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Research Paper

A Study on the Characteristics, Behavioural Biases and Risk Tolerance of Investors in Kannur District, Kerala State

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ABSTRACT : *Financial markets serve as a crucial link between savers and investors by enabling the efficient allocation of financial resources from units with surplus funds like households to units with deficit of funds like businesses, governments, and entrepreneurs. One of the major participants in these markets are individual investors who invest their savings in these markets with an expectation of getting high returns. These investors, non-professional participants who invest personal savings in financial instruments and understanding the behaviour of these individual investors is important because they constitute a significant and growing segment of financial markets, particularly in emerging economies like India. In this direction, this study focuses on understanding the behaviour of retail investors residing in Kannur district, Kerala. This study aims at examining the demographic profile, investment preferences, behavioural biases and risk tolerance among the investors in the study area. Data was collected from 185 investors using structured questionnaire. It is found that majority of the respondents are male, married, 26 - 45 years in age, with monthly income between ₹20000 and 80000 and educated. Most of the investor use electronic and online media for information and invest in fixed deposits and bonds other than shares. Majority of the respondent's exhibit behavioural biases like overconfidence, disposition effect and herding behaviour. Among the information used for investment decisions, recommendation of financial analyst is the most commonly used source followed by earnings announcements made by companies. With respect to risk tolerance, it is seen that majority of the respondents are ready to take average to substantial risk.*
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KEYWORDS: *Individual Investors, Behavioural Biases, Sources of Information, Risk Tolerance.*

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I. INTRODUCTION

Financial markets are avenues used in the trading of financial instruments like stocks, bonds, and derivatives. They play an important role in connecting the savers with the investors by facilitating the effective distribution of financial resources between the surplus units (households) and the deficit units (businesses, governments and entrepreneurs) who would need capital. Financial markets encompass in general, capital markets, money markets, foreign exchange markets, and derivatives markets which have their own specialized roles in the financial system. Such markets are very crucial in raising capital as they help in collecting savings and channeling it to productive investment opportunity thus contributing to the growth of economy [1]. Efficiency in financial markets is also believed to increase liquidity, risk management and price discovery which is necessary to achieve the stability and growth of the economy. In India, it has been found that the market-based indicators of financial development have a positive impact on economic growth [2]. Individual investors are one of the important player in these markets and they invest their savings in such markets hoping to get high returns.

Retail investors or individual investors are non-professional investors who use their comparatively smaller personal savings to invest in financial instruments, namely equities, mutual funds, bonds, fixed deposits and other market-linked products. The individual investors are more prone to psychological and behavioural influences than institutional investors because they usually lack access to advanced information and analytical skills compared to institutional investor [3]. The behaviour of individual investors has now become a major focus of research in the field of modern finance especially given the fact that financial markets are now getting more complex, technologically advanced and accessible to a broader audience. The behaviour of individual investors is a factor that should be understood since they form an important and an increasingly growing proportion of financial markets, especially in emerging markets such as India. The decisions they make regarding investments affect the liquidity, volatility, and capital formation of the market, which makes it necessary to employ specific financial education programs and protection mechanisms for investors [4].

The behaviour of individual investors has emerged as a focus topic for research in finance in the recent times with the financial markets becoming increasing complex and accessible. Although investors are assumed to be rational in processing all the available information the context of traditional finance, behavioural finance proves otherwise by showing that psychology and cognitive biases play a crucial role in influencing financial decision-making [5,6]. Such behavioural forces exhibited by investors tend to cause irrational choices when it comes to investment preference, risk taking behaviour, and market performance.

In the Indian context, advanced digital investment platforms, and financial literacy programs have been rapidly growing in the Indian capital market, leading to an increased number of people entering the stock markets as retail investors [7,8]. Kerala, with its high literacy levels, huge amounts of non-resident remittances and the culture of high saving, is a unique place to study investor behaviour. At the state level, Kannur district has its peculiarities such as the high concentration of expatriates, the increasing exposure to equity and mutual funds market and the growing use of online trading tools which can influence the financial attitudes of investors and the trends of their decisions-making.

