Journal of Commerce and Accounting Research
13 (4) 2024, 71-79
http://publishingindia.com/jcar/
doi: https://doi.org/10.21863/jcar/2024.13.4.008

Submitted: 06 July, 2023
Accepted: 15 December, 2023

INDIAN STOCK MARKET DRIVERS ON A CUSP OF CHANGE: AN EMPIRICAL STUDY

Md Nasim Ansari, Jamaluddeen****

Abstract *Domestic and Foreign institutional investors are professional investors who aim to profit from price movements in the stock market. These investors not only profit from their investments but also drive the stock market of any country. The study examines the association between Sensex Nifty 50's movements and investing patterns of FIIs, DIIS and the causal relationship between stock market returns and institutional investments (FIIS and DIIs). The study also analyses the impact of FIIs and DIIs in driving the Indian stock market. The study employed correlation analysis, vector autoregression model, Block exogeneity Wald-test and the Granger causality test for the objectives. Our results indicate the gradual fall in the FIIs-DIIs ratio in the Indian stock market, making domestic institutional investors a prominent counterforce to FIIs and establishing it as an equal driver. DIIs act as positive feedback traders, while FIIs act as neutral to negative traders. The causality test demonstrates that market return has a significant impact on both the players, but neither FIIs nor DIIs have a significant impact on market movement.*

Keywords: *Domestic Institutional Investors (DIIs), Foreign Institutional Investors (FIIs), Sensex, Nifty 50, VAR, Block Exogeneity Wald Test, FIIs-DIIs Ratio, Driver*

JEL code: *C01, C58, G23*

INTRODUCTION

The Indian stock market is one of domestic and foreign investors' most prominent investment destinations. They prefer to invest here because the Indian capital market is regarded as one of the best-performing capital markets among all stock markets in the world and has optimistic growth prospects for local and foreign investments (Bansal, 2021; Shamim et al., 2019; Vijayakumar, 2019). India recently became the world's fifth-largest economy and will likely maintain this growth rate in the coming years. It is regarded as an emerging manufacturing hub in global value chains, a growing domestic consumer market, strong momentum in infrastructure development and a global leader in both the public and private sectors' digital transformation. The growing economy, favourable government policies, increased infrastructure investment, norm relaxation and improvements in financial infrastructure can all help build trust among domestic investors and increase foreign capital inflows into the country in the future. The flow of funds into the stock markets from various investor groups has significant implications for investors and policymakers, as stock market movements are frequently attributed to such flows (Arora, 2016; Ansari, 2023). Domestic institutional investors (DIIs) and Foreign institutional investors (FIIs) are two major investor groups and drivers of the Indian stock market studied in the study. DIIs are institutions like mutual funds, households, insurance companies, banks, pension funds, provident funds and investment trusts that pool money from the public or small investors and invest a significant amount in different stocks and assets of the country. After the 1991 financial liberalisation, the Indian capital market received huge foreign funds from various FIIs. Foreign institutional investors, or FIIs, have traditionally wielded disproportionate influence in the Indian equity market, with their net flows dictating market tone (Dhingra, 2016; Gahlot, 2019). Capital inflows through FDI and equity investments will drive momentum in stock market indexes (Vijayakumar, 2020). The activities of FIIs are used to determine any market rally or dip; if they were net sellers, we saw a significant fall, and if they were net buyers, we saw a rally in the Indian stock market (Shamim et al., 2019). *DIIs*, in addition to FIIs, influence net investment flows into the economy. However, as time passes, *DIIs* become more robust and mature, making the Indian securities market a more stable investment avenue (Salar et al., 2016). Over the last year or so, the market has

* UGC Senior Research Fellow, Department of Commerce, University of North Bengal, Siliguri, West Bengal, India.
Email: nasimansari70313@gmail.com; ORCiD: https://orcid.org/0000-0001-6057-1540

** Assistant Professor, Department of Commerce, University of North Bengal, Siliguri, West Bengal, India.
Email: qjamaluddeen@gmail.com

demonstrated an unexpected trend in which domestic solid institutional investor (DII) flows have made it more resilient. The Indian stock market is on the cusp of change, and the current resilience is just because of the *DIIs* and the retail investors. Our study aims to demonstrate the Indian stock market and restrict FIIs from being the sole drivers in any rally or dip in the market. The study will provide small investors with some cues to make investment decisions based on the trading actions of both FIIs and DIIs.

