

UNMASKING INVESTOR BIASES: A STUDY FROM DELHI-NCR

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Abstract

The paper is an attempt to study the relationship between different biases and the investment decision-making of the investors, in this study three biases were selected namely Over-confidence bias, disposition bias and Home bias. To achieve the objectives this study gathered data from a sample of 400 respondents and the data analysis took place with the help of SPSS and Warp-PLS. Findings of the study suggested overconfidence bias does not share a significant relationship with investment decision-making but on the other hand disposition and home bias share a significant relationship with investment decision-making.

Keywords: Investment Decision-Making, Over-Confidence, Disposition, Home, Warp-PLS

INTRODUCTION

Stock market has been covered by the traditionalists in the recent decades and the movements of the stock market were seen through the prism of traditional finance theories (Lintner, 1965). These theories emphasized upon the risk and return aspects of the investments. Framework of these theories were based on rationality of the human mind while making investment decisions. But the basic flaw of these theories lies in the assumption of rationality in behavior of individual investors while making investments (Sharpe, 1964; Lintner, 1965; Fama, 1970). Therefore, traditionalists were unable to decode the mystery behind the stock market movements and irrational behavior exhibited by individuals during trading. With these a new study or a new branch of finance evolved known as behavioral finance which emphasized upon the behavioral factors of the investors and the consequences of those decisions taken under undue influence of biases. In other words emotions, feelings and instincts play a pivotal role in the emergence of irrational decisions taken by investors. Behavioral finance ultimately leads to decoding of mystery behind stock market movements and irrational behavior of investors (Kahneman, Tversky, 1979).

In studies on financial markets institutional investors are found to be smarter with respect to their trading behavior but on the other hand individual investors are termed as noise traders

With the passage of time the behavioral finance theorists found one more important aspect that behavioral biases changes their magnitude in different countries. Asian investors have exhibited the traits of herding bias during their trading activities.

Home bias is another bias which plays pivotal role in shaping the decisions of investors as under the influence of this bias investors tend to stick to their obvious choices and they don't try to experiment to increase their returns. On the other hand over-confidence bias makes investors to place extra-ordinary confidence in their decisions with respect to investment. Disposition bias points to the inclination of the retail investors to sell their profit making positions as soon as possible while holding on to loss making positions in hope of squaring them off in profit.

In the present study an attempt has been made to understand the linkages between Overconfidence, Disposition and Home biases with Investment Decision Making.

LITERATURE REVIEW

Home Bias

Beracha et al. (2014) considered Home bias as closely related to affinity with culture. He found that HNI investors and mutual fund managers tend to trade frequently in those countries which are culturally quite similar to their home country. **Fedenia et al. (2013)** examined the language aspect in the home bias and the resultant effect on the investment decision making, as according to this study investors coming from English speaking countries tend to

exhibit less home bias during trading activities. **Anderson et al. (2011)** suggested that cultural closeness between the countries of institutional investors and target countries leads to the preference given to the similar country. **Suh (2005)** in his study showcased evidence of prevalence of home bias in the investment of financial institutions of global level, and showcasing that home assets have been preferred over foreign assets. Hamburg (2013) studied the impact of different accounting practices in different countries on home bias and concluded that it results in the weakening of home bias after steps like IFRS accounting system as practices became uniform. **Oehler et al. (2008)** studied the investment pattern of German mutual funds and found that German portfolios are heavily invested in domestic stocks but it also concluded that investment pattern of German mutual funds are shaped by home biased investors of Germany. **Lütje and Menkhoff (2007)** conducted study to understand home bias exhibited by mutual funds and concluded that for gaining information advantage they prefer to stay invested in the domestic stocks. **Menkhoff et al. (2010)** carried out a research on Home bias in Germany and divided the respondents into three categories namely individual investors, institutional investors and investment advisors and concluded that institutional investors exhibited home bias during trading activities.

Disposition Effect

Barber et al. (2007) carried out research in the stock market of Taiwan and disposition effect was seen among the retail investors' behavior but institutional investors did not exhibit this bias. It is closely linked to the patience and belief in one's positions. **Talpsepp (2011)** carried out study in Estonia to understand the impact of Disposition effect, divided the sample population in the category of domestic and foreign investors and observed that institutional investors did not exhibit disposition in the trading behavior. **Cici (2012)** stated that when mutual funds are desperate to earn profits and when managed by a team tend to showcase effects of disposition. **Choe and Eom (2009)** examined the impact of disposition effect on futures trading and concluded that impact of disposition effect has weakened over the period of time with the advent of superior technology and experience of dealing in stock market.

