DRIVING FACTORS OF SMALL TICKET INDIVIDUAL INVESTORS IN FINANCIAL INVESTMENT INSTRUMENTS: EMPIRICAL REVISIT INVOLVING INDIVIDUAL INVESTORS

Diptayan Bhattacheryya, Adamas University
Gouranga Patra, Adamas University
Samyadip Chakraborty, IMI Kolkata

ABSTRACT

Financial markets have been evolving rapidly with technological development and enhanced information accessibility by investors. It has become more complicated since investors' choice-options and chance for making either rational or illogical decisions based on profound or limited knowledge respectively, have also grown manifold with availability of online investment options. Extant studies have largely discussed the conventional aspects of investment in different studies related to behavioural finance. Traditional investment orientation believes that investors are rational and make smart investment decisions to maximize profit or gain by selecting the best investment option, especially in difficult times. However, evidence highlights that investment decision making of individual investors depends not only on the availability of funds, but also on the understanding of different investment patterns. Therefore, it is very important for the marketers to understand the different levels of orientation of investors which help them to make the right investment decision about their personal financial investment. This study attempts to investigate the financial investment backdrop among the small ticket individual investors and also to identify the prominent factors affecting investment decision making for investment in financial products. Using a three-pronged triangulation approach of extant literature survey, case-based factual description and empirical validation, this study, using a structured questionnaire explored the aspects that concerned the small ticket investors in the investment front. Using exploratory factor analysis over a total sample response dataset of 284 small ticket investors from Eastern India (where mostly small ticket size investors are service class individuals), the study establishes six core investment behavioral dimensions for small ticket investors in Indian context, namely behavioural, psychological, investment, risk, technological and socio-economic orientations. The study moves forward and takes the first step towards proposing the scale items for small ticket-size investment-choice driver scale; thereby contributing to both academic and practitioners' body of knowledge.

Keywords: Small Ticket Investors, Investment Orientation, Investment Behaviour, Investment Decision.

INTRODUCTION

The nature of the financial market has seen changes with the advancement of technology and application and information is accessible to all consumers. Therefore, it is difficult for marketers to inject wrong thoughts to consumers as people can search information and they can choose the best option as per their requirement as per as financial product is concerned (Sahi, 2017). Traditional financial models describe that customers are

rational in their decision-making process and select fund options which are relevant to them. (Mittal, 2010). But it also noted that people feel that they are making logical decisions but finally shows that it is illogical because of lack of knowledge about the market which is hotly discussed in conventional and in part of behavioural finance. When we talk about the nature of traditional finance, it states that investors are rational and make errorless investment decisions in terms of selection of financial products which leads to minimizing risk and maximizing profit through the choice of best investment options and they do in different time periods (Kumar & Goyal, 2015).

When an individual makes their investment decision making, it does not depend only on their availability of funds but it is strongly connected with understanding the various patterns of investment. There are lot of studies conducted on this issue like (Baker & Wurgler, 2007; Banerjee, 1992) conducted study in various financial markets to judge that investment choices are not only made based on traditional financial theory which depicts profit and loss but it also depends on behavioural finance factors that is related to attitudinal perspective of the consumers. However, (Raiffa & Raiffa, 1968; Kahneman & Tversky, 2013) noted that investment behaviour of an individual mentioned in the theory is different from reality. There are two important aspects that matter with the investors before investment, is it rational or emotional. Theory highlights rational decision-making process whereas, some emotional issues move investors in making investment decisions which is the evidence of irrational market behaviour or inefficient markets. Here, the importance of behavioural finance is apparent. Individuals may not always be coherent, according to behavioural finance; instead, they are human beings who are having different risk carrying capabilities that leads to irrational decision making in their selection of financial products.

Irrelevant information towards various funds and emotional engagement of consumers has an impact on their investment decision making. The traditional finance theory assumes that investors believe in a rational decision-making process which is related to maximizing their profit and expanding their capital. There is another observation that investors often believe in the rule of thumb associated with investment which already exists in their mind and laborious mental calculations that may lead to poorer options and market friction (Arora & Chakraborty, 2021; Yang et al., 2021).

Marketers should keep in mind before launching any products that information processing to the consumers are limited. There is a study by (Simon, 1979) stating that a person's capability to grasp all the information is limited and overuse of information leads to incorrect decision-making process. Therefore, risk orientation to a financial product is very much important for consumers. It is a human feature known as "bounded rationality." Consequently, illogical and irrational thoughts may impact an individual in their financial decisions. There is also behavioural bias associated with financial decision making, it's associated with the attitude, information from peers and family etc (Jain et al., 2021). Apart from behavioural orientation, individual investment decision making is the result of psychological and mental orientation which persuade individuals to select the right decision on investment. In (Trehan & Sinha, 2018) explained a few difficulties of behavioural biases which leads to irrelevant decision making and these are loss aversion, overconfidence, herding, and risk perception which have a lot of impact on the decision-making process.

