A GROUP PROJECT ON

"THE BEHAVIOURAL ASPECTS FOR INVESTMENTS IN FINANCIAL INSTRUMENTS"

BY

Supratik Banerjee-03

Prasad Chaudhari-07

Hardik Bajaj-14

Maharaja Konar-23

Vedanth Mahulkar-26

Mohammed Sameer M.K-28

UNDER THE GUIDANCE OF

DR. SANDEEP BHANOT

Sri Chandrasekarendra Saraswati Vidyapuram,Plot I-E, Sector V, Nerul, Navi Mumbai – 400706

December 2023

Index

Abstract:

This survey investigates the diverse array of behavioral aspects influencing individuals' investment decisions in financial instruments. Recognizing the pivotal role of human psychology in financial markets, our study aims to provide a nuanced understanding of the factors that shape investment behavior. Through a comprehensive analysis of existing literature and empirical studies, we delve into key behavioral dimensions impacting investment choices, risk perceptions, and decision-making processes.

This survey explores the impact of investor demographics, financial literacy, and personality traits on investment behavior. By considering the interplay of these factors, we seek to identify commonalities and differences among diverse investor groups, offering insights that can inform targeted strategies for financial education and advisory services.

The findings from this survey contribute to both academic research and practical applications in the field of finance. Understanding the behavioral aspects of financial instrument investments can enhance risk management strategies, improve financial education programs, and guide policymakers in creating more effective regulations. Ultimately, this survey strives to advance our comprehension of the intricate relationship between human behavior and financial decision-making, fostering a more holistic approach to investment analysis and portfolio management.

Chapter 1- Introduction

Individual investor behaviour in India's financial markets has garnered significant attention due to its impact on market dynamics, volatility, and overall economic stability. This literature review aims to consolidate existing research to comprehend the various factors influencing Indian individual investor behaviour in the realm of investment decision-making, risk perception, and market participation.

Studies suggest that Indian individual investors often display a strong inclination towards traditional investment avenues like gold, real estate, and fixed deposits. However, with increasing financial literacy and technological advancements, a gradual shift towards equities and mutual funds is observed. Factors such as age, income, education, and risk tolerance significantly influence investment choices, with younger, educated investors displaying a greater appetite for risk and willingness to explore diverse investment options.

The advent of technology and the proliferation of online trading platforms have significantly influenced Indian investor behaviour. Easy access to information, real-time market updates, and the rise of mobile trading apps have democratized market participation. This surge in retail investor participation, especially among the younger demographic, has reshaped market dynamics, leading to increased retail-driven volatility, particularly in segments like equities and cryptocurrencies.

Indian individual investor behaviour is a complex interplay of various psychological, socio-economic, and technological factors. While traditional preferences persist, evolving market dynamics, technological advancements, and behavioural biases continue to reshape investment patterns.

Chapter 2 – Literature Review

To obtain a brief understanding of our topic we went through a few published research papers. Their names and summaries of the papers are as follows:

- **Role of Behavioural Finance in Investment Decision – A Study of Investment Behaviour in India, By Dr. Vinay Kandpal and Mr. Rajat Mehrotra**.

The study aimed to examine how investors behave in relation to investment patterns as well as the variables that investors weigh when making investment decisions. Using a questionnaire, faculty members in Uttarakhand were questioned. The study concluded that behaviour matters a lot when it comes to making a wise investment decision, and thus in selecting a particular investment option, an investor must consider factors such as goals in life, spending habits, expenses, income, perception towards investments, lifestyle changes, time period, nature towards investment, thought process, natural habits, study of one's financials, risk bearing capacity, liquidity, and expected return.

- **The Impact of Behavioural aspects on Investment Decision Making, By NindityaNareswari, AlifiaBalqista, Indonesia.**

The purpose of this study is to investigate how behavioural factors, such as sentiment investors, overconfidence, salience, overreaction, and herd behaviour, affect people's decisions while making investments. Partial least square structural equation modelling, was utilized as a data analysis approach on the 413 individual investors that made up the sample. The findings demonstrated the beneficial effects of sentiment investors, overconfidence, salience, overreaction, and herd mentality on the process of making investing decisions. The study's findings have significant ramifications for how investors should view themselves to foresee bias when making financial decisions.

