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# ANALYSIS SOME CRITICAL BIASES IN BEHAVIORAL FINANCE THAT AFFECT INVESTMENT PROCESS

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## ABSTRACT

Behavioral finance biases can make us think we are smarter about how we spend and invest our money. If you know about these biases, you might be able to fight them and make better financial decisions. Mental accounting mistakes, loss aversion, anchoring,overconfidence and herd behaviour are some of the most common mistakes people make. Mental accounting mistakes, loss aversion, overconfidence, anchoring, and herding are some of the most common mistakes. In this paper we can get clear idea about some critical biases in the behavioral finance, which may really helpful to avoid the investment mistake.

**Keywords:** biases, behavioral finance, investment, overconfidence, anchoring, and herding

## INTRODUCTION

An investor's or an analyst's decision-making can be influenced by their psychological state, which is studied in the field of behavioural finance. The resulting effects on the markets are also taken into consideration in this report. It emphasizes on the fact that investors are not always rational, have limited self-control, and are influenced by their own prejudices. Behavioral finance considers investors to be "normal" people, yet they are prone to biases and errors in decision-making. At least four buckets can be used to categories decision-making biases and errors.


***Figure 1: Four buckets of behavioral***

### How to Overcome Behavioral Finance Issues

***Plan and Prepare:***As investors, it is very important for each of us to plan and think about how we will invest before we do it. We should not just invest in one market instrument but spread our money out across different industries. Also, we should make our investment decisions based on reasonable thinking that is based on reliable information and facts about how well a company is doing.

***Focus on the Process:*** There are two approaches to decision-making:

Reflective – logical and methodical, but it takes a lot of work to actively participate in it.

Reflexive – Going with your instincts, which is easy, automatic, and our first choice.

When making decisions, it's important to protect a methodical approach. Instead than focusing on the result, shift your attention to the process. In your guidance to others, encourage them to consider the process rather than just the destination. Focusing on

the process will help you make better decisions because the process helps you think about what you're doing before you do it.

## LITERATURE REVIEW

It can be hard for financial agents to make good decisions if they aren't sure how they feel, how they think, or how they feel about things (Blajer-Gobiewska et al., 2018; Lucey & Dowling, 2005). It's true that knowing all of the market information helps investors make better decisions, but it has been shown that having too much information can make things worse for people who invest. This makes the threat, the relative risk, and the effectiveness of loss prevention worse. Oh and Sheng (2011), from Shanghai, China, have used the irrational investor sentiment model to see if text message sentiment can predict how stock prices will move in the future. They looked at the predictive power of text message sentiment. They suggest a different way to invest that uses user-generated content, and they say that a new tool can help virtual investment communities make money. In 2017, Houlihan and Creamer came up with a way to combine all of the characteristics into a single model. This is because the performance, the sentiment on social networks, and market data can all be used as risk factors in an asset pricing model. They found that, on the one hand, market data and a buy-sell relationship can help the model work better. On the other hand, sentiment from StockTwits can help the model work even better. However, there isn't a standard way to measure how people feel when they use instant messaging (Houlihan & Creamer, 2017).

Irrational investors, Feldman and Lepori (2016) say, have a big effect on the value of an asset because they are there. However, in the long run, only rational investors stay in the market, and the rest leave because they lost money. This means that the effects of investors' personalities and prejudices aren't as big as they used to be when herd behaviour was much less common (Lakshmi et al., 2013). In the same way, new investors will come into the market, and the process will keep going. In general, people who work in the financial industry want to make more money than the market does (Howard, 2014). The presence of herd behaviour adds to the risk of making an investment (Messis&Zapranis, 2014). As Sadi et al. show, it is important to understand this "gap" between an investor's personality and how they see the market. This gap can be caused by their emotions and overconfidence as well as their commitment, retrospection, and randomness, as they show (2011).

## RESEARCH METHODOLOGY

This is a cross-sectional study, and the Quantitative method was used to look at the data. A questionnaire is made and the survey method is used to get answers. The size of people who took sample in the study was 350, but some questionnaires were not filled out properly. A sample size of just three hundred questions was chosen for this study because they were found to be important and useful.Investors in the National Stock Exchange are asked for their information by way of "convenience sampling."The purpose of this research analysis is to determine what the data means and to make a conclusion from it. To examine data, inferential statistics and descriptive statistics are utilised. SPSS is a computer programme that is used to do statistics. First, Cronbach Alpha is used to make sure the data is accurate. The range from 0.70 to 0.90 is thought to be OK. Second, the correlation coefficient is used to see if there is a link between variables like investment decision making and behavioural biases. Finally, regression analysis is done to find out which variables have an effect on each other. Here, we form the hypotheses like,

**H1:**There is a significant relationship between investment decision- making process and behavioral biases (overconfidence, anchoring, disposition, herding).

