

Factors affecting Investment Behaviour of Foreign Institutional Investors: Perception of Indian Investors

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ABSTRACT

Liberalization of economic policies in 1992 allowed foreign institutional investors investing in Indian capital markets. Though FII permitted to invest Indian stock markets in 1992, they actually started investing in India from 1997 and factual growth of FII investment came after 2002. Since then participation of FII in Indian stock market has continuously increased. They have emerged to be one of the largest investors and have acquired ownership of substantial proportion of non-promoter shares. They have also emerged to be dominant market players contributing very high proportion 41.73% of total stock exchange turnover of BSE and NSE combined. In Indian markets, FII are perceived to be very large and sophisticated investors with very high impact on stock market returns. Many investors and market participants tend to make their stock market strategy based on investment pattern of FII and base their stock market analysis on their perception about factors considered by FII in their investment decision. In this context this paper studies perception of market participants about major determinants of FII investment decision and extent to which investors are influenced by FII investment.

INTRODUCTION

Indian capital market is the backbone of Indian economy. The strong capital market supports the growth of economy and for development of strong capital market Smooth flow of capital and funds are crucial. Emerging economies like India are in need of funds due to dearth of internal source of capital to steps forward. Today all emerging economies are competing to attract Foreign Investment, as Foreign Capital in the form of Foreign Institutional Investors (FII) and Foreign Direct Investments (FDI) are a way to remedy this paucity of funds. Thus, for all emerging markets study of FII and FDI has become essential for organized growth of their capital market.

Since 1992, foreign institutional investors have been allowed to invest in all the securities traded on the new issue market and stock exchanges in India. Foreign Institutional Investors (FII) has initiated active participation in Indian stock market from 1997 and time to time their dominance has been increased. Growth (CAGR) of FII investment in Indian equity market based on the year 1996-97 up to the year 2015-16 are shown in following table.

Year	CAGR	Year	CAGR
1997-98	20.72%	2007-08	24.04%
1998-99	8.58%	2008-09	19.89%
1999-00	15.96%	2009-10	21.92%
2000-01	18.33%	2010-11	22.68%
2001-02	17.90%	2011-12	21.78%
2002-03	15.53%	2012-13	22.20%
2003-04	21.68%	2013-14	21.62%
2004-05	24.26%	2014-15	23.43%
2005-06	25.28%	2015-16	21.96%
2006-07	24.00%		

(Source: Calculated based on data available on SEBI website)

Above table presents steady growth of FII investment in Indian equity market. The gross turnover of FII in the equity market segment of the Indian stock exchanges (NSE & BSE) was Rs 1,113,332 million in 2014–2015 ("A Review Indian Securities Market," 2015), which marked increase of 40% as compare to 2013-14. The total turnover of the FII in the equity market constituted 21% of the total turnover on Indian stock exchanges in 2014–2015, reflecting a marginal increase from 20.5% recorded in 2013–2014. FPI share in the Indian cash market had climbed to 26.20 per cent in May 2015. In March 2016 FII total turnover (Gross Purchase + Gross Sale) was 41.73% of total turnover of BSE and NSE. Thus, in this span of 19 years (1997-98 to 2015-16) FII have emerged to be a dominant market player, who can influence security prices significantly. In Indian markets, FII are perceived to be very large and sophisticated investors with very high impact on stock market returns. Many investors and market participants tend to make their stock market strategy based on investment pattern of FII and base their stock market analysis on their perception about factors considered by FII in their investment decision. Therefore this paper aims to study the behaviour of FII investment in India. Study of determinants of FII investment may help to understand their behaviour in better way. Following literature review will help us well again to establish objectives of the study.

LITERATURE REVIEW

Prasuna (2000) studied determinant of FII in India. In the study it has been found that mainly the return in the host country's stock market attracts the FII investments, other factors are also creating impact on the arrival of FII but they are statistically insignificant.

Kumar (2001) investigated the effects of FII inflows on the Indian stock market represented by the Sensex using monthly data from January 1993 to December 1997 and inferred that FII investments are more driven by Fundamentals and do not respond to short-term changes or technical position of the market. In testing whether Net FII Investment (NFI) has any impact on Sensex, a regression of NFI was estimated on lagged values of the first difference of NFI, first difference of Sensex and one lagged value of the error correction term (the residual obtained by estimating the regression between NFI and Sensex).

