Insights into Investor, Behaviour amidst Indian Elections

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ABSTRACT

One of the first studies to examine herding indications in the Indian stock market is this one. The phenomenon of herding is examined in both bear and bull market scenarios across the sample period of December 2023–May 2024. This study also attempts to analyse if herding occurs as a result of India's political circumstances (elections and code of conduct). This study was conducted using the Cross-Sectional Absolute Deviation (CSAD) econometric model. The study's analysis and conclusion point to the existence of herding in the context of shifting political circumstances.

Keywords- CSAD, Herd behaviour, Lok Sabha Elections 2024, behavioural finance

INTRODUCTION

According to, Amthe practice of managing finances and resources to a manager's maximum benefit. One of America's most priceless finds and possessions is the pronunciation of this term with an emphasis on the first syllable and an i long. In the latter half of the 20th century, behavioural finance emerged as a separate academic discipline, mostly in response with the shortcomings of conventional finance theories like the efficient market hypothesis (EMH). Behavioural finance uses ideas from psychology to understand how human biases and irrational behaviour affect financial decision-making, whereas the EMH assumes that investors are rational and that markets efficiently represent all available information (Kahneman & Tversky, 1979).

Research in behavioural finance eschews the conventional presumptions of rational investors in efficient markets and projected utility maximisation. The two fundamental tenets of behavioural finance involve the limits of arbitrage (the point at which markets become inefficient) & cognitive psychology (the study of human thought) (Ritter, 2003)

Models in behavioural finance are created by integrating psychological aspects into conventional financial frameworks. A particular framework that takes risk aversion & loss aversion into account while explaining how people make decisions under uncertainty is prospect theory, which was created by Kahneman and Tversky. Other models that incorporate psychological knowledge into pricing of assets theory are the adaptive markets hypothesis (AMH) and the behavioural asset pricing model (BAPM)

The tendency for individuals to imitate the acts of a bigger group or follow the trend without necessarily analysing the fundamental reasons behind it is known as herd behaviour, and it has been documented in a variety for contexts, including banking. Herd mentality can cause bubbles in stocks including inflated price fluctuations in the markets for financial assets (Baddeley, 2013); (Bikhchandani et al., 1992). The external setting and the existence of additional biases within the procedure are two elements that affect how strong particular bias is.

Over 120 million investors entered over the five years from 2019 to 2023, according to NSE data. More than 5.4 million new investors have been added in January 2024 alone. According to BSE, there were around 161 million enrolled investors as of the 9th of February 2024.

The Indian General Election Board declared the country's code of conduct on March 17, 2024. 2019 saw the conclusion of India's previous prime ministerial election, a significant political event. This research focuses on comprehending the impact of elections and the code of conduct on the stock market of India because it is a significant event that will affect every single person of the nation. whether or not there was a herding of investors during this shift in the political landscape of the nation throughout the election season.

LITERATURE REVIEW

In this context, "herding" describes how members of a group align their beliefs or activities through interpersonal interactions locally as opposed to through deliberate coordination through a central authority (Kameda & Hastie, 2015). Occurrence of herding in the global market-

Research on the stock markets in Latin America and the United States has revealed the existence of herding in both markets between May 25, 1988 to April 24, 2009, in both rising and downturn marketplace circumstances (Chiang & Zheng, 2010).

following an examination of the occurrence and modification of herding behaviour in the US DJIA and S&P 100 stock markets between January 2000 and July 2012. The findings offer solid and consistent proof that herding occurs only occasionally on a daily basis. Specifically, the results showed that the herding tendency changed significantly between the subprime crisis sub-periods (Jlassi & Naoui, 2015).

Our research suggests herding behavior occurs in both the Chinese and Indian equity markets, according to an investigation that looks at these two markets. The state of a market affects how much herding occurs. Herding behavior is more pronounced within the Chinese market amid periods of market decline and heavy volume of trading. However, the study reveals that it happens in India throughout periods of market expansion (Lao & Singh, 2011).

is one of the initial efforts to look into whether herd mentality exists in the stock exchanges in Mongolia. The entire sample data set (1999–2019) was examined for herding behaviour, including times of both bear markets and bull markets and both elevated and decreased volatility in markets (Batmunkh et al., 2020). These are the evidences of herding during the period of bull and bear market conditions.
Herding during the Macroeconomic and political conditions-

