

Herding Bias And Investment Performance

Author

Abstract

One fundamental question remain unanswered, are investments free from behavioural biases? This study sought to evaluate the effects of herding bias on investment performance. The study was guided by the herding theory. The study results indicate that herding behaviour has a statistically significant influence on investment performance. This means that investors imitating the observed actions of others or the movements of the market instead of following her own beliefs and available information.

Keywords: Herding Bias, Behavioral Bias, Herding Theory

Date of Submission: 29-11-2024

Date of Acceptance: 09-12-2024

I. Introduction

Experimental evidence in the literature of behavioral finance indicate that persons don't behave reasonably. For example, Barberis and Thaler (2003) gives an excellent models summary which attempt to clarify the puzzle of equity investment premium, excessive trading, excess volatility, predictability of stock return by use of both Prospect Theory of Kahneman and Tversky (1979) as well as beliefs. The scrutiny that markets are not proficient and biases of investors affect the prices of assets considerably has been supported in literature (Daniel et al. 2002). Literature indicates that markets may not be competent or investors are not rational and as a result prices may considerably diverge from basic values because of irrational investors existence (Black, 1986; De Long et al, 1990; Shleifer and Vishny, 1997; Barberis et al., 2001; Hirshleifer, 2001; Daniel et al., 2002; Subrahmanyam, 2007). Survey data of investor optimism that was carried out by Gallup during the period of 1998 to 2002 was used by Vissing-Jorgensen (2004) and revealed that irrational behaviour (for instance herding bias, representativeness heuristic, effect of disposition, status quo bias as well as under-diversification) are weaker for other complicated investors (experience of investor and wealth used as substitutes for investor complexity). Based on his findings, Vissing- Jorgensen hence recommended that behavioural biases have an effect on several investors less than other investors. Since biases may considerably affect the prices of stock, it's key to understand the factors that affect unfairness. Persons in different cultures/ societies might have behavioural biases that is different which might affect their monetary decisions (Fan and Xiao, 2005; Statman, 2010).

Most of the literature on the behavioural finance studys individual investors within developed markets for instance UK, Western Europe and USA. Literature reveals that Turkish citizens are more socialist as compared to UK, Western Europe and USA (Hofstede, 2001). In addition, the index of ambiguity avoidance, which captures the society tolerance for ambiguity as well as uncertainty, is high amongst the citizens of Turkey. Since Turkey is an upcoming market, furthermore, there exists differences in the culture as compared to UK, Western Europe and USA, it's worth studying individual investors in Turkey based on behavioural biases they display. If citizens in Turkey vary from those within the countries that are developed, the behavioural biases of individual investors in Turkey might vary from the results within the literature.

In ISE, the trading volume is comparatively high and provides investors with a liquid market. Even though foreign investors hold approximately 65% of the total free float in ISE, they comprise only approximately 15% of the trading quantity. Investors that are foreign in most cases prefer ISE30 as well as ISE100 (a chief benchmark) stocks, which have capitalization of high market, high liquidity plus they are delegate of regions they operate. Liquidity as well as trading volume is regularly provided by individual investors locally. This study seeks to focus on Herding bias and it's effect on investment performance

II. Herding Theory

Herd behaviour is possible amongst the mainly mentioned but less understood term in financial glossary. Difficulty in quantifying as well as measuring the being of the behaviour forms obstructions to broad research. Nonetheless, there exists at least two points citizens tend to unanimously concur upon. Foremost, as one of the origin pillars in the recently developed behavioural area of asset pricing, herd behaviour aids clarify market-wide irregularities (Kudryavtsev, Cohen & Hon-Snir, 2013).

Because human being biases are not powerful enough to shift returns as well as market prices, they only have actual irregular effects if they create communal contamination with a tough touching content, that leads to

more extensive phenomena for instance herd behaviour, subsequent, it is normally accepted that the herding flood might result to a condition in which the price of market fail to reproduce all applicable information; therefore, the market turn into unstable as well as moves towards incompetence (Kudryavtsev, Cohen & Hon-Snir, 2013).