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

Bose and Coondoo (2004) have studied liberalisation policies that expanded the membership of FII categories and their scope of investment in the Indian market, enhanced sectoral and individual caps, made provision for hedging FII' risk of making investment in the Indian stock markets by allowing them to enter the foreign exchange and derivatives market, and made procedural simplifications and fees reduction, seem to have a significant expansionary effect on net inflows. Measures to improve the SEBI/RBI's control over the FII investments like banning of NRIs/OCBs and mandating stricter disclosure norms also do not show any significant negative impact on the net inflows. On the whole, we find that these policies mostly render FII investments more sensitive to domestic market returns and raise the inertia of FII flows.

Rai and Bhanumurthy (2004) have used monthly data from 1994 to Nov 2002 and observed that FII inflow depends on stock market returns, inflation rate (both domestic and foreign) and ex-ante risk.

Chen, Wang, and Lin (2008) have studied that the herding behavior forms and how it changes over time. Their results suggested that there is an industry effect when Qualified Foreign Institutional Investors (QFIIs) pick up stocks, they herd on securities classified in specific industries and also prefer stocks with high past returns as well as large firm size, supporting the argument that QFIIs are momentum traders. Characteristic herding and investigative herding explain QFIIs' trading behavior in Taiwan.

P. K. Prasanna (2008) examined the relationship between foreign institutional investment and firm specific characteristics in terms of ownership structure, financial performance and stock performance. He observed that foreign investors invested more in companies with a higher volume of shares owned by the general public. Among the financial performance variables the share returns and earnings per share are significant factors influencing their investment decision.

Amita (2014) has studied the relationship between FII and four economic variables namely Foreign Exchange Rates, BSE Sensex, Exchange Rates, and Inflation. She used secondary data for a period of 12 years between 2001-02 and 2012-13. In her study she found that the correlation coefficient between FII and Sensex, FII and FERs, FERs and Sensex, and WPI and

Sensex were found positive. However, exchange rates and Inflation were found having negative relationship with FII. The results of Granger Causality Model indicated bi-directional causality between FII and Sensex, and FII and Exchange rate. However, no causality is found between FII and Foreign Exchange Reserves.

Anand (2015) has reported that Janet Yellen's rate move has ushered in some acche din for emerging markets (EMs), and more so for India, feel experts. With the right ingredients such as strong growth, reform push, stable currency, better macros, the India story just gets better, they add. In September 2015 (Anand, 2015b) he also reported that experts are of the view that selling by foreign institutional investors is more or less temporary, and they should become net buyers as and when a revival in corporate earnings becomes visible and fears of global slowdown subside. Anand (2015c) reported in October month that in 2015, commodity prices are soft, inflation is well below RBI's comfort level, the US is looking at raising interest rates, signaling strength in the economy, and stocks valuations seem more reasonable after over 10 per cent correction from the record high of 30,024.74.

OBJECTIVES

On the basis of above literature review following objectives are formed for the study.

- To study perception of Indian investors towards impact of Foreign Institutional Investors (FII) on Indian Stock Market
- To study perception of Indian investors regarding extent to which FII consider different company specific factors while investing in Indian stock market.
- To study perception of Indian Investors regarding extent to which FII consider various macro economic factors while investing in Indian stock market.
- To study perception of Indian Investors regarding extent to which current government initiatives while investing in India towards FII considering current government initiatives.

RESEARCH METHODOLOGY

To fulfill above objectives following methodology has been followed.

- ✓ **Research design:** Descriptive research design is applied to describe various factors affecting FII investment decision in India.
- ✓ **Population:** The population of the study is group of all the investors and potential investors of industrial security market in Surat city.
- ✓ **Sampling:** For the study as investors who are in the business of stock trading are considered as respondents. These respondents were selected on the basis of convenient sampling method. In total from 200 respondents data is collected.
- ✓ **Sources of Data and Data Collection Method:** Primary data are directly collected through personal survey using structured Questionnaire.

The questionnaire consists of 43 variables which focus on various factors regarding types of companies, industries, current government initiatives and failures, macro economics factors, fundamental factors etc. and reaction of FII on these factors. Secondary data are collected from various articles published in news paper and on websites related to stock market; and research papers published in various journals.

