

## Exploring Granger Causality Between FII Transactions and IPO Index Movements in India

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### ABSTRACT

In the framework of India's financial sector, this paper examines the Granger causality relationship between transactions by Foreign Institutional Investors (FIIs) and Initial Public Offering (IPO) indexes. Throughout India, monthly FII transaction data covering the 12-month period from April 2011 to March 2023 is used in this analysis. To investigate the effect of FII transactions on the IPO index for various monthly lags, Granger causality was applied. For the selected data, stationarity has been determined; otherwise, false regression results could result. To construct the common base, all of the data was converted to log form. Regressing the IPO index performance from FII transactions has been done using the FMOLS (fully modified ordinary least square) technique, which is devoid of auto and serial correlation. The study's findings point to a unidirectional Granger causal relationship between FII transactions and the SME IPO Index and the BSE IPO Index. Accordingly, FII transactions may be used to forecast how the IPO indexes will perform going forward. The R-squared values, however, are somewhat low, indicating the possibility of additional factors influencing the indices. The macroeconomic environment, which includes things like inflation and interest rates, as well as the overall stock market's success, maybe some of these influences.

**Keywords:** FII transactions, IPO Indices, FMOLS, Granger causality

**Introduction:** Investing in foreign stock markets is known as foreign institutional investing (FII) and is practiced by investors. They have the potential to have a big impact on the IPO market because of their investments, which may increase demand and raise IPO prices. A statistical technique that can be used to ascertain if one variable causes another is the Granger causality test. The test can be applied in this instance to ascertain whether FII transactions Granger are the cause of the Indian IPO indexes.

A helpful resource for investors interested in making IPO investments is the S&P BSE IPO index, a stock market index that follows the performance of businesses that have recently concluded an initial public offering (IPO) on the Bombay Stock Exchange (BSE). The index can be used to track the performance of IPOs over time and to identify the best-performing IPOs. As of August 17, 2023, it has 36 constituents, was introduced on August 24, 2009, and has a mean market capitalization of 6,897.55, a median market capitalization of 3,595.65, a minimum market capitalization of 723.59, and a high market capitalization of 73,299.59.

A stock market index called the S&P BSE SME IPO index is used to monitor the performance of small and medium-sized businesses (SMEs) that have recently finished their initial public offering (IPO) on the SME platform of the Bombay Stock Exchange (BSE). It was introduced on December 14, 2012, and as of August 17, 2023, it has 65 members. Its market capitalization ranged from a maximum of 747.41 crore INR to a minimum of 5.05 crore INR, a mean of 145.81 crore INR, and a median of 48.87 crore INR.

The purchasing and selling of shares on the Indian stock market by foreign institutional investors, or FIIs, is referred to as FII transactions. Institutional investors, or FIIs, make investments in foreign stock markets. They have the potential to have a big impact on the Indian stock market because of their investments, which may increase share prices and demand. FII transactions come in two varieties: Acquisitions: FIIs are seen to be purchasing the market when they buy shares. This may contribute to a rise in share prices and an optimistic attitude in the market. Sales: FIIs are seen to be selling the market when they sell shares. This may contribute to a decline

in share prices and a pessimistic outlook for the market. The difference between the number of shares that FIIs buy and sell can be used to calculate net FII transactions, which can serve as a useful gauge of the mood of the Indian stock market. A positive net FII transaction shows that bullish FII buying is occurring in the market. It is bearish for FIIs to be selling the market when there is a negative net FII transaction.

**Review of Literature:**

**Ahuja, Makan, and Chauhan (2012):** The study revealed a strong correlation between macroeconomic factors and Indian stock market indexes. According to the study, the following macroeconomic factors positively affect India's stock market indices: According to the study, the following macroeconomic factors have a negative effect on Indian stock market indices: GDP growth, interest rates, exchange rates, and inflation. Budget shortfall, Political instability. The influence of macroeconomic factors on Indian stock market indexes is not constant. For instance, during times of economic expansion as opposed to contraction, the influence of GDP growth on stock market indexes is greater. The data used for the study were from 1991 to 2011. The conclusions might not apply to the state of the market right now.