Decisions made by a single shareholder which are prejudiced by the decisions of other shareholders are usually affected by the behavior of herding (Hott, 2009). As a result, all the decisions of investment that are not exclusively based on the financial information of a given corporation or an industry field ought to be interpreted by the use of the Theory of Herding. The greater part of researchers as well as economic journalists concurs that unreasonable investment behaviour has an effect on capital markets. Nevertheless, the opinions concerning the impact level as well as its nature differ. Literature has shown that the major issue unreasonable investment decision-making results to is distortions of money market (Shiller, 2000; Welch, 2000; Shleifer, 2000; Lu, 2010; Lawlor, 2009; Singh, 2012). Herding behaviour is particularly concluded to result to a chain of deceptive information fuelling the irregularities on capital markets. According to Welch (2000), the behavior results to a “snowball-effect” which is not easy to stop.

III. Empirical Review

In financial markets herding is described as joint imitation that leads to action convergence (Hirshleifer and Teoh, 2003). Individuals are influenced by their surrounding and they tend to conform to what is norm within that environment. It is observed that fundamentally people who communicate regularly tend to think similarly. One reason why judgments by people who regularly communicate regularly are similar is because they share information and react to the same information. The social influence has an enormous power on an individuals' perception. Dargham (2009) conducted a study and found out that when an individuals' judgment is different from a group they tend to change their judgment to conform to the groups' thinking. They simply think that all other individuals could not be wrong. Shiller (2000) states that, in our daily livelihood we have learnt lesson that, when a big group of citizens is undisputed in its decisions then they are probably correct.

Herd behaviour may portray itself on the financial markets where even the most rational investors tending to be affected by this by taking into consideration the decisions of others, even when they are well aware that everybody else is acting in a group like way. A core variable to herding is word of mouth. People commonly tend to trust their relatives, friends and even the colleagues more than they do the investment agents.

One reason why the herding effect is pronounced is because of the noise effect. The term noise defines the continuous fluctuation in market prices and volumes that make investors to get confused about the market's direction. Black (1986) noted that value securities of investors based on a noise other than utilizing the available information regarding the security. Most noise traders tend to believe that they are making rational investment decisions when they rely on the market noise to make investment decisions. However, the investments they make are often not based on any fundamental data. Noise traders frequently try to join the other traders and react fast when they think the noise is skewing the market towards a particular direction. Thereby investors may make irrational decisions by overreacting to good and bad news thus affecting their financial performance.

Prosad (2014) conducted an empirical analysis of the influence of behavioural biases of investors on the Equity Market in India and repercussions on decisions of stock selection. The study used a sample of diverse market pointers of Nifty 50 stocks. The pointers included; Daily transaction volume of the securities and index, Daily total returns of the securities and index, Daily low and high values of the index, the daily risk-free rate of return of the T-bill index as well as Daily closing prices of Nifty 50 index options.

The set of data was taken for a time period of 2006 to 2013. Additionally, the research utilized both time-series data as well as cross sectional data. The study was based on overconfidence theory and the disposition effect theory. This study concentrated on four behavioural biases in the equity market of market, that is; herd behaviour, pessimism (optimism), disposition effect, overconfidence effect, by use of both secondary and primary data. Primary data provided the immediate insight into psychology of investors. Conversely, the approach of secondary data provided the results that could be widespread on the market as a total, for the period of 2006 to 2013. The analysis of secondary data determined the impact as well as presence of behavioural biases on several pointers of the equity market in India such as risk premium, return dispersion, volume of transaction and volatility.

