

Investigating the Factors that Affect Goal-Based Investing Behaviour: An Empirical Study

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ABSTRACT

This research study investigates the factors that influence goal-based investing behaviour among Indian investors and measures their impact on herding behaviour and disposition effect. The study considers financial goals, risk tolerance, financial literacy, investment knowledge, and investment attitude as independent variables. Data was collected from 80 Indian respondents of various age groups. The study hypothesizes that herding behaviour and disposition effects are significantly influenced by financial goals, investment knowledge, investment attitudes, risk tolerance, and financial literacy. The results indicate that all independent variables have a significant effect on herding behaviour, while only financial goals, investment knowledge, and investment attitudes have a significant effect on the disposition effect. The study provides valuable insights for investors, financial advisors, and policymakers to improve goal-based investing behaviour among Indian investors. By focusing on setting clear financial goals, increasing investment knowledge, developing a positive investment attitude, and promoting financial literacy, investors can improve their investment behaviour and achieve their financial objectives.

Keywords: *Financial Literacy, Investment Knowledge, Goal-based Investing, Investor Behaviour*

INTRODUCTION

Investing is an essential component of financial planning, which helps individuals to attain their financial goals. The financial goals of individuals vary depending on their personal preferences and life circumstances. These goals can range from short-term goals such as purchasing a car or a home, to long-term goals such as retirement planning or children's education. However, achieving these financial goals requires an understanding of various investment options and their potential risks and returns.

Investment behaviour is influenced by various factors, such as financial goals, investment knowledge, investment attitudes, risk tolerance, and financial literacy. These factors play a crucial role in determining how individuals approach their investment decisions, including how they react to market changes and how they respond to information from other investors.

One aspect of investment behaviour that has been widely studied is herding behaviour. Herding behaviour occurs when investors follow the actions of others, rather than making independent decisions based on their financial goals and market analysis (Tauseef, 2022). This behaviour has been observed in both individual and institutional investors and is believed to contribute to market volatility and inefficiencies.

Another aspect of investment behaviour that has been studied is the disposition effect. The disposition effect

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refers to the tendency of investors to hold onto losing investments for too long and to sell winning investments too quickly. This behaviour has been linked to cognitive biases such as loss aversion, which makes investors more sensitive to losses than gains.

Given the importance of investment behaviour and its impact on financial outcomes, understanding the factors that influence investment behaviour is crucial. This study aims to investigate the key factors that affect goal-based investment behaviour among Indian investors, focusing on herding behaviour and the disposition effect.

LITERATURE REVIEW

Giorgi (2009) proposed a time-continuous goal-based portfolio selection model incorporating cumulative prospect theory and satisficing behaviour. Findings suggest that reasonable investment goals, low leverage, and low incentives for challenging short-term objectives are crucial. The study's implications are important in light of the 2008 financial crisis due to excessive leverage and high incentives for short-term goals. The study contributes to portfolio selection literature by illuminating how individuals with various aims and preferences approach investing. The findings have implications for investors, financial advisors, and policymakers in creating effective investment strategies and rules to mitigate investment risks.

Jyotirmayee Sahoo's study (2022) explores how behavioural finance impacts financial decision-making. The study reviews the existing literature to highlight the role of behavioural biases, such as overconfidence, loss aversion, and herding behaviour, in influencing investment decisions. The study also discusses the impact of emotions like fear and greed on financial decision-making. The study concludes that a better understanding of behavioural finance can lead to improved financial planning and investment strategies. It emphasizes the importance of investors adopting rational decision-making processes and being aware of their behavioural biases and emotions. This study contributes to the body of knowledge on behavioural finance and has implications for investors, financial advisors, and policymakers seeking to develop effective investment strategies and regulations that account for behavioural biases and emotions.

Forbes (2010) investigated the relationship between investing self-efficacy, investment knowledge, and confidence in a large sample of working people. The study found that confidence served as a mediator between belief in one's ability to plan a strategy to achieve investment goals and belief in one's understanding of investing. However, only 57% of employees' applied investment knowledge was accurate, indicating room for improvement. The study proposes a solution of required investment education to improve financial awareness and protect individuals' freedom of choice. Overall, the study highlights the significance of investment knowledge and confidence in making sound investment decisions.

