In the absence of adequate empirical evidence, the emergence of FIIs in stock market has been a debatable issue over the posh lobby of the Parliament to common man. 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. However, 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:

1) A ‘Destabilizing forces’ hypothesis, that predicts increased volatility due to the FIIs inflows.

2) A ‘Non-destabilization’ hypothesis that FIIs have no impact on stock market volatility.

Even about the impact of the FIIs flows on stock market return, there are two views:
1) A ‘Positive Feed Back Trading’ hypothesis that says FIIs enter the market when there are some positive signals of higher stock return and withdraws when they perceive some negative information.

2) 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 two cases, the former hypothesis states that the FIIs enter in the foreign market to reap the benefits and thereafter 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 part, 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.

The empirical studies reviewed in this chapter are grouped into three categories as follows:

- Impact of entry of foreign institutional investors on volatility and return of the Indian stock market.

- Impact of foreign institutional investors on volatility and return of the foreign stock markets.

- Determinants of the foreign institutional investments in Indian stock market.

_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 using 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.

**TABLE 2.1: RESULTS OF PREVIOUS STUDIES ON THE THEME IMPACT OF FIIs ON VOLATILITY AND RETURN**

<table>
<thead>
<tr>
<th>Author</th>
<th>Market</th>
<th>Impact on Volatility</th>
<th>Impact on Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahmani-Oskooee and Sohrabian (1992)</td>
<td>---------</td>
<td>---------</td>
<td>Feedback Trading</td>
</tr>
<tr>
<td>Kim and Singal (1993)</td>
<td>BSE</td>
<td>No Impact</td>
<td>---------</td>
</tr>
<tr>
<td>Amihud and Mandelson (1994)</td>
<td>BSE</td>
<td>---------</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Warther, V. (1995)</td>
<td>BSE &amp; NSE</td>
<td>---------</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Rao, Murthy and Rangnathan (1999)</td>
<td>BSE</td>
<td>Increase</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Banaji, J. (2000)</td>
<td>BSE</td>
<td>---------</td>
<td>Bi-directional</td>
</tr>
<tr>
<td>S.S.S.Kumar (2000)</td>
<td>BSE</td>
<td>Decrease</td>
<td>---------</td>
</tr>
<tr>
<td>Chakrabarti (2001),</td>
<td>BSE</td>
<td>---------</td>
<td>Feedback Trading</td>
</tr>
<tr>
<td>Froot, O’Connell and Seasholes (2001)</td>
<td>BSE &amp; NSE</td>
<td>Increase</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Pasricha and Singh (2001)</td>
<td>BSE &amp; NSE</td>
<td>Increase</td>
<td>---------</td>
</tr>
<tr>
<td>Khanna, Sushil (2002),</td>
<td>BSE</td>
<td>---------</td>
<td>No Impact</td>
</tr>
<tr>
<td>Mukherjee, Paramita (2002),</td>
<td>BSE &amp; NSE</td>
<td>Increase</td>
<td>Feedback Trading</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Exchange(s)</td>
<td>Findings</td>
<td>Methodology</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>Srivastva, Madhuri (2002),</td>
<td>BSE &amp; NSE</td>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>Ananthanarayanan et al (2003),</td>
<td>BSE AND NSE</td>
<td>No Impact</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Batra (2003),</td>
<td>BSE</td>
<td>No Impact</td>
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<td>Chakrabarti (2003),</td>
<td>BSE</td>
<td>No Impact</td>
<td>Increase Return</td>
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<tr>
<td>Mazumdar (2004),</td>
<td>BSE</td>
<td>No Impact</td>
<td>No Impact</td>
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<td>Rai and Bhunumurthy (2004),</td>
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<td>Increase</td>
<td>Feedback Trading</td>
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<td>Singh, Sharwan Kumar (2004),</td>
<td>BSE</td>
<td>Increase</td>
<td>No Impact</td>
</tr>
<tr>
<td>Ahmad, Ashif and Ahmed(2005)</td>
<td>NSE Nifty</td>
<td>Increase but little</td>
<td>Increase</td>
</tr>
<tr>
<td>Badhani(2005)</td>
<td>BSE</td>
<td>No Impact</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Bhattacharya and Jaydeep(2005)</td>
<td>BSE</td>
<td>Increase</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Biswas, Joydeep(2005)</td>
<td>BSE</td>
<td>Increase</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Pal, Parthapratim (2005)</td>
<td>BSE</td>
<td>Increase</td>
<td>Feedback Trading</td>
</tr>
<tr>
<td>Panda, Chkradharga(2005)</td>
<td>BSE AND NSE</td>
<td>No Impact</td>
<td>Feedback Trading</td>
</tr>
<tr>
<td>Banerjee and Sarkar(2006)</td>
<td>NSE</td>
<td>No Impact</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Biswas, Jaydeep(2006)</td>
<td>BSE</td>
<td>No Impact</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Karmakar, Madhusudan(2006)</td>
<td>S&amp;P CNX NIFTY</td>
<td>Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>Mohan, T.T.Ram (2006)</td>
<td>BSE</td>
<td>No Impact</td>
<td>Increase Return</td>
</tr>
<tr>
<td>Porwal and Gupta (2006),</td>
<td>NSE S &amp; P CNX</td>
<td>Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>Rakshit, Mihir (2006),</td>
<td>BSE</td>
<td>No Impact</td>
<td>Decrease Return</td>
</tr>
<tr>
<td>Upadhyay, Saroj(2006)</td>
<td>BSE</td>
<td>Increase</td>
<td>Increase Return</td>
</tr>
</tbody>
</table>