In his study Prosad (2014) found that the herding behaviour is not observed in the general market, though, it persisted in the phase of bull. The study concluded that this bias may reduce the dispersion of security return. Furthermore, in the existence of harsh herding, the dispersion may turn out to be negative. In addition, the equity market in India was mostly negative for the period of 2006 to 2013. This research showed that precedent volatility is among the factors that lead to negativity. The bias is accountable for making a risk-return association that is negative within investors. In addition, the disposition as well as overconfidence effect as well prevailed within the equity market in India. These kinds of biases increased the volumes of individual, market security transaction correspondingly and ultimately their financial performance. Upon separating the influence of these biases, it was revealed that overconfidence bias predominates the effect of disposition. Lastly, the findings of survey captured the present state of behavioural biases of investors in India within the area of Delhi/ NCR.

Nyamute, Lishenga and Oloko (2015) studied the association between portfolio performance and investor behaviour at the Nairobi Securities Exchange. This research was rooted in the behavioural finance theory which assumes that people go through the behavioural biases in making decisions of investment instead of following the customary theory of finance that needs shareholders to be rational plus to consider important basics in making investment as well as financial decisions

IV. Analysis

This study sought to examine the effect of herding on investment performance. To analyze this objective, both descriptive and inferential analyses were done for the variable.

To test for herding bias the respondents were asked various statements which were laid on a likert scaled questionnaire. The results indicate that 47% of the respondents did not consult anyone when important making their real estate investment decisions. Forty four percent (44%) of the respondents agreed that they rely on their own knowledge other than trusting other people when making investment decisions. A small 41% said they would change their opinions about an investment if they heard a famous analyst that conflicts with their opinion. Thirty 39% of the respondents trust their friends, family or colleague’s judgment while making real estate investment as opposed to a close 33% who disagreed with this statement. The mean score was 3.12, which was well above the mid-point of 2.5 on a scale of 1-5 and a standard deviation of 1.05 pointing that there was high convergence of responses among the various respondents in the real estate industry.

The findings on herding behaviour show that herding bias had significant impact on investment decision making among real estate investors in Kenya. This study concurs with Kumar and Lee (2006) who carried out a study on retail investor and found that the trading retail investors buy or sell one group of investment and they tend to buy or sell other groups exhibiting herding behaviour. Li, Rhee and Wang (2009) in their study on the herding behaviour among investors in the Chinese market found that institutional investors who are the better informed exhibited intense herding compared to the less informed individual investors.

Inferential Statistics of Herding Bias and Investment Performance

To examine the effect of investment behaviour based, herding bias, on the performance investments in Kenya the following hypothesis was formulated’

Herding based behaviour has no effect on the investment performance in Kenya.

In order to test this hypothesis, the first step was to model the relationship between herding bias and real estate investment performance.

Bivariate linear regression of herding bias and real estate investment in Kenya

When the weighted herding bias measures were regressed on weighted real estate investment performance, linear regression model summary, ANOVA and regression model coefficients were generated for further analysis.

The results summaries are presented in Table 4.1. The linear summary in Table 4.1 show that $R=0.511$ which means that there is a moderate correlation between herding bias and investment performance. $R^2= 0.261$ which means that approximately 26.1% of the corresponding variation in investment performance is explained by a unit change on herding bias.

Table 4.1: Model fitness of Herding bias and Investment Performance in Kenya

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.511 ^a	.261	.252	.389	2.002
a. Predictors: (Constant), Herding bias					
b. Dependent Variable: Investment performance					

The model presented in Table 4.1 was further assessed for its significance using ANOVA. The ANOVA results for the linear model are presented in Table 4.1. The table indicates the model F value is 23.557 which is significant with p value $p=0.000 < p=0.05$. This implies that the overall model is significant in the prediction of real estate investment in Kenya.

Based on the results we therefore reject the null hypothesis that Herding based behaviour has no effect on the investment performance of real estate investors in Kenya and confirm that indeed there is a statistically significant effect of herding bias on real estate investment performance in Kenya.