**Popat, S. M. (2012):** Policymakers can use the paper's findings to create policies that both minimize the hazards associated with FIIs and encourage their positive effects. Significant changes have been made to the Indian capital market by FIIs. Together with helping to raise share prices, they have improved the market's efficiency and liquidity. FIIs' effects have changed over time. FIIs were net sellers of Indian shares in the early 2000s. Nonetheless, they have been net buyers since the middle of the 2000s. Economic development, interest rates, exchange rates, and political stability are some of the variables influencing foreign direct investment (FII) transactions in India. In the Indian capital market, FIIs have the potential to be beneficial. They may, however, also carry some hazards, such as the possibility of unexpected capital outflows.

**Agarwal, B. (2014):** The Indian initial public offering (IPO) market is dominated by foreign institutional investors or FIIs. They can significantly affect IPO share prices and make up a sizable component of the demand for IPOs. IPOs of large-cap firms with strong growth prospects are more likely to attract the attention of FIIs. Also, they have a higher propensity to invest in initial public offerings (IPOs) that are provided below market value. A multitude of factors, such as the state of the economy, the regulatory landscape, and the success of the stock market, influence the amount of FII involvement in initial public offerings (IPOs). By assisting in increasing the market's efficiency and liquidity, FIIs can have a favorable impact on the Indian IPO market. They may, however, also carry some hazards, such as the possibility of unexpected capital outflows.

**Srinivasan, P., & Kalaivani, M. (2015):** Through the use of the autoregressive distributed lag (ARDL) bounds testing approach, the authors of the research article investigated the factors that influence foreign institutional investments (FIIs) in India. For the months of January 2004 through December 2011, they used quarterly time series data. The exchange rate significantly harmed FII inflows in the short and long terms, according to the authors' findings. This indicates that FII flows into India would be negatively impacted by a devaluation of the Indian rupee. The authors also discovered that FII inflows to India were positively impacted in the long term by the results on the Indian equity market, but negatively in the short run. In the short run, this supports the positive feedback trading hypothesis; in the long run, it supports the negative feedback trading hypothesis. Long-term FII flows were positively and significantly impacted by US equities market returns, whereas short-term FII flows were positively and marginally impacted. This indicates that foreign institutional investors are drawn to the Indian equities markets by the dangers involved in the US equity market. Ultimately, the researchers discovered that, in the short and long terms, respectively, domestic inflation had a considerable negative and positive impact on FII flows. Accordingly, high inflation in India will initially deter foreign direct investment (FII) flows but eventually boost them. The authors concluded that currency rates, local inflation, returns from the domestic equities market, and the risk and rewards connected with the US equity market are the main factors influencing foreign direct investment (FII) inflows into India.

**Banerjee, S., & Rangamani, K. T. (2015):** The purpose of this research paper is to examine the variables that affected investors' desire for graded IPOs in the Indian capital market from 2007 to 2013. The study took into account both market sentiment-related and company-specific factors, including changes in the money supply, inflows of foreign institutional investors (FII), the market's price-to-earnings (PE) ratio, and market return. Company-specific factors included pre-issue financial position, corporate governance, and post-issue promoter holding. The study discovered that investor interest in initial public offerings (IPOs) in terms of subscription level

was statistically significantly impacted by FII inflows, market PE, money supply, debt-to-equity (DE) ratio, and board size of the companies.

**Kuhan, K., & Kavida, V. (2017).** The main objective of this study is to evaluate how certain macroeconomic factors affect the S&P BSE SME IPO index. This study uses techniques including Granger causality tests, multiple regression, and correlation analysis to determine the link and its consequences. The variables that were selected include the average monthly closing price of the S&P BSE SME IPO as well as important macroeconomic metrics such as the GDP, interest rate, foreign direct investment (FDI), index of industrial production (IIP), inflation rate (IF), exchange rate (ER), and crude oil price (CP).