- ✓ **Tools & Techniques for Data Analysis:** To rank different factors affecting selection of companies by FII investment in India Arithmetical Mean and Standard Deviations are used. Cronbach Alpha is used to check the reliability of parameters to measure factors affecting FII investment decision in India. Kaiser-Meyer-Olkin (KMO) and Bartlett's test used to measure sampling adequacy for undertaking factor analysis. Finally, factor analysis is applied to reduce number of factors and grouped them on the basis of their homogeneity

MAJOR RESULTS AND IMPLICATIONS

Perception about relation between Sensex and Nifty fluctuations and FII flows

	Frequency	Percent	Cumulative Percent
Highly Negative	0	0	0
Negative	11	5.5	5.5
No relation	43	21.5	27.0
Positive	84	42.0	69.0
Highly positive	62	31.0	100.0
Total	200	100.0	

The result of above study shows that 21.5% of respondents perceive that there is no relation between FII flow and Indian stock market fluctuations (Sensex and Nifty being major representatives). While 78.5% respondents believe that there is relation between FII flow and Indian stock markets. Out of this 73% respondents believe that there is positive (31% highly positive) relation between FII flow and Indian stock market. Joshi and Desai (2015) have also found that FII Investment and Sensex are having strong positive correlation during bullish trend than correlation during bearish trend. Thus, it is essential to study the behaviour of FII to understand the movement and reasons for the movement in Indian stock market. Following results show various factors affecting FII investment behaviour.

FACTORS AFFECTING FII' INVESTMENT DECISION WHILE INVESTING IN INDIAN STOCK MARKET

- A. **Companies Related Factors:** Following factors are most important factors perceived by investor that FII consider for selecting companies for investing in Indian stock market. These factors have mean value more than 4 (out of 5 point scale) and having lesser standard deviation (less than 1).

Most Important Factors	Mean	S.D.
Financial Services	4.37	.791
Large Cap	4.36	.890
Oil & Gas	4.32	1.005
IT	4.31	.829
Banking	4.29	.835
Earnings Per Share	4.29	.915
Dividend Per Share	4.27	.872

Other researchers have also received similar results like Chen et al. (2008) have also found QFIs pick up stocks, they herd on securities classified in specific industries and also prefer stocks with high past returns as well as large firm size. K. P. Prasanna (2008) has also studied that among the financial performance variables earnings per share is significant factor influencing their investment decision.

Other factors which are considered by FII, which has mean value up to 3.7 and standard deviation around 1 or lesser, are as follow.

Other Important Factors	Mean	S.D.
Old Firms	4.10	.954
Pharmaceuticals	4.01	1.035
Telecom Services	3.92	1.097
Liquid Firms.	3.73	.981
Low Stake of DII in Company	3.71	.980
Young Firms	3.70	.898

Factors which have mean values are less than 3.7 and their standard deviations are more than, are least concerned perceived by investors for FII to select companies while investing in Indian stock market. Such factors are as shown below in following table.

Other Less Important Factors	Mean	S.D.
Corporate Governance.	3.66	1.054
High Volatile Stock.	3.65	1.060
Mid Cap.	3.63	1.004
Manufacturing.	3.61	.976
Highly Levered Firms.	3.61	.907
Small Cap.	3.56	1.030
High Stake Of DII In Company.	3.47	1.056
Low Volatile Stock.	3.38	1.000
Aviation	3.35	1.079
Real Estate.	3.17	1.272
Tourism & Hospitality.	3.04	1.181

B. Other Economic and Global Factors

Other than companies related factors, we have studied other factors viz. Purchasing power parity (Amita, 2014), GDP growth rate, inflation related indices as suggested by Rai and Bhanumurthy (2004) and Amita (2014) Consumer price index, Wholesale price index, Index of industrial production, Fiscal deficit, Interest rate in FII's domestic country, Problems in domestic country of FII, fundamentals of economy (Kumar, 2001) like Growth opportunity in domestic country of FII, Growth rate in other nations, Growth in economy of other developing countries, Problems in other developing countries, factors related to new government appreciated by Anand (2015a), Anand (2015b) and Anand (2015c) like Make in India campaign, Increase in limit of Investment limit in various sectors for FII, Approach of Prime Minister MODI towards relations with other nations, Ease in tax structure for FII, GST bill, FII limit and Bureaucracy.

For further analysis of these factors it's important to check their reliability. Cronbach (1951) suggested value of Cronbach's Alpha, the level of acceptance to check the instrument reliability. Following table shows the calculation of reliability test.

Reliability Statistics	
Cronbach's Alpha	N of Items
.720	19

The value of Cronbach’s Alpha is 0.720, which is more than the accepted level of 0.70, hence we may say that the

instrument is reliable and can be used with other statistical procedures for factor analysis.