**H2:** There is a co-relation between financial and economic theories with individuals' decision-making process

## RESULT AND DISCUSSION

Initially, the 'Cronbach's alpha test' for measurement of dependability done. A secondary objective is to examine the relationship between behavioural biases and financial choices. It was found that the value of Cronbach Alpha is 0.762. As a result, the scale's Cronbach alpha value is higher than 0.6, indicating its reliability.

***Table 1: Demographic profileof Investors***

| **Investor's Age** | **Frequency** | **(%) Percentage** |
|---|---|---|
| 18 to 30 | 93 | 31 |
| 31 to 40 | 84 | 28 |
| 41 to 50 | 69 | 23 |
| Above 50 | 54 | 18 |
| **Investor's sex** | **Frequency** | **(%) percentage** |
| Male | 226 | 75.33 |
| Female | 74 | 24.67 |
| **Education level** | **Frequency** | **(%) percentage** |
| U.G | 147 | 49 |
| P.G | 104 | 34.66 |
| Other | 49 | 16.33 |
| **Job** | **Frequency** | **(%) percentage** |
| Business | **169** | **56.33** |
| Employee | **131** | **43.66** |
| Total | **300** | **100** |

***Table 2: co-relation analysis***

| | | Investment Decision Making | Overconfidence | Anchoring | Disposition | Herding |
|---|---|---|---|---|---|---|
| Investment Decision Making | Pearson Correlation | 1 | 0.409** | 0.378** | 0.325** | 0.402** |
| | Sig. (2-tailed) | | 0.000 | 0.000 | 0.000 | 0.000 |
| | N | 251 | 251 | 251 | 244 | 238 |

There are good causes for many of the behavioural biases that we encounter. Some of the things we do are based on the fact that our brains aren't very powerful. They were made to help our ancestors, who were much more involved about not being clobbered by woolly mammoths or attacked by saber-toothed tigers than about being deceived by financial advisers.Inappropriately, predators have become less hairy and toothy in recent years, making them more difficult to notice. Overconfidence variables have a positive correlation with investment decision-making, which is 0.409 at a 1% degree of certainty. This demonstrates that when investor overconfidence grows, so does the investor's investing decision-making. At a 1% level of certainty, the link among investment decision and Anchoring bias making is 0.378, which is very important. This means that there is a strong connection among investment decision making and Anchoring bias. When anchoring rises, so does investment decision making. At a 1% level of certainty, the correlation between disposition bias and investment decision making is noteworthy at 0.325. This demonstrates that as one's disposition bias increases, so does one's ability to make sound financial decisions. According to the correlation coefficient between investment decisions and herding biasof 0.402, which indicates a positive link between the two variables, the increase in herding bias leads to an increase in the number of investors making similar investment decisions.

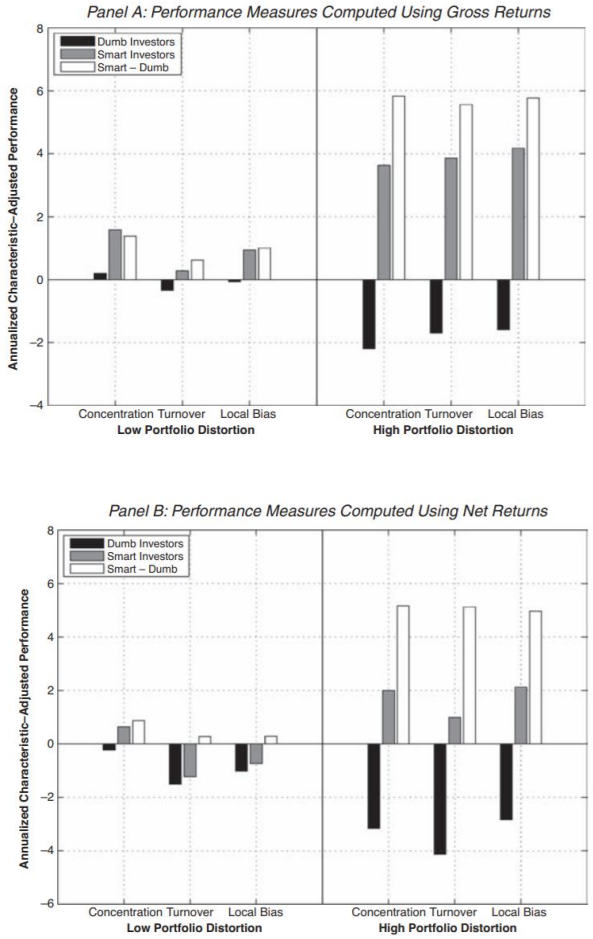


***Figure 2: Annualized characteristic-adjusted percentage returns of ability-distortion investor categories.***

The four common behavioural biases also showed that they can be found in the stock market or when people make decisions about portfolios. Their existence leads to a lot of trades, which increases the cost of doing business. The study also sheds light on how people think about the stock market. It shows that people buy and sell stocks and why they