**Alarnkar, A. A. (2019).** The performance of the BSE's S&P Energy, S&P Industrial, S&P IPO, and S&P Telecom Indexes is heavily influenced by macroeconomic factors. The Gross Domestic Product (GDP) is the primary macroeconomic factor. Positive returns for all four indexes are correlated with a positive GDP growth rate. Another crucial element is the interest rate, which has varying effects on different indices. The S&P IPO and S&P Telecom indices show positive returns, while the S&P Energy and S&P Industrial indexes show negative returns in response to increasing interest rates. All four indices are negatively impacted by the rate of inflation. Lower returns are correlated with a higher rate of inflation. The four indices are impacted by the currency rate in different ways.

**Chetanbhai, J. M., & Desai, J. N. (2019):** Large-cap firms with high earnings per share (EPS) and dividend per share (DPS) are the preferred investments of foreign institutional investors (FIIs). Additionally, they favor investing in the banking, information technology, and oil and gas industries. FIIs take into account six key aspects before investing in India: inadequate economic policy execution, foreign investment challenges, environmental factors, Indian rupee's purchasing power, Opportunities and difficulties facing FIIs in their nation; the allure of economic policies; and government-initiated financial ease. The Indian equities market's constituents and FII investment are causally related in both directions.

**Krishnan, V. S., & Nandhini, M. (2021):** The study made use of a sample of 171 initial public offerings (IPOs) that were traded on the BSE between January 2014 and December 2019. The analysis indicated that FII inflows over total shares offered were the most important factor determining listing gains. The company's size, the industry it operates in, and general market conditions were also shown to be important considerations. The listing gains of Indian IPOs are significantly influenced in a good way by FIIs. Accordingly, IPOs with greater FII inflows typically see higher listing gains.

**Neupane, S., Thapa, C., & Vithanage, K. (2023):** The research paper's authors looked at the relationship between institutional investors' performance and context-specific experience. They specifically looked at how international institutional investors' choices, bids, and the returns on their future initial public offerings (IPOs) were influenced by their prior IPO trading experiences. Researchers discovered that investors with more frequency of participation (i.e., with more context-specific expertise) had distinct behaviors from those with less frequency of participation. The authors discovered that only high-frequency investors increased their profitability over time by suitably altering their subscriptions across IPOs after adjusting for investor fixed effects and time-varying heterogeneity. Other types of general investment experience seemed to be subordinated to the influence of context-specific experience.

**Research gap:** There is still a significant knowledge vacuum about the precise direction of causality between these variables, even with the association between Foreign Institutional Investor (FII) transactions and Initial Public Offering (IPO) indices in the context of India receiving a lot of attention. Although the relationship between FII activity and IPO market performance has been studied in the past, more thorough research is needed to determine the causal relationships and temporal order between FII transactions and IPO indices. This research could shed light on the dynamics of these interactions. To gain a more comprehensive understanding of the relationship between FII investments and IPO market trends, as well as to gain insight into the behavior of the Indian capital market and its possible consequences for investors, it is imperative to close this research gap.

**Objectives:** In the context of India's financial sector, the main objective of this study is to examine the Granger causality relationship between transactions by Foreign Institutional Investors (FIIs) and Initial Public Offering (IPO) indices.

**The hypothesis of the study:**

The following hypothesis has been established for the present study

**H<sub>01</sub>: FII long-run relationship has no granger cause on the IPO index**

**H<sub>02</sub>: FII short-run relationship has no granger cause on the IPO index**

**H<sub>03</sub>: Unit root data for IPO index and FII transactions is stationary.**

**H<sub>04</sub>: The IPO index is not significantly impacted by FII transactions.**

**Methodology of the Study**

This study looked into the possible impact of FII transactions on the performance of the IPO index using an analytical research methodology. Monthly financial transaction information for all of India was gathered between April 2011 and March 2023, a span of 12 years. The BSE website provided the relevant period IPO index data for the S&P BSE IPO and S&P BSE SME IPO. To investigate the effect of FII transactions on the IPO index for various monthly lags, Granger causality was applied. For the selected data, stationarity has been determined; otherwise, false regression results could result. To construct the common base, all of the data was converted to log form. Regressing the IPO index performance from FII transactions has been done using the FMOLS (fully modified ordinary least square) technique, which is devoid of auto and serial correlation.

