

A STUDY OF EFFECT OF BEHAVIOURAL BIASES ON INVESTMENT DECISIONS

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ABSTRACT

Based on the presumption that individuals make fair predictions about the future and make rational decisions, the subject of finance has developed during the past few decades. Different behavioural biases have a significant impact on investors' decision-making processes. The study's major goal is to identify the cognitive and emotional biases that influence investor decisions and to ascertain whether there is a connection between behavioural biases and investment choices. The major goal of the study is to identify and rank the behavioural aspects that affect investors' decision-making processes. Through a survey, information was gathered from 396 people in Northern India, which was then examined. The results of this study suggest that emotional and cognitive biases might affect investing decisions. Both constructs have significant effect and is important for the development of attitudes towards investment decisions as well as for investment intentions.

Keywords: Cognitive Biases, Emotional Biases. Investment decisions, Decision Makers

I) INTRODUCTION

According to the definition of finance, it is the study of how humans distribute scarce resources and how they are managed, acquired, and invested over time. Because it is anticipated that they would accurately interpret the newly available information that makes the financial markets efficient, the essential tenet of classical finance theories is the rationality of market participants. One of the most significant contributions to the subject of finance is the Efficient Market Hypothesis, which was first proposed by Markowitz in 1952 and further refined by Fama in 1971.

Researchers have long been interested in how people make decisions. Early writings on the subject (e.g., Adam, A., & Shauki, E. (2014).; Chittedi, K.R (2014)) had taken an economic stance. The utility hypothesis, which advocated that people make decisions by taking the predicted results of such decisions into account, was one of the widely accepted theories at the time. In this regard, a logical decision-maker will use all the information at their disposal, analyse the possibilities, and choose the ideal action to take (Schiffman & Kanuk, 2007). Prior research argued in favour of the rational decision-making of the individual. However, these ideas are no longer seen as being plausible because it is uncommon for people to have access to sufficient knowledge, incentive, or time for making such a perfectly sensible decision (Simon, 1997). Humans do not "naturally" make decisions in the way that a logical person should, according to behavioural economics. Rather, it is a widely acknowledged truth that people frequently make poor decisions (Tomer, 2016). People are frequently characterised as looking for adequate options rather than the best ones when making decisions (Tversky & Kahneman, 1974).

Understanding investors' cognitive, social, and emotional biases and how these biases affect market pricing, returns, and resource allocation are the main goals of behavioural finance theories. As a result, behavioural finance is a modern science that employs psychological theories to comprehend investor and financial market behaviour.

According to (Dargham, 2009), behavioural finance has posed a challenge to traditional finance since it focuses on how investors respond to information that is freely available to them, which in turn helps to comprehend the investors' behaviour and actual market practises. As a result, behavioural finance educates investors about their cognitive biases and empowers them to make wiser financial choices under challenging circumstances. According to (Shefrin, 2002), practitioners learning behavioural finance should be able to see their own mistakes as well as those of others and make an effort to avoid them in their subsequent investment decisions.

II) LITERATURE REVIEW

These days, behavioural finance is emerging as a fresh field. It makes an effort to research the investors' unreasonable actions. Many behavioural economists think that the fundamental premise of classical finance—that people are rational—was wildly unrealistic.

(Sewell, 2007) states that "the study of the influence of psychology on the behaviour of financial practitioners and the subsequent impact on markets" is known as behavioural finance.

The behavioural finance reviews conducted between the late 1970s and 2005 demonstrated that psychological research will serve as a foundation for explaining irrational behaviour, which gives rise to the core ideas of behavioural finance. Kumar and Goyal (2015), According to the utility theory (EUT), an investor's investing behaviour is entirely dependent on the risk involved with each alternative and his utility if he wants to evaluate all of his options and come to a balanced conclusion. The anticipated utility theory was examined by (Kahneman&Tversky, 1979) as a "descriptive model of decision making under risk," and it was discovered that preferences for risky prospects displayed few widespread effects that were at odds with the fundamental utility theory. As a result, they created a new theory known as prospect theory.