LITERATURE REVIEW

Understanding institutional investors' investment patterns and stock market volatility is critical. The stock market's movement is caused by investors' investment patterns. The following is a summary of the review literature:

FIIs and DIIs are professional investors who aim to profit from price movements in the stock market. These investors profit from their investments and drive any country's stock market (Bansal, 2021). Loomba (2012) and Batra (2003) used daily data on FIIs and the Sensex from 2001 to 2011 to investigate the dynamics of FII trading behaviour and its influence on the Indian stock market. The findings revealed a positive association between the Indian stock market and FII activity. The buying and selling activities of FIIs influence the behaviour of DIIs. Furthermore, FIIs have a more significant impact on Indian stock returns than DIIs (Bansal, 2021; Sathish, 2020; Gahlot, 2019; Salar, 2016). The presence of FIIs aided Indian stock market growth while also increasing volatility (Sripriya et al., 2014). FIIs affect stock prices positively when they purchase and negatively when they sell, and research demonstrates that FIIs enhance market volatility when they sell (Dhingra et al., 2016). The trading behaviours of *DIIs* and FIIs follow opposing trading patterns. *DIIs* are negative feedback traders, and FIIs are positive feedback traders. The researchers observed weak evidence of a negative relationship between future stock returns and foreign institutional investments (Arora, 2016; Satish, 2020). There is a correlation between FII and mutual fund investment activity, and it significantly impacts the volatility of the Indian securities market with at least one lag. There is a link between market volatility and FIIs but not mutual funds (Naik & Padhi, 2015; Chhimwal, 2020). Similarly, Kumar et al. (2020) observed that there is no substantial evidence of such linkages between Mutual Fund assets and stock market returns in Indian marketplaces throughout the research period. The trading strategies of FIIs and DIIs differ significantly. The FIIs employ a positive feedback strategy, whereas the DIIs employ a negative one. This negative feedback strategy was more prominent during the crisis. FPI and DII flows are also negatively related (Kadanda & Raj, 2017). When domestic equity inflows surpass foreign equity inflows by a substantial margin, as observed in 2015-2018, Indian stock market volatility is unaffected by foreign equity investments. However, when extensive foreign net inflows resume, Indian market volatility remains high, as has been experienced since 2019 (Aggarwal et al., 2022). Using the Granger Causality test, Nautiyal et al. (2013) and Sehgal et al. (2009) found no relationship between FIIs flow and stock return in the Indian stock market. The Indian stock market return has a significant impact on the investing behaviour of institutional investors in India; the study discovered unidirectional causality from the stock market return to DIIs and FIIs flows (Chakrabarti, 2001; Mukherjee et al., 2002; Thiripalraju & Acharya, 2011; Dua & Garg, 2013). Domestic and foreign institutional investors are active participants in the Indian stock market. FIIs are essentially opportunistic agents who cause no fundamental change in the market but profit speculatively from it (Murthy et al., 2013).

OBJECTIVE OF THE STUDY

- To find the association between movements of SENSEX, NIFTY50 and investing patterns of FIIs, DIIS.
- To examine the causal relationship between stock market return and institutional investment (FIIS and DIIs).
- To analyse the impact of FIIs and DIIs in driving the Indian stock market.

METHODOLOGY

The study uses monthly data on equity flows by FIIs and DIIs and the monthly closing values of the BSE Sensex and Nifty 50. The data set covers the period from January 2015 to May 2023. As the research is based on secondary data, the data has been obtained from different websites, like the official websites of BSE and NSE, moneycontrol.com, SEBI, investingindia.com, Yahoo Finance, etc., journals, news reports and magazines. The Sensex and Nifty returns are calculated using the formula

$$r = \frac{c_c - c_p}{c_p},$$

where C_p = previous closing price of the index and C_c = current closing price of the index. Since the data was a time series, before applying any econometric tests, we had to check whether the data was stationary or not, and for this, we applied the Augmented Dicky-Fuller (ADF) and Phillips-Perron (PP) unit root tests. Correlation analysis is used to analyse the current relationship between institutional investment (FIIs, DIIs) and index movements (Sensex,

Nifty 50). A bivariate vector auto-regressive (VAR) model is used to investigate the relationship between returns and institutional investment (FIIs and DIIs). The VAR model assists in determining if historical returns may be used to forecast future flows and vice versa. To identify the direction of causality between stock market returns and institutional investments, Granger causality tests are performed.