Various studies have been conducted to understand the role of planned behaviour model of investors in their financial decision-making process. It stated that less experience of an individual might be motivated to develop a cognitive mind set about the product that causes silent belief of own concept. On the other hand, consumers with a high level of experience and knowledge about financial products develop the capacity to judge right information and help to ignore the available information and buying decisions take place based on their past experience and decision. When consumers make decisions based on their

past experience, it causes cognitive bias and these cognitive biases lead to ratify the decision-making process. The above statement makes clear that planned behaviour is an important model that can be used by marketers to develop confidence within the investor mind about the investment proposal using two sides argument so that cognitive bias may be reduced.

When we talk about investing in financial products of an individual, it is important to have a minimum level of investment orientation for the consumers. These are related to financial knowledge, financial attitude, financial literacy and a few other components. In (Albaity et al., 2019; Han & Jang, 2013) mentioned that financial literacy is an important component of financial orientation of the investor in stock market as well as in other investments. The low level of financial knowledge can lead to information asymmetry which may affect the individual's participation in investment decision making. Fear and less knowledge about the market is an important factor to create a hurdle and keep the investors away from investing in risk fund investment (Van et al., 2011).

In (Kumar & Rajkumar, 2014; Subramanya & Murthy, 2013) conducted a study in the context of Indian investors and the study has given special focus on demographic characteristics of investors and its relation with the investment decision making of individual investors in India. The study claimed that behavioural orientation of the financial market of Indian consumers is a new concept and for that socio-psychological and economic aspects of investors are not addressed properly which is the reason the investors face difficulties to invest in risk- oriented funds. But there is an impact on the demographic profile of the investors.

From the above discussion we can conclude that to do right investment investors need proper behavioural orientation towards investment in various funds. Apart from that there is a need for psychological orientation that reduces cognitive bias as well as investment orientation that gives knowledge that is important for selecting the right fund.

The investment decision making process depends upon many factors and it varies from individual level of investors. None of the fewer decisions of the investors are linked to investment factors such as risk, ambiguity and product preference. Increased levels of financial literacy help to make good investment decisions with high confidence to manage risk. Investment decisions can be measured mainly on rate of return, risk level and prior information provided by the financial institutions to the individual level.

There is a similar study by on the validity of demographic factors and its role in deciding the investment behaviour of individuals in various levels of funds. Individuals can raise their level of living and make better investment selections by having a better awareness of the relationship between demographic characteristics and investment decision-making. Additionally, it will help legislators and financial organizations create new financial products. The prevailing assumption in economic and finance literature is that investors make their judgments on information that is readily available to the public as well as market sentiment.

From conducted a study on "investor irrationality and the decision-making process are based on cognitive psychology and biases related with people's beliefs and preferences". There are several studies discussing that financial decision making in terms of investment depends on several factors and these not only limited to psychology, behavioural, socio-economic, technology but also associated with residence of the households, risk taking attitude and demographic factors of the households. Studies reveal that demographics such as gender, age, income, education level and locality relate to investment decisions of people. Psychology influences the investment decisions of investors and due to this reason investor's investment decisions become acceptable ones but not optimal ones.

Technological orientation of the investors makes it a huge obstacle to invest in financial products. It is widely used by the financial institutions to promote their products online and the process of buying and selling is also done through online mode where the role

of intermediaries is reduced. Study made by (Zhang et al., 2015; Xie et al., 2016) mainly discussed on data volume, service variety and information protection and predictive correctness. The study established a relationship between information technology used in financial sectors and e-commerce and finance with the individual decision-making process. Artificial Intelligence, Machine learning and Big data improves the efficiency of risk-based pricing and risk management while significantly alleviating information asymmetry problems.

This is a continuous debate going on regarding data security, privacy and data protein by technology. Numerous studies have discussed that it helps to verify and collect the data, predict credit risk status, and detect fraud (Glancy & Yadav, 2011; Gray & Debreceny, 2014; Jin et al., 2018; Pejic 2019) identified that data mining technology plays vital roles in risk managing and fraud detection.

From the above discussion, it may clear us that there are some orientations which needs to be checked by the marketers before launching financial product and these are psychological orientation of the consumers towards investment in various scheme of investment because, a lot of studies indicate that psychological factors like financial attitude, locus of control, financial literacy takes huge role in decision making. In the same line behavioural orientation, socio-economic orientation of the individual helps to select investment like no risk, low risk and high-risk level of investment. There are two other important factors like risk orientation and investment orientation that take part, it is because of individual knowledge about the product and the associated risk with the financial product because most of the time investment is done without knowledge of these two factors. The last orientation which is very much important in the current context is the technology orientation, because most of the financial institutions now promote and sell their financial products using digital platforms. It helps consumers to get proper information about various investment proposals that reduce third party intervention as well as reduce risk and fraud chances. Looking into the above discussion the current study wants to address a few questions and the objectives of the research are as follows.

