

Firm Performance Determinants Of Fii In Indian Companies

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Abstract

Present paper aims to examine the impact of firm performance measures on FII in Indian companies listed on BSE during the financial years April 01st, 2005 to March 31st, 2016. The findings provide sufficient evidence that firm performance variables for the BSE-listed companies played an important role for FIIs by influencing their investment decisions. Panel results verified that FIIs have been attracted more towards the big-sized companies, with high turnover, high ROE, sound liquidity position and high export rate. Further, FIIs perceive more book-to-market ratio, excessive leverage and dividend yield as risk enhancing factors, thereby causing them to withdraw their investments from such risky projects.

Keywords: BM, FII, Leverage, ROE

1. INTRODUCTION

Indian companies have always considered foreign investment as one of the crucial sources of finance until 1947. Thereafter, the Indian government framed the policies that primarily promoted internal sources of finance instead of foreign sources. However, the balance of payment crisis in 1991 made the Government to be more trade-liberal and to revise its previous regulations relating to foreign investment. Hence, foreign sources were considered for setting up new projects along with promotion of existing entrepreneurial ventures in India (Alam, 2011). According to Section 2 (f) of the SEBI (Foreign Institutional Investors) Regulations, 1995, “Foreign institutional investor means an institution established or incorporated outside India which proposes to make investment in securities in India”. Foreign institutional investors (FIIs) are allowed to trade either in new or existing securities and are regulated in India under the Foreign Exchange Management Act (FEMA), 1999, and the Securities and Exchange Board of India (Foreign Institutional Investors) Regulations, 1995. According to the policy framed by the Indian Government (2000) foreign institutional shareholding with multiple investors can invest up to 24% of paid-up capital and any investment in excess of this limit could be made only with a special permission. Investment limit for a single foreign institutional investment (FII) has been fixed at 10% of company’s paid-up capital. However, these ceilings could be raised by passing of special resolution (Kulshrestha, 2014).

Ferreira and Matos (2008) founded that foreign institutional investors (FIIs) have a strong preference for big-sized firms, firms that are members of world index, cross-listed on a US stock exchange and with low insider ownership. Significant contribution of foreign investment in accelerating the growth and development of Indian economy makes it imperative to investigate the factors or determinants influencing such investment. FIIs are very cautious while taking investment decision in foreign countries. Thus, it is imperative to identify the determinants of foreign investments at a firm level. Present study attempts to examine the investment pattern of FIIs by considering firm performance as determinants.

2. LITERATURE REVIEW

Global investors consider specific advantages while selecting their foreign assets (Solnik, 1974). According to Lakonishok *et al.* (1994) and Dahlquist & Robertsson (2001), institutional investors prefer growth firms, i.e., firms with low BM. Liljeblom *et al.* (2001) in their study had taken daily opening and closing prices from 1994 to 1996, showed the positive relation between falls in the ex-dividend day price and the degree of foreign ownership, indicating that foreign investors disfavour stocks with high dividends. These empirical results suggested that foreign investors hold fewer shares with high dividend yields to mitigate the negative

impact of disharmonious taxation. Aggarwal *et al.* (2005) found that institutional holdings are positively related to the ROE of the firms in which institutions invest. Jensen & Meckling (1976) argued that debt reduces a firm's agency costs through increased monitoring by the bondholders. If institutional ownership acts as a monitoring mechanism as well, one would expect to see a negative relationship between leverage and institutional ownership due to the substitution effect. Bathala *et al.* (1994) examined the role of institutional ownership on managerial ownership and debt policy. They indeed found a negative relation between debt levels and institutional ownership. Ferreira & Matos (2006) observed that FIIs choice of firms for investment is based more on firm level characteristics than country level by applying panel regression on dataset from 27 countries. FIIs were found to base their investment decision by analyzing the firm related factors, particularly, in case of countries with poor investor protection and tend to prefer companies with certain attributes based on their firm performance. Hence, analysis of firm performance characteristics to understand the variations in FII has assumed importance. Patibandla (2002) by taking data from 1989-1999, found foreign investment to be positively associated with firm performance. Lin & Shiu (2003) indicated that foreign investors avoid high debt companies and prefer companies with bigger size. Similar results were supported by Jiang & Kim (2004) and Al-Najjar (2010) wherein, a positive association was observed between foreign ownership and firm size. Al-Najjar (2010) in a study on Jordanian institutional investors found FIIs investment decision based on firms' capital structure, its size, profitability, risk, future growth prospects and liquidity. Similarly, Halder & Rao (2012) in an Indian study on 500 industrial firms observed that foreign investment is extensively influenced by company's financial factors and CG practices. Prior studies observed a positive association of firm size with amount of FII. Some studies have empirically proved that FIIs prefer large-sized firms as they are less subject to financial distress and bankruptcy risk. This preference is based on the fact that such firms have the required financial resources and are able to minimize the risk of their stock investment through diversification strategies (O'Brien & Bhushan, 1990; Tong & Ning, 2004). Huberman (1999) and Dahlquist & Robertsson (2001) agreed that FIIs prefer well-known firms with which they and market is more familiar, i.e., considerably a positive association of firm size with investor ownership. These results are also consistent with previous studies on U.S. firms (Falkenstein, 1996; Benett *et al.*, 2003). On the basis of results provided by various studies, following hypotheses have been formulated regarding FII and firm performance determinants:

H_{1a}: There is a significant positive association between FII and firm size

H_{1b}: There is a significant negative association between FII and BM ratio

H_{1c}: There is a significant positive association between FII and firm market turnover

H_{1d}: There is a significant negative association between FII and dividend yield

H_{1e}: There is a significant positive relationship between FII and ROE

H_{1f}: There is significant negative relationship between FII and Leverage

H_{1g}: There is a significant positive relationship between FII and cash

H_{1h}: There is a significant positive relationship between FII and export rate

3. NEED OF THE STUDY

In emerging economies like India, foreign capital helps in increasing the labour productivity and to build up foreign exchange reserves to meet the current account deficit. Foreign investment provides a channel through which country can have access to foreign capital. The increasing importance of the new market engines, i.e., FIIs makes it valuable to investigate the factors that push such investments. It is required to empirically identify the factors that motivate the FIIs to pump in more money into the Indian market and also the factors that make them withdraw their funds, i.e., has a negative impact on FII. Moreover, FIIs are likely to face more information asymmetry in developing markets, like India as compared to domestic investors.

In India, most of the foreign investment studies have either focused on FDI (e.g., Sethi *et.al*, 2003; Kamath, 2011; Kumar, 2012; Sahni, 2012) or on stock market (e.g., Johri, 2012; Sarvanankrishnan, 2012; Sharma, 2014; Kulshrestha, 2014). There have been very few Indian studies based on analyzing the impact of firm performance on FII (e.g., Patnaik, 2008; Lakshmi, 2010; Deb *et al.*, 2013). Hence, it is important to empirically analyze and prove the impact of firm specific characteristics for understanding the variations in FII, in the Indian context. Present study has made an attempt to conduct an analysis by including all key factors relating to firm performance represented through firm characteristics that may affect investment decisions of FIIs.

4. OBJECTIVE OF THE STUDY

Present paper aims to examine the impact of firm performance measures on FII in Indian companies listed on BSE during the financial years April 01st, 2005 to March 31st, 2016.

5. RESEARCH METHODOLOGY

Data has been analyzed for the financial years April 01st, 2005 to March 31st, 2016. Initial sample included all companies (4,168) listed with BSE. From this sample, companies with missing data for the required period of study or that had insufficient data on the required variables, were excluded from the sample.

Consequently, the final sample resulted into 291 companies for the present study. Data required for the present study has been obtained from the Prowess database maintained by CMIE (Centre for Monitoring Indian Economy), annual reports of the companies and websites of BSE (www.bseindia.com) and SEBI (i.e., www.sebi.gov.in).

Proportion of FII holdings in the stock at the end of financial year has been taken as the proxy of FII. This data has been obtained from the website of SEBI. Firm size, book-to-market ratio, turnover, dividend yield, ROE, leverage, cash, and export rate have been taken up as the firm performance proxies. With respect to firm performance characteristics, firm size (**SIZE**), book-to-market ratio (**BM**), turnover (**TURN**), dividend yield (**DY**), return on equity (**ROE**), leverage (**LEV**), cash (**CASH**), and export rate (**EXP**) have been taken as independent variables. Literature has provided sufficient evidence that FIIs prefer big-sized firms over small ones while taking investment decision as big-sized firms are perceived to be better known and well established, and are in a position to manage the risky situations prevailing in the market. Accordingly, **SIZE** has been hypothesized to have a positive association with FII in present study and has been computed by taking log of total assets. **BM** is used as a measure of differentiation between companies with value-oriented stock or growth-oriented stocks. FIIs prefer to invest in companies with low **BM** ratios as it is an indicator of growth firms. **BM** which has been computed by taking ratio of net worth to market capitalization, has been hypothesized to have a negative association with FII. Market liquidity of companies' shares is better assessed by its turnover. High turnover rate ensures proper management of company's funds and relatively more demand of its offerings in a market, thereby, attracting more investors. **TURN** indicating the liquidity of company's shares, has been computed by the ratio of total value of stocks traded to market capitalization. Based on literature review, it is expected to show positive association with FII.