The equation for Augmented Dicky-Fuller (ADF) unit root test:

$$\Delta Y_t = \gamma Y_{t-1} + \varepsilon \quad \text{Where } \gamma = \beta - 1 \text{ ——— (Dicky-Fuller)}$$

$$\Delta Y_t = \alpha + \gamma Y_{t-1} + \varepsilon \text{ (intercept added)}$$

$$\Delta Y_t = \alpha + \phi t + \gamma Y_{t-1} + \varepsilon \text{ (Intercept and time trend added)}$$

When the lag of the dependent variable ΔY_t is added as an independent variable for the better fitness of the model, the equation will be:

$$\Delta Y_t = \alpha + \phi t + \gamma Y_{t-1} + \Sigma^{m}_{i=1}\, \phi_i\, \Delta Y_{t-i} + \varepsilon$$

——— (Augmented Dicky-fuller)

Where α = Intercept, ϕt = Time trend, $\Sigma^{m}_{i=1}\, \phi\, \Delta Y_{t-i}$ = lag of the dependent variable $\Delta Y_{t,}$ and ε is the error term.

If $\beta=1$, then $\gamma=0$ means a unit root exists, and the series is non-stationary. On the other hand, if $\beta>1$, then the series will become explosive, and if $\beta<1$, then $\gamma<1$, which means the relationship will slowly die out, the unit root will not exist and the series will become stationary.

The equation for Phillips-Perron (PP) unit root test;

$$\Delta Y_t = \alpha + \phi t + \gamma Y_{t-1} + \Sigma^{m}_{i=1}\, \phi_i\, \Delta Y_{t-i} + \varepsilon$$

In the above equation, β_1 represents intercept, δY_{t-1} a lagged term, U_t is a white noise term and $\beta_2 t$ is the linear trend. Compared to the ADF test, the PP test is less restrictive and does not assume any serially uncorrelated residuals.

DATA ANALYSIS, RESULTS AND INTERPRETATIONS

Correlation Analysis

The results highlighting the dynamic relationship of DIIs and FIIs with two major Indian stock market indices are presented in Table 1. The result evinces a strong negative correlation (-0.814) between DIIs and FIIs, which means one buys the other to sell and vice versa (consistent with the findings of Arora, 2016; Satish, 2020; Bansal, 2021). The correlation between DIIs and index movement (Sensex and Nifty 50) was found to be significantly positive, indicating the buying behaviour of *DIIs*, which boosts the Indian stock market. On the other hand, the correlation between FIIs and Indian stock market indices is insignificantly negative (consistent with the finding of Salar et al.,) 2016 but contradictory to the findings of (Batra, 2003; Loomba, 2012; Bansal, 2021; Shamim et al., 2019; Sathish, 2020; Gahlot, 2019; Dhingra, 2016; Naik & Padhi, 2015; Chhimwal, 2020). Unlike previous research, DIIs act as positive feedback traders, while FIIs act as neutral to negative traders. Thus, the indices are protected from a massive fall and restricted from being explosive (Ansari, 2023).

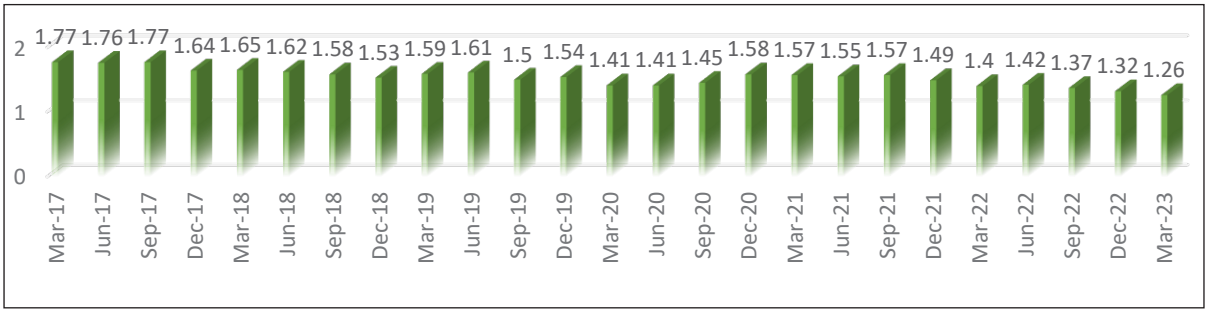
Table 1: Correlations

		DIIs	FIIs	SENSEX	NFTY
DIIs	Pearson Correlation	1	-.814**	.219*	.227*
	Sig. (2-tailed)		.000	.028	.023
	N	101	101	101	101
FIIs	Pearson Correlation	-.814**	1	-.108	-.115
	Sig. (2-tailed)	.000		.282	.252
	N	101	101	101	101
SENSEX closing	Pearson Correlation	.219*	-.108	1	.999**
	Sig. (2-tailed)	.028	.282		.000
	N	101	101	101	101
NFTY closing	Pearson Correlation	.227*	-.115	.999**	1
	Sig. (2-tailed)	.023	.252	.000	
	N	101	101	101	101