OBJECTIVES

1. To investigate the financial investment backdrop among the small ticket individual investors.
2. To identify the prominent factors affecting investment decision making for investment in financial products.
3. To establish a case-based understanding background to evaluate the investors psychology prompting investment decisions.

LITERATURE REVIEW

The current research is an attempt taken by the researcher to find out the relationship between different levels of orientation of consumers and its impact of taking financial investment decisions. In (Shleifer, 2000) conducted a study to know the impact of market information on an individual investor about their investment decision making. The study explained that proper market information enhances customer knowledge about the product and helps them to make rational decision making. In (Waweru et al., 2008) showed that, to some extent, investors' investment behaviour is affected by the changes in the price of in terms of interest of secured fund and stock market up and down movement. There are studies mentioning that significant price movement in various investment portfolios changes the behavioural orientation of the consumers and develops a negative belief of individual. In (Hilbert, 2012; Chaudhary, 2013). Cognitive dissonance, mental accounting heuristics and

anchoring of investors' thinking play a role for individual investors to make investment decisions.

In (Hilbert, 2012) explained that behavioural bias such as herding, overconfidence and reinforcement bias influence individual investors more as compared to their institutional counterparts. There are some different opinions made by (Chaudhary, 2013), the study stated on prospect of behavioral finance and claimed that the irrational decision making of the investors happens due to certain characteristics of individual like anchoring, overconfidence, herd behaviour, over and underreaction, and loss aversions and these all are the part of risk orientation of consumers and lesser knowledge leads to irrational financial decisions. Different financial traits and biases such as loss aversion, hindsight bias, anchoring, endowment effect, disposition effect and mental accounting help individual investors in making sound financial decisions.

Asserts that loss aversion plays a critical role in shaping people's assessment of risky bets. According to them, the inclination of a person to be more impacted by losses than equivalent benefits is known as loss aversion. In their research, (Akhter & Ahmed, 2013) discovered that a variety of factors, including recommendations from brokers, recommendations from friends and family, historical performance, media coverage, etc., affect investment decisions.

For investment of personal financial products, psychological orientation is an important determinant of individuals in their investment process, there are some important aspects like financial attitude, deliberate thinking, financial knowledge and self control etc. (Kahneman & Tversky, 2013) mentioned that heuristics or mental shortcuts have long been cited and considered to be the key foundation of behavioural decision-making of individuals. These two important deterministic models explain the process of individual decision making based on their past experience which tends to be biased in favour of past incidental reminders. With psychological orientation, socio-economic orientation takes part to shape the attitude of consumers by providing market information. It also explains social structure, cultural heritage, ethics and values make social pressure in decision-making has also been taken as an attribute of the decision model to examine the attitude of investors and hence, their risk-taking propensity (Brown et al., 2008). Factors such as to gain recognition in society, fear of criticism and constraints such as technical knowledge and lack of investment experience are the principal components of investors' irrational decision-making. Therefore, we can say that psychological and socio-economic orientation of individuals helps to develop a positive attitude towards investment, whereas, lack of investment orientation and technical expertise put them in the wrong decision-making process.

Studies have been conducted that attempt to build an individual's attitude toward making investment decisions at different risk levels. Few researchers have looked into this topic and found that AT significantly affects behavioral intention when it comes to financial decisions (Phan & Zhou, 2014; Raut & Das, 2017). Good purchasing intentions and the ability to take on risk in a variety of investments are developed by investors with a good mindset.

Anchoring bias is the emotional state of things that occurs when investors give statistically random and emotionally determined anchors too much weight, which causes them to make irrational decisions. "Anchoring" is the term for this emotional condition (Tseng, 2011; Liang & Qamruzzaman, 2022). According to, investors' judgements are typically negatively impacted by overconfidence and anchoring heuristics. According to (Kumar & Lim, 2008), framing significantly influences American individual investors' decisions. Investors that use frames make better portfolio decisions and experience less disposition effects. Because decision-making is the skill of negotiating challenging conditions, investors frequently make irrational investment decisions (Andriamahery &

Qamruzzaman, 2022). As a result, choosing one choice among several options requires a unique expertise. Therefore, understanding consumer emotion should be a considerable part of marketers that protect consumers from irrational decision making. When investors choose their investment during time, cognitive illusions affect the willingness to accept investment options and their ability to grasp and assess such choices (Feng & Seasholes, 2005). Cognitive illusions may have a role in the decision-making processes of investors, making it simpler for them to put off making significant financial decisions and also investors can access their level of risk associated with investment.