Over-Confidence Bias

Mishra and Metilda (2005) have suggested in their study that more experienced and sophisticated investors usually exhibit traits of over-confidence during trading in comparison to less educated and less experienced retail investors. **Barber and Odean (2001)** have studied the prevalence of over-confidence in context of gender and concluded that Men are more confident as compared to their female counterparts. **Odean (1998)** suggested in his study that over-confidence bias leads to the muted response to a verified piece of information about any particular stock and resulting in unexpected losses. **Baker and Nofsinger (2002)** examined the impact of over-confidence bias among retail investors and concluded that it generally leads to a tendency among investors to control events, underestimating risks and overestimating their knowledge during trading and leading to losses or below average return. **Cooper, Folta and Woo (1995)** examined various aspects of over-confidence bias that affects retail investors and concluded that investors do not seek help during decision-making process and end-up making wrong decisions.

Objective of the Study

- Primary purpose of the study is to comprehend the linkages between over-confidence, disposition and home bias with the investment decision making of the retail investors in Delhi-NCR.
- Objective of the study is to cover the Home Bias which is less-covered in relation to investment decision making.

METHODOLOGY OF THE STUDY

By perusing the available literature in the public domain structured questionnaire was designed which was divided into two parts. First part was carrying questions related to personal details of the respondents and Second part was dealing with questions related to behavioral biases and investment decision making using with the help of a Likert Scale.

The study involved a sample size of 400 respondents belonging to the Delhi-NCR area as Delhi-NCR is the most important part of India in terms of politics and financial activities, as people are more flexible in sharing their beliefs and thought process while making investment decisions. Data collection took place with the help of Google form.

Data Analysis and Hypothesis Development

Data-analysis in this study was conducted with the help of SPSS 23. As the key variables to be studied were clear from the onset their linkages or relationships with the investment decision making needed to be studied from a different perspective and the linkages were tested with the help of WARP-PLS 7.0 so that every factor can be analyzed in isolation with each other. Following Hypothesis were formed to simplify the research process:

- H01: over-confidence bias does not share a significant relationship with investment decision making of investors.
H02: home bias does not share a significant relationship with investment decision making of investors.
H03: disposition bias does not share a significant relationship with investment decision making of investors

Demographic Profile

Table 1 Demographic Profile

Gender	Frequency	Percent
Male	203	50.75
Female	197	49.25

Table 2 Age

Age Group	Frequency	Percent
18-30	227	56.75
31-45	148	37
46-60	23	5.75
More than 60	2	0.5

Table 3 Marital Status

Status	Frequency	Percent
Married	171	42.75
Unmarried	229	57.25

Table 4 Educational Qualification

Education	Frequency	Percent
Graduation	214	53.5
Post-Graduate	148	37
Doctorate	16	4
Others	22	5.5

Table 5- Occupation

Occupation	Frequency	Percent
Private Sector Employee	107	26.75
Public Sector Employee	44	11
Self-Employed	71	17.75
Retired	1	0.25
Others	177	44.25

Income

Table 6

Income	Frequency	Percent
Less than 03 Lakhs	272	68
3-6 Lakhs	42	10.5
>6-10 Lakhs	42	10.5
>10 Lakhs	44	11

Investment Experience

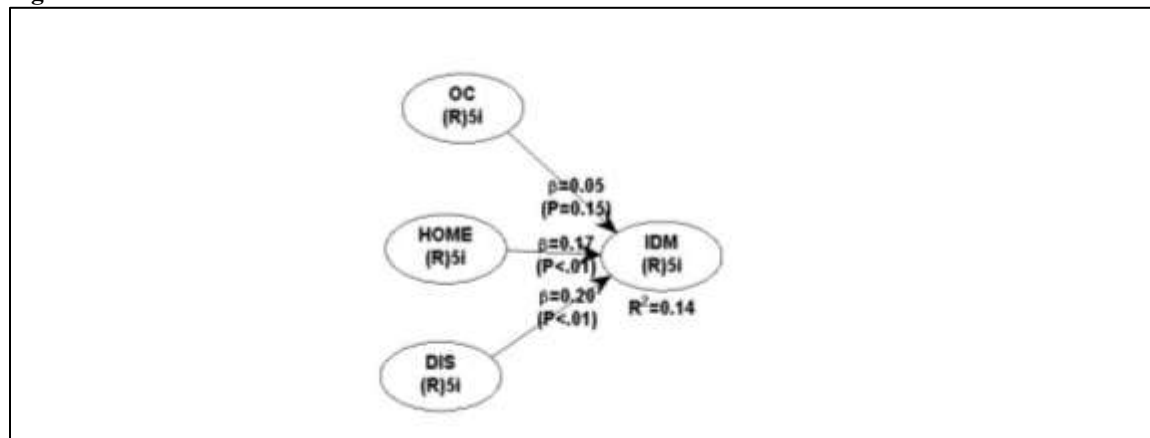
Table 7

Experience	Frequency	Percent
Less than 02 Years	282	70.5
2-5 Years	77	19.25
>5-10 Years	18	4.50
>10 Years	23	5.75

RESULTS

Research Framework

Figure 1 Research Framework



Reliability

Cronbach's alpha is the most widely used method to analyze the reliability of a construct in the questionnaire, as it measures the inter-item reliability. Cronbach's alpha is usually acceptable when the construct value is more than 0.70. Each construct in this study has measured more than 0.70 showing high correlation.

