NSE	Increase	—————
Banaji, J. (2000)	INDIA	—————	Bi-directional
S.S.S.Kumar (2000)	BSE	Decrease	—————
Rao, Murthy and Rangnathan (1999)	BSE	Increase	Increase Return
Amihud and Mandelson (1994)	INDIA	—————	Increase Return
Kim and Singal (1993)	INDIA	No Impact	—————
Warther, V. (1995)	BSE & NSE	—————	Increase Return
Bekaert, Harvey and Lumsdaine, (2002)	20 Emerging Market	—————	Mixed Feedback Trading
Bronser, Steven and Neal (2002)	Jakarta Stock Exchange (INDONESIA)	No Impact	Feedback Trading
Nilsson (2002),	Nordic Stock Exchange	Increase	Increase Return
Moel (2000)	20 Emerging Markets	—————	Decrease Return
Choe, Kho and Stulz (1998)	Korean Stock Market	—————	No Impact Feedback Trading
Bekaert and Harvey (1997)	20 Emerging Markets	No Impact	—————
Bahmani-Oskooee and Sohrabian (1992)	—————	—————	Feedback Trading

Upadhyay, Saroj (2006), found in her study that FII flows supplement and augment domestic savings and domestic investment without increasing the foreign debt of our country. Capital inflows to the equity market increase stock prices, lower the cost of equity capital and encourage the investment by Indian firms. The Indian stock market is both shallow and narrow and the movement of stocks depends on limited number of stocks. As FIIs purchase and sell these stocks there is a high degree of volatility in the stock market. The high degree of volatility can be attributed to the increase in investment by FII, which increases the stock prices. Beside this, even when any correction takes place and the stock price declines; there will be pull out by the FIIs in a large number. According to the study the reason of the volatility is that the FIIs manipulate the situation of boom in such a manner that they wait till the index rises up to a certain height and exit at an appropriate time. This tendency increases the volatility further.

Ahmad, Ashif and Ahmed (2005), made a firm level analysis of FII's role in the Indian equity market. At the aggregate level, FII investments and NSE Nifty seem to have a strong bi-directional causality. At the firm level, FIIs are influencing equity returns especially in the government owned companies. He also confirmed that there has been very little destabilizing effect of FII flows on individual equity returns of the firms during their period of study.

Badhani (2005) attempted Granger Causality Test on the monthly data from April 1993 to March 2004 and observed in the contemporary Indian scenario (i) bi-directional long-term causality between FII investment Flow and stock prices, but no short-term causality could be traced between the variables, (ii) no long-term relationship between exchange rate and stock prices, but short-term causality runs from change in exchange rate to stock returns, not vice versa, and (iii) exchange rate long term Granger causes FII investment flow, not vice versa.

Bhattacharya and Jaydeep (2005), determined the lead and lag interrelationship between the Indian stock market, net foreign institutional investment and exchange rate. By employing the Granger non-causality test by taking BSE sensitive index as proxy for the Indian stock market and the indices of Real Effective Exchange Rate (REER) of the Indian Rupee for the exchange rate for a period of 13 years started from Jan. 1993 to March 2005, they suggest that stock prices could capture information on neither the FIIs nor the exchange rate. Investors can therefore apply profitable trading rules to earn supernormal profits. Also FII cannot capture information on exchange rate thus adding to the possibility of application of profitable trading rules. Under the circumstances, the Indian stock market seems to be bearing the underlying strain not currently visible at the surface. The implementation of profitable trading strategy may at any point of time generate over-enthused investment

and this, if coupled with market overreaction, may result in a destabilized system. A point also to be noted here is the current concentration of FII funds in the IT and Banking sector, which in any event of flow reversals may worsen the situation.

Biswas, Joydeep (2005), conducted a study with an objective to study the role of FIIs in the development of noise driven Indian stock market by taking the data from 1991 to 2004. The inflows of huge institutional investments in India increased the turnover and market liquidity. But excessive speculation indulged by FIIs is the single most important reason for abnormal fluctuations of share price in Indian stock market in the post-liberalization period. The study concludes that FIIs influence the share price movement in Indian stock market but their role in the development of Indian stock market is still questionable.

Pal, Parthaprati (2005), especially examines the behavior of the FIIs in India for the period March 2004 to June 2004 and investigate how the withdrawal of foreign portfolio capital in the post election phase has affected the price and equity holding pattern of different Sensex companies. He found that sensex are quite closely related to FIIs movement in India and also support the feedback-trading hypothesis. He also supports that being the most dominant non-promoter shareholder in the Sensex companies then the other investors group FIIs also increase volatility in the market.