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

The impact of FIIs' on the movement of the BSE Sensex and Nifty 50 indexes is not as significant compared to DIIs as it used to be. The counter-investment strategy of *DIIs* is restricting FIIs from being the sole significant influencer of the Indian stock market. Fig. 1 shows the FIIs-DIIs ownership ratio, which has gradually decreased in the Indian stock

market since 2015. However, the widest disparity between FII and DII holdings came in the quarter ending March 2017, when DII holdings were 77% lower than FII holdings. The FII-to-DII ownership ratio likewise fell to an all-time low of 1.26 in March 2023, down from 1.32 in December 2022, which shows the DII's increasingly prominent position in the Indian stock market.



Source: Motilal Oswal (2022) and Oberoi (2023) (Compiled by Author).

Fig. 1: Nifty-500 FII-DII Ownership Ratio (Quarterwise)

Unit Root Test

Table 2: Augmented Dicky-Fuller (ADF)

Null hypothesis: DIIs, FIIs, SENSEX Return, and Nifty 50 have a Unit root

Exogenous: Constant; Lag length: 0 (Automatic- based on SIC, maxlag= 12)

	DIIs		FIIs		Sensex Return		Nifty 50 Return	
	T-Stats	**Prob***	**T-Stats**	**Prob***	**T-Stats**	**Prob***	**T-Stats**	**Prob***
ADF test statistic Critical values:	-5.08444	0.000	-6.70147	0.000	-10.7426	0.000	-10.5252	0.000
1% level	-3.49702		-3.49702		-3.49702		-3.49702	
5% level	-2.89062		-2.89062		-2.89062		-2.89062	
10% level	-2.58235		-2.58235		-2.58235		-2.58235	

*Mackinnon (1996) one-sided p-values.

Table 3: Phillips-Perron (PP)

Null hypothesis: DIIs, FIIs, Sensex Returns, and Nifty 50 returns have a Unit root.

Exogenous: Constant; Bandwidth 3 (Newey West- Automatic) Using Bartlett Kernel.

	DIIs		FIIs		Sensex Returns		Nifty 50 Returns	
	T-Stats	**Prob***	**T-Stats**	**Prob***	**T-Stats**	**Prob***	**T-Stats**	**Prob***
ADF test statistic Critical values:	-5.09881	0.000	-6.70661	0.000	-10.8533	0.000	-10.5713	0.000
1% level	-3.49703		-3.49703		-3.49703		-3.49703	
5% level	-2.89062		-2.89062		-2.89062		-2.89062	
10% level	-2.58235		-2.58235		-2.58235		-2.58235	

*Mackinnon (1996) one-sided p-values.

Tables 2 and 3 depict the unit root tests of DIIs, FIIs, Sensex returns and Nifty 50 returns. Both the tests, i.e., ADF and PP, reject the null hypothesis (Prob<0.01) in level for all the selected time series variables at the intercept. It indicates that the data are stationary, and we can use the VAR model to investigate the relationship between DIIs, FIIs, Sensex returns and Nifty 50 returns.

Selection of Lag Length

We employed the vector auto-regressive (VAR) technique to investigate lead-lag causation among the three selected time series. The VAR method considers all the time series as endogenous variables. Each endogenous variable in the model is explained using its own lagged values and the lagged values of additional endogenous variables chosen randomly. Usually, the VAR model does not take into account exogenous variables. There are two groups of endogenous factors in the study: first, Sensex returns, DIIs and FIIs, and second, Nifty 50 returns, second, DIIs, and FIIs, with no exogenous variables. The VAR technique evaluates many variables at once, and we hypothesised that if one time series variable causes' other time series variables, the coefficients of the lagged values of the former time series must be significant. However, we needed to identify the appropriate number of lags to investigate multivariate causation in a VAR technique. The unrestricted VAR is used to select the lag length, and the optimal lag is the smallest value of the Akaike information criterion (AIC) and Hannan-Quinn information criterion. We selected the optimum lags for further analysis as 2 for the two selected time series groups, considering the AIC presented in Table 4.