Factor Analysis

To conduct the factor analysis Kaiser-Meyer-Olkin (KMO) is a measure of sampling adequacy and its value should be greater than 0.6 for the sample to be adequate for undertaking

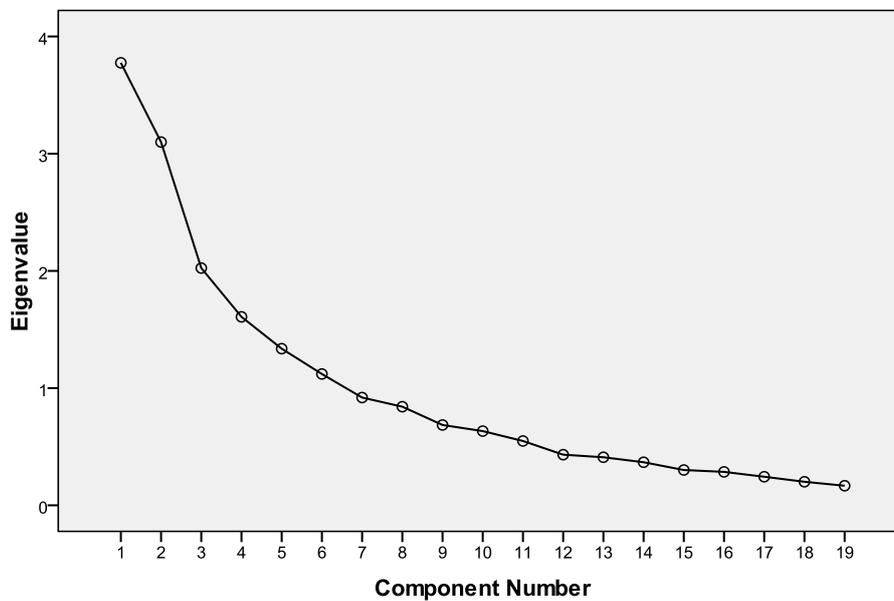
factor analysis. Also, the p-value of Bartlett (1950) test of sphericity should be less than 0.05.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.696
Bartlett's Test of Sphericity	Approx. Chi-Square	1465.666
	Df	171
	Sig.	.000

Above KMO and Bartlett's Test's table displays the results for interpreting the adequacy of data for factor analysis. Since in our study, the value of KMO test is 0.696 (higher than 0.6) and the p-value of Bartlett's test is 0.000 (less than 0.05), factor analysis can be undertaken using this data.

Scree Plot: The Scree Plot is used to determine the optimal number of components. The component beyond the point at which the curve changes its direction and becomes horizontal contributes very little to variation and therefore they can be eliminated.

Scree Plot



In our study only six components lie on the steeper side of the curve and all other lie on the flat portion of the curve. Therefore, scree plot suggests that optimal number of components is six.

Rotated component matrix: It is the key output of principal components analysis. It contains estimates of the correlations between each of the factors and the estimated reduced number of components.

Rotated Component Matrixa						
	Component					
	1	2	3	4	5	6
1 Purchasing power parity [currency value]			.392			
2 Economic growth [GDP]						.648
3 Consumer price index [inflation]			.849			
4 Wholesale price index [inflation]			.801			
5 Index of industrial production [IIP]			.776			.315
6 Fiscal deficit	.324					.617
7 Interest rate in FII's domestic country.				.739		
8 Problems in domestic country of FII.				.875		
9 Growth opportunity in domestic country of FII.				.699		

10 Growth rate in other nations.		.868				
11 Growth in economy of other developing countries.		.889				
12 Problems in other developing countries.		.842				
13 Make in India campaign.					.793	
14 Increase in limit of Investment limit in various sectors for FII.					.418	.611
15 Approach of Prime Minister MODI towards relations with other nations.					.808	
16 Ease in tax structure for FII. [MAT]					.329	.630
17 Unable to pass goods and service tax [GST] bill.	.800					
18 Revise in limit of FII investment limit in Government sector. [G sec.]	.892					
19 Highly bureaucratic system.	.885					
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 7 iterations.						

From the above table of rotated component matrix using principal component analysis we could minimize number of factors from 19 to 6 factors. After factor analysis factors which are grouped together (6 factors derived out of 19 factors) are as follow: (1) 1. Bureaucracy related issues in the economy. 2. Economic condition of other emerging economies. 3. Inflation

CONCLUSION

Considering FII as professional investors we have found that they are very cautious in investing in Indian capital market and even in selecting companies for their investment. We have found that FII more prefer large cap companies considering their EPS and DPS. They like to invest in Oil & Gas, Information Technology and Banking related scrip than other sector in Indian capital market. We can have also tried to

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