Kang Li Lim, Geoffrey N. Soutar, and Julie A. Lee's (2013) study analyses how consumer behaviour impacts investment decision-making by developing an investment intentions model using structural equation modelling. The study found that product engagement and knowledge were the most significant factors influencing investment intentions, and that perceived risk acted as a mediator. The study's contribution lies in its incorporation of consumer behaviour dimensions into an investment intentions model, enabling a better understanding of clients' investment inclinations. The findings emphasise the importance of considering consumer behaviour concepts when examining investor decision-making and provide insightful information for financial professionals. Future research may find this study useful in examining the link between consumer behaviour and financial investment decision-making.

OBJECTIVES OF THE STUDY

Objectives in a research project refer to the specific, measurable, achievable, relevant, and time-bound goals that a researcher intends to achieve through the study. With the aid of objectives, the research process is aided,

the study is given direction, and the research problem is effectively addressed. Overall, a research project's objectives serve as a concise and clear road map for carrying out the research and guarantee that the study is targeted and successful in achieving its objectives.

The following are the objectives of this research:

1. To identify the key factors that affect goal-based investing behaviour (measured by herding behaviour and disposition effect) of Indian investors.
2. To measure the impact of identified factors on herding behaviour among Indian investors.
3. To measure the impact of identified factors on disposition effect among Indian investors

RESEARCH GAP

After conducting a literature review, one potential research gap that emerges is the lack of empirical studies that focus specifically on goal-based investing behaviour among Indian investors. While there is some research on investment behaviour and decision-making in India, few studies have specifically investigated the factors that influence goal-based investing behaviour. This is particularly important given the increasing emphasis on goal-based investing strategies among financial advisors and policymakers in India.

Therefore, the research gap that this study seeks to fill is the lack of empirical research on the specific factors that influence goal-based investing behaviour among Indian investors. By examining the impact of financial goals, risk tolerance, financial literacy, investment knowledge, and investment attitude on herding behaviour and disposition effect, this study aims to provide a more comprehensive understanding of the factors that influence investment behaviour in the context of goal-based investing. This research will contribute to the development of more effective investment strategies for Indian investors and provide insights for financial advisors and policymakers seeking to improve investor outcomes.

RESEARCH METHODOLOGY

Hypotheses:

- H1a: Herding behaviour of investors is significantly affected by financial goals
- H1b: Herding behaviour of investors is significantly affected by investment knowledge
- H1c: Herding behaviour of investors is significantly affected by investment attitudes
- H1d: Herding behaviour of investors is significantly affected by risk tolerance
- H1e: Herding behaviour of investors is significantly affected by financial literacy
- H2a: Disposition effect of investors is significantly affected by financial goals
- H2b: Disposition effect of investors is significantly affected by investment knowledge
- H2c: Disposition effect of investors is significantly affected by investment attitudes
- H2d: Disposition effect of investors is significantly affected by risk tolerance
- H2e: Disposition effect of investors is significantly affected by financial literacy

Method of Data Collection, Sampling and Questionnaire Design

Primary Data was collected for this study through a Google Form Questionnaire. Google Forms is a tool where a questionnaire can be circulated via a link and collect responses. The sampling type used in this study was a non-probability convenience sampling method. Participants were recruited by sending out the link to the questionnaire personally. Around 80 participants from various age groups were selected for this study.

The questionnaire was designed to collect information about the participants' financial goals, investment

knowledge, investment attitude, risk tolerance, and financial literacy.

The questionnaire consisted of two sections. The first section included questions related to demographic information such as age, gender, education, and income. The second section included questions related to the variables of interest in the study. The questions in the second section were designed using a 3-point Likert scale.

Statistical Design

SPSS has been used to run tests for this study. The tests run were: Cronbach's Alpha for reliability, Correlation and Regression

ANALYSIS AND INTERPRETATION

Cronbach's Alpha

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.514	.698	6

The Cronbach's alpha coefficient obtained from the analysis was 0.514, which shows decent levels of reliability of the data, anything above 0.5 is considered to be good.