- **A Study of the Role of Behavioral Finance in Investment Decision Process of Individual Investors with Reference to Behavioral Finance Theories' Effect on Investors, By Ashutosh Singh, and Dr. S. D. Sharma.**

Investment decisions involve several expectations of financial returns. The researchers' focus in this study was on how investing decisions were influenced by behavioural finance theories. To create constructs, researchers have employed a variety of behavioural finance theories. A set of questions had been created to assess the many facets of investment choices.Further the questionnaire extracted 10 variables. These include the following: risk consideration, value consideration, fear of losing out on an opportunity, regret aversion, psychological influence, cognitive dissonance, investor emotion, over- and under-reactive instincts. The corelation and multiple corelation coefficients of these variables have been examined.

Even within the above-mentioned papers there were certain reviews which seemed insightful. They are as follows:

- **Tavakoli (2011)** inspected the different factors influencing the decision of the investors. He analysed the 13 factors to determine whether the investors consider these factors and decisions are influenced by these factors. He found that some of these factors are more influencing including financial statement, consulting with anybody, second hand information resources, financial ratios, reputation of the firm, profitability variable. Most important sub variable of profitabilityis the dividend.

- **Kadariya (2012)** investigated factors impact on the investor decision. These factors include capital structure, political and media coverage, luck and financial education and trend analyses in the Nepalese capital market. He concluded that majority of the investors are youngsters and they take decision considering the media coverage and friends recommendations as good source of information. Dividend, earning, equity contribution and government control are considered the most important factors while taking the decision. Investors when bears the loss blame to the market and when earns profit take whole credit to their own abilities.

- **Mittal, S. K. (2019)** has developed theoretical frame work of the researcher on behavioral bias in investment decisions. It has been said that buyers are emotional than rational. This is also applicable in investment decisions as the investment can be considered as buying of financial instruments. The researcher has drawn the significance of behavioral finance in the context of investment decision making.

- **Chaturvedi, A. (2022)** reveals that investors invest in different investment avenues for fulfilling financial, social, and psychological need. The researchers have found that the existing literature does not have studies which are related with the behavioral finance theories. In modern world interpretation of the effect of behavioral finance theories on investment decisions can be studied.

Chapter 3 – Research Methodology

Objective of the Research:

To understand the investors' attitudes, beliefs, and decision-making processes in different age brackets and differentiating these factors with different percentage of willingness to invest and their risk appetite.

Research Design:

Survey Type:

- It is a descriptive study focusing on investors' attitudes, beliefs, and decision-making processes.
- It also focusses on awareness and risk appetite of the investor.
- It is majorly factored down with different age group brackets which will give a sense of most sought and probable aspects in terms of those investors which fall under their respective age bracket.

Sampling Strategy:

- The sampling strategy or technique used wasPurposive Sampling with a descriptive study.
- The reason for using Purposive Sampling was because we had a criteria of age of at least 18 years old along with individuals who are investing in any sense into any of the financial instruments.

Sampling Size:

- The adequate size of the sample was decided to be a minimum of 100 investors response with a good mix in different age categories to make a meaningful analysis for defining the behavioral aspect for investing in any of the financial instrument.

Survey Instrument:

Questionnaire Design:

- The team put down a total of 10 questions after shortlisting and grouping the questions to make a meaningful outcome with the same.
- The questions were descriptive as it was aligned with the behavioural aspect of the investor based on risk tolerance, decision-making biases, investment goals, etc.

Google Forms

We have used google forms for the purpose of data collection by preparing a questionnaire.

Variables

The main key variables that will be measured in the survey are:

1. Risk Aversion.
2. Relation between the amount being invested and risk appetite.
3. Most sought after financial instruments to invest and the percentage of income investors are willing to invest.

Chapter 4 - Data Analysis and Interpretation

What is Data Analysis?

To find relevant information, support inferences, and help decision-making, data analysis is the process of analysing, cleaning, manipulating, and modelling data.

Data analysis is utilized in a variety of fields in business, research, and social science. It contains a wide range of facts and methodologies and encompasses a wide range of procedures under a variety of names. Data analysis is used in the modern business environment to assist businesses in making more scientific decisions and running more efficiently.

To examine each component individually, an entire set of data must be broken down through analysis. The act of taking raw data and turning it into information that users can use to make decisions is known as data analysis. Data is gathered and analysed to provide answers to questions, test hypotheses, or refute theories.