Table 4.2: ANOVA for Herding Bias

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.163	1	9.163	23.557	.000 ^b
	Residual	136.141	350	.389		
	Total	137.304	351			

a. Dependent Variable: Investment performance
b. Predictors: (Constant), Herding bias

The linear regression model coefficients were further assessed for their significance in the model. Analysis of the regression model coefficients is shown in the Table 4.3. A test on beta coefficient of the resulting model indicate that the linear model's constant $\alpha = -0.580$ is significant with p value $p = 0.000 < 0.05$. The coefficient $\beta = -0.453$, has a p value $p = 0.000 < 0.05$, implying that it is statistically significant in the model.

The above findings show that there a strong relationship between herding bias and investment performance in Kenya. The findings are in concurrence with prior findings. Kumar and Lee (2006) carried out a study on retail investor sentiments and found that the trading retail investors buy or sell one group of investment and they tend to buy or sell other groups exhibiting herding behaviour. Nyamute, Lishenga and Oloko (2015) studied the relationship between investor behaviour and investment performance which found that investor behaviour influence investment performance.

Table 4.3: Regression Coefficients of Herding Bias and Investment Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.580	.072	8.071	.000
	Herding bias	-.453	.054	-8.431	.000

a. Dependent Variable: Investment performance

V. Conclusion

Behavioural finance is a contemporary way of analyzing and explaining the forces underpinning investment decisions the world over. In doing so, through the establishment of certain psychological patterns, behavioural finance seeks to detect behaviour that is inconsistent with the assumptions of investor rationality and market efficiency. This study has found that investor behaviour does influence portfolio performance for those investing in Kenya. This study sought effect of herding bias on performance of investments in Kenya. To achieve this objective, respondents were asked to indicate their level of agreement to various investment behaviour based of herding bias. The study hypothesized that there was no statistically significant relationship between herding bias and performance investments in Kenya.

The findings of this study imply that herding based behaviour influence investment performance. This study is in concurrence with study a study by Prosad (2014) which found that the herding bias can lower the security return dispersion and in the presence of severe herding, the dispersion might become negative.

This study indicates that behavioural biases have a negative impact on investment performance. To avoid the negative impact of behavioural biases firstly, when evaluating investments, investors should avoid at barely looking at the risk and return characteristics of that individual investment. Rather, analyze how that particular investment will impact to the total portfolio performance, and determine whether it will enhance the total return, minimize risk, or both.

The findings clearly indicate that behavioural biases affect investors in the market in Kenya and their effect on performance is significant. Therefore the study recommends that the government establishes a regulatory body that will come up with investment policies and regulations. These is of help to investors when it comes to making investment decisions regarding to which areas of investment to venture and for them to develop their own market niche. These policies and regulations will also be useful to the government when it comes to tax regulations and control of various investments.

References:

- [1] Barberis, N., Huang, M. & Santos, T. (2001). Prospect Theory And Asset Prices. *Quarterly Journal Of Economics*, 116(1), 1-53.
- [2] Barberis, N. & Thaler R. H., (2003). *A Survey Of Behavioural Finance, A Handbook Of The Economics Of Finance*. Amsterdam: Elsevier Science.
- [3] Barberis, N. & Xiong, W. (2009). What Drives The Disposition Effect? An Analysis Of A Long-Standing Preference-Based Explanation. *Journal Of Finance* 64(2): 751-784.
- [4] Barberis, N., Huang, M. & Thaler, R. (2006). Individual Preferences, Monetary Gambles & Stock Market Participation: A Case For Narrow Framing. *The American Economic Review*, 6: 1069-1090.
- [5] Black, F. (1986). Noise. *Journal Of Finance*. 41(3): 529-543.
- [6] Daniel, K., Hirshleifer, D. & Teoh, S.H. (2002). Investor Psychology In Capital Markets: Evidence And Policy Implications. *Journal Of Monetary Economics*, 49: 139-209.
- [7] De Long, J. B., Shleifer, A., Summers, L. H. & Waldmann, R. J. (1990). Noise Trader Risk In Financial Markets, *Journal Of Political Economy*, 98(4),703-738.
- [8] Fan, J. & Xiao, J. (2003). A Cross-Cultural Study In Risk Tolerance: Comparing Chinese And Americans. *Consumer Interest Annual* 44(9): 1205-1217.
- [9] Hirshleifer, D. (2001). Investor Psychology And Asset Pricing. *Journal Of Finance* 1(4): 1533-1536.
- [10] Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviours, Institutions And Organizations Across Nations* (2nd Edition). Thousand Oaks: Sage Publications.