Panda, Chkradhara (2005), examined the impact of FIIs and mutual fund investments on Indian stock market by using Vector Auto regression (VAR) analysis and Granger Causality Test on data of NSE and BSE for the period from Oct. 2003 to Mar. 2004 and found that the returns on Indian stock market indices were more affected by the mutual fund investment than FIIs investment. FIIs are found to follow positive feedback strategy and to have return chasing tendency. The study conclude that domestic investors like mutual funds in that case affect Indian stock market to a great extent than FIIs and recent boom in the Indian stock market could not be mainly because of large FII inflow.

Lakshmi, K. (2004), examined the trend of foreign institutional investors in India for the time period of 1992 to 2003 and found that the FIIs investment in the 19 companies that comprise the S&P CNX NIFTY was only about 12 percent of the total outstanding shares. National stock exchange reported that FIIs hold only a meager 4.26 percent of the total outstanding shares of the companies listed on NSE at the end of March 2003. A sectoral analysis of the data reveals that FIIs hold less than 10 percent of all the sectors except two sectors namely FMCG and Media & Entertainments.

Mazumdar (2004), found that FII flows have enhanced liquidity in the Indian stock market but not much evidence is there to support the hypothesis that FII flows have generated

volatility in the returns.

Rai and Bhunumurthy (2004), examined the determinants of foreign institutional investments in India and their impact on the other domestic financial markets on the basis of monthly data of BSE from Jan. 1994 to Dec. 2002. They employed ARMA, GARCH and TAR model on the data and concluded that FII inflows depend on stock market returns, inflation rates (both domestic and foreign) and ex-ante risk. In terms of magnitude, the impact of stock market returns and the ex-ante risk turned out to be the major determinants of FII inflows. They also suggest that stabilizing stock market volatility and minimizing the ex-ante risk would help to attract more FII, an inflow of which has a positive impact on the real economy.

Singh, Sharwan Kumar (2004), in their study analyzed the policy towards foreign institutional investment and explore some determinants of FII flows and examines if the overall experience had been stabilizing or destabilizing for the Indian capital market. The study concluded that in the 1990s, the volatility of cross-border portfolios investment flows into India had been less than that in respect of other emerging market economies. It also concluded that FII flows were positively related with BSE Sensex. FII inflows to India display seasonality, with inflows being significantly higher in the first few months of the calendar year. Notwithstanding their potentiality favorable impact on growth prospects, highly volatile nature of capital flows, especially portfolio flows and short term debt, underscores the need for efficient management of these flows.

Ananthanarayanan, Krishnamurthi and Sen (2003), examines the impact of trading of Foreign Institutional Investors on the major stock indices of India by employing Box Jenkins Test on the data (Jan. 1993 to June 2003). They separate the flows into expected and unexpected and found that unexpected flows have a greater impact than expected flows. Second, they identify the specific flows of foreign institutional investors flowing into (or out of) each exchange and examine the impact on the specific stock market indices. They found strong evidence consistent with the base-broadening hypothesis consistent with prior work. They did not find compelling confirmation regarding momentum or contrarian strategies being employed by foreign institutional investors. Their findings support the price pressure hypothesis. They did not find any substantiation to the claim that foreigners' destabilize the market.

Batra (2003), using both daily and monthly data attempted to understand the trading behavior of FIIs and return in Indian equity market. He used the BSE Index for that purpose and the time period of the study was 1979 to 2002. He considered all the three components of FII flows, purchase and sales and the net flows to find out which of these have more impact on the stock market returns. He found the strong evidence of FIIs chasing trends and adopting positive feedback trading

strategies. However, he did not find FII having any destabilizing impact on the equity market.

Chakrabarti (2003), made an empirical investigation to see the interrelationship between FII flows and equity returns in India using monthly data. He came with the evidence that the FII flows are highly correlated with equity returns in India but this high correlation is not necessarily evidence of FII flows causing price pressure- if anything, the causality is likely to be the other way around.. Since the US and world return were not significant in explaining the FII flows there was no evidence of any informational disadvantage of FIIs in comparison with the domestic investors in India. His study found that the beta of the Indian market with respect to S & P 500 Index seemed to affect the FII flows inversely but the effect disappears in the post-Asian crisis.

Bekaert, Harvey and Lumsdaine, (2002), in their study on interrelationship between capital flows, returns, dividend yields and world interest rates in 20 emerging markets including india found that the shocks in equity flows initially increases returns which is consistent with a price pressure hypothesis but the effect immediately dies out and there is only incomplete reversal suggesting some of feedback trading as the lagged returns are not significantly related with unexpected flows.