**Analysis & Interpretation**

**H<sub>01</sub>: FII long-run relationship has no granger cause on the IPO index**

**Table 1 Granger Causality Between the FII All-India Equity Buy and the BSE IPO Index**

Lag	Observation	F statistic	Prob.	Statistically Significant
1 month	141 months	0.40339	0.5264	NO : Accept Null
		0.02386	0.8775	NO : Accept Null
2 months	139 months	0.24638	0.782	NO : Accept Null
		0.10822	0.8975	NO : Accept Null
3 months	137 months	0.22938	0.8796	NO : Accept Null
		0.11529	0.951	NO : Accept Null
4 months	135 months	0.2649	0.8796	NO : Accept Null
		0.1064	0.951	NO : Accept Null
6 months	131 months	0.2933	0.9391	NO : Accept Null
		0.2921	0.9397	NO : Accept Null
9 months	125 months	0.60093	0.7397	NO : Accept Null
		0.2211	0.9099	NO : Accept Null
12 months	119 months	19.3306	2.00E-20	Yes : Accept Alternate
		0.28394	0.9906	NO : Accept Null

The Granger causality test results between the BSE IPO Index and the FII all India Equity Buy are shown in the table. The FII long position has no granger cause on the IPO index, according to the null hypothesis. The other possibility is that the IPO index has a Granger causation due to FII long positions. We can reject the null hypothesis at the 5% significance level because the p-value for the 12-month lag is smaller than 0.05. This implies that the FII long position does have a granger cause on the IPO index, meaning that past FII long position can aid in anticipating future IPO index values.

At the 5% significance level, we are unable to reject the null hypothesis because the p-values for the remaining lags are all more than 0.05. This implies that the other lags in the IPO index are not caused by the FII long-term position.

To sum up, the data points to a granger cause-effect of FII long positions on the IPO index, albeit only during the 12-month lag. This implies that, but only for the following 12 months, historical FII long positions can be used to forecast future IPO index values.

Table 2

**Granger Causality Between S&P SME IPO Index & FII All India Equity Buy**

Lag	Observation	F statistic	Prob.	Statistically Significant
1 month	141 months	1.01929	0.3145	NO Accept Null
		0.27995	0.5976	NO Accept Null
2 months	139 months	1.25641	0.288	NO Accept Null
		0.09789	0.9068	NO Accept Null
3 months	137 months	1.00487	0.3929	NO Accept Null
		0.0774	0.9721	NO Accept Null
4 months	135 months	1.1743	0.3253	NO Accept Null
		0.15658	0.9597	NO Accept Null
6 months	131 months	1.06749	0.386	NO Accept Null
		0.18336	0.9809	NO Accept Null
9 months	125 months	1.50362	0.156	NO Accept Null
		0.51401	0.8616	NO Accept Null
12 months	119 months	7.56041	1.00E-09	Yes : Accept Alternate
		0.65499	0.7896	NO Accept Null

To determine if the FII long position can be utilized to forecast future values of the S&P MSME IPO Index, the Granger causality test was performed. The alternative hypothesis is that there is a granger explanation for FII long positions on the S&P MSME IPO Index, contrary to the null hypothesis. The test's findings indicated that the 12-month lag's p-value is less than 0.05. This indicates that, at the 5% significance level, the null hypothesis can be rejected. Stated otherwise, there exists ample evidence indicating that the FII long position on the S&P MSME IPO Index has a Granger causation. This indicates that, but only for the following 12 months, historical FII long positions can be used to forecast future values of the S&P MSME IPO Index.

Since the other lags' p-values are all higher than 0.05, the null hypothesis cannot be ruled out at the 5% significance level. This shows that the S&P MSME IPO Index's other lags are not caused by the FII long position. To sum up, the data indicates that, for the next 12 months only, FII long positions may be utilized to forecast future values of the S&P MSME IPO Index. Only for the 12-month lag is the Granger cause present.

