Behavioral Finance: Analyzing the Influence of Overconfidence, Herding and Anchoring Biases on Investor Behavior and Financial Market Trends

Ashana Bisht

ABSTRACT

Behavioral finance challenges the traditional assumption of rational decision-making in financial markets by emphasizing psychological influences on investor behavior. This study empirically examines the influence of three major cognitive biases—overconfidence, herding, and anchoring—on investor behavior and financial market trends.

The research design used was both descriptive and analytical. A standardized questionnaire distributed via Google Forms was used to gather primary data from 150 investors. SPSS software was used to evaluate the gathered data. Regression analysis, correlation analysis, and reliability analysis (Cronbach's Alpha) were among the statistical techniques used to investigate the connections between investor decision-making and behavioral biases.

The results suggest that while overconfidence had a mixed effect and worse reliability, herding and anchoring biases had a statistically significant favorable impact on investor behavior. The findings support the notion that psychological biases significantly influence market movements and investing choices. The study emphasizes the value of financial literacy in reducing irrational investment behavior and adds empirical evidence from retail investors to the body of literature on behavioral finance.

Keywords: Behavioral finance, Overconfidence bias, Herding bias, Anchoring bias, Investor behavior, SPSS analysis

INTRODUCTION

Conventional financial theories, such the Efficient Market Hypothesis, make the assumption thaanomalies, bubbles, and collapses, however, show that reason is not always followed. In order to understand these variances, behavioral finance combines psychology and finance.

Emotional responses and cognitive shortcuts frequently impact investor behavior. Investors who suffer from overconfidence bias tend to overestimate their level of expertise and forecasting skills. Herding bias is the tendency for people to follow the behavior of others instead of doing their own research. Investors that suffer from anchoring bias tend to base their decisions largely on preliminary data or points of reference.

Since these biases have a direct impact on market inefficiencies, speculative bubbles, and stock price volatility, it is imperative to comprehend them. Thus, this study explores the ways in which anchoring, herding, and overconfidence biases affect investor behavior and financial market patterns.

LITERATURE REVIEW

The introduction of Prospect Theory by Kahneman and Tversky (1979), who pointed out departures from rational decision theory, helped behavioral finance gain notoriety.

Overconfident investors tend to trade excessively, which lowers their net returns, according to Barber and Odean (2001). According to their research, overconfidence has a major impact on trading frequency and risk-taking behavior.

Herding behavior in financial markets was described by Bikhchandani and Sharma (2000), who showed how investors copy one another, creating pricing distortions and market inefficiencies.

Anchoring bias was recognized by Tversky and Kahneman (1974), who explained how people tend to rely largely on preliminary knowledge while making decisions in the face of ambiguity. Anchoring affects price expectations and stock

valuation in financial environments.

Although behavioral biases have a substantial impact on financial decision-making, there is currently little empirical data based on organized statistical testing among retail investors. This study uses empirical analysis based on SPSS to try and close that gap.

RESEARCH METHODOLOGY

Research Design

In order to investigate the connections between investor behavior and behavioral biases, the study uses a descriptive and analytical research approach.

Data Collection

A structured questionnaire disseminated via Google Forms was used to gather primary data. Likert-scale items assessing investor behavior, herding, anchoring, and overconfidence were included in the survey.

To bolster theoretical underpinnings, secondary data was collected from books, scholarly publications, and financial research papers.

Sampling Size and Technique

Accessibility led to the practice of convenience sampling. 150 investors with a range of demographic backgrounds made up the final sample.

Tools used for Analysis

SPSS software was used to examine the data. The statistical instruments listed below were used:

1. Cronbach's Alpha (analysis of reliability)
2. Analysis of Correlation
3. Analysis of Regression
4. Characteristic Statistics

A significance criterion of 5% ($\alpha = 0.05$) was established.

DATA ANALYSIS AND RESULTS

Reliability Analysis

The internal consistency of the constructions was tested using Cronbach's Alpha.