In spite of such favourable conditions, the behavioural trends of investors in Kannur have not been subject to academic focus. Knowledge of these patterns regarding investors in Kannur will be useful to financial planners, policy-makers, investment advisors, and others. This is because behavioural biases such as overconfidence, herd behaviour, and loss aversion, anchoring and mental accounting, affect the ways people assess risk and select investment products [4,9]. Looking into these dimensions of investor behaviour within a localised setting can be able to capture region-specific factors like the socio-economic background, risk tolerance levels, and financial awareness that influence the investment decisions in the region.

Hence, the proposed paper seeks to determine the behavioural variables affecting investment choice among retail investors in the Kannur district in Kerala. The study aims to determine demographic, psychological, and behavioural factors that determine the behaviour of investors by combining theories of behavioural finance with evidence-based research regarding the region. It is hoped that the findings will add to the larger literature in behavioural finance literature and provide practical information that is useful to those advisors, intermediaries, regulators and policy makers dealing with investors in this and other markets.

1.1 Problem Statement

The behaviour of the investor is a factor that has been well identified as a determinant in the determination of financial choices particularly in the emerging markets where the retail participation is hitting impressive strides. Although the behavioural finance literature has put much emphasis on the effect of psychological biases, socio-demographic and risk perception on investment decision-making [5,9], there is a scarcity of knowledge on how these factors translate to local and regional backgrounds in states such as Kerala. In Kerala, Kannur district is a special socio-economic portrait in the view of non-resident Indian households, evolving financial dreams, and exposure to equity and mutual fund markets. Nonetheless, there are few empirical studies that feature the behavioural patterns of investors in Kannur. This deficiency in region-specific evidence leaves gaps in the comprehension of how behavioural biases, risk tolerance and financial attitude determine investment decisions in this district. Thus, it is considered that a systematic study is needed to determine the psychological, demographic, and socio-cultural factors that influence investor behaviour in Kannur among retail investors.

1.2 Significance of the Study

Regional level of investor behaviour is important in developing effective financial education programs, enhancing advisory service, and market participation. The behavioural biases often cause investors to make suboptimal choices that cause excessive trading, market-noise trading, or avoidance of profitable investment opportunities because of fear of loss [4,6]. Interpreting the presence of these behavioural patterns among investors in the Kannur district, the study gives good information on how these psychological and behavioural variables

II. REVIEW OF LITERATURE

Regarding the studies on investor, the traditional financial theories assume that investors are rational in their decision making and hence the financial markets are efficient [10]. However, the assumption of this

Efficient Market Hypothesis has been challenged by the emergence of behavioural finance. According to Kahneman and Tversky [5], based on their Prospect Theory, they are of the view that individuals evaluate outcomes based on perceived gains or losses, and not on absolute wealth. They are of the opinion that individual investors tend to be loss-averse. In this regard, Barberis and Thaler [9] further argue that cognitive limitations, heuristics, and emotional factors led investors to deviate from being rational decision makers. Statman [4] has highlighted that investors seek not only utilitarian benefits but also expressive and emotional satisfaction. With respect to individual investors, Thaler [6] has put forward the concept of mental accounting, he believes that investors treat money differently depending on psychological categories or mental accounts. These ever-growing theoretical developments in behavioural finance illustrates that investment behaviour of individual investors results from a combination of psychological biases, emotions, and heuristics. These theories provide a strong foundation for exploring behavioural tendencies among Kerala based investors.

Various studies on the behaviour of individual investors have demonstrated behavioural biases significantly influence portfolio choices and trading activities. Overconfidence has been shown to cause excessive trading and underestimation of risk [11], whereas herd behaviour leads investors to mimic the actions of others, especially in volatile markets [12]. Studies also report the persistence of anchoring, mental accounting, regret aversion, and the disposition effect among global investors [13]. These findings help establish behavioural biases as universal phenomena, relevant regardless of geography or market structure.