What is Data Interpretation?

The use of procedures for reviewing data to draw conclusions that are based on solid evidence is referred to as data interpretation. The analysis of data gives the information meaning and establishes its significance and ramifications.

Data interpretation is important, which is why it must be done correctly. The likelihood of data coming from various sources is relatively high, and the data often enters the analytic process with random organization. Data analysis is frequently highly individualized.

In other words, the nature and objective of interpretation will differ from business to business and are probably related to the sort of data being analysed. Although many various techniques can be useddepending on the nature of each unique piece of data, "quantitative analysis" and "qualitative analysis" are the two most popular and widely used subcategories. Yet, it must be remembered that visual representations of data findings are meaningless unless a wise choice is made about scales of measurement before any meaningful data interpretation inquiry can start. The scale of measurement for the data must be chosen before any significant data analysis can start because it will affect data interpretation ROI throughout the long term.

Analysis and interpretation of the data collected.

1. The amount people save for investments.

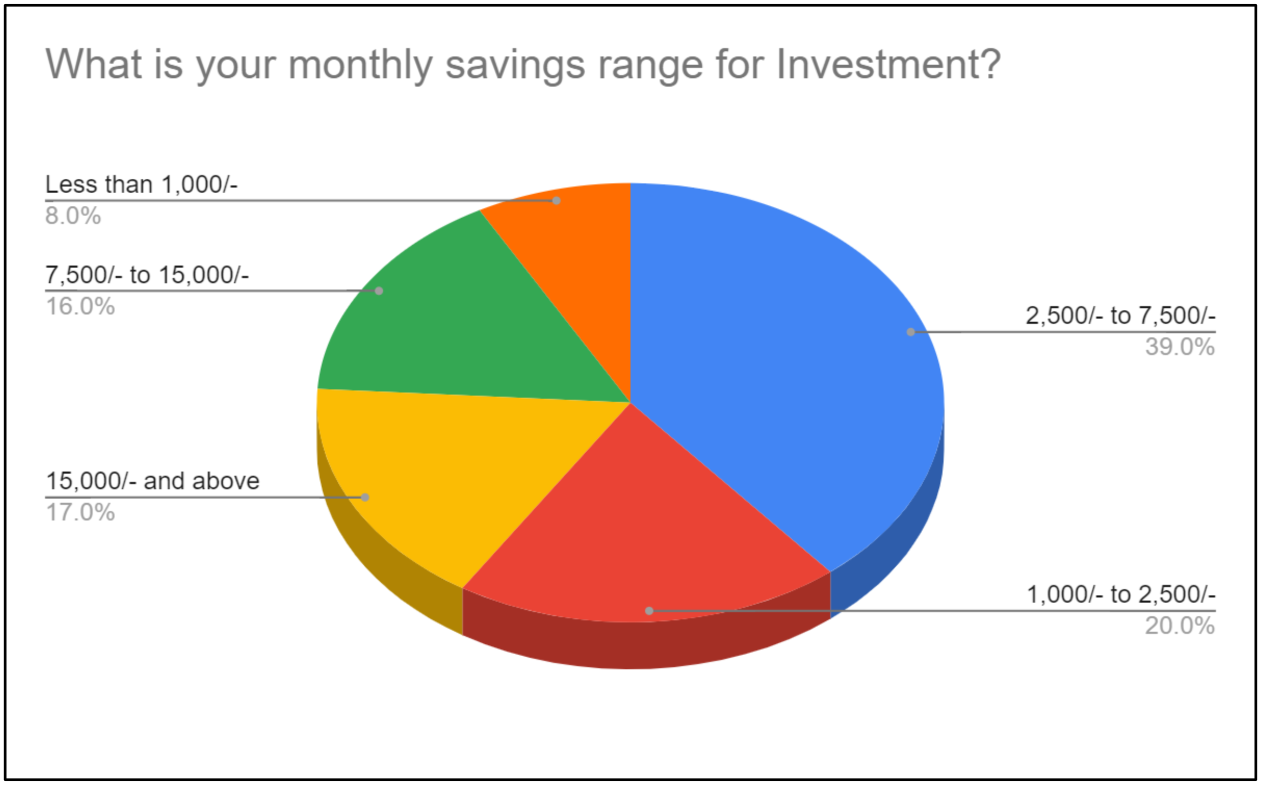

Figure 1. The amount people save for investments

What is your monthly savings range for Investment?	Percentage %
Less than 1,000	8.0%
1,000 to 2,500	20.0%
2,500 to 7,500	39.0%
7,500 to 15,000	16.0%
15,000 and above	17.0%

Interpretation:

From the above data, out of 100 respondents, the majority, i.e., 39.9% save money between 2,500 to 7,500, while 20.0% save between 1,000 to 2,500. 17.0% of respondents save more than 15000. 16.0% of respondents save between 7,500 to 15,000 however 8.0% save less than 1000.