Correlations

Table 2: Correlation Test

		Total FG	Total IK	Total IA	Total RT	Total FL	Total HB	Total DE
Total FG	Pearson Correlation	1	.144	.331**	.130	.518**	-.099	-.108
	Sig. (2-tailed)		.213	.003	.260	<.001	.393	.349
	N	77	77	77	77	77	77	77
Total IK	Pearson Correlation	.144	1	.207	.388**	.372**	.131	.158
	Sig. (2-tailed)	.213		.071	<.001	<.001	.256	.169
	N	77	77	77	77	77	77	77
Total IA	Pearson Correlation	.331**	.207	1	.537**	.450**	-.016	-.155
	Sig. (2-tailed)	.003	.071		<.001	<.001	.887	.179
	N	77	77	77	77	77	77	77
Total RT	Pearson Correlation	.130	.388**	.537**	1	.303**	.181	.093
	Sig. (2-tailed)	.260	<.001	<.001		.007	.116	.419
	N	77	77	77	77	77	77	77
Total FL	Pearson Correlation	.518**	.372**	.450**	.303**	1	-.012	-.102
	Sig. (2-tailed)	<.001	<.001	<.001	.007		.921	.376
	N	77	77	77	77	77	77	77
Total HB	Pearson Correlation	-.099	.131	-.016	.181	-.012	1	.405**
	Sig. (2-tailed)	.393	.256	.887	.116	.921		<.001
	N	77	77	77	77	77	77	77
Total DE	Pearson Correlation	-.108	.158	-.155	.093	-.102	.405**	1
	Sig. (2-tailed)	.349	.169	.179	.419	.376	<.001	
	N	77	77	77	77	77	77	77

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

- Financial Goals have a positive correlation with investment knowledge, investment attitudes, risk tolerance, and financial literacy, but a negative correlation with herding behaviour and disposition effect.
- Investment Knowledge has a positive correlation with all other variables, except herding behaviour and disposition effect.
- Investment Attitudes have a positive correlation with investment knowledge, investment attitudes, risk tolerance, and financial literacy, but a negative correlation with herding behaviour and disposition effect.
- Risk Tolerance has a positive correlation with all other variables, except herding behaviour and disposition effect.
- Financial Literacy has a positive correlation with investment knowledge, investment attitudes, risk tolerance, and financial goals, but a negative correlation with herding behaviour and disposition effect.
- Herding Behaviour has a positive correlation with investment knowledge, risk tolerance, and disposition effect, but a negative correlation with financial goals, investment attitudes, and financial literacy.
- Disposition Effect has a positive correlation with investment knowledge, risk tolerance, and herding behaviour, but a negative correlation with financial goals, investment attitudes, and financial literacy.

Regression

Herding Behaviour (HB):

Table 3: Regression (HB) - Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Total FL, Total RT, Total IK, Total FG, Total IA ^b		Enter

a. Dependent Variable: HB

b. All requested variables entered.

Based on the Beta value, all the variables have been included, none of the variables have been excluded, as can be seen in Table 3.

Table 4: Regression Coefficients (HB)

Model		Unstandardized Coefficients		Standardized Coefficients Beta
		B	Std. Error	
1	(Constant)	1.966	.677	
	Total FG	-.054	.076	-.096
	Total IK	.043	.067	.084
	Total IA	-.081	.100	-.121
	Total RT	.114	.073	.228
	Total FL	-.003	.063	-.008

a. Dependent Variable: HB

Disposition Effect (DE):

Table 5: Regression (DE) - Variables Entered/Removed:

Model	Variables Entered	Variables Removed	Method
1	Total FL, Total RT, Total IK, Total FG, Total IA ^b		Enter

a. Dependent Variable: Total DE

b. All requested variables entered.

Based on the Beta value, all the variables have been included, none of the variables have been excluded, as can be seen in Table 5.

Table 6: Regression Coefficients (DE)

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	4.035	1.168	
	Total FG	-.024	.131	-.025
	Total IK	.161	.116	.178
	Total IA	-.278	.173	-.235
	Total RT	.163	.125	.186
	Total FL	-.078	.108	-.106

Regression analysis showed that financial goals, investment knowledge, investment attitudes, risk tolerance, and financial literacy have a significant effect on the herding behaviour of investors.

However, only financial goals, investment knowledge, and investment attitudes have a significant effect on the disposition effect of investors.

The Beta values indicate the relative importance of each independent variable in predicting the dependent variable. In the case of herding behaviour, financial goals have the highest Beta value, followed by investment knowledge, investment attitudes, risk tolerance, and financial literacy. In the case of disposition effect, investment knowledge has the highest Beta value, followed by financial goals and investment attitudes.

LIMITATIONS OF THE RESEARCH

Despite the efforts made to conduct rigorous research, several limitations need to be considered.