Table 4: VAR Lag Order Selection Criteria

Endogenous Variables: DIIs Net, FIIs Net, SENSEX Returns						
Lag	**LogL**	**LR**	**FPE**	**AIC**	**SC**	**HQ**
0	-2853.556	NA	9.59e+22	61.43131	61.51301	61.46430
1	-2905.536	91.90905	4.14e+22	60.59218	60.91896*	60.72412*
2	-2796.486	16.73706	4.14e+22	60.59111**	61.16298	60.82201
3	-2790.216	11.19274	4.40e+22	60.64980	61.46677	60.97967
4	-2780.796	16.20599	4.37e+22	60.64078	61.70283	61.06961
5	-2777.293	5.800361	4.95e+22	60.75900	62.06614	61.28678
6	-2759.397	28.47983*	4.12e+22*	60.59768	62.11992	61.19443
Endogenous Variables: DIIs, FIIs, Nifty 50 Returns						
0	-2740.064	NA	8.35e+21	58.99062	59.07231	59.02360
1	-2691.896	92.19201	3.60e+21	58.14830	58.47509*	58.28025*
2	-2682.856	16.71972	3.60e+21*	58.14743**	58.71931	58.37834
3	-2677.143	10.19710	3.87e+21	58.21813	59.03509	58.54799
4	-2667.411	16.74361	3.82e+21	58.20238	59.26444	58.63121
5	-2663.254	6.882600	4.26e+21	58.30654	59.61369	58.83433
6	-2646.312	26.96246*	3.62e+21	58.15573	59.68797	58.76248

Source: Author's work using EViews 12 SV (x64).

Note: *indicates lag order criteria, and **indicates optimum lag selected for further analysis.

Table 5 exhibits the causality/Block Exogeneity Wald test, which signifies the direction of causality between DIIs, FIIs and two Indian stock market indices returns. With this test, we found the following notable results:

The causality between DIIs, FIIs and Nifty 50 returns shows a unidirectional causality between DIIs, FIIs and Nifty 50 returns in the short run. It indicates that the Nifty 50 returns impact the activities of DIIs and FIIs but not vice versa (Nifty 50 returns → DIIs and FIIs). Similar unidirectional causality was found between the activities of DIIs and FIIs, where the activities of DIIs impact the activities of FIIs but not vice versa (DIIs → FIIs). The results of causality between DIIs, FIIs and Sensex returns also show there is a unidirectional causal relationship between DIIs, FIIs and Sensex returns in the short run. It indicates that the Sensex influences the activities of DIIs and FIIs returns but not vice versa (Sensex returns → DIIs and FIIs). Similar unidirectional causality was found between the activities of DIIs and FIIs, where the activities of DIIs influence the activities of FIIs but not vice versa (DIIs → FIIs). As a result, none of the drivers has power over the market's trajectory. On the contrary, FIIs' investment activity tracks market returns, increasing market volatility, whereas DIIs' investing behaviour is diametrically opposed to FIIs, providing stability to the Indian stock market. As a result, it is possible to infer that, slowly but steadily, DIIs are emerging as strong shock absorbers and equal drivers of the Indian stock market.

Table 5: VAR Granger Causality/Block Exogeneity Wald Test

Variables: DIIs, FIIs, Nifty 50 Returns				Variables: DIIs, FIIs, Sensex Returns			
Dependent Variable: DIIs				Dependent Variable DIIs			
Excluded	**Chi-Sq**	**df**	**Prob.**	**Excluded**	**Chi-Sq**	**df**	**Prob.**
FIIs	0.442484	2	0.8015	FIIs	0.425327	2	0.8084
Nifty 50 returns	7.201129	2	0.0273**	Sensex returns	6.283059	2	0.0432**
All	7.549920	4	0.1095	All	6.628621	4	0.1569
Dependent Variable: FIIs				Dependent variable: FIIs			
DIIs	19.46804	2	0.0001**	DIIs	19.87714	2	0.0000**
Nifty 50 returns	4.726271	2	0.0941*	Sensex returns	4.654491	2	0.0978*
All	25.24398	4	0.0000**	All	24.91455	4	0.0001**
Dependent Variable: Nifty 50 returns				Dependent Variable: Sensex returns			
FIIs	1.437100	2	0.4875	DIIs	0.235320	2	0.8890
DIIs	0.410885	2	0.8143	FIIs	1.304596	2	0.5208
All	1.678391	4	0.7946	All	1.419157	4	0.8409

**significant at the 0.05 level, *significant at the 0.10 level.

Source: Author's Compilation using EViews 12 SV (x64).

Tables 6, 7 and Figs. 2 and 3 shows the stability of the VAR model. As no roots lie outside the circle, VAR satisfies the stability condition. Hence, we can proceed with our study and go for the Granger causality test to validate the Block exogeneity Wald test results.