In (Prasad et al., 2021) conducted a study from the multiple aspect and wanted to investigate the impact of behavioural factors, financial literacy and socio-economic factors on investment decision making of investors and how it varies with demographic profile of the respondents. The study considered some important variables from these three areas and also included personal factors, herding factors, overconfidence, ability bias, loss aversion, regret bias and mental accounting on behavioural factors. The socioeconomic factors like market, firm and social factors, returns, risk and prior information is considered. Financial literacy is financial related behaviour and financial related attitude. The study found a significant impact of these factors on financial decisions. Another study made by (Ahmed, 2012) who reports that company reputation influences investment decisions. In (Dew & Xiao, 2011) reported in their study that individual investor behaviour is influenced by socio-economic factors. This is also supported by (Suman, 2012) as they opined that the level of annual income and savings influences investment decisions. Reported individual levels of financial literacy and accounting information helped investors invest in risky instruments and improve risk taking capability. In (Maditinos et al., 2007) indicated that they were more concerned with fundamental and technical analysis, therefore technology orientation is needed for better investment choices. In (Chijwani & Vidyapeeth, 2014) conducted study in Indian context and reported that Indian women are not more prone towards financial knowledge and they have less role in investment decision making process, therefore, enhancing financial literacy among women may lead to better investment level of risk fund. In (Dash, 2010) supported this and opined that investors' risk-taking capacity depends upon age, gender, income, education and occupation (Marinelli et al., 2017).

There are several studies mentioning that investment plan and choices of an individual about investment proposals are affected by their proper knowledge, experience, family structure and financial stability and risk-taking capability. In (Islamoglu et al., 2015). (Chandra et al., 2012) believed that the income level also influences investment decision-making. Investors have high self-esteem and always try to reduce risk through alternative plans for their investment.

The above review various levels of orientation which an investor needs before investment. As the current investment pattern is changing and marketers/ financial institutions are promoting more on risk-oriented investment like stock markets, mutual funds etc, there is a huge role of technology because it helps investors to access risk and gain, detect wrong investment and fraud. Technology helps to predict future growth trends using AI and ML (Prasad et al., 2021). It predicts the market trends, forecast stock direction position for the next few days through technical analysis and market new information. Therefore, technological literacy is an important part to invest in risk-oriented funds (Agrawal et al., 2019).

It investigated the significance of time series descriptors derived from technical analysis and news information to forecast stock direction reversal for the next few days by using various classification techniques.

So, the current research will give us a hint whether marketers should focus or not focus on the above factors before launching any investment proposal to the investors and it is

mostly appropriate when they do investment in a risk fund. The current study is important for the marketers who design their investment proposal to the West Bengal market.

METHODOLOGY

The study concentrated on collecting responses from the potential investors and trying to understand the key aspects that affected their investment perspective. The study followed a three-stage methodology. First, a detailed literature survey was carried out both in terms of extant academic literature and practitioner's literature. From the in-depth survey 49 action items of interest were identified which were deemed to be having potential for understanding the investment horizon choice and investment decision choice of potential investors.

These action items were further narrowed and discussed through two stage focussed group discussion involving 5 discussion members including the FGD administrator.
After two rounds of FGD, a pilot questionnaire was developed having 31 items for the initial pilot study involving 52 investors in a closed convenience group through WhatsApp group involving a demographically diverse set of investors.

After the pilot study and based on real-time inputs, 24 final study items were shortlisted and were put forward for large-scale data collection using both online and physical survey-based techniques. For online survey, standard survey platform (surveymonkey.com) was used and for the physical questionnaire, a survey assistant enabled data collection was done. Stratified systematic sampling technique was used. Demographic controls based on age, gender, education status, financial independence and income range were put in place.
Sample size and data collection:

Totally 330 filled in responses were obtained in three waves and after two reminders. Finally, after data cleaning and removal of incomplete responses, 281 usable responses were recorded.

Data collected was checked for response non-response biases and further subjected to exploration through exploratory factor analysis (EFA) using SPSS 26 software.

RESULTS AND DISCUSSION

The outcome from EFA highlights acceptable KMO value and significant Bartlett's test of sphericity result. Harman's single factor test was also conducted to check for any common method bias; however, no biasedness output was detected.
From the Scree-plot and Eigen value chart six clearly separated and distinct factor structures were revealed and total variance explained was 72.1 percent. However, no single factor explained more than 50 percent of variance, complying to the acceptable norms of Harman's single factor rule.

The EFA was carried out using principal- component analysis using Varimax rotation. The 24 items clearly segregated to form a six factor structure and the item loadings were robust. No significant cross-loading was reported as well. The six factors, each with four item loadings, were further checked for reliability measures using Chronbach's alpha values. All six factors reported rounded up alpha values of 0.8 and above; signifying excellent and acceptable reliability measures (Table 1).

