## Foreign Institutional Investor Trading and Future Returns: Evidence from an Emerging Economy

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## 1. Introduction and Motivation

Foreign Institutional Investors (FII) are institutions established outside India that invest in securities in India. The label "FII" masks considerable heterogeneity. FIIs include large overseas mutual funds and hedge funds, as well as small investment firms. FII participation in the Indian Equity market has grown considerably in the last 15 years, from Rs. 38 Billion (\$1.2 Billion) at the end of December 1993 to Rs. 8,082 billion (\$174.8 billion) at the end of December 2015.<sup>2</sup> In light of this growth, an important question to be addressed is whether FII investments have generated positive abnormal returns. That is how skilled have FIIs been?

What are the current views of academics and regulators on the expected performance of FIIs? Two broad and opposing views have been offered. Some commentators argue that FIIs are endowed with superior expertise and resources by virtue of being global firms, and are hence likely to be successful portfolio managers. For example, according to IOSCO (2012), "FIIs are highly specialized and manage substantial capital, can enhance market features in many ways, including increasing liquidity, influencing market psychology, and improving disclosures and corporate governance." Others contend that FIIs are likely to be disadvantaged in terms of experience and access to information vis-à-vis the incumbent domestic investors (Brennan and Cao (1997)) and hence likely to underperform. Additionally, local governments tend to tightly regulate FIIs in terms of the types of securities they can trade and thus limit their performance potential.

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<sup>2</sup> https://www.equitymaster.com/india-markets/fiis/displayyearlyfii.asp

To evaluate which of the two afore-stated views dominate, researchers have examined data on investment performance of FIIs. Interestingly, the evidence on the stock-level investment performance in multiple markets (including Finland, Indonesia, Japan, South Korea, and Taiwan) is mixed. While Grinblatt and Keloharju (2000), Huang and Shiu (2009), and Bae, Min, and Jung (2011) conclude that FIIs generate superior performance, Kang and Stulz (1997), Dvorak (2005), and Choe, Kho, and Stulz (2005) report the opposite.

In this study, our research objective is to evaluate the investing skill of FIIs in India, a large emerging market that is relatively unexplored.<sup>3</sup> While there are many anecdotal references in the Indian financial press of significant FII activity in Indian financial markets, formal evidence of their role, and the consequences of their activity, is limited.

FII trades can be classified into two broad categories: trades on their own account and trades on behalf of foreign investors. To facilitate the latter, FIIs issue derivative instruments known as P-Notes, via investment banks. FIIs initiate trades on behalf of their clients and then P-Notes are issued to the clients to indicate that shares are held by the FII on behalf of the client. Information on the identity of P-Note holders is typically difficult to establish, at least at the time of the trade. Thus, P-Notes offer foreign investors an opportunity to get exposure to the Indian market without having to register as an FII with the Indian securities market regulator SEBI.<sup>4</sup> A frequent claim in the financial press is that P-Note holders are connected to Indian corporate entities and thus help the latter to retain control in the investee firms or even avoid paying taxes in India (see for example, Economic Times<sup>5</sup>). Thus, it is possible that FII trades related to P-Notes are motivated by the desire to retain corporate control or avoid taxes, potentially at the expense of a return maximization objective. Hence, whether FIIs are successful portfolio managers, and whether they even care about market

In terms of economic significance, the National Stock Exchange (NSE) whose firms we study is the twelfth largest exchange in terms of market capitalization at the beginning of 2015. (https://en.wikipedia.org/wiki/List\_of\_stock\_exchanges).

Further, on cumulative foreign direct investment by 2013, India ranked seventh in Asia and twenty-sixth in the world (https://en.wikipedia.org/wiki/List\_of\_countries\_by\_FDI\_abroad).

<sup>4</sup> See Parikh (2014) for a more detailed discussion of the structure of the market for P-Notes.

<sup>5</sup> Economic Times. July 1, 2014. Promoter-banker-FII nexus under scanner for P-Note abuse. Economic Times. Retrieved from http://articles.economictimes.indiatimes.com/2014-07-01/news/51002682\_1\_offshore-derivative-instruments-entities-registered-fiis

performance, are open questions.

## 2. Findings

Our study employs a database of daily stock-level trades of FIIs in India for the years 2003-2014. This firm-level data was not available till SEBI began releasing masked FII transaction data in a step towards compliance with a promise made in reply to a parliamentary question. We aggregate daily trades over a quarter to construct a measure of quarterly net buying.

Our first finding is that FIIs' trades are on average unprofitable over the sample period. For our sample period, portfolios of stocks that are formed based on positive, zero, and negative FII quarterly net buying yield average quarterly returns of 1.6%, 3.8%, and 2.4%, respectively. This suggests that investing in stocks in which FIIs do not trade yields superior returns to those in which they trade. Further, their sells perform better than their buys. Figure 1 presents this evidence.