Khanna, Sushil (2002), discussed the impact of FII inflows on the Indian economy and conclude that there was no evidence that the entry of FIIs have reduced the cost of capital to the Indian corporate sector nor have they helped the corporate sector to shift from their dependence on internal resources and funds from public sector development banks to the capital markets. The overall cost of the economy of increased short-term capital flows has been substantially higher than any current potential benefits.

Mukherjee, Paramita (2002), explores in his study the relationship of foreign institutional investment flows to Indian equity market with its possible covariates based on a daily data-set for the period Jan. 1999 to May 2002 by employing Granger Causality Test on it. He obtained the result that the FII net inflow is correlated with the return in Indian equity market. So far as investment in Indian equity market is concerned, foreign investors do not seem to be at informational disadvantage compared to domestic investors. The study also reveal that Asian crisis marked a regime shift in the sense that in the post Asian-crisis period the return in the Indian equity market turned out to be the sole driver of the FII inflow, where as for the pre-Asian crisis period other covariates reflecting return in other competing markets, urge for diversifications etc. were also found to be correlated with FII net flows.

Srivastva, Madhuri (2002), concluded that capital/technology intensive sector are attracting significantly higher share of the

total foreign investment as compared to labour intensive sectors such as food-processing industries, hotels, tourisms and textiles. The foreign investment does not have any considerable impact on the macro economy parameters of Indian economy.

Chakrabarti (2001), has perceived a regime shift in the determinants of FII following the Asian financial. He used the data of BSE for a period of 6 years from May 1993 to Dec. 1999. By applying the Granger Causality Test on the data he found that in the pre-Asian crisis period, any change in FII had a positive impact on equity returns, but it found a reverse relationship in post Asian crisis period. The study point out that the change in FII is mainly due to change in equity returns.

Froot, O'Connell and Seasholes (2001), also experienced the existence of price pressure along with persistence of flows. For the analysis purpose the study classified the FIIs flow into two parts expected flows and unexpected flows and on the basis of that classified data the analyst concluded that FIIs do not seem to be at an informational disadvantage, they seem to experience an informational advantage. Secondly, the impact of the unexpected sales by the FIIs on the respective market returns was considerably high. This shows that the market was very sensitive to the FIIs trading, especially sales, which the policy makers should take into account. On the basis of degree of association between unexpected sales and respective market returns they found that BSE was more vulnerable to instability due to trading by FIIs as the impact of unexpected sales at BSE (21.9 percent) reduce the stock price considerably when compared to that of NSE (11.4 Percent)

Pasricha and Singh (2001), evaluated the impact of FIIs on stock market volatility between the April 1998 to March 2000 on BSE and NSE both. They found that FIIs have always remained net investors in the country except during 1998-99 and their investment has been steadily growing since their entry in the Indian markets. They are here to stay and have become the integral part of Indian capital market. Although their (FIIs) investment in relation to market capitalization was quite low, they have emerged as market movers. The market had been moving, in consonance with their investment behavior. However, their entry has led to a greater institutionalization of the market and their activities have provided depth to it. FIIs have also contributed towards making Indian market modern and comparable with international standards. Their entry has brought transparency and simplicity in the market operations.

Banaji, J. (2000), emphasized on the fact that the capital market reforms like improved market transparency, automation, dematerialization and regulations on reporting and disclosure standards were initiated because of the presence of the FIIs. He opinioned that FII flows can be considered both as the cause and the effect of the capital

market reforms. The market reforms were initiated because of the presence of FIIs and this in turn has led to increased inflows. The Government of India gave preferential treatment to FIIs till 1999-2000 by subjecting their long term capital gain to lower tax rate of 10 percent while the domestic investors had to pay higher long-term capital gains tax. The Indo-Mauritius Double Taxation Avoidance Convention 2000 (DTAC), exempts Mauritius based entities from paying capital gains tax in India- including tax on income arising from the sale of shares.

Moel (2000), analyzed the effect of ADR listings from foreign markets on three aspects of development of local stock markets, viz., openness, liquidity and growth. His sample constituted firms from 28 emerging markets including India. He found that following ADR issues, there was an increase in transparency and a decline in liquidity & growth of the home equity market in terms of size and the number of new listings. He used accounting disclosure standards to proxy for openness of the market while liquidity was measured using the share turnover of the firms in the home market that do not list abroad. Finally growth of the home equity market was measured using the total market capitalization (using firms that do not list abroad) to gross domestic product (GDP) ratio. Mole's study indicated that listing of foreign ADRs have an adverse impact on the home market liquidity and growth measured in terms of total market capitalization.