Table 1
BARTLETT'S TEST, **ROTATION: VARIMAX WITH KAISER NORMALIZATION, KMO: 0.832, BARTLETT'S TEST: APPROX. CHI-SQ.: 3067.094, DF: 190, SIG: .000, EXTRACTION METHOD: PCA, N=281, COMPONENTS**

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Reliability Cronbach's Alpha
BHO1	0.860						0.8
BHO2	0.821						
BHO3	0.809						
BHO4	0.797						
IVO1		0.878					0.875
IVO2		0.828					
IVO3		0.820					
IVO4		0.799					
RKO1			0.879				0.866
RKO2			0.824				
RKO3			0.802				
RKO4			0.792				
SCO1				0.917			0.862
SCO2				0.845			
SCO3				0.841			
SCO4				0.642			
PSO1					0.910		0.852
PSO2					0.903		
PSO3					0.865		
PSO4					0.501		
TCO1						0.828	0.750
TCO2						0.757	
TCO3						0.724	
TCO4						0.695	

The result of the study delineates a few important aspects like minimizing risk and maximizing return, information accessibility and peer level investment help investors to change their behavioural pattern. On the other hand, knowledge towards investment, market inflation information, performance of past investment helps a lot to develop investment orientation. Investment in less risk funds, safety and return, prior loss and confidence from past investment are important items to identify risk orientation. On the same contrary, it is noted that family structure, social status, market information and past investment have a strong impact on socio-economic orientation of the investor. There is a huge role of

psychological orientation of the investors before investing and the current study found regular saving patterns, planning for income and expenditure, regular information about balance, interest rate are strong determinants of psychological orientation. The last of the current study identifies that few important aspects of technological orientation which develop confidence in the investor mind like investment benefits using technology, contactless and secure transactions and identification of wrong proposals are the components based on technology. Finally when we tested the reliability of these six components, in all the cases it is 0.75 and above. Therefore, the present study proposed a model which can best suited for the marketer to understand the decision-making pattern of the individual investors (Figure 1).
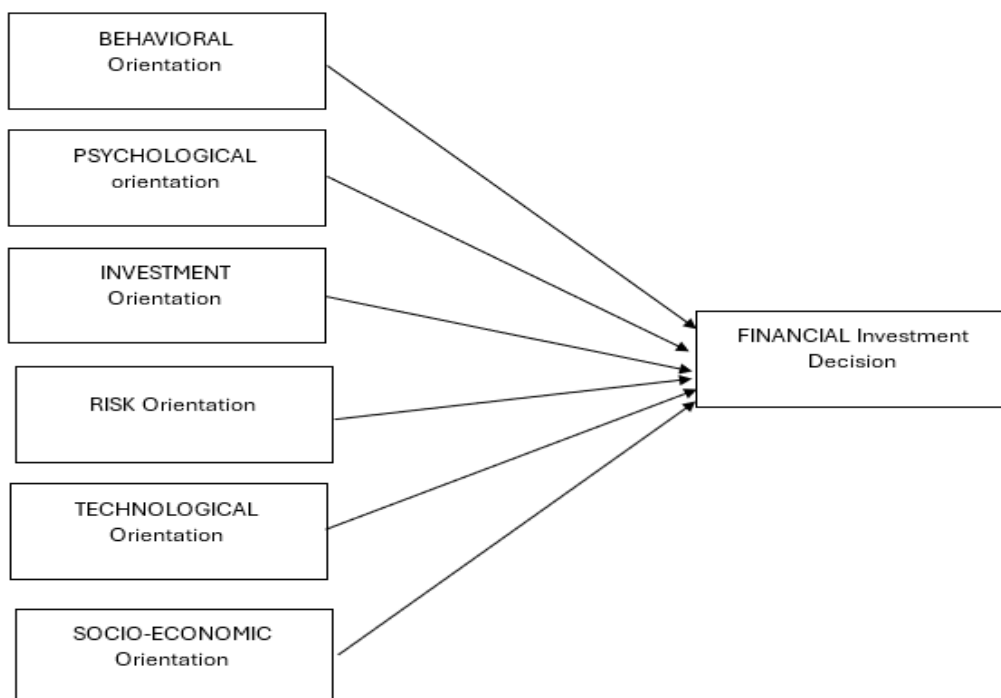
FIGURE 1
OUTCOME OF THE STUDY- STUDY MODEL

CASE BASED FACTUAL DESCRIPTIONS

Caselet 1 (Real Example with Name Changed, Bhubaneswar, Odisha, India, Male 25 Yrs, Service Background)

Rahul, a fresh graduate, joined his corporate career recently and was keen at saving money for future career and family goals. When he was initially searching for investment options on a website and asking through friends, he faced a dilemma, which asset class or category or investment instrument to choose. His dilemma came from three reasons, small disposable amount, asset class or instrument risk and past inexperience at the investment front. However, the most challenging hurdle that aggravated his initial cold feet response was his lack of knowledge and understanding regarding the risk involved in the investment.

Caselet 2 (Real Example with Name Changed, Kolkata, India, Female 37 Yrs, Primary School Teacher)

Supriya, a primary school teacher at a school in the outskirts of Kolkata, earns a

manageable salary and she wants to make small monthly savings (small ticket regular monthly savings and not lumpsum big amount) as salary payout. She is concerned about the fundamentals of savings and being a single mother worries about the future of the savings. So her consideration is not just the return but the assurance of return and avenue of monthly saving options.