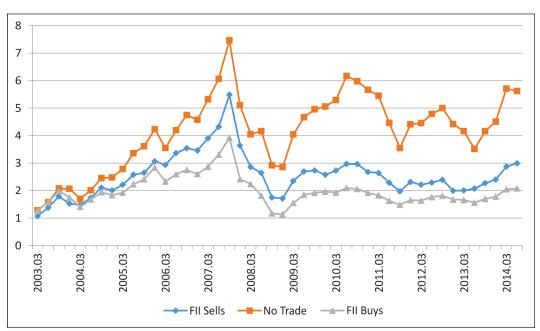


Figure 1: Performance of FIIs in the Indian Market (2003-14)

Figure 1 tracks the value of Re. 1 invested on March 31, 2003 in three portfolios of stocks: stocks in which FIIs are net buyers in a quarter (net buy portfolio), stocks in

which they did not trade during the quarter (no trade portfolio), and stocks in which FIIs are net sellers (net sell portfolio). Portfolios are formed at the end of each quarter and one-quarter ahead value-weighted returns are calculated, with weights equaling the market capitalization at the end of the quarter in which portfolios are formed. Quarterly returns are computed by summing continuously compounded daily returns. We then calculate the product of 1 plus each portfolio return over time to arrive at the future value of Re. 1 at the end of the third quarter of 2014.6

We consider stocks in which FII trade and correlate 3-month and 12-month stock returns with prior quarterly FII trading and find that FII trading is negatively associated with subsequent returns. A 10% increase in FII net buying is associated with 3% (6%) decline in returns of the stock in the subsequent quarter (year).

To understand the causes of this poor performance, we separate the sample into (a) small/large stocks and (b) stocks that are frequently traded by FIIs and those that are less frequently traded. Fewer analysts follow small firms and these firms face more uncertainty and are hence harder to value. Hence, we expect that the relation between FII trading and subsequent returns to be more negative for small firms. Our results, especially for one-year returns, are consistent with this prediction. Researchers in behavioural finance have developed theoretical models that posit that traders who are overconfident trade too much and consequently suffer losses (Odean (1998); Barber and Odean (2000); Daniel and Hirshleifer (2015)). Therefore, we predict that FII trading losses will be magnified when they trade more frequently. We divide our sample based on the median number of transactions per quarter (buys + sells) and find that in quarters in which FII trade more frequently, the negative relation between FII trading and subsequent returns is aggravated. Thus, the poor performance of FIIs in India can be partly attributed to excessive trading.

Next, we examine the relation between FII trading and subsequent earnings surprises and announcement returns. We find that net quarterly FII buying is unrelated to unexpected earnings for the next quarter. In contrast, net buying is significantly negatively related to earnings announcement returns: a 10% increase in lagged net buying is associated with 0.7% decrease in earnings announcement returns. The

<sup>6</sup> Data on daily returns are obtained from the PROWESS database. Data on FII trading are obtained from the NSDL website: https://www.fpi.nsdl.co.in/

inability to predict earnings news and the poor returns around earnings announcements strengthens the conclusion that FIIs in India do not behave like informed traders. This contrasts with a bulk of the U.S. evidence that institutional trades are positively associated with subsequent earnings news (Gompers and Metrick (2001); Yan and Zhang (2009)).

Lastly, we examine whether FIIs exploit a well-known trading anomaly known as the post–earnings-announcement drift, or PEAD. This refers to the tendency for a stock's cumulative abnormal returns to drift in the direction of an earnings surprise for several weeks following an earnings announcement.<sup>7</sup> Our examination of FII net buying during the earnings announcement suggests that they do not exploit the post-earnings announcement drift. In contrast, we find that FII net buying during the earnings announcement is not related to earnings surprises and is negatively related to subsequent three-month stock returns. We conclude that FIIs fail to exploit the PEAD strategy.

## 3. Implications

Our study adds to the evidence on FII performance by examining their medium-term performance in a relatively unexplored economy like India. In a contemporaneous study of Indian FIIs, Acharya, Anshuman, and Kumar (2014) find that abnormal returns associated with unusually low daily FII trading are short-lived and tend to reverse within two weeks. Our evidence suggests that reversals occur over longer periods – three months to one year, and are also concentrated around earnings announcements. Further, we find that both FII buys and sells are associated with poor subsequent performance. Our evidence that unusually high trading magnifies FII trading losses complements work on trading losses associated with overconfident individuals who trade too frequently (Barber and Odean (2000); Daniel and Hirshleifer (2015)).

Our findings lead to the question of why FIIs perform poorly in the Indian market. The first possibility is that FIIs are either not smart or are overconfident. The evidence that their losses are magnified when they trade more frequently suggests that

We confirm that the PEAD anomaly is observed in India. For our sample, buying firms in the top quartile of earnings surprise and shorting firms in the bottom quartile, generates average market-adjusted returns of 6.5% over the next 3 months.

overconfidence is a partial explanation. A second explanation is that other investors perceive FIIs as smart money and follow/mimic their trades. This herding in turn could lead to prices overshooting true values and subsequently reversing. A third possibility is that FIIs are global investors who are willing to accept losses in Indian markets some of the time because some of their Indian trades are executed to rebalance global portfolios and thus reduce risk. A fourth possibility is that FIIs might be conduits for Indian funds routed back to India via foreign countries. Because some of these funds may represent income on which taxes have been avoided, FIIs might be willing to accept trading losses as the benefit from tax avoidance exceeds these losses. Lastly, the desire to increase or maintain corporate control might cause some FIIs to behave like long-term investors and accept short-term losses. Disentangling these alternate explanations would be a very interesting subject for future research. This paper only takes the first step in understanding FII flows into India and raises more research possibilities.