- [11] Hott, C. (2009). Explaining House Price Fluctuations. Working Papers 2009-05, Swiss National Bank.
- [12] Kahneman, D. & Tversky A. (1979). Prospect Theory: An Analysis Of Decision Under Risk. *Econometrica*, 47: 263-292.
- [13] Kudryavtsev, A. Cohen, G. & Hon-Snir, S. (2013). Rational' Or 'Intuitive': Are Behavioural Biases Correlated Across Stock Market Investors? *Contemporary Economics*, 7(2): 31-53.
- [14] Kumar, A. & Lee, C. M. (2006) Retail Investor Sentiment And Return Movements. *Journal Of Finance*, 61: 2451–2486.
- [15] Lawlor Leroy, S. F. & Porter R. D. (1981). The Present Value Relation: Tests Based On Implied Variance Bounds. *Econometrica*, 49(3): 555-574.
- [16] Li, W., Rhee G. & Wang, S. S., (2009). Differences In Herding: Individual Vs. Institutional Investors In China. *Asian Finance Association (Asianfa) 2015 Conference Paper*. Retrieved On 27th June, 2013 From [Http://Ssrn.Com/Abstract=1342209](http://Ssrn.Com/Abstract=1342209) Or [Http://Dx.Doi.Org/10.2139/Ssrn.1342209](http://Dx.Doi.Org/10.2139/Ssrn.1342209).
- [17] Lu, L., (2010). Asset Pricing And Welfare Analysis With Bounded Rational Investors. *The Financial Review Journal* 45(2): 485-499.
- [18] Nyamute, W., Lishenga, J. & Oloko, M. (2015). The Effect Of Investment Style On Portfolio Performance: Evidence From The Nairobi Securities Exchange. *International Journal Of Multidisciplinary Research And Development* 2(5): 552-554.
- [19] Prosad, J. (2014). Impact Of Investors' Behavioural Biases On The Indian Equity Market And Implications On Stock Selection Decisions: An Empirical Analysis. Phd Synopsis, Jaypee Institute Of Information Technology.
- [20] Shiller, R. (2000). *Irrational Exuberance*. New Jersey: Princeton University Press.
- [21] Shleifer, A. (2000). *Inefficient Markets: A Introduction To Behavioural Finance*. Oxford: Oxford University Press.
- [22] Singh, A. (2012). Changing Contours Of Global Crisis – Impact On Indian Economy. Retrieved On 12th April, 2012 From [Http://Rbi.Org.In/Scripts/Bs_Speechesview.aspx?Id=678](http://Rbi.Org.In/Scripts/Bs_Speechesview.aspx?Id=678).
- [23] Statman, M. (2010). The Cultures Of Risk Tolerance. Ssrn Paper No: 1647086.
- [24] Subrahmanyam, A. (2008). Behavioural Finance: A Review And Synthesis. *European Financial Management* 14(1): 12-29.
- [25] Vissing-Jorgensen, A. (2004). Perspectives On Behavioural Finance: Does "Irrationality" Disappear With Wealth? Evidence From Expectations And Actions. *Perspectives Of Behavioural Finance* 1(1): 141-146.
- [26] Welch, I., (2000). Herding Among Security Analysts. *Journal Of Financial Economics*, 38(3): 369-396.