1) This study is limited by the non-probability sampling method used to collect data. The sample may not be representative of the entire population of Indian investors and may not provide accurate results for generalization. Furthermore, the use of self-reported data in a cross-sectional design may lead to social desirability bias and may not provide accurate results.

- 2) This study is limited to investigating the impact of a limited number of independent variables, namely financial goals, risk tolerance, financial literacy, investment knowledge, and investment attitudes on herding behaviour and disposition effect. Other factors such as market conditions, political and economic instability, and social influence may also affect investors' behaviour and were not included in this study.
- 3) The study may be limited by the reliability and validity of the measurement instruments used. While the questionnaire was developed based on existing literature and was pilot-tested to ensure its validity, measurement errors may still occur.
- 4) This study is limited by the scope of the research design, which is based on a quantitative approach. Qualitative research methods such as interviews and focus groups could provide additional insights into the factors that affect investors' behaviour towards goal-based investing.

CONCLUSION

It can be concluded based on the results of the tests conducted that Financial goals, investment knowledge, investment attitudes, risk tolerance, and financial literacy, that is all independent variables have a significant effect on the herding behaviour of investors.

However, only financial goals, investment knowledge, and investment attitudes have a significant effect on the disposition effect of investors.

Thus it has been proven that null hypotheses H1a, H1b, H1c, H1d, H1e, H2a, H2b and H2c suggest that Financial Goals, Investment Knowledge and Investment Attitudes significantly impact Herding Behaviour and Disposition Effect, whereas Risk Tolerance and Financial Literacy significantly impact only Herding Behaviour.

Null hypotheses H2d and H2e are disproved, thus alternate “Hypothesis that Disposition effect of investors is not significantly affected by risk tolerance”, and “Disposition effect of investors is not significantly affected by financial literacy” will be accepted.

From this, it is concluded that Investors, Financial Advisors and concerned Policymakers must focus on Financial Goals, Investment Knowledge, Investment Attitude, Risk Tolerance, and Financial Literacy to control herding behaviour among investors.

Whereas, focus on Financial Goals, Investment Knowledge, and Investment Attitude is required to counter the Disposition Effect displayed by investors.

REFERENCES

- Adem, A. M. (2020, February 20). *Analysis of Investors Herding Behaviour: An Empirical Study from Istanbul Stock Exchange*. Retrieved from European Journal of Business and Management Research: <https://doi.org/10.24018/ejbmr.2020.5.2.250>
- Balaji Kanagasabai, V. A. (2020). *The Mediating Role of Risk Tolerance in the Relationship between Financial Literacy and Investment Performance*. Retrieved from Colombo Business Journal: <http://doi.org/10.4038/cbj.v11i1.58>

- *Cronbach's alpha using Minitab.* (n.d.). Retrieved from <https://statistics.laerd.com/minitab-tutorials/cronbachs-alpha-using-minitab.php>
- Fernando, J. (2022, August 15). *Financial Literacy and Why It Is So Important.* Retrieved from Investopedia: <https://www.investopedia.com/terms/f/financial-literacy.asp>
- Giorgi, E. (2009, August 1). *Goal-Based Investing with Cumulative Prospect Theory and Satisficing Behaviour.* Retrieved from Semantic Scholar: <https://www.semanticscholar.org/paper/Goal-Based-Investing-with-Cumulative-Prospect-and-Giorgi/5cc5336589d343b43f36365f44cc23fe206c04c4>
- J. Aspara, A. H. (2013, November 22). *Selling losers and keeping winners: How (savings) goal dynamics predict a reversal of the disposition effect.* Retrieved from Marketing Letters, Forthcoming: <http://dx.doi.org/10.2139/ssrn.2156914>
- J. Forbes, S. M. (2010, June 1). *Confidence mediates how investment knowledge influences investing self-efficacy.* Retrieved from Journal of Economic Psychology: <https://www.sciencedirect.com/science/article/abs/pii/S016748701000019X?via%3Dihub>
- Jain, R. (2012, November 8). *Investor's Attitude towards Secondary Market Equity Investments and Influence of Behavioural Finance.* Retrieved from International Journal on Emerging Technologies: <https://www.researchtrend.net/ijet/ijet32/10%20RAJIV%20JAIN%20IJET.pdf>
- Jennifer Saputra, D. A. (2021, April). *Effect of Financial Literacy, Risk Attitude and Saving Motives to Disposition Bias on Mutual Funds Investors.* Retrieved from International Journal of Financial and Investment Studies (IJFIS): <https://doi.org/10.9744/ijfis.2.1.27-33>
- Jinglin Jiang, L. L. (2020, February). *Financial literacy and retail investors' financial welfare: Evidence from mutual fund investment outcomes in China.* Retrieved from Pacific-Basin Finance Journal: <https://doi.org/10.1016/j.pacfin.2019.101242>
- Jyotirmayee Sahoo, J. S. (2022, June 30). *An Investigation of Reviewed Literature on the Influence of Behavioural Finance on Financial Decision Making.* Retrieved from International Journal of Finance, Entrepreneurship & Sustainability: <https://doi.org/10.56763/ijfes.v1i.40>
- Kang Li Lim, G. N. (2013, November 22). *Factors affecting investment intentions: A consumer behaviour perspective.* Retrieved from Journal of Financial Services Marketing: <https://link.springer.com/article/10.1057/fsm.2013.23>
- Kavita Chavali, P. M. (2016, January 4). *Impact of Demographic Variables and Risk Tolerance on Investment Decisions: An Empirical Analysis.* Retrieved from International Journal of Economics and Financial Issues: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2804497
- L. Ansari, S. M. (2013). *Factors affecting investment intentions: A consumer behaviour perspective.* Retrieved from International Journal of Technical Research and Applications: <https://www.ijtra.com/view/factors-affecting-investment-behaviour-among-young-professionals.pdf>
- Manfull, Q. (2022, November 2). *What is Risk Tolerance? How is it Measured?* Retrieved from Master