2. What is your Risk Appetite for Investing?

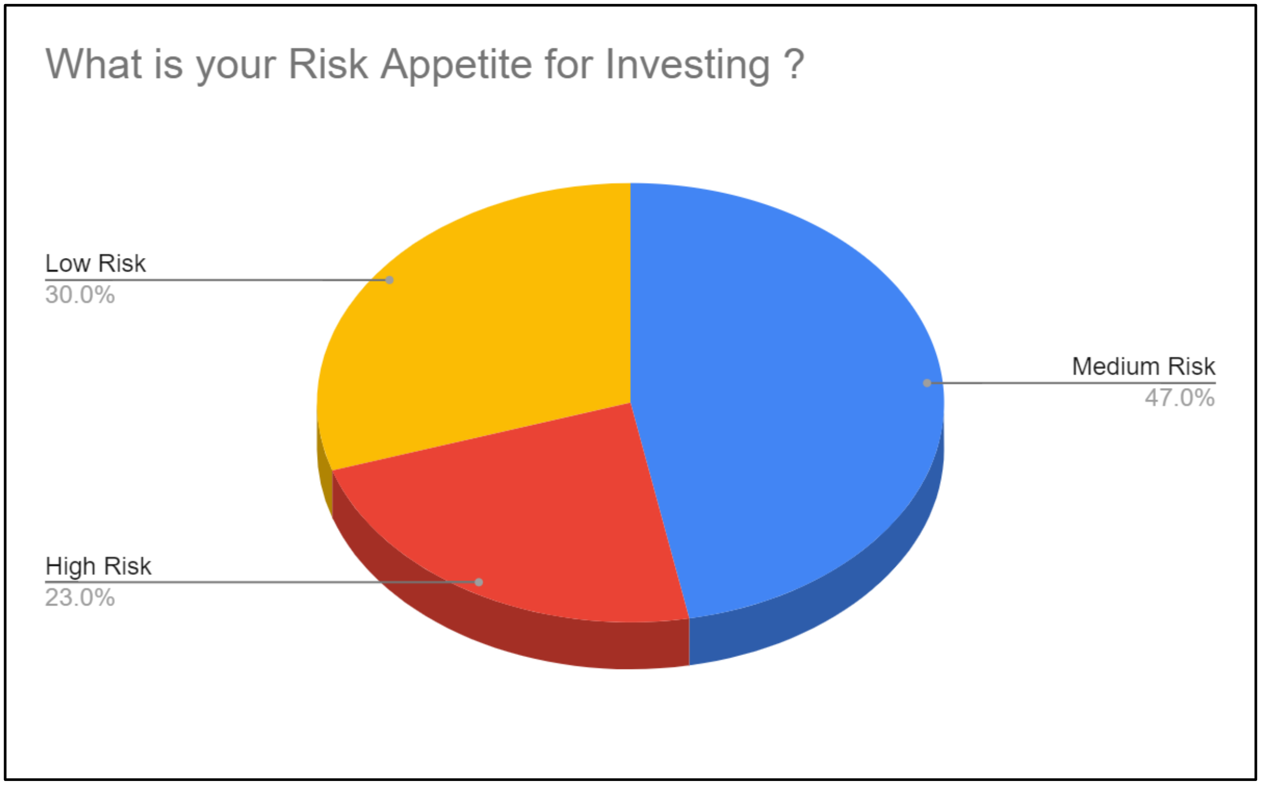

Figure 2. What is your Risk Appetite for Investing?

What is your Risk Appetite for Investing?	Percentage %
High Risk	23.0%
Medium Risk	47.0%
Low Risk	30.0%

Interpretation:

Most of the respondents i.e., 47.0% do prefer in investing which has medium risk, while 30.0% prefer low risk however 23.0% invests in investment which has high risk.