Kumar, S.S.S (2000), made an investigation regarding the stability of the foreign institutional investors in India between January 1990 to March 1998 at BSE and found that the volatility in return of Indian stock market before opening for FIIs was 41.05 percent where as the volatility after opening up is 22.66 percent. The study also checked the significance of the difference in both periods (pre and post entry) by applying the F-test and inferred that volatility of the Indian stock market has reduced after the arrival of FIIs.

Rao, Murthy and Rangnathan (1999), conducted a study of developed market by taking the data for a period of 8 years (1990 to 1998). They suggest that FIIs investments would help the stock markets directly through widening investor base and indirectly compelling local authorities to improve the trading system. In their study they analyzed the investment exposure of the five US-based India specific funds that suggested a close resemblance between FII investment and trading pattern at the BSE. On the behalf of that they interpreted that net FII investment influences stock prices in India as it traces the relationship to the sectoral level. They found heavy emphasis of FIIs was on computer software and consumer goods industry. One another finding was that the FIIs are having a strong presence in the Indian Mutual Funds segment.

Bekaert and Harvey (1997), considered twenty emerging markets including India and examined stock return volatility before and after liberalization. A common claim of all these

studies is that, the proposition that liberalization increases volatility is not supported by empirical evidence.

Warther, V. (1995), separate the flows into expected and unexpected flows, using time-series models to estimate expected flows and then investigate their correlation with market returns and find an high positive correlation between returns and unexpected inflows. He concluded that unexpected net FII equaling 1 percent of market capitalization was associated with a 9.3 percent and 7.9 percent increase in BSE and NSE stock prices respectively. He also test for the existence of feedback trader and price pressure strategies resorted to by the FIIs to determine the nature and causality of the flows and found evidence for the existence of the negative feedback trading at the monthly horizon, that is the foreign investors buy when the price is low and sell when the price is on the increase. They brought out the precise nature and extent of relationship. Unexpected sales at BSE equaling 1 percent of the market capitalization was associated with 21.9 percent drop in its stock market and in the case of NSE, unexpected sales equaling 1 percent of market capitalization was associated with 11.4 percent in NSE stock prices and unexpected net flows to NSE equaling 1 percent of market capitalization was associated with 12.3 percent rise in its equity prices.

Kim and Singal (1993), study the behavior of stock prices following the opening of a stock market to foreigners or large foreign inflows. They found that there is no systematic effect of liberalization on stock market volatility. These findings corroborate Bakaert's findings that volatility in emerging markets is unrelated to his measure of market integration.

Bahmani-Oskooee and Sohrabian (1992), were among the first to use co integration and Granger causality to explain the direction of movement between exchange rates and stock prices and found FIIs use positive feedback trading strategies; causality may run from stock prices to foreign investment. The portfolio balancing efforts of foreign investors would also put pressure on demand for (or supply) of currency, which may affect its exchange rate. On the other hand, the payoff of foreign investors depends on exchange rate movements as well as on stock price movements, and they may rebalance their portfolio in response to an (an anticipated) change in exchange rate. The relationship of FII investment with stock prices on the one hand, and with exchange rate on the other hand may produce indirect relation between exchange rate and stock prices.



CONCLUSION

The following points have emerged from the analysis of the existing studies conducted with the objective of finding the impact of FIIs on underlying stock market (i.e. Indian stock market).

- Most of the research studies have indicated either a significant increase or no impact on the volatility of the underlying stock market due to introduction of FIIs in Indian stock market. It means foreign institutional investors destabilize prices and creating a threat of incremental risk.
- Regarding the impact on stock return two findings are observed. First, according to majority of the researchers FIIs arrival increase the return in the host country market. Second finding is that majority of FIIs follow a feed back trading strategy. Thus, it is quite confusing to decide that which one is cause and which one is impact. However, the view FIIs increase return has found more support by researchers.
- Most of the research studies find that the introduction of FIIs in stock market enhance the growth of the country by developing stock market and by increasing transparency and fair dealing.
- Majority of the researchers use ARCH, GARCH, TGARCH models to find out the impact of FIIs on the volatility of the stock market and regression and Granger Causality Model to find out the determinants of the FIIs in underlying stock market.

Based on the above-mentioned findings, we can conclude that FIIs help in enhancing the liquidity, marketability and efficiency of the stock market. They help in completing the market and provide a chance to diversify and pooling the risk. However, almost equal evidence is found in the support that FIIs follow feedback trading strategy, means they arrive in the host country to reap the benefits of higher return and as soon as they see the adverse condition they exit from there and create the conditions more adverse. The unfavorable conditions, however, can be tackled with the help of government regulations. In nutshell, while framing regulations about foreign investors in Indian, the regulators and policy makers must not ignore the fact that FIIs help to develop the stock market and also contribute in the development of the host country.

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