Behavioural finance has gained considerable attention in India due to rising retail participation in financial markets. Chandra and Kumar [14] found evidence of heuristics, representativeness, overconfidence, and availability bias among Indian investors. They also find the existence of an asymmetric pattern of distribution and usage of information among individual investors. Pati and Shome [15] have observed that investors prefer bank deposit schemes rather than switching over to high yielding but risky channels of savings. Sultana and Pardhasaradhi [16], based on their studies have found that most of the equity investors do not have sufficient knowledge of basic economic concept to make informed investment decisions. They have also found that some of the major factors influencing investment decisions are wealth maximisation, risk minimisation, brand perception, financial expectation and accounting information. Studies have been conducted in various Indian cities to understand the behaviour of individual investors. These studies reveal that demographic factors such as income, age, gender, occupation, and educational background play a major role in shaping investment preferences [17]).

Studies have been conducted in Indian context to examine the influence of various factors like financial literacy, risk tolerance, and behavioural biases on investment decision making. Sivaramakrishnan et al. [18] in their study have found that higher financial literacy positively influences stock market participation. They are also of the opinion that biases such as overconfidence or anchoring are present among the investors. Other studies have indicated that psychological, socioeconomic, and demographic factors are found to influence the ability of the investors to tolerate risk [19]. Also it this seen that that limited financial literacy often results in investors relying more on heuristics or social cues while making investment decisions, and they are found to be increasing susceptibility to biases like herding and availability [20]. These studies on the behaviour of Indian investor shows that these investors are not purely rational and they are often guided by behavioural tendencies that are shaped by socio-economic and psychological influences.

It is found that studies on the behaviour of individual investors in Kerala are few. Kerala provides an interesting context due to its high literacy rate and strong saving habits. In this direction, the present study intends to understand the behaviour of individual investors, with special reference to Kannur district of Kerala. Existing Kannur-based research is largely confined to mutual funds and does not examine broader categories such as equity, fixed deposits, digital investments or gold. Nor does it comprehensively study multiple behavioural biases such as overconfidence, disposition effect or herding. This highlights a clear need for a more holistic behavioural study focusing on individual investors in Kannur district.

2.1 Objectives of the Study

This study on behaviour of investors in Kannur was conducted with the following objectives.

- To examine the demographic profile of retail investors in Kannur district, Kerala.
- To identify the various investment avenues used by the investors.
- To understand the usage of sources of information by the investors.
- To examine the presence of various behavioural biases among the investors.
- To explore the level of risk tolerance among investors in Kannur.