Table 6: VAR Stability Condition Check

Roots of Characteristics Polynomial

Endogenous Variable: FIIs, DIIs, Sensex returns

Exogenous Variable: C, Lag Specification: 1 2

Root	Modulus
0.783313	0.783313
-0.272492 – 0.347887i	0.441902
-0.272492 + 0.347887i	0.441902
0.050724 – 0.409525i	0.412654
0.050724 + 0.409525i	0.412654
0.161413	0.161413

No root lies outside the unit circle.

VAR satisfies the stability condition.

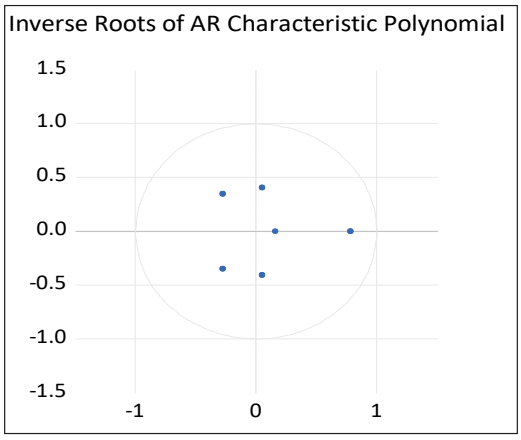


Fig. 2

Table 7: VAR Stability Condition Check

Roots of Characteristics Polynomial

Endogenous Variable: FIIs, DIIs, Nifty 50 returns

Exogenous Variable: C, Lag Specification: 1 2

Root	Modulus
0.790367	0.790367
-0.266850 – 0.367473i	0.454142
-0.266850 + 0.367473i	0.454142
0.059441 – 0.417840i	0.422047
0.050724 + 0.417840i	0.422047
0.154231	0.154231

No root lies outside the unit circle.

VAR satisfies the stability condition.

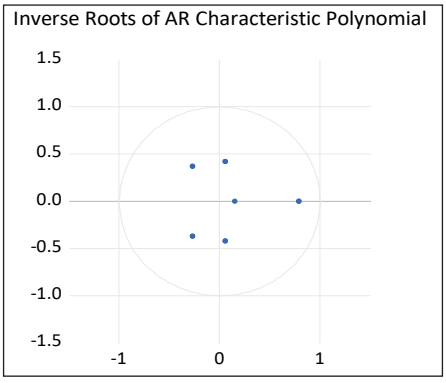


Fig. 3

Table 8 shows the pair-wise Granger Causality test, confirming the vector autoregressive (VAR) results and demonstrating that FII and DII net flows do not Granger cause the Sensex or Nifty 50 returns. However, Sensex and Nifty 50 returns do Granger cause FIIs net flow at Lag 2. In this case, unidirectional causation goes from index results (Sensex and Nifty 50) to FII and DII investments. It indicates that the BSE Sensex return influences the investment behaviour of both DIIs and FIIs, but the Granger causality test fails to demonstrate the reverse causal link. These data points indicate that no players control or direct the Indian securities market. Since 2015, increased domestic flows have made the Indian stock market less susceptible to foreign equity inflows. Neither FIIs nor DIIs have a substantial impact on market volatility. This is because *DIIs* have emerged as a potent counterforce to FIIs with opposing investment and trading methods in India. The counter-investment strategy of *DIIs* precludes FIIs from wielding significant influence in the Indian stock market.

Table 8: Pair-Wise Granger Causality Tests

Variables: DIIs, FIIs, Nifty 50 returns, Lags: 2

Null Hypothesis	Obs.	F-Statistic	Prob.	Inference
FIIs does not Granger Cause DIIs	99	0.16525	0.8479	Accepted
DIIs does not Granger Cause FIIs		9.96970	0.0001	Rejected**
DIIs does not Granger Cause Nifty 50 returns	99	0.12137	0.8858	Accepted
Nifty 50 returns does not Granger Cause DIIs		3.61359	0.0308	Rejected**
Nifty 50 returns does not Granger Cause FIIs	99	2.43540	0.0931	Rejected*
FIIs does not Granger Cause Nifty 50 returns		0.64465	0.5271	Accepted
Variables: DIIs, FIIs, Sensex returns, Lags: 2				
FIIs does not Granger Cause DIIs	99	0.16525	0.8479	Accepted
DIIs does not Granger Cause FIIs		9.96970	0.0001	Rejected**
Sensex returns does not Granger Cause DIIs	99	3.15449	0.0472	Rejected**
DIIs does not Granger Cause Sensex returns		0.05771	0.9440	Accepted
Sensex returns does not Granger Cause FIIs	99	2.06649	0.0920	Rejected*
FIIs does not Granger Cause Sensex returns		0.60324	0.5491	Accepted

**significant at the 0.05 level, *significant at the 0.10 level.

Source: Author's compilation EViews 12 SV (x64).