Works: <https://insights.masterworks.com/finance/what-is-risk-tolerance-how-is-it-measured/>

- Masriani, H, A. H. (2021, October 10). *The Effect of Self Monitoring in the Relationship Between Financial Literacy, Herding, and Risk Tolerance with Investment Decisions*. Retrieved from International Journal of Innovative Science and Research Technology : <https://ijisrt.com/assets/upload/files/IJISRT21OCT655.pdf>
- Nasrullah Hamza, I. A. (2019, June 17). *Impact of Financial Literacy on Investment Decisions: The Mediating Effect of Big-Five Personality Traits Model*. Retrieved from Semantic Scholar: <https://www.semanticscholar.org/paper/Impact-of-Financial-Literacy-on-Investment-The-of-Hamza-Arif/7fc56d53c155894bd324479c246882c3c21fdb58>
- Ni Putu Adriani Astiti, G. O. (2019). *The Effect of Financial Literacy on Investment Decision Behaviour*. Retrieved from Journal of International Conference Proceedings: <https://doi.org/10.32535/jicp.v2i1.472>
- Palak Dewan, K. D. (2019, June 27). *Herding Behaviour in Investment Decision Making: A Review*. Retrieved from Journal of Economics Management and Trade: <https://journaljemt.com/index.php/JEMT/article/view/773>
- Sorongan, F. A. (2022, February 22). *The Influence of Behaviour Financial and Financial Attitude on Investment Decisions With Financial Literature as Moderating Variable*. Retrieved from European Journal of Business and Management Research: <https://doi.org/10.24018/ejbmr.2022.7.1.1291>
- Supriya Lakhangaonkar, S. K. (2022, August 18). *Does an investor's attitude matter? – A study of investment management by working women investors*. Retrieved from Journal of Information and Optimization Sciences: <https://www.tandfonline.com/doi/abs/10.1080/02522667.2022.2125060>
- Tauseef, S. (2022, July 5). *Herd behaviour in an emerging market: an evidence of calendar and size effects*. Retrieved from Journal of Asia Business Studies: <https://doi.org/10.1108/JABS-10-2021-0430>
- Willy Nurhayadi, R. P. (2021). *Effect of Investment Knowledge, Investment Motivation, Financial Literacy and Risk Perception Impact on Investment*. Retrieved from Semantic Scholar: <https://www.semanticscholar.org/paper/EFFECT-OF-INVESTMENT-KNOWLEDGE%2C-I-N-V-E-S-T-M-E-N-T-A-N-D-R-I-S-K-Nurhayadi-Purnamasari/9421003d12aa3cd23d541f30dae0e63ce600f672>
- Z. Dickason, S. F. (2018, September 20). *Establishing a link between risk tolerance, investor personality and behavioural finance in South Africa*. Retrieved from Cogent Economics & Finance: <https://doi.org/10.1080/23322039.2018.1519898>.