According to (Shiller, 2003), the EMH hypothesis started to gain traction in academic circles in the 1970s. A series of anomaly findings and signs of excessive return volatility in the 1980s weakened the validity of this idea. In order to address these anomalies and excessive volatility, behavioural finance, a new academic field that combines sociology and psychology with finance theories, was created. In the 1990s, there were a few significant advances, such as feedback theories and other things.

(Schierreck, De Bondt, & Weber, 1999) said that behavioural finance attempts to integrate the knowledge from theories pertaining to psychology and finance in order to establish a connection between human behaviour and market occurrences. However, behavioural finance seeks to recognise and examine these biases.

Daniel Kahneman and Amos Tversky, two eminent psychologists, created the prospect theory. They provided examples of how investors defy the fundamental utility principle. They experimented with how alternative ways of framing the same events affected investor choices. The experiment's participants had to select one of two possibilities. Eighty percent of the participants picked the first choice, which had a 100% chance of winning \$4,000 and an 80% chance of earning \$5,000. According to anticipated utility theory, people in the two scenarios listed above should make the same decision because the outcomes are same. As a result, it is obvious that people will give preference to some outcomes over others (Kahneman&Tversky, 1979). So, according to prospect theory, a category of delusions that might influence the decision-making process include loss aversion, mental accounting, and regret aversion.

III) RESEARCH METHODOLOGY

Operationalisation

In order to examine the conceptual framework and the given hypotheses, this study used a questionnaire survey. The measures used in this study were modified versions of those used in other works. The respondents were asked questions using a Likert scale with a 5-point range. Pre-testing of the questionnaire was also done. In light of the input from the review process, the questionnaire has been updated. The reviewing procedure didn't result in any substantial changes. After that, a pilot study with 40 knowledgeable individual investors was carried out. Along with Cronbach's criteria, a reliability study was conducted.

Data Collection

In this investigation, the analytical unit is an individual. This study looked specifically at North India. There are 700 individual investors in all, the respondents were picked one at a time until the required sample size was attained using the sequential sampling method. The response rate was 75.7%, with 550 of the 700 questionnaires that were sent out receiving a response. Only 396 of these responses qualified for further review because they were valid and suitable. According to the results, most respondents were men between the ages of 31 and 40.

Hypothesis

H1 Emotional Biases have significant effect on investment decisions

H2 Cognitive Biases have significant effect on investment decisions

List of Constructs

Emotional Biases (EB)

Loss Aversion (EB1)

Regret Aversion (EB2)

Overconfidence (EB3)

Cognitive Biases (CB)

Availability (CB1)

Mental Accounting (CB2)

Representative (CB3)

Anchoring (CB4)

Herding (Cb5)

IV) Analysis and finding

The two main techniques used in this study for data analysis were structural equation modelling (SEM) and analysis of moment structures (AMOS). The SEM's value stems from its capacity to analyse measurement errors while also testing the whole model (Schumacker & Lomax, 2012). If the errors are large, this is essential (Byrne, 2001). These characteristics, in the opinion of Tabachnick and Fidell (2007) and Hair, Anderson, Tatham, and Black (1998), have made SEM a powerful tool with strict procedures capable of handling complex models. In light of these elements, the SEM was employed as the primary data analysis technique. This study likewise employed a two-model estimation technique, similar

to Anderson and Gerbing (1988), in which a confirmatory factor analysis was completed first, followed by an examination of the structural model. This strategy works better at making it easier to pinpoint the cause of a poor model fit. The assumptions about the information (such as the number of samples, missing factors, outliers, and homogeneity) were checked to make sure they weren't wrong and Data were screened and examined before the primary data analysis procedure. According to the descriptive analysis, there were 0.6% of missing data, with the missing data occurring at random. Following that, "regression imputation" was used to replace the missing data (Lynch, 2003).