DISCUSSION

The insights gained from the study's findings offer critical new perspectives on the functioning of the Indian stock market and the role that domestic and FIIs play. One notable finding is the continuous drop in the FII-DII ownership ratio, which indicates a shift in the market environment. This drop challenges the traditional belief that FIIs are the primary drivers of the Indian stock market, showing the rising impact of DIIs. According to the correlation analysis, DIIs function as positive feedback traders, adding to market resilience, whereas FIIs trade more neutral to negative. Surprisingly, the study's findings imply that neither FIIs nor DIIs directly and significantly influence market movements. This implies that other factors, such as macroeconomic indicators or global economic conditions, may play a crucial role in shaping the trajectory of the Indian stock market. Despite the continued offloading of shares by FIIs post-COVID-19, the Indian stock market has shown resilient behaviour, indicating a declining impact of FIIs in driving market dynamics. The notion that DIIs are becoming significant drivers in the Indian capital market is further supported by the favourable connection that has been discovered between index movement and DIIs. The transformation challenges investors to re-evaluate their long-standing dependence on FIIs or DIIs as the primary indicators used to make investment decisions. The shifting dynamics imply that investors should focus on companies with strong fundamentals and fair valuations rather than solely relying on the buying and selling activities of FIIs or DIIs.

IMPLICATIONS

The study's implications extend beyond academics, impacting investors and market participants. The decline of FIIs and the increase of DIIs indicate a probable shift in market dynamics. Investors are urged to adopt a holistic decision-making approach, considering FIIs and DIIs. The

findings emphasise understanding the broader economic context and global factors influencing the Indian stock market. It is recommended that choices should not be made exclusively based on FII or DII activities because other factors may also determine market movements. Continuous monitoring and adaptable investing methods are crucial in responding to evolving market circumstances. Focusing on firms with solid fundamentals and fair values enables investors to navigate uncertainties in a landscape fuelled by FIIs and DIIs.

CONCLUSION

This study intends to contribute to the existing literature by investigating the influence of increased domestic equity inflows on Indian stock market volatility. The study sheds light on whether rising domestic flows since 2015 have made the Indian stock market less susceptible to foreign equity inflows. The correlation results show that DIIs act as positive feedback traders, while FIIs act as neutral to negative traders. Thus, the indices are protected from a massive fall and restricted from being explosive. The causality test demonstrates that market return has a significant impact on both players, but neither FIIs nor DIIs have a significant impact on market movement. Gradual decline in the ownership ratio of FIIs-DIIs (Fig. 1), the Indian stock market standing resilient despite the continuous offloading of shares by FIIs post-COVID-19, decreasing impact of FIIs in driving the Indian stock market, index returns causing FIIs movement, the increasing footprint of DIIs in the Nifty 500, positive correlation between index movement and DIIs—all these are going against FIIs being the dominant driver of the Indian stock market and in favour of DIIs in the growing presence and establishing itself as a prominent driver of the Indian capital market. These might be an indication of a change in the drivers of the Indian stock market. As a result, investors should not rely on their investment decisions based on the buying and selling activities of FIIs or DIIs; instead, they can take cues from the trading actions of both players in making investment decisions because FIIs and DIIs activities may be used to evaluate market activity. Thus, Investors should focus on firms with solid fundamentals and fair values.

REFERENCES

Aggarwal, V., Doifode, A., & Tiwary, M. K. (2022). Do lower foreign flows and higher domestic flows reduce Indian equity market volatility? *Vision, 26*(4), 461-470.

Ansari, M. N. (2023). The emergence of DIIs as a strong counterforce to FIIs in changing Indian securities market - An empirical study. *International Journal of Financial Management, 13*(1), 1-8.

Arora, R. K. (2016). The relation between investment of domestic and foreign institutional investors and stock returns in India. *Global Business Review, 17*(3), 654-664. doi:https://doi.org/10.1177/0972150916630830

Bansal, P. K. (2021). Critical study of Indian stock market relationship with domestic (DIIs) and foreign institutional investors (FIIs). *Materials Today: Proceedings, 37,* 2837-2843.