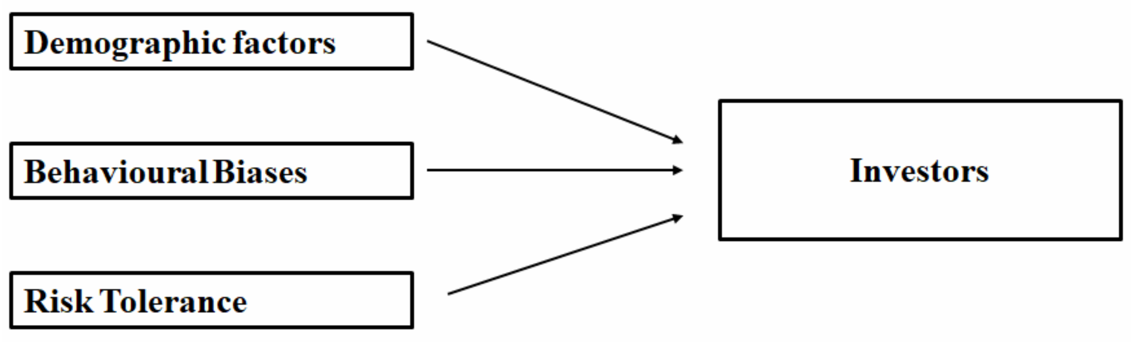

Fig. 1: Conceptual Model for the Study

III. METHODOLOGY

In this study to understand the behaviour of individual investors, the data from the investors was collected through survey method. Questionnaire is used as the instrument for collecting data. The questionnaire was development considering the research objectives and the questionnaire was divided into four sections based on the data to be collected. First section consists of questions related to the demographic details of the respondents that need to be collected. Second section consists of questions on information regarding investments made and the sources of information used. Third section consists of question to understand the behavioural bias among the respondents. Finally, the fourth section consists of questions related to evaluating the risk tolerance of investors. The items included in questionnaire to capture the data and information were adopted from standardized questionnaires developed or used by earlier researchers. Validity and reliability of the items in the questionnaire was tested as per the criteria used by previous researchers and was found to be acceptable.

This study is conducted within the geographical region of Kannur district in Kerala state in India. The population for this study consists of all investors in Kannur district who are investors in the stock market. As the population for this study is very large, it is not possible and necessary to elicit information from all of them. So a sample of the population was selected using convenient sampling technique. Total of 200 investors were approached with the questionnaire for this study. Both hard copy of the questionnaire as well as in the form of Google Form is used depending on the convenience of the respondent. Favourable response was received from 188 respondents. Finally, considering the defective questionnaires, 185 complete questionnaires that could be used for this study was received and used for this study.

The data thus collect was analyses to find out the relationship between the variables within the conceptual model developed for this study. The data collected was subject to preliminary data analysis like data cleaning, data editing, coding and data entry. The data analysis was conducted using SPSS software and the results of the data analysis is discussed in the following sections.

IV. RESULTS AND DISCUSSION

The data collected was analysed using SPSS software and the results obtained are discussed in the following sections.

4.1 Demographic Characteristics of the Respondents

From the data collected for this study the demographic characteristics of the respondents was analysed. Demographic characters of investors is considered to be important in understanding investors behaviour. Table 1 below shows the demographic characteristics of the respondents in this study.

Variable	Category	Percentage
Gender	Male	79.0
	Female	21.0
Age (Years)	< 25	5.4
	26-35	40.0
	36-45	40.0

	> 46	14.6
Monthly Income (₹)	< 19999	12.3
	20000 - 39999	24.7
	40000 - 59999	26.4
	60000 - 79999	18.5
	80000 - 99999	4.4
	> 100000	13.6
Marital Status	Single	18.5
	Married	81.5
Education	Under Graduate	6.2
	Graduate	28.4
	Post Graduate	65.4

Table 1: Demographic Profile of the Respondents

Gender is considered to be an important factor that influences stock market participation. In this study, it seen that majority (79%) of the respondents were male and only 21% of the respondents were female. Such dominance of male among investors have been reported in many studies in India and abroad. This indicates that the participation of female as investors in stock market is less and necessary measures have to be undertaken to motivate their participation as investors in stock market.

With respect to the age of the participants it is seen majority (80%) of the respondents are in the age group of 26 – 45 years. While about 15% are above 46 years in age, only about 5% are less than 25 years of age. From this it can be concluded that majority of investors could be those who have settled in their life.

With respect to monthly income it can be seen that majority (51%) of the respondents have a monthly income in the range of ₹20000 to ₹59999. While about 18% have monthly income of₹60000 to ₹79999, about 13% have monthly income of more than ₹100000, and about 13% have monthly income of less than ₹19999 and only about 4% have monthly income between ₹80000 and ₹99999. This indicates that with respect to income the middle income group comprises the major part of investors.

Regarding the marital status of the respondents, it can be seen that while majority (81%) of them is married only about 19% are unmarried. This shows that those who have settled down in the life with a family are more inclined to investments.

When education is taken into consideration, majority (65%) of the respondents are post-graduates. While about 29% of the respondents are graduates, only about 6% of the respondents are under-graduates. It could be concluded that more educated people are more inclined towards investments. This could be the reason that they have more knowledge about investing.