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.

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 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 finds evidence for the existence of the of 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.

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 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 that heavy emphasis of FIIs was on computer software and consumer goods industry. The other finding was that the FIIs are having a strong presence in the Indian Mutual Funds segment.

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 opined that FII flows could 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.

*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 was 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.

*Chakrabarti (2001),* has perceived a regime shift in the determinants of FII following the Asian financial crisis. 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 points 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 purpose of analysis 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 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 market. They are here to stay and have become the integral part of Indian capital market. Although their (FIIs) investment in relation to market capitalization is quite low, they 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.

*Khanna, Sushil (2002)*, discussed the impact of FII inflows on the Indian economy and concluded that there is 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 reveals 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 inflows, 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 sectors 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.
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 Bhanumurthy (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 TARCH 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 explored some determinants of FII flows and examined, 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 portfolio 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. Not withstanding 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.

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) applied 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 flows 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, 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 needs 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 FII influences the share price movements in Indian stock market but their role in the development of Indian stock market is still questionable.

Pal, Parthapratim (2005), especially examines the behavior of the FIIs in India for the period March 2004 to June 2004 and investigated 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 than 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.

Banerjee and 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, number of listed companies, increased efficiency and liquidity. The author expressed that expansion of the Indian stock market in the post-liberalization decade was truly impressive but in terms 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 was 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 touched 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 the 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)*, concludes 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 suggests to derive the benefits of FII flows without having to put up with the uncertainties created by the participatory notes 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.

*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.

2.2 Impact of Foreign Institutional Investors on Instability and Return: Confirmation from Foreign Stock Markets.

Merton (1987), shows that the expected return in the market with unrestricted investor base is higher than restricted investors base. Entry of foreign investors in the stock market broadens the investor’s base, which increases diversifications and risk sharing, lowering the risk premium for country specific volatility.

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.

Clark and Berko (1997), propounded a research to find out the evidence of base-broadening hypothesis, which suggests that the expansion of investor base to include foreign investors leads to increased diversifications followed by reduced risk and consequently lowering the required risk premium and found similar relation between foreign equity purchases in Mexico and market returns. He found unexpected purchases of Mexican stocks by foreign investors equaling 1 percent of market capitulation were associated with a 13 percent rise in Bolsa index. The significant coefficient of unexpected flows was consistent with the base-broadening hypothesis.

Choe, Kho and Stulz (1998), have examined the impact of foreign investors on stock returns in Korea before and after the 1997 Asian crisis using daily trade data. They find evidence of positive feedback trading before the crisis. During the crisis period their study reveals a weakening of the herding effect and disappearance of positive feedback trading by foreign investors. In addition they find no evidence of a
destabilizing effect of the trades by foreign investors on Korea’s stock market.

Rodrik (1998), was more emphatic in arguing against capital convertibility. He challenged the proposition that capital controls lead to economic inefficiency. His study of sample of countries that have open capital markets (as measured by IMF) shows that there was no basis to argued that growth or economic performance was superior to others that have higher capital controls. Once the countries with open capital market do experience a financial crisis due to sudden capital outflows, often caused by external factors, it took several years for growth to recover.

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.

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.

TABLE 2.2: IMPACT OF FOREIGN INSTITUTIONAL INVESTORS ON VOLATILITY AND RETURN OF THE FOREIGN STOCK MARKETS
<table>
<thead>
<tr>
<th>Author</th>
<th>Market</th>
<th>Impact on Volatility</th>
<th>Impact on Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merton (1987)</td>
<td>Emerging Markets</td>
<td>Decrease</td>
<td>Decrease</td>
</tr>
<tr>
<td>Bekaert and Harvey (1997)</td>
<td>20 Emerging Markets</td>
<td>No Impact</td>
<td>--</td>
</tr>
<tr>
<td>Clark and Berko (1997)</td>
<td>Mexican Market</td>
<td>Decrease</td>
<td>--</td>
</tr>
<tr>
<td>Rodric (1998)</td>
<td>Developing Economies</td>
<td>--</td>
<td>No Impact</td>
</tr>
<tr>
<td>Moel (2000)</td>
<td>20 Emerging Markets</td>
<td>--</td>
<td>Decrease Return</td>
</tr>
</tbody>
</table>

Bronser, Steven and Neal (2002), analyzed the foreign trading behavior on the Jakarta stock exchange (Indonesia) between 1995 and 2002. They detected herding and positive feedback trading by foreign institutional investors but found no evidence to indicate that such trading behaviors by foreign investors destabilized the market prices during the Asian crisis.