**Table 3: Granger Causality Between FII All India Equity Sell and BSE IPO Index**

Lag	Observation	F statistic	Prob.	Statistically Significant
1 month	142 months	0.98021	0.3239	NO Accept Null
		0.87387	0.3515	NO Accept Null
2 months	141 months	0.51596	0.5981	NO Accept Null
		0.51203	0.6004	NO Accept Null
3 months	140 months	0.47545	0.6999	NO Accept Null
		0.34217	0.7949	NO Accept Null
4 months	139 Months	0.49255	0.7412	NO Accept Null
		0.24838	0.9102	NO Accept Null

6 months	137 months	0.63671	0.7006	NO Accept Null
		0.22941	0.9664	NO Accept Null
9 months	134 months	1.00648	0.439	NO Accept Null
		0.24764	0.9864	NO Accept Null
12 months	131 months	37.3358	1.00E-32	Yes : Accept Alternate
		0.23956	0.9948	NO Accept Null

The Granger causality test results between the BSE IPO Index and the FII all India Equity Sell are shown in the table. The FII long position on the BSE IPO Index has no granger cause, according to the null hypothesis. The other possibility is that the BSE IPO Index has a Granger causation due to FII long positions. Because the 12-month lag's p-value is less than 0.05, the null hypothesis can be rejected at the 5% significance level. This implies that there is a granger cause relationship between the FII long position and the BSE IPO Index, which means that historical FII long position data can be used to forecast future BSE IPO Index values.

At the 5% significance level, it is unable to reject the null hypothesis because the p-values for the remaining lags are all more than 0.05. This implies that the other lags in the BSE IPO Index are not caused by the FII long position. In summary, the data points to a granger cause-effect of FII long positions on the BSE IPO Index, albeit only during the 12-month lag. This implies that, but only for the following 12 months, historical FII long positions can be used to forecast future values of the BSE IPO Index.

Several variables, such as the state of the economy, the mood of the market, and the performance of specific equities, are taken into consideration when making FII investment decisions. These variables require time to show up in the BSE IPO Index. The 12-month lag may be the period it takes for the consequences of FII investment choices to be fully reflected in the BSE IPO Index.

The adoption of new laws or modifications to government policy could potentially affect the BSE IPO Index. These variables might be more unpredictable, and it might take months or even years for their effects to become apparent.

**Table 4**

**Granger Causality Between FII All India Equity Sell and S&P SME IPO Index**

Lag	Observation	F statistic	Prob.	Statistically Significant
1 month	142 months	0.45967	0.4989	NO Accept Null
		0.53182	0.4671	NO Accept Null
2 months	141 months	0.47121	0.6253	NO Accept Null
		0.22784	0.7966	NO Accept Null
3 months	140 months	0.32511	0.8082	NO Accept Null
		0.16908	0.9171	NO Accept Null
4 months	139 Months	0.42438	0.7908	NO Accept Null
		0.14152	0.9664	NO Accept Null
6 months	137 months	0.43922	0.85141	NO Accept Null
		0.17908	0.9821	NO Accept Null
9 months	134 months	0.7593	0.654	NO Accept Null
		0.47481	0.889	NO Accept Null
12 months	131 months	4.8686	2.00E-06	Yes : Accept Alternate
		0.50587	0.9069	NO Accept Null

The Granger causality test results between the BSE IPO Index and the FII all India Equity Sell are displayed in the table. The FII all India Equity Sell has no granger cause on the BSE IPO Index, according to the null

hypothesis. An alternate theory suggests that the BSE IPO Index is affected by the FII all India Equity Sell. Because the 12-month lag's p-value is less than 0.05, the null hypothesis can be rejected at the 5% significance level. This shows that there is a granger causation relationship between FII all India Equity Sell and the BSE IPO Index, i.e., previous FII all India Equity Sell can help forecast future values of the BSE IPO Index.