sometimes don't buy or sell at all. As a result, the most difficult thing for investors to deal with is making good investment decisions. Results from this study show that investors' profits and losses mostly depend on their ability to make good investments. It said that in today's world, investors need to know more about their own behavioural biases because these biases were already known to exist before and during the global financial crisis as well. An important part of this study focused on individual investors, who had a lot less knowledge about how traditional financial theories can help them make smarter decisions. This made them more prone to making psychological mistakes. Study: Overconfidence and herding bias have a big impact on people's investment decisions, but disposition and anchoring don't have any big impact on how they make decisions. The t-values for these two are 3.759 and 2.561, respectively. The way we're doing now lets us know that our hypotheses are in a good place.

## CONCLUSION

Bias occurs when someone can't figure out what needs to be done. The main focus of this study was on the development and analysis of four types of behavioural bias: anchoring, overconfidence, disposition effect, and herding behaviour. There are more behavioural biases that can be studied in the future that have a big impact on how people make investment decisions in their own unique way. There are other ways to look into the effects of the research. For example, it could look into how group or company investment decisions might be affected.

## REFERENCES


1. Feldman, T., & Lepori, G. (2016). Asset price formation and behavioral biases. *Review of Behavioral Finance*, *8*(2), 137–155.
2. Lakshmi, P., Visalakshmi, S., Thamaraiselvan, N., & Senthilarasu, B. (2013). Assessing the linkage of behavioural traits and investment decisions using SEM approach. *International Journal of Economics andManagement*, *7*(2), 221–241.
3. Howard, C. T. (2014). Behavioral portfolio management. *Journal of Behavioral Finance and Economics*, 1–37.
4. Messis, P., & Zapranis, A. (2014). Herding behaviour and volatility in the Athens stock exchange. *The Journal of Risk Finance*, *15*(5), 572–590.
5. Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). Behavioral finance: The explanation of investors' personality and perceptual biases effects on financial decisions. *International Journal of Economics and Finance*, *3*(5), 234–241.
6. Oh, C., & Sheng, O. (2011, December). Investigating predictive power of stock micro blog sentiment in forecasting future stock price directional movement. In *ICIS* (pp. 1–19).
7. Houlihan, P., & Creamer, G. G. (2017). Can sentiment analysis and options volume anticipate future returns? *Computational Economics*, *50*(4), 669–685.
8. Qiu, L., Welch, I. (2004). *Investor sentiment measures* (No. w10794). National Bureau of Economic Research.
9. Godoi, K. C., Marcon, R., & da Silva, A. B. (2005). Loss aversion: A qualitative study in behavioral finance. *Managerial Finance*, *31*(4), 46–56.
10. Hammond, R. C. (2015). *Behavioral finance: Its history and its future* [Selected Honors Theses] (pp. 1–45).
11. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, *47*(2), 263–291.
12. Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *Journal of Economic Perspectives*, *17*(1), 83–104.
13. Amos Tversky and Daniel Kahneman, "Judgement Under Uncertainty: Heuristics and Biases," *Science* 185, no. 4157(1974): 1124–1131.
14. Robert Bloomberg, "The 'Incomplete Revelation Hypothesis' and Financial Reporting," *Accounting Horizons* 16 (2002): 233–243.
15. George A. Miller, "The Magical Number Seven, Plus or Minus Two," *Psychological Review* 101, no. 2 (1956): 343–353.
16. Joachim Klement, "The Flaws of our Financial Memory," *CFA Institute Conference Proceedings Quarterly* 28, no. 3 (2011): 1–8.
17. Elizabeth Loftus and Jacqueline Pickrell, "The Formation of False Memories," *Psychiatric Annals* 25, no. 12, (1995): 720–725.
18. Hersch Shefrin and Enrico Maria Cervellati, "BP's Failure to Debias: Underscoring the Importance of Behavioral Corporate Finance," *Quarterly Journal of Finance* 1, no 1 (2011): 127–168.
19. D. Harmon, M. de Aguiar, D. Chinellato, D. Braha, I. Epstein, and Y. Bar-Yam, "Predicting

Economic Market Crises Using Measures of Collective Panic" (February 13, 2011), arXiv:1102.2620v1.

20. Gerd Gigerenzer, "Out of the Frying Pan into the Fire: Behavioral Reactions to Terrorist Attacks," *Risk Analysis* 26, no. 2 (2006).