Caselet 3 (Mr Gour Chandra Ghosh, Real Name Used With Permission; 62 Years, Retired Service Pensioner, Durgapur, West Bengal, India)

It is concerned about appropriate and secured ways of investment, worried about online investment and security issues of his post- retirement funds. The lack of information and updated understanding of computer enabled online transaction, demat and internet banking made the retired service pensioner sceptical and worried to invest. He showed more keen interest in peer-group opinion leadership and depended on face-to-face agent driven investment which was limited to few traditional instruments and feared all the new-age avenues of online market driven instruments.

These three caselets in the context of three different protagonists from three distinct age groups, having distinct priority levels and belonging to different investment horizon segments portrays the fears, hesitation and vital deciders that impact their decision regarding investment and choice of investment instruments to suit the needs.

CONCLUSION AND IMPLICATIONS OF RESEARCH

The present study helps us to identify the important factors and associated sub factors which are important from the marketer's point of view as well as from the investors point of view. The study identifies the significant importance of behavioural orientation, psychological orientation, socio-economic orientation, technological orientation, investment and risk orientation and the result of factors analysis proved that each factor has a strong impact on the decision-making process. The study paves the path for three-pronged research including past literature based academic and practitioner literature, real-time caselets involving three different investor profiles and finally large-scale data collection using questionnaire driven surveys. Results clearly establish and highlight six key aspects as vital investment decisions influencing perspectives among small ticket size retail investors. The six key aspects that emerged are: behavioural, psychological, investment, risk, technological and socio-economic orientations that prompts and shapes the decision-making ecosystem for small ticket-size investors in retail investment backdrop. The study creates the stepping stone towards defining the items under the six key variables that emerged from the factor analysis study; thereby, paving the way towards creation of the proposed antecedent model of small ticket investors' decision -making factors. The proposed definition and construct items that were bundled during the factor analysis stage and adapted during the questionnaire making have been highlighted in Appendix-1. This opens up the further chance for path analysis for future linkages.

LIMITATIONS OF THE STUDY AND FUTURE SCOPE OF RESEARCH

The study suffers from the common limitations of empirical research as it is cross-sectional and limited in terms of the sample universe considered. This study involved mostly small ticket retail investors in consideration which may have limited the wider aspects and decision-making factors to be included in the consideration set when the focussed group based initial questionnaire formation was made, as well as the factor analysis driven factor identification was carried out. The outcomes of the study may be limited to the consideration

and analysis environment of small ticket size investors only and may suffer generalizability. A detailed linkage analysis between the factors and the decision state and also the moderating role of the various factors like experience and financial literacy may be extended in the future study to create a better nuanced understanding Appendix Table 1.

		Appendix Table 1 **DEVELOPMENT OF CONSTRUCT AND ITEMS FOR STUDY**		
Sr No	**Construct Name**	**Definition**	**Coded Items**	**References**
1.	Behavioural Orientation	Is defined as the distinct personality traits of the consumers that affects their decision making of personal financial products.	BHO1- Like to invest which minimize risk and maximize return BHO2- Interested to invest in different diversified investment markets BHO3- Ready to invest where my peer group/ acquaintances have already invested BHO4- Seek detailed available information for making the current investment decision.	Chen (2007) Taylor and Todd (1995) Bansal and Taylor (2002) Bloomfield and Hales (2002) Kaustia et al. (2008)
2.	**Investment orientation**	It is defined as the extent of awareness level of the consumers that enables them to make sound and effective decisions in their investment activities and involves understanding of financial literacy, spending patterns, self-control, saving behaviour, attitude toward risk, and family financial priorities.	IVO1- Aware about the hurdles of investment across various investment instruments/ schemes IVO2- Aware about spending patterns and associated outcomes. IVO3- Aware about family financial priorities that motivate to know various investment IVO4- Aware about the performance/ range of return across various investment instruments.	Ammer, & Aldhyani,(2022). Mpaata et al. (2021) Azhar et al. (2017) Ariffin et al (2017) Pasewark & Riley (2010)
3.	Risk orientation	It is an orientation of an individual's behaviour i.e. the way in which he/she handles his/her financial situation and involves affects his/her social, and personal, capability to face and manage financial stress during investment.	RKO1- Ready to accept less risk oriented investment rather than high risk and high return instruments. RKO2- Security of investment is more important than return RKO3- Exposure to past financial loss prompted risk aversion. RKO4- Experience of past investment outcomes gives confidence to invest in similar classes of investment instruments.	Bayer et al. (2020) Jaccard & Blanton (2014) Chun and Ming (2009) Ngoc (2014) Kannadhasan, (2015) Areiqat et al. (2019)