FII prefer few shares with high dividend yield to avoid income tax burden, thus **DY** is expected to have a negative impact on FII. It has been computed by ratio of dividend to equity to market value of equity. **ROE** proxies for firm profitability and is expected to attract more of foreign investment. In present study, **ROE** has been taken as the ratio of profit after tax to net worth. **LEV** is a measure of a firm's long-term financial distress and found that foreign investors being risk averse feel less attracted towards firms with high leverage. **LEV** has been computed by the ratio of total assets to net worth in present study. FII are attracted towards the companies with more cash as it's an indicator of liquidity. Thus, **CASH** has been hypothesized to be positively associated with FII and has been computed by the ratio of cash and short-term investments with total assets. **EXP** proxy firm visibility in foreign markets and are expected to be positively influencing the FII. In present study, **EXP** has been computed by the ratio of exports to sales. Data related to all above mentioned variables has been obtained from the PROWESS database.

Multivariate analysis including the Generalized Least Square (GLS) Random Effect Model for assessing the impact of firm performance measures on FII. An overview of the analysis also brings into light the fact that FII, which is a dependent variable in the present study, has zero values. Hence, it is important to check the robustness of the panel results after removal of zeros. For this purpose, consistent with past research (e.g., Dalhquist & Robertsson, 2001; Patnaik & Shah, 2008; Khanna, 2018) Tobit Model has also been applied for the panel cross-section regressions of *FII* on firm performance variables for the sample BSE-listed companies. The overall impact of all independent variables has been measured by Adjusted R^2 , and individual independent variable's impact has been assessed by significance of regression coefficients. The data has been analyzed by using the STATA (version 12.0), and SPSS (version 17.0).

6. DATA ANALYSIS AND INTERPRETATION

This section presents the results of panel data obtained by applying GLS RE model and Tobit model on firm performance variables as determinants of FII. Table 1 show the results of panel cross-sectional regression of FII on firm performance variables of GLS RE Model for the BSE listed companies.

Table 1: Panel Cross-sectional Regression of FII on Firm Performance Variables

Variable	ω	z
Constant	-0.063***	-3.73***
SIZE	0.24***	8.55***
BM	-0.01***	-9.35***
TURN	0.01***	4.02***
DY	-0.01*	-1.68*
ROE	0.02*	1.71*
LEV	-0.02***	-4.00***
CASH	0.01***	5.62***
EXP	0.01*	1.81*
Panel Results: 31.70%; Wald χ^2 : 302.36***		

Panel results shows that all firm performance variables explain 31.70 percent of the cross-sectional deviation in *FII* which is significant for the regression coefficients and regression model ($Wald \chi^2 = 302.36$; $p < 1\%$). The coefficient estimate of *SIZE* ($\omega = 0.24$, $p < 1\%$) leads to acceptance of H_{1a} that firm size has a

significant relationship with FII and is consistent with previous research (Falkenstein, 1996; Huberman, 1999; Dahlquist & Robertsson, 2001; Benett *et al.*, 2003; Khanna, 2018). Panel results of the table show that the regression coefficient on **BM** ($\omega = -0.01$, $p < 1\%$) has shown a significantly negative influence on **FII**, thus leading to acceptance of **H_{1b}** and confirm these findings with previous research (e.g., Lakonishok *et al.*, 1994; Dahlquist & Robertsson, 2001; Khanna, 2018). **H_{1c}** based on significant relationship of firm market turnover with FII also stands to be accepted, as indicated by the significantly positive regression coefficient estimates of **TURN** ($\omega = 0.01$, $p < 1\%$), and has also found to be consistent with the previous research (Gompers & Metrick, 2001; Almazan *et al.*, 2005; Khanna, 2018). These findings justify the fact that FII prefer growth firms indicated by companies' turnover as determinants of their market liquidity than the short-term gains in the form of dividends (Gompers & Metrick, 2001; Almazan *et al.*, 2005). Findings of panel data show the results in conformation of **H_{1d}** whereby, coefficient estimate on **DY** ($\omega = -0.01$) turned out to be significantly negative (i.e., $p < 10\%$). These results strongly support that FIIs prefer low dividend paying stocks, so as to reduce the negative impact of disharmonious taxation that may arise on account of holding shares with high dividend yield (Dahlquist & Robertsson, 2001; Liljeblom *et al.*, 2001). Significantly positive regression coefficient estimates on **ROE** ($\omega = 0.02$, $p < 10\%$) leads to acceptance of **H_{1e}**. These findings are consistent with previous research (e.g., Aggarwal *et al.*, 2005; Khanna, 2018) which shows that ROE, being a proxy of companies' profitability has been found to make a significantly positive impact on foreign investment. These findings justify the fact that high ROE indicates that a company is managing its assets very efficiently and earning due return on them. This, thereby, enhances investors' faith on such efficiently managed companies. Empirically testing the significant impact of leverage on FII has been the sixth hypothesis (**H_{1f}**). Results has shown the significantly negative impact of **LEV** ($\omega = -0.02$, $p < 1\%$) on **FII**, thus supporting **H_{1f}**. Panel results leads to acceptance of **H_{1g}**, whereby, regression coefficient estimate on **CASH** ($\omega = 0.01$, $p < 1\%$), has been found to have a considerably affirmative influence on **FII**. **H_{1h}** has been to test the significant influence of export rate of a company on FII. Based on panel results, **H_{1h}** stands to be accepted, as coefficient estimate on **EXP** ($\omega = 0.01$, $p < 10\%$) has shown a significantly positive impact on **FII**. These results are consistent with previous research (e.g., Dahlquist & Robertsson, 2001; Lakshmi, 2010; Khanna, 2018), whereby, it has been proved that a higher export rate by a company is an indicators of its' visibility in foreign markets. Consequently, foreign investors are more familiar with such companies and tend to prefer them for investment purposes. Table 2 shows the results of Tobit Model for the panel cross-section regressions of **FII** on firm performance variables for the BSE-listed companies.