Measurement Model

The evaluation of a measuring model that included every construct of interests. To make sure that the measures agreed and did not reflect other factors, this study conducted both discriminant and convergent validity tests. Convergent validity was examined using factor loadings, reliability composites, and the average variance extracted (AVE). Table 1 displays the composite dependability values for each variable, which varied from 0.850 to 0.916 and exceeded the suggested levels of 0.7. Table 2 lists the correlation between constructs, and Table 3 lists the results of the structural model.

V) CONCLUSION

Making various additions to the canon of published works was the aim of this study. First of all, this study advanced knowledge of the behavioural elements of individual investment instead of adhering to basic or standard approaches. Studies on Indian investors' investment habits have been done, however they have primarily focused on demographics. It is yet unknown how socio psychological factors in the Indian setting may affect investors' investment behaviour.

The findings of this study indicate that the influence of Cognitive Biases and Emotional biases on investment decisions. Both constructs have significant effect and is important for the development of attitudes towards investment decisions as well as for investment intentions.

REFERENCES

1. Adam, A., & Shauki, E. (2014). Socially responsible investment in Malaysia: Behavioral framework in evaluating investors' decision making process. *Journal of Cleaner Production*, 80, 224-240
2. Ajzen, I. (1985). *From intentions to actions: A theory of planned behaviour*. Berlin Heidelberg: Springer, 1, 12-24
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior And Human Decision Processes*, 50(2), 179-211
4. Bansal, H., & Taylor, S. (2002). Investigating interactive effects in the theory of planned behavior in a service-provider switching context. *Psychology and Marketing*, 19(5), 407-425
5. Blanchard, C., Fisher, J., Sparling, P., Nehl, E., Rhodes, R., Courneya, K., & Baker, F. (2008). Understanding physical activity behavior in African American and Caucasian college students: an application of the theory of planned behavior. *Journal of American College Health*, 56(4), 341-346
6. Borden, L.M., Lee, S.A., Serido, J., & Collins, D. (2008). Changing collegestudents' financial knowledge, attitudes, and behavior through seminar

- participation. *Journal of Family and Economic Issues*, 29(1), 23-40
7. Chen, M.F. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits. *Food Quality and Preference*, 18(7), 1008-1021
 8. Cialdini R.B., & Trost, M.R. (1998). Social influence: Social norms, conformity, and compliance. In D.T. Gilbert & S.T. Fiske (Eds.), *The handbook of social psychology*, 4, 151-192
 9. Chittedi, K.R (2014). Financial development and instability: A theoretical perspective. *Journal of Stock and Forex Trading*, 3(3) 1-5
 10. Dickson, M. (2000). Personal values, beliefs, knowledge, and attitudes relating to intentions to purchase apparel from socially responsible businesses. *Clothing and Textiles Research Journal*, 18(1), 19-30
 11. Ekpe, I., Mohamad, M.R., Mat, N., & Simpong, D.B. (2016). Socio-political influence and youth's leadership participation in Malaysia: A conceptual model extending TPB. *Mediterranean Journal of Social Sciences*, 7(3S1), 222-228.
 12. Fünfgeld, B., & Wang, M. (2009). Attitudes and behaviour in everyday finance: Evidence from Switzerland. *International Journal of Bank Marketing*, 27(2), 108-128.
 13. Gill, A., Biger, N., & Mand, H.S., & Gill, S.S. (2011). Factors that affect mutual fund investment decision of Indian investors. *International Journal of Behavioural Accounting and Finance*, 2(3-4), 328-345
 14. Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned behavior in predicting intention to trade online: Some evidence from a developing country. *International Journal of Emerging Markets*, 2(4), 348-360
 15. Hong, H., Kubik, J. D., & Stein, J. C. (2004). Social interaction and stock-market participation. *The Journal of Finance*, 59(1), 137-163
 16. Kaiser, F.G., Oerke, B., & Bogner, F.X. (2007). Behavior-based environmental attitude: Development of an instrument for adolescents. *Journal of Environmental Psychology*, 27(3), 242-251
 17. Kashif, M., Zarkada, A., & Ramayah, T. (2016). The impact of attitude, subjective norms, and perceived behavioural control on managers' intentions to behave ethically. *Total Quality Management and Business Excellence*, 29(5-6), 481-501
 18. Kaur, I., & Kaushik, K.P. (2016). Determinants of investment behavior of investors towards mutual funds. *Journal of Indian Business Research*, 8(1), 19-42
 19. Kidwell, B., & Jewell, R. (2008). The influence of past behavior on behavioural intent: An information-processing explanation. *Psychology and Marketing*, 25(12), 1151-1166
 20. Koropp, C., Kellermanns, F.W., Grichnik, D., & Stanley, L. (2014). Financial decision making in family firms: An adaptation of the theory of planned behavior. *Family Business Review*, 27(4), 307-327
 21. Kumar, S., & Goyal, N. (2016). Evidence on rationality and behavioural biases in investment decision making. *Qualitative Research in Financial Markets*, 8(4), 270-