4	**Socio-Economic orientation**	It is the extent to which the socio-economic characteristics like culture, family structure, social status, social interaction, economic affluence level of the investors affects the investment pattern and type.	SEO1- Family structure affects investment behaviour SEO2- Social structure driven interaction is important for investment SEO3- Cultural background affects the financial investment behavior SEO4- Economic affluence level of investors (HIG/MIG/LIG)	Klapper et al. (2013) Mandell and Klein (2009) Prasad et al. (2021) Lotto, (2023).
5	**Psychological orientation**	It is the extent of psychological resilience exhibited by the investor before taking investment decisions in terms of like financial attitude, understanding of self-efficacy, materialism and position of the locus of control.	PSO1- Prefer to stay updated regarding various investment options. PSO2- Spending planning is pivotal for my personal financial management PSO3- Frequently check my investment portfolio standings PSO4- Stay updated about the financial policies/rates from varied sources (internal/external)	Perry and Morris (2005) Rotter (1966) Dew & Xiao (2011) Rajna et al (2011) Goyal et al. (2022) Kasoga,& Tegambwage, (2022)
6	**Technological Orientation**	It is defined as the extent to which the investor exhibits technological exposure in their investment decision making in terms of online investment platform literacy, mobile platform awareness, fraud safety understanding and cyber security measures.	TCO1- Online investment platform literacy is crucial for my investment decision TCO2- Mobile platform awareness is pivotal for staying updated regarding investment options/ details. TCO3- Fraud safety understanding helps assure secure contactless transactions. TCO4- Understanding of cyber security measures crucial for completing encrypted online investment transactions.	Hill, (2018) Einav & Levin, (2014) Rennock et al. (2018) Zheng et al. (2018) Tapscott and Tapscott (2017) Staples et al. (2017) Hasan et al. (2020)

REFERENCES

Agrawal, M., Khan, A. U., & Shukla, P. K. (2019). Stock price prediction using technical indicators: a predictive model using optimal deep learning. *Learning*, 6(2), 7.

Ahmed Heshmat, N. (2012). Non-professional investors' behavior: an empirical study of female Saudi investors. *International Journal of Commerce and Management*, 22(1), 75-90.

Akhter, R., & Ahmed, S. (2013). Behavioral aspects of individual investors for investment in Bangladesh stock

market. *International Journal of Ethics in Social Sciences*, 1(1).

Albaity, M., & Rahman, M. (2019). The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. *International Journal of Emerging Markets*, *14*(5), 988-1012.

Andriamahery, A., & Qamruzzaman, M. (2022). Do access to finance, technical know-how, and financial literacy offer women empowerment through women's entrepreneurial development?. *Frontiers in psychology*, *12*, 776844.

Arora, J., & Chakraborty, M. (2021). Does the ease of reading of financial disclosures influence investment decision?. *Economics Letters*, *204*, 109883.

Baker, M., & Wurgler, J. (2007). Investor sentiment in the stock market. *Journal of economic perspectives*, *21*(2), 129-151.

Banerjee, A. V. (1992). A simple model of herd behavior. *The quarterly journal of economics*, *107*(3), 797-817.

Brown, J. R., Ivković, Z., Smith, P. A., & Weisbenner, S. (2008). Neighbors matter: Causal community effects and stock market participation. *The Journal of Finance*, *63*(3), 1509-1531.

Chandra, A., & Kumar, R. (2012). Factors influencing Indian individual investor behaviour: survey evidence. *Papers.ssrn,com*.

Chaudhary, A. K. (2013). Impact of behavioral finance in investment decisions and strategies–a fresh approach. *International journal of management research and business strategy*, *2*(2), 85-92.

Chijwani, M. Vidyapeeth, D. Y. P. (2014). A study of financial literacy among working women in Pune. *International Journal for Scientific Research and Development*, 1(11), 2456-2458.

Dash, M. K. (2010). Factors influencing investment decision of generations in India: An econometric study. *Int. J. Buss. Mgt. Eco. Res*, *1*(1), 15-26.

Dew, J., & Xiao, J. J. (2011). The financial management behavior scale: Development and validation. *Journal of Financial Counseling and Planning*, *22*(1), 43.

Feng, L., & Seasholes, M. S. (2005). Do investor sophistication and trading experience eliminate behavioral biases in financial markets?. *Review of finance*, *9*(3), 305-351. Indexed at, Google Scholar, Cross Ref

Glancy, F. H., & Yadav, S. B. (2011). A computational model for financial reporting fraud detection. *Decision Support Systems*, *50*(3), 595-601.

Gray, G. L., & Debreceny, R. S. (2014). A taxonomy to guide research on the application of data mining to fraud detection in financial statement audits. *International Journal of Accounting Information Systems*, *15*(4), 357-380.

Han, J. J., & Jang, W. (2013). Information asymmetry and the financial consumer protection policy. *Asian Journal of Political Science*, *21*(3), 213-223.

Hilbert, M. (2012). Toward a synthesis of cognitive biases: how noisy information processing can bias human decision making. *Psychological bulletin*, *138*(2), 211.

Islamoglu, M. Apan, M. Ayvali, A. (2015). Determination of factors affecting individual investor behaviours: A study on bankers. *International Journal of Economics and Financial Issues*, *5*(2), 531–543.

Ivković, Z., & Weisbenner, S. (2007). Information diffusion effects in individual investors' common stock purchases: Covet thy neighbors' investment choices. *The Review of Financial Studies*, *20*(4), 1327-1357.