Table 2: Panel Results of Tobit Model for Regression of FII on Firm Performance Variables

Model 6			
$FII_{jt} = \gamma_0 + \gamma_1 SIZE_{jt} + \gamma_2 BM_{jt} + \gamma_3 TURN_{jt} + \gamma_4 DY_{jt} + \gamma_5 ROE_{jt} + \gamma_6 LEV_{jt} + \gamma_7 CASH_{jt} + \gamma_8 EXP_{jt} + e_{jt}$			
Variable	Coefficients	z	$p > z $
SIZE	0.24***	8.19	0.00
BM	-0.01***	-9.39	0.00
TURN	0.01***	4.22	0.00
DY	-0.01***	-1.88	0.06
ROE	0.01*	1.25	0.09
LEV	-0.02***	-4.24	0.00
CASH	0.01***	5.72	0.00
EXP	0.01*	1.89	0.06
Wald χ^2 : 292.47***; Log-Likelihood: 4322.05			

Note: ***, **, * shows significance at 1%, 5% and 10% level of significance, respectively.

Results of the Tobit Model verify the model fitness as indicated by a significant Wald χ^2 and log-likelihood ratio (Wald $\chi^2 = 292.47$; $p < 1\%$). Consistent with the findings of Table 1, present table verifies the robustness of results. The coefficient estimates of **SIZE** ($z = 0.24$, $p < 1\%$), **TURN** ($z = 0.01$, $p < 1\%$), **ROE** ($z = 0.01$, $p < 10\%$), **CASH** ($z = 0.01$, $p < 1\%$), **EXP** ($z = 0.01$, $p < 10\%$) have a significantly positive impact on **FII**. These results, thereby, leads to acceptance of hypotheses, viz., H_{1a} , H_{1c} , H_{1e} , H_{1g} , and H_{1h} that a company size, its turnover, ROE, sufficient cash flows and export rate, have been found to have a significantly positive impact on FII. Further, the regression coefficients on **BM** ($z = -0.01$, $p < 1\%$), **DY** ($z = -0.01$, $p < 10\%$), and **LEV** ($z = -0.02$, $p < 1\%$) have shown significantly negative impact on **FII**. These results also lead to acceptance of hypotheses, viz., H_{1b} , H_{1d} , and H_{1f} which empirically prove in the present study that high book-to-market ratio of a company, high dividend yield, and excessive leverage, have been found to be negatively influencing the FII preference for such companies, in a significant manner. Thus, the findings based on the Tobit Model have also been found to be consistent with the panel results as well as the past research, thus, confirming their impact on FII. These results are also consistent with the findings obtained from the developed markets (e.g., Dalhquist & Robertsson, 2001; Ferreira & Matos, 2006).

7. SCOPE FOR FUTURE RESEARCH

Foreign capital plays an important role in the economic development of country but as they are short-term investors always searching for prospective opportunities to ensure security and safety of their returns

considered analysing companies on different parameters. In this study specifically financial sector has been considered for analysing the determinants pouring foreign investors to invest focussing on firm performance parameters. Further study can be extended to different sectors covering longer time period which may influence the result by exploring other parameters.

8. CONCLUSION

Present paper aimed to assess the impact of firm performance variables on FII. Results showed that firm size, ROE and export to sales have been found to have a positive impact on FII while Leverage and Book to market ratio, have shown a negative impact on FII. These outcomes thus prove that superior firm performance is associated with better corporate governance mechanisms thereby leading to increase in firm value which is admired by foreign investors one of the This consequently raises foreign investor's interest and preference for such firms.

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