22. Lin, H. (2010). Applicability of the extended theory of planned behavior in predicting job seeker intentions to use job-search websites. *International Journal of Selection and Assessment*, 18(1), 64-74
23. Listyarti, I., & Suryani, T. (2014). Determinant factors of investors' behavior in investment decision in Indonesian capital markets. *Journal of Economics, Business, and Accountancy Ventura*, 17(1), 45-54
24. Lynch, S. (2003). Cohort and life-course patterns in the relationship between education and health: A hierarchical approach. *Demography*, 40(2), 309-331
25. Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, 2(3), 173-191
26. Meiser, T., & Hewstone, M. (2006). Illusory and spurious correlations: Distinct phenomena or joint outcomes of exemplar-based category learning? *European Journal of Social Psychology*, 36(3), 315-336
27. Olokoyo, F., Oyewo, B., & Babajide, A. (2014). Attitude of investors to capital and money market investments before and after financial crisis. *International Journal of Sustainable Economies Management*, 3(1), 53-64
28. Wood, R., & Zaichkowsky, J. (2004). Attitudes and trading behavior of stock market investors: A segmentation approach. *Journal of Behavioral Finance*, 5(3), 170-179
29. Wood, W., Tam, L., & Witt, M.G. (2005). Changing circumstances, disrupting habits. *Journal of Personality and Social Psychology*, 88(6), 918-933

Tables: Table 1: Measurement Model's result

| | Items | Factor Loading | Cronbach's Alpha Extracted | Composite Reliability | Average Variance |
|------------------------------------|-------|----------------|----------------------------|-----------------------|------------------|
| Emotional Behavioral Biases | EB1 | 0.740 | 0.857 | 0.850 | 0.635 |
| | EB2 | 0.690 | | | |
| | EB3 | 0.840 | | | |
| Cognitive Behavioral Biases | CB1 | 0.840 | 0.907 | 0.916 | 0.663 |
| | CB2 | 0.820 | | | |
| | CB3 | 0.980 | | | |
| | CB4 | 0.730 | | | |
| | CB5 | 0.670 | | | |
| Intention to Invest | IID1 | 0.870 | 0.866 | 0.899 | 0.671 |
| | IID2 | 0.750 | | | |
| | IID3 | 0.870 | | | |

Table 2: Correlation among the Constructs

| Constructs | EB | CB | IID |
|------------|--------------|--------------|--------------|
| EB | 0.824 | | |
| CB | 0.181 | 0.809 | |
| IID | 0.533 | 0.486 | 0.811 |

Table 3: Result of structural model and hypothesis testing

| Path | B | t-value | Hypotheses | Results |
|--------|------|---------|----------------|-----------|
| EB→IDD | 0.22 | 6.119* | H ₁ | supported |
| CB→IDD | 0.32 | 6.553* | H ₂ | supported |

*Denotes $p < 0.05$.