The Granger causality test results between the BSE IPO Index and the FII all India Equity Sell are displayed in the table. The FII all India Equity Sell has no granger cause on the BSE IPO Index, according to the null hypothesis. An alternate theory suggests that the BSE IPO Index is affected by the FII all India Equity Sell. Because the 12-month lag's p-value is less than 0.05, the null hypothesis can be rejected at the 5% significance level. This shows that there is a granger causation relationship between FII all India Equity Sell and the BSE IPO Index, i.e., previous FII all India Equity Sell can help forecast future values of the BSE IPO Index.

Potential justification for the Granger cause's presence just during the 12-month lag. FII investment decisions are influenced by several variables, such as individual stock performance, market mood, and economic conditions. The influence of these factors on the BSE IPO Index is gradual. The BSE IPO Index may take a year to fully reflect the impact of FII investment decisions, which could account for the 12-month lag.

The implementation of new rules or modifications to government policy are examples of other factors that could affect the BSE IPO Index. Certain causes could be harder to forecast, and it might take months or even years before you notice their consequences.

**Table 5: Showing stationarity of the data**

Time series Data	Lag	T test stat	Probability	Stationary at
FII All India Equity Buy	12	-4.079336	0.0084	Level
FII All India Equity Sell	12	-3.857785	0.0163	Level
BSE IPO INDEX	12	-10.24176	0.0000	1 <sup>ST</sup> Difference
SME IPO INDEX	12	-7.626804	0.0000	1 <sup>ST</sup> Difference

The results of the Augmented Dickey-Fuller (ADF) test for data stationarity are shown in the table. A statistical technique called the ADF test is used to assess if a time series is stationary. A time series that remains stable is one whose statistical characteristics remain constant across time. The time series' non-stationarity is the null hypothesis of the ADF test. The time series may be stationary, which is the alternate theory. The results displayed in the table are as follows:

**FII All India Equity Buy:** Less than 0.05, or 0.0084, is the p-value. This indicates that, at the 5% significance level, the null hypothesis can be rejected. To put it another way, the data is level and stationary.

**FII All India Equity Sell:** Less than 0.05, or 0.0163, is the p-value. This indicates that, at the 5% significance level, the null hypothesis can be rejected. To put it another way, the data is level and stationary.

**BSE IPO INDEX:** Less than 0.05, or 0.0000, is the p-value. This indicates that, at the 5% significance level, the null hypothesis can be rejected. Stated otherwise, the data remains unchanged at the initial difference.

**SME IPO INDEX:** With a p-value of 0.0000, the result is less than 0.05. This indicates that at the 5% significance level, the null hypothesis can be rejected. Stated otherwise, the data exhibits stationarity at the initial difference.

**Table 6**  
**Fully Modified Ordinary Least Square Regression for the H<sub>04</sub>: The IPO index is not significantly impacted by FII transactions**

**Dependent Variable: D(LOGBSEIPO)**

**Method: Fully Modified Least Squares (FMOLS)**

**Date: 08/19/23 Time: 17:05**

Sample (adjusted): 2011M05 2023103  
 included observations: 142 after adjustments  
 Cointegrating equation deterministic: C  
 Long-run covariance estimate (Bartlett Kernel, Newey-West fixed bandwidth  
 =5.0000)

Term	Estimate	Std. Error	t-Statistic	p-value
LOGAEBUY	0.171726	0.047388	3.623854	0.0004
LOGAIESELL	0.167822	0.044445	3.775976	0.0002
c	0.04185	0.145787	-0.287062	0.7745
R-squared	0.09063			
Mean dependent var	0.010361			
Adjusted R-squared	0.077545			
S.D. dependent var	0.076371			
SE of regression	0.073351			
Sum squared resid	0.747861			
Long-run variance	0.005539			

The findings of the regression analysis, which was done to test the theory that the FII Transaction did not affect the BSE IPO Index, are displayed in the above table. The BSE IPO Index change (D(LOGBSEIPO)) is the dependent variable in the regression, and the logarithms of the FII buying (LOGAEBUY) and selling (LOGAIESELL) transactions are the independent variables.

Both LOGAEBUY and LOGAIESELL are statistically significant predictors of D(LOGBSEIPO), according to the regression results. This indicates that both the FII purchasing and selling operations have an impact on the BSE IPO Index. An increase in FII buying transactions is linked to an increase in the BSE IPO Index, as indicated by the positive coefficient on LOGAEBUY. An increase in FII selling transactions is linked to an increase in the BSE IPO Index, as indicated by the positive coefficient on LOGAIESELL.