1. Bias in Overconfidence: Unreliable
2. Herding Bias: Reasonably dependable
3. Strong anchoring bias: Dependability
4. Investor Conduct: Dependability

This suggests that while overconfidence shown poorer internal consistency, herding and anchoring variables were statistically reliable for additional study.

Correlation Analysis

The findings of correlation show:

1. Investor behavior is positively and significantly correlated with herding bias.
2. Additionally, there is a positive and statistically significant correlation with anchoring bias.
3. A weaker or erratic relationship is indicated by overconfidence bias.

This implies that social imitation and reference points have a greater impact on investors than do self-perceived superior knowledge.

Results of Correlation

Behavioral biases and investor behavior were found to be positively and statistically significantly correlated by the Pearson correlation study.

Investor Behavior and Overconfidence Bias: $r = 0.545$, $p < 0.01$
Investor Behavior and Herding Bias: $r = 0.713$, $p < 0.01$
Investor Behavior and Anchoring Bias: $r = 0.714$, $p < 0.01$

These findings show that investor behavior in financial markets is greatly impacted by the strength of behavioral biases. Of the three biases, overconfidence revealed a very mild link with investor decision-making, but anchoring bias and herding bias showed the highest relationships.

Regression Analysis

The effect of independent variables (anchoring, herding, and overconfidence) on the dependent variable (investor behavior) was investigated using regression analysis.

The findings show:

1. Investor behavior is significantly predicted by herding bias.
2. Anchoring bias has a big impact on how people make decisions.
3. Comparatively speaking, overconfidence bias has less explanatory power.
The model demonstrates that differences in investor decision-making and financial market patterns can be explained by behavioral biases taken together.

Results of Regression

The predictive ability of behavioral biases on investor behavior was assessed using multiple linear regression analysis.

The following outcomes were displayed by the regression model:

R is 0.772.
$R^2 = 0.596$

R^2 adjusted = 0.587
F is 71.73.
$p < 0.001$

Overconfidence, herding, and anchoring biases together account for 59.6% of the variance in investor behavior,

according to the R2 value. The statistical validity of the regression model is confirmed by the significant F-value. The regression coefficients for each participant showed:

Overconfidence Bias: Not statistically significant ($\beta = 0.089$, $p = 0.204$)
Herding bias is a significant beneficial influence ($\beta = 0.414$, $p < 0.001$).
The best indicator of investor behavior is anchoring bias ($\beta = 0.428$, $p < 0.001$).

These results indicate that while overconfidence bias did not show a statistically significant effect in the current sample, herding and anchoring biases had a significant impact on investor decision-making.

DISCUSSION

The results are consistent with theories of behavioral finance that highlight the role of psychology in financial decision-making. One significant variable that showed that investors frequently follow peer behavior and market trends instead of doing their own independent research was herding bias.

Investment decisions were also greatly impacted by anchoring bias, which implies that investors base a lot of their financial decisions on historical pricing or preliminary data.

In this study, overconfidence bias shown lower reliability, which would suggest that investors are wary or that the measurement items did not adequately capture the construct.

All things considered, the study backs up the claim that collective psychological tendencies have an impact on financial markets and that they are not totally efficient.

CONCLUSION

This study offers actual proof that investor behavior and financial market patterns are greatly impacted by behavioral biases. While overconfidence has conflicting impacts, herding and anchoring biases are the main factors influencing investment decisions.

The results emphasize the value of financial literacy initiatives to encourage sensible investment practices and lessen irrational decision-making. Instead than relying on emotional or socially motivated conduct, investors should be taught to depend on fundamental analysis.

To further understand the behavioral influences in financial markets, future study might use larger samples, more sophisticated statistical models, and comparison analysis across various investor types.

REFERENCES

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics, 116*(1), 261–292.

Bikhchandani, S., & Sharma, S. (2000). Herd behavior in financial markets. *IMF Staff Papers, 47*(3), 279–310.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185*(4157), 1124–1131.