Nilsson (2002), has explored that stock market liberalization could lead to excess volatility possibly on account of noise trading for Nordic stock markets. He found evidence of higher expected return, higher volatility and stronger links with international
stock markets characteristic of the deregulated period in all Nordic stock markets.

2.3 Studies on Determinants of the Foreign Institutional Investments in Indian Stock Market

Some researchers and economists have conducted studies to identify the determinants of the FII flows to India’s capital market. Similarly, certain studies have analyzed the causal relationship between FIIs and returns of the host country market. This section reviews them in brief.

*Asha C. Parsuna (2000)*, finds that mainly the return in the host country stock market attract the FIIs investments, other factors are also creating impact on the arrival of FIIs but they are statistically insignificant.

*Chakrabarti (2001,)* came with the evidence that the FIIs flows are highly correlated with equity returns in India. He also found that the FII flows effect rather than cause of these returns and hence it contradicted the view that FIIs determine the market return in general.

*Mukherjee and Coondoo (2002)*, also explore the relationship of FII Investments to the Indian equity market with its possible covariates based on a daily data set for the period January 1999 to May 2002. The study finds the FIIs flows to and from the Indian market tend to be caused by return in domestic equity market. The study also explains that the return from the exchange rate variation and fundamentals of the Indian economy may have influenced FIIs decision, but such influence does not seem to be strong.

*Gorden and Gupta (2003)*, apply the multiple regression technique on the monthly data from September 1992 to October 2001 to find out the relation between fundamental factors of the Indian economy and portfolio flows and find external interest rate and lagged domestic stock market return as key variables for explaining portfolio arrivals.

*Rai & Bhanumurthy (2003)*, examine the determinants of the FIIs investments in India by taking the data from January 1994 to November 2002 and find a positive relation between FIIs and stock market return (BSE) and an adverse effect of fundamental factors such as speculation and sentiments.
Lakshmi Sharma (2005), framed a model by taking FIIs investment as dependent variable and impact cost, market return and the ratio of non-promoters category of shareholders to total outstanding shares as independent variables and found that impact cost and the quantum of the shares available for trading in the market seem to be two important considerations for FIIs for their investment purpose. But of the two significant variables, impact cost had emerged as the most important variable explaining the FIIs investment in a company.

Panda (2005), tried to examine the impact of FIIs Investments on the Indian stock market by applying VAR analysis on the daily data from October 2003 to March 2004 and found Mutual Fund investments having better explanatory power than FIIs investments in explaining returns on both of the main Indian markets BSE and NSE Nifty. The investigation found that FIIs investments did not affect BSE Sensex rather it was affected by the later.

Bandhani (2005), studies interlinkage of stock prices, net FIIs investment and exchange rate. Using monthly data from April 1993 to March 2004. He observed bi-directional long-term causality between FIIs investment flows and stock prices, but no short-term causality could be traced between the variables. The author further found that exchange rate long-term granger causes FIIs investment flows, not vice versa. This study does not find any long run relationship between exchange rate and stock prices but short-term causality runs from changes in exchange rate to stock returns, not vice-versa.

Bhattacharya and Mukherjee (2006), investigate the nature of the causal relationship of FIIs with stock return and exchange rate in India by applying co integration and long term Granger Causality test and find a bi-directional causality between stock return and FIIs investments. But no causal relationship between exchange rates and net investments by FIIs investments is found.

Tripathy (2007), examines the interlinkage among stock market, market capitalization and net FII investments by applying both Ganger Causality and Vector Auto Regression test (VAR). The results indicate that there is no significantly causality between FII investment and market capitalization but there is an unidirectional casual relationship between market capitalization and stock market and net FII investment and...
After going through the existing studies on the subject under reference, we were in a position to note some gaps in them. First, the period of these researches was relatively shorter. Secondly, the number of the independent variables considered for examining their linkage with FIIs have remained limited. Thirdly, the multiple regression models was applied without verifying the properties of the time series data such as stationary, autocorrelation etc. Fourth, no one has studied the impact of the FIIs on Indian market’s trading volume, Lastly, majority of the authors have proceeded with only one dependent variable i.e. either purchase or sale or net investment by the FIIs. The present study is an improvement over the earlier studies in several ways. It has used the longer period of data to study the behaviour of stock market after FIIs were permitted to invest in Indian stock market. It would study all the aspect of impact of FII investment on Indian market in terms of return, volatility, market capitalization and trading volume.

2.4 References


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