Table 8

Construct	No. of Items	Alpha (α)
OC	5	0.775
DIS	5	0.809
HOME	5	0.808

Measurement Model (Convergent Validity)

For analyzing the statistical aspects of the model in the case of reflective items can be done by testing construct validity. In addition to this various other aspects were examined like AVE, Convergent Validity, and Discriminant Validity. Composite reliability is relied upon mainly to assess the internal consistency of the variable and the factor loadings are expected to more than 0.70, in the present study all the factor loading are more than 0.70 whereas AVEs are higher than 0.50. In the case of assessing discriminant validity the AVE value of construct should be more than inter construct correlation.

Table 9

Items	Factor Loadings
OC1	0.712
OC2	0.734
OC3	0.758
OC4	0.721
OC5	0.706
Home1	0.777
Home2	0.733
Home3	0.749
Home4	0.782
Home5	0.721
DIS1	0.708
DIS2	0.773
DIS3	0.753
DIS4	0.784
DIS5	0.746
IDM1	0.778
IDM2	0.744
IDM3	0.740
IDM4	0.752

IDM5	0.757
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Table 10 Confirmatory Factor Analysis

Items	Overconfidence	Disposition	Home Bias	Investment Decision Making
AVE	0.528	0.567	0.567	0.569
Composite Reliability	0.848	0.867	0.867	0.868

Table 11 Full Collinearity VIF

Overconfidence	Home	Disposition	Investment Decision Making
1.195	1.107	1.239	1.122

Table 12 Discriminant Validity

Constructs	Overconfidence		Disposition		Home Bias		Investment Decision Making	
	FLC	HTMT	FLC	HTMT	FLC	HTMT	FLC	HTMT
Overconfidence	0.727		0.370		0.215		0.214	
Disposition	0.370	0.468	0.753		0.240	0.298	0.273	
Home Bias	0.215	0.270	0.240		0.753		0.218	
Investment Decision Making	0.214	0.270	0.273	0.337	0.218	0.269	0.754	

Table 13 Hypothesis Results

Relationship	Path Coefficient	P-Value	Hypothesis Supported
Overconfidence → Investment Decision Making Behavior	0.052	0.150	Supported
Home → Investment Decision Making Behavior	0.169	<0.01	Not Supported
Disposition → Investment Decision Making Behavior	0.201	<0.01	Not Supported

DISCUSSION AND CONCLUSION

The study analyses the impact of Overconfidence bias, Disposition Bias and Home Bias on the Investment Decision Making of the retail investors in Delhi-NCR area. In a fast-growing economy like India people are rapidly expanding their area of operation in terms of investment and in pursuit of earning high return on their investment, they try to explore new investment avenues like stock market (shares and mutual funds). As stock market is known for its unpredictability and daily volatility, an investors is expected to behave diligently. The findings of the study reveal that disposition bias has a significant relation with investment decision making, in other words people in Delhi-NCR are suffering from disposition bias during investment decision making which is consistent with the previous studies like Frazzini (2006), which found that disposition affects the investment behavior to a great extent, due to which retail investors sell their profit making shares very soon and holding on to loss making stocks far longer than they should. Whereas overconfidence bias is not significantly related with investment decision making as people with achieving maturity and with the help of using other tools can overcome the problem of overconfidence during investment decision making but our findings in relation to overconfidence bias is partly consistent with previous studies like Kurniawati D. et al. (2019), which found that overconfidence leaves a positive impact on the outlook of investors. But on the contrary Home bias was found to be sharing a significant relation with investment decision making, which is quite similar to the findings of the previous studies like Kang (1997) which found that foreign investors also wish to place more importance to those shares where they enjoy informational advantage. This brought to the fore a critical aspect of the retail investor's personality that due to easy availability of data they prefer to invest in domestic companies rather than going global for earning higher rate of return as it is not possible for them in case of global companies to gather credible piece of information about their financial health due to which sometimes they are not

able to take advantage of many lucrative opportunities in the foreign markets and this hampers growth as an investor. By taking stock of the thought process of the investors with the help of this research regulators and mutual funds can formulate policies which can help them train retail investors to invest properly in the stock market in a balanced way and will also help financial advisors to advice investors in an even-handed manner, in the context of various biases affecting their decision making.

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