4.2 Trading Characteristics

The data collected about trading behavior of the respondents with respect to their trading experience, sources of information that they use for making trading decisions and various assets in which they invest have been analysed and presented in Table 2.

Variable	Category	Percentage
Trading Experience (Years)	< 2	34.3
	3 - 6	31.9
	> 7	33.8
	Electronic media	55.3

Sources used for Information	Brokers	43.7
	Friends& Relatives	33.6
	Print Media	39.5
	Online Resources	77.5
	Company Announcements	38.0
	Own analysis	44.7
Investment Assets	Fixed Deposits	45.4
	Shares..	100.0
	Debentures/ Bonds	25.4
	Derivatives	18.5
	Gold/ silver	33.6
	Real Estate	32.1

Table. 2: Trading Characteristics of the Respondents

With respect to trading experience it can be seen that while about 34% of the respondents have been trading for less than two years, about 32% have trading experience of tree to six years and about 34% have trading experience of more than seven years. From this it can be inferred that number of new investors and experienced investors are approximately same and this could be because of the reason that investors who have trading experience are leaving the market after some time, otherwise the number of experienced investors should have been high.

The sources of information used by the investors are very important for making good investment decisions. On analysing the sources that were used by the respondents it was seen that online sources was used by majority (78%) of investors. While electronic media was used by about 55% of the respondents, about 45% of the respondents did their own analysis and about 44% of the respondent relied on brokers for information. It is also seen that about 40% of the respondents used print media as source of information, about 38% relied on announcements made by the companies and about 34% took advices from friends and relatives. From the above data it can be inferred that while online resources and electronic media is the most widely used source of information, investors also use all other sources to a lesser extend as source of information while making investment decisions.

Data was also collected with respect to the other assets in which these respondents invest other than stocks. Multiple options were given to respondents and from the analysis of this data it was seen that other than shares, fixed deposit turned to be the next attractive avenue with about 45% respondents investing in that. While about 34% invested in Gold/ Silver, about 32% invested in Real Estate, about 25% invested in Debentures/ Bonds and only about 19% invested in Derivatives. Thus it can be inferred that among the respondents apart from shares, most of them invest variety of avenues and there is no avenue that is more preferred.

4.3 Behavioural Biases among the Investors

Investors are considered to exhibit various behavioural biases that influences their investment behaviour. With respect to this study, three major biases exhibited by investors, namely overconfidence, disposition effect and herding have been considered. Responses were collected from the respondents on statements intended to understand the presence of these three biases among the investors and this section discusses the related findings.

4.3.1 Overconfidence

On the analysis of the data collected, it was found that overconfidence bias was prevalent among the respondents with mean values of 3.39, 3.35 and 3.40 out of the maximum of 5.0 for the three statements used for measuring this bias. This has been shown in Table 3.

Behaviourial Bias	Statements	Mean value
Overconfidence	I am confident that my investment knowledge is above average	3.39
	My past investment successes can be attributed to my own skills and understanding	3.35
	I believe that my skills and knowledge of stock market can help me to outperform the market	3.40

Table 3: Overconfidence Bias among the Respondents

4.3.2 Disposition Effect

The results from the analysis of the data with respect to the presence of disposition effect among the respondent, it is found that disposition effect was present among the respondents The mean value is found to be 3.21, 3.15 and 3.08 for the three statements used for measuring this bias. It is to be also noted that eventhough this bias is present among the respondent, when compared to the earlier measured overconfidence bias, the disposition effect is found to lesser extent. Table 4 gives that details of the analysed data regarding disposition effect.