Jain, J., Walia, N., Singh, S., & Jain, E. (2021). Mapping the field of behavioural biases: A literature review using bibliometric analysis. *Management Review Quarterly*, 1-33.

Jin, M., Wang, Y., & Zeng, Y. (2018). Application of data mining technology in financial risk analysis. *Wireless Personal Communications*, *102*, 3699-3713.

Kahneman, D., & Tversky, A. (2013). Prospect theory: An analysis of decision under risk. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 99-127).

Kumar, A., & Lim, S. S. (2008). How do decision frames influence the stock investment choices of individual investors?. *Management science*, *54*(6), 1052-1064.

Kumar, S. P., & Rajkumar, S. (2014). Awareness and knowledge of mutual fund among the investors with special reference to Chennai: A critical study. *International Journal of Research and Development: A Management Review*, *2*(4), 1-4.

Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making–a systematic literature review. *Qualitative Research in financial markets*, *7*(1), 88-108.

Liang, Z., & Qamruzzaman, M. (2022). An asymmetric investigation of the nexus between economic policy uncertainty, knowledge spillover, climate change, and green economy: evidence from BRIC nations. *Frontiers in Environmental Science*, *9*, 807424.

Maditinos, D. I., Šević, Ž., & Theriou, N. G. (2007). Investors' behaviour in the Athens stock exchange (ASE). *Studies in economics and Finance*, *24*(1), 32-50.

Marinelli, N., Mazzoli, C., & Palmucci, F. (2017). How does gender really affect investment behavior?. *Economics Letters*, *151*, 58-61.

Mittal, M. (2010). Study of differences in behavioral biases in investment decision-making between the salaried

and business class investors. *IUP Journal of Behavioral Finance*, 7(4).

Pejic Bach, M., Krstić, Ž., Seljan, S., & Turulja, L. (2019). Text mining for big data analysis in financial sector: A literature review. *Sustainability*, *11*(5), 1277.

Phan, C. K., & Zhou, J. (2014). Vietnamese individual investors' behavior in the stock market: An exploratory study. *Research Journal of Social Science & Management*, *3*(12), 46-54.

Prasad, S., Kiran, R., & Sharma, R. K. (2021). Behavioural, Socio-economic Factors, Financial Literacy and Investment Decisions: Are Men More Rational and Women More Emotional?. *The Indian Economic Journal*, *69*(1), 66-87.

Qamruzzaman, M. (2023). Nexus between economic policy uncertainty and institutional quality: evidence from India and Pakistan. *Macroeconomics and finance in emerging market economies*, *16*(3), 389-408.

Raiffa, H. and Raiffa, H. (1968). Decision Analysis: Introductory Lectures on Choices under Uncertainty, Addison-Wesley, MA.

Raut, R. K., & Das, N. (2017). Individual investors' attitude towards online stock trading: some evidence from a developing country. *International Journal of Economics and Business Research*, *14*(3-4), 254-267.

Sahi, S. K. (2017). Psychological biases of individual investors and financial satisfaction. *Journal of Consumer Behaviour*, *16*(6), 511-535.

Shleifer, A. (2000). Inefficient markets: An introduction to behavioural finance. *Oup Oxford*. Google Scholar

Simon, H. A. (1979). Rational decision making in business organizations. *The American economic review*, *69*(4), 493-513.

Subramanya, P. R., & Murthy, R. P. R. (2013). Investors attitude towards mutual fund (special reference to Chikkamagalore district, Karnataka state, India). *International Journal of Management and Business Studies*, *3*(1), 68-71.

Suman, D. P. W. (2012). Stock market reforms and investors. *Asia Pacific Journal of Research in Business Management*, *3*(5 and 8), 84–95.

Trehan, B., & Sinha, A. K. (2018). A study of existence of overconfidence biases among investors and its impact on investment decision. *SSRN*. 61, pp. 54-79. Indexed at, Google Scholar

Tseng, S. Y., & Rd, F. (2011). The role of information searches in investment choice variation: Digital information, advice seeking and heuristics. *African Journal of Business Management*, *5*(12), 4934.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial economics,* 101(2), 449-472.

Waweru, N. M., Munyoki, E., & Uliana, E. (2008). The effects of behavioural factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of business and emerging markets*, *1*(1), 24-41.

Xie, P., Zou, C., & Liu, H. (2016). The fundamentals of internet finance and its policy implications in China. *China Economic Journal*, *9*(3), 240-252.

Yang, Y., Qamruzzaman, M., Rehman, M. Z., & Karim, S. (2021). Do tourism and institutional quality asymmetrically effects on FDI sustainability in BIMSTEC countries: an application of ARDL, CS-ARDL, NARDL, and asymmetric causality test. *Sustainability*, *13*(17), 9989.

Zhang, S., Xiong, W., Ni, W., & Li, X. (2015). Value of big data to finance: observations on an internet credit Service Company in China. *Financial Innovation*, *1*(1), 1-18.