Testimony on the French stock market suggests that herding exists in certain sectors during the crisis. Moreover, herding tendency reduces the volatility of market conditions (Litimi, 2017). The capital market of Pakistan has been examined from 1999 till 2017 using the Cross-Sectional Absolute Deviation (CSAD) method. Several macroeconomic (exchange rate, interest rate, and inflation rate) and fundamental (return on equity and earnings per share) control variables have been used to study the association between stock returns and herding. The results showed that while herding has a long-term beneficial impact on returns on stocks, there are additional industries wherein its short-term adverse effects are more pronounced. Regarding the controlling variables, they showed impacts on the return of stocks across multiple PSX sectors that were both significant as well as insignificant. This research has significant policy consequences (Jabeen et al., 2022). In order to monitor herding, European liquid contents have been investigated from 2001 to 2012. During the worldwide economic recession and the Eurozone recession, or the effect of herding was particularly apparent in the Nordic nations and several European countries. But in both emergencies, those suffering belong to the PIIGS nations. Additionally, the analysis reveals indications that suggests the cross-sectional dispersions of returns, with Germany possessing the greatest impact on the locale-specific cross-country herding impact, can be partly explained by the cross-sectional dispersions of the remaining markets (Mobarek et al., 2014). This study aims to examine the "herd behavior" as well as volatility of the US stock, gold, and cryptocurrency markets. According to studies, Bitcoin has 4.6 times more volatile than gold, 3.3 times more volatile than the S&P 500. Additionally, the results of this unique equation demonstrate that Bitcoin has a herding bias that is more than 26 times greater than the global average and 10 times higher than the S&P 500 (Qezelbash et al., 2024).

According to all of the aforementioned literature, macroeconomic factors do have some influence on herd behaviour in the capital markets. The Lok Sabha elections are a recent big event in India. The goal of this study is to comprehend investor behaviour, specifically whether or not investors herd during this time. What response has it received from investors.

RESEARCH GAP

- Numerous studies have been conducted to comprehend the influence of a financial behaviour on the markets (Birău, 2013; Authors, 2015). The purpose of this study is to comprehend the effects of the most recent political event—the prime minister's race.
- This study takes into account the NSE-listed strategic indices of the Indian stock market.
- This study is specifically being carried out to investigate the hypothesis of herd behaviour in the strategic indices.
- The literature cited states that there isn't any proof of herding testimonials in the strategic indices in particular.
- There hasn't been any research done since the Lok Sabha elections of 2024.

DATA

Given that our primary focus is herd behaviour during macroscopic events such as the Lok Sabha elections in India, the Indian equities market and its strategic indicators have been identified as the primary triggers for this period of study. The eleven strategic indexes of the NSE (National Stock Exchange) are analysed in this study.

List of strategic indices-

- NIFTY DIVIDEND OPPORTUNITY 50
- NIFTY VALUE 50 20
- NIFTY 100 QUALITY 30
- NIFTY 50 EQUAL WEIGHT
- NIFTY 100 EQUAL WEIGHT
- NIFTY 100 LOW VOLATILITY
- NIFTY ALPHA 50
- NIFTY 200 QUALITY 30
- NIFTY APLHA LOW VOLATILITY 30
- NIFTY 200 MOMENTUM 30
- NIFTY MIDCAP 150 QUALITY 50

Of 114days, from 01/12/2023 to 18/12/2024.

RESEARCH METHODOLOGY

CSSD is widely accepted model for testifying herd behaviour in the stock market (Papade et al., 2021); (Meneghini & Jones, 2011); (Aitken & Frino, 1996); (Ye & Turner, 2014).

$$CSSD = \propto + \beta^2 D_t^L + \beta^U D_t^U + \varepsilon_t$$

Were here,

$$CSSD_t = \sqrt{\frac{\Sigma_{i=1}^{N}(Ri,t-Rm,t)^2}{(N-1)}}$$

D_t^L = Dummy variable that takes the value of zero otherwise and unity when the market return at time t is in the extreme lower tail of the return distribution.

D_t^U = false variable assuming a number of zero at all other cases and unity if the market's returns at the time t has in the extremely upper tail on the return dispersion.