Behaviourial Bias	Statements	Mean value
Disposition Effect	My past investment successes make me invest more in stocks	3.21
	I prefer to sell stocks as soon as their price starts increasing	3.15
	I prefer to keep holding on to stocks even if their past performance is not very encouraging	3.08

Table 4: Disposition Effect among the Respondents

4.3.3 Herding

With respect to the presence of herding, it is seen that herding is present among the respondents. The mean value for the three statements used for measuring herding is found to be 2.97, 2.94 and 2.92. Eventhough the presence of herding behavior is seen among the respondents, level of herding compared to the other two biases discussed above is low. The analysis of data in this regard is given in Table 5.

Behaviourial Bias	Statements	Mean value
Herding	I prefer to buy stocks if many "buy" orders were placed from the beginning of the trading session	2.97
	Other investors' decisions of buying and selling stocks have impact on my investment decisions	2.94
	I usually react quickly to the changes of other investors' decisions and follow their reactions to the stock market	2.92

Table. 5: Herding among the Respondents

4.4 Information Sources used by Investors

Various sources are used by investors for obtaining information to aid them in decision making. In this study, the usage of information by individual investors from four commonly available sources has been considered. These sources are the financial earnings announcement made by companies, dividend decisions taken by companies, recommendations given by market analysts and recommendations given by friends and relatives. From the analysis of the responses given by respondents it can be seen that the respondents found all the sources of information to be useful for making investment decisions. The summary of the responses in this regard is given in Table 6.

Sources of Information	Mean Value
Earnings announcements made by companies	3.30
Dividend Declaration	3.07
Analyst Recommendation	3.60
Friends and Relatives Recommendation	3.13

Table 6: Usage of Sources of Information by the Respondents

From the data on the usage of information from various sources, it is seen that eventhough all the above sources of information are considered to be useful by the respondents, most useful source is considered to be the recommendation of the analysts. This may be due to the fact that analysts are considered to be more informed. Next most useful source of information is considered to be the earnings announcements like annual, half yearly and quarterly performance reported by the companies. This is followed by advices and recommendations made by friends and relatives. Dividend declaration made by the companies is found to be the least useful among the sources considered in this study.

4.5 Risk Tolerance of Respondents

Risk tolerance is one of the important factors that influence investor decision making. The risk tolerance level of the respondents was classified into four categories. The result of this categorization is given in Table 7. It was found that majority (40%) of the respondents were ready to take average risk. While about 28% were ready to take above average risk, about 25% were ready to take substantial risk and only about 6% were not willing to take risk. Thus it can be inferred that a large proportion of respondents are ready to take average or above average risk or their risk tolerance level is high. Only very few respondents are not willing to take risk.

Level of Risk Tolerance	**Percentage**
Not willing to take risk	5.9
Take average risk	40.2
Take above average risk	28.4
Take substantial risk	25.4

Table. 7: Risk Tolerance of the Respondents

V. CONCLUSION

Financial markets serve as a crucial link between savers and investors by enabling the efficient allocation of financial resources from units with surplus funds like households to units with deficit of funds like businesses, governments, and entrepreneurs. One of the major participants in these markets are individual investors who invest their savings in these markets with an expectation of getting high returns.Individual investors, also referred to as retail investors, are non-professional participants who invest personal savings in financial instruments such as equities, mutual funds, bonds, fixed deposits, and other market-linked products.Understanding the behaviour of these individual investors is important because they constitute a significant and growing segment of financial markets, particularly in emerging economies like India. In this direction, this study focuses on understanding the behaviour of **retail investors residing in Kannur district, Kerala. This study aims at examining the** demographic profile, investment preferences, behavioural biases and risk tolerance among the investors in the study area.It is found that majority of the respondents are male, married, 26 - 45 years in age, with monthly income between ₹20000 and 80000 and educated.Most of the investor use electronic and online media for information and invest in fixed deposits and bonds otherthan shares. Majority of the respondent's exhibit behavioural biases like overconfidence, disposition effect and herding behaviour. Among the information used for investment decisions, recommendation of financial analyst is the most commonly used source followed by earnings announcements made by companies. With respect to risk tolerance, it is seen that majority of the respondents are ready to take average to substantial risk.

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