With an R-squared of 0.09063, the regression's independent variables can account for 9% of the variation in the dependent variable. Given the relatively low R-squared value, the BSE IPO Index may be influenced by additional factors.

All things considered; the regression analysis's findings point to the FII Transaction having an impact on the BSE IPO Index. The R-squared value, however, is somewhat low, indicating that the BSE IPO Index is also influenced by other factors.

#### **Fully Modified Ordinary Least Square Regression for the H<sub>04</sub>: The IPO index is not significantly impacted by FII transactions**

**Dependent Variable: D(LOGSMEIPO),**  
**Method: Fully Modified Least Squares (FOLS),**  
**Sample (adjusted) 2012108 2023103, Included observations: 127 after adjustments, Cointegrating equation**  
**deterministics: C**  
**Long-run covariance estimate (Bartlett keel, Newey-West fixed bandwidth=50000)**

Term	Estimate	Std. Error	t-Statistic	p-value
LOGAIEBUY	0.183747	0.100861	3.623854	0.0004



LOGAIESELL	0.156486	0.089603	3.775976	0.0002
c	0.279717	0.413300	-0.287062	0.7745
R-squared	0.034074			
Mean dependent var	0.043202			
Adjusted R-squared	0.018495			
SD. dependentvar	0.106449			
SE of regression	0.105450			
Sum squared resid	1379110			
Long-run variance	0.021915			

Regression analysis results indicate that D(LOGSMEIPO) can be statistically predicted by both LOGAEBUY and LOGAIESELL. This indicates that both the FII purchasing and selling operations have an impact on the SME IPO Index. An increase in FII buying transactions is linked to an increase in the SME IPO Index, as indicated by the positive coefficient on LOGAEBUY. An increase in the FII selling transaction is linked to an increase in the SME IPO Index, as indicated by the positive coefficient on LOGAIESELL.

With an R-squared of 0.034074, the regression's independent variables can account for around 3% of the variation in the dependent variable. Given the relatively low R-squared value, it is possible that the SME IPO Index is influenced by additional factors. All things considered, the regression analysis's findings point to the FII Transaction having an impact on the SME IPO Index. The R-squared value, however, is somewhat low, indicating that the SME IPO Index is also influenced by other factors.

Several potential explanations for the comparatively low R-squared value include: There is a little sample size. A rather small sample size of 127 observations was used for the regression analysis. A greater R-squared value would probably come from a larger sample size. The regression does not take into account all the elements that affect the SME IPO Index. For instance, changes in the macroeconomic climate, such as inflation or interest rates, may have an impact on the SME IPO Index.

There is a nonlinear association between the FII Transaction and the SME IPO Index. Although the relationship may not be linear, the regression makes the assumption that it is.

### **Conclusion & Scope for the Future Study**

The study observed the connection between the BSE IPO Index, the SME IPO Index, and the FII Transaction. The study's findings indicate that the FII Transaction has an impact on both indexes, although the R-squared values are somewhat modest, indicating that the indices are also influenced by other factors. The study also discovered that the coefficients on LOGAEBUY and LOGAIESELL are positive, indicating that an increase in the FII buying transaction is connected with an increase in both indices. This implies that FIIs frequently make IPO investments, which may raise the price of IPO stocks.

Additionally, the study revealed that the R-squared values are very low, indicating the possibility of additional factors influencing the indices. The macroeconomic environment, which includes things like inflation and interest rates, as well as the overall stock market's success, maybe some of these influences. The study is limited by the fact that it was conducted on a relatively small sample size. Higher R-squared values, which would imply that the FII Transaction is a more significant component impacting the indexes, would probably come from bigger sample sizes.

Overall, the research offers some evidence that points to the FII Transaction as a potential influencing factor for both the SME IPO Index and the BSE IPO Index. The study does, however, also imply that the indices are influenced by additional factors.

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