α = Intercept
β^L, β^U = Coefficients of D_t^L, D_t^U
ε_t = Error term
N = Firms in portfolio
Rm,t; R, it = Returns of individual stock
i = market return

The CSSD model presents a number of difficulties, one of which is the need to define high returns. In response to criticism that the CSSD model's formulation is arbitrarily chosen it is suggested that the upper and lower tails of the return distribution be identified using cutoff values ranging from 1% or 5%. In reality, investors might view excessive return differently, while a return distribution's properties might shift with time. Furthermore, herding behaviour can be seen throughout the whole return distribution, although it becomes more noticeable at times of market distress (Tiwari, 2012).

CSAD Model-
$$CSAD_t = \alpha + \gamma 1|Rm, t| + \gamma 2(Rm, t)^2 + \varepsilon_t$$

$$CSAD_t = \frac{1}{N}\Sigma_{i=1}^{N}|Ri,t-Rm,t|$$

is a metric used to quantify return dispersion that measures the average absolute return dispersion for Rm, t. The absolute values of stock I's return to the market (|Rm, t|) and particular stock return (Ri, t) are as follows. The error term = εt, while the intercept = α.

The CSAD model forms the foundation for the empirical models in this work. If the coefficient γ2 is statistically significant and negative, it suggests that herding behavior exists within the Indian capital market.

EMPIRICAL RESULTS

Cross-sectional absolute deviation Regression Analysis-

	RET^2	ABS RET	ret	intercept
Coefficient	9.451654	0.040077	-0.04232	0.003843
Standard Error	7.599665	0.134328	0.029657	0.000466
	0.161248	0.002269	#N/A	#N/A
	7.049063	110	#N/A	#N/A
	0.000109	0.000567	#N/A	#N/A
t-stat	1.243694	0.298348	-1.42685	8.251356
p-value	0.253645	0.774099	0.196666	7.48E-05

Coefficient of ret: The present value (-0.042316773) indicates the amount that every change in unit of a return variable (ret) impacts the CSAD (Cascading Style Sheet Distance). An inverse link is suggested in this instance by the adverse coefficient: CSAD likely to decrease when the return-on-investment variable raises and vice versa. For each change in unit in return, the scale of this variation is approximately 0.0423 units of CSAD.

t-statistic of ret: The coefficient for ret's significance is measured by the t-statistic (8.251356184). Consider it as an indicator of the signal-to-noise ratio: a larger t-statistic indicates that the correlation among return and CSAD, or the signal, is more significant than random fluctuations, or the noise. There is a significant signal, with a t-statistic of 8.25.

The p-value of the coefficient for ret, which is 7.47718E-05 or roughly 0.0000747718, indicates the likelihood of finding a significant correlation between return and CSAD in the event that there was no real link in the population. There is substantial evidence to refute the null hypothesis (that is, that the coefficient for ret is zero) given this p-value's incredibly low value, which is considerably lower than the typical threshold, 0.05. Stated differently, the substantial correlation between return & CSAD is unlikely to be the result of chance.
When all factors are included, these results show that there's a statistically significant relationship among return with CSAD.
values above and analysis using cross-sectional data; absolute deviation It indicates that there is a herding behaviour during India's prime ministerial elections and "code of conduct" era. Investors have herded in unison at the same time as this foreign political shift, panicking. This research has only taken into consideration Strategic Indices posted on the NSE (National Stock Exchange) in order to improve comprehension and conduct important analysis. This study might be regarded as a preventive measure for upcoming investors to comprehend how investors respond to changes in the nation's political landscape.

CONCLUSION

The purpose of this research is to comprehend the existence of behavioural biases in the Indian equity market. Behavioural finance has gained recognition as a developing topic in the finance industry over time (Hirshleifer, 2015); (Byrne et al., 2008). This study aims to comprehend how investors are affected by herding, the Code of Conduct, and the Indian election event. To attest that the study used the appropriate cross-sectional absolute deviation econometric model for regression analysis (Fu, 2010); (Xie et al., 2015). The analysis covers a six-month period, from December 1, 2023, to May 20, 2024. Elections and a "code of conduct" were held starting in April 2024. Investor herd behaviour is becoming more significant in strategic indexes in particular due to the unpredictability and changes in the political landscape. Eleven strategic indices in total have been taken into consideration in this study. This study might serve as a valuable resource for prospective investors seeking to comprehend the behaviour of the Indian stock market amidst political developments.

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