Batra, A. (2003). The dynamics of foreign portfolio inflows and equity returns in India (No. 109). Working Paper.

Chakrabarti, R. (2001). FII flows to India: Nature and causes. *Money and Finance, 2*(7).

Chhimwal, B., & Bapat, V. (2020). Impact of foreign and domestic investment in stock market volatility: Empirical evidence from India. *Cogent Economics & Finance, 8*(1), 1754321.

Dhingra, V. S., Gandhi, S., & Bulsara, H. P. (2016). Foreign institutional investments in India: An empirical analysis of dynamic interactions with stock market return and volatility. *IIMB Management Review, 28*(4), 212-224.

Dua, P., & Garg, R. (2013). Foreign portfolio investment flows to India: Determinants and analysis, Working Paper No. 225, Centre for Development Economics, Delhi School of Economics.

Gahlot, R. (2019). An analytical study on the effect of FIIs & DIIs on the Indian stock market. *Journal of Transnational Management, 24*(2), 67-82. doi:https://doi.org/10.1080/15475778.2019.1601485

Kadanda, D., & Krishna, R. (2017). Relationship between foreign portfolio investments (FPI), domestic institutional investors, and stock market returns in India. *International Journal of Financial Management, 7*(4), 1.

Loomba, J. (2012). Do FIIs impact volatility of Indian stock market? *International Journal of Marketing, Financial Services & Management Research, 1*(7), 80-93.

Motilal Oswal India Strategy. (May 2022). Retrieved from from://images.assettype.com/bloombergquint/2022-05/e57334de-142f-4f60-a212-0e1be0eb3702/Motilal_Oswal_India_Strategy_May_2022.pdf

Mukherjee, P., Bose, S., & Coondoo, D. (2002). Foreign institutional investment in the Indian equity market: An analysis of daily flows during January 1999-May 2002. *Money & Finance, 2*(9-10).

Murthy, K. V. B., & Singh, A. K. (2013). Do foreign institutional investors really drive the Indian stock market? *Asia-Pacific Journal of Management*

Research and Innovation, 9(1), 45-53. doi:https://doi.org/10.1177/2319510X13483510

Naik, P. K., & Padhi, P. (2015). Interaction of institutional investment activity and stock market volatility: Evidence from India. *Asia-Pacific Journal of Management Research and Innovation, 11*(3), 219-229.

Nautiyal, N., & Kavidayal, P. (2013). Study of causality analysis between Indian stock market index and FII Net inflow. *Madras University Journal of Business and Finance,* 12-22.

Oberoi, R. (2023, May 4). ATMANIRBHAR stock markets! Gap between FII, dii holding declines to lowest-ever level in q4fy23. *Business Today.* Retrieved from https://www.businesstoday.in/markets/stocks/story/atmanirbhar-stock-markets-gap-between-fii-dii-holding-declines-to-lowest-ever-level-in-q4fy23-380071-2023-05-04

Kumar, P., Saxena, C., & Gupta, A. K. (2020). A study on relationship between stock market returns and mutual fund flows. *Journal of Commerce and Accounting Research, 9*(1), 1-5.

Salar, S. A. (2016). Impact of domestic institutional investors on Indian stock market. *Journal of Advanced Studies in Finance, 7*(2 (14)), 146.

Sathish, P. (2020). An analysis of trading behaviour of foreign and domestic institutional investors in the Indian stock market: An empirical study. *Indian Journal of Research in Capital Markets, 7*(1), 22-37.

Sehgal, S., & Tripathi, N. (2009). An examination of home advantage (bias) argument in the Indian financial markets: Domestic financial institutional investors (DFIIs) vis-à-vis foreign institutional investors (FIIs). *Asian Journal of Finance & Accounting, 1*(2), 163-174.

Shamim, M., & Salar, S. A. (2019). Impact of domestic institutional investments on Indian equity Market.

Sripriya, V. (2014). Foreign institutional investors' trading activity and volatility in Indian stock market. *Indian Journal of Applied Research, 4*(11), 223-225.

Thiripalraju, & Acharya, R. (2011). *Dynamic Interaction between institutional investment and stock returns in India: A case of FIIs and MFs.* Indian Institute of Capital Markets, Mumbai.

Vijayakumar, A. N. (2020). Dynamic effects of us and Asian markets on Indian stock market. *Journal of Commerce and Accounting Research, 9*(4), 1-10.

Vijayakumar, A. N. (2019). Impact of Euro-Asian markets on Indian capital market. *Journal of Commerce and Accounting Research, 8*(4), 50-64.