3. **Monthly investment and risk appetite relationship.**

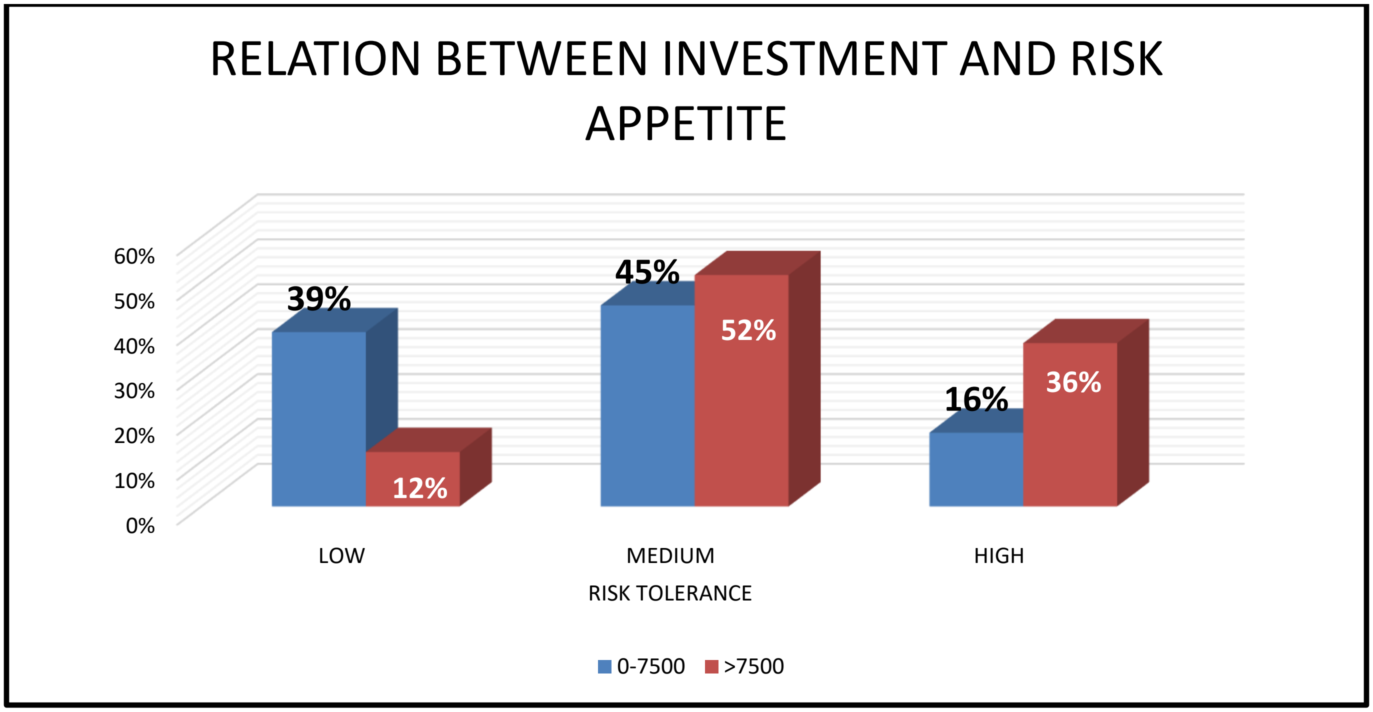

Figure 3. What is your relation between Risk Appetite and the amount being invested?

Risk appetite	Monthly investment range		Percentage of total	
	0-7500	BEYOND 7500	0-7500	>7500
LOW	26	4	39%	12%
MEDIUM	30	17	45%	52%
HIGH	11	12	16%	36%
TOTAL	**67**	**33**		

Interpretation:

After drilling through the data, we obtained from the responses it was clear that majority of our samples invested any amount between 0 and 7500. This range contributed to 67% of the sample and the reason was quite clear as majority of them are students and don't have enough savings.

When we broke down the data further, we got a surprising result that people with lower amounts of investments were less tolerant to risks as compared to the ones with higher amounts invested.

The data showed that around 39% of the people investing in the bracket of 0 to 7500 had a lower risk appetite while only 12% of those in the bracket beyond 7500 had a lower appetite. Similarly, only 16% people had a high-risk tolerance in the lower investment group while 36% of the people were ready to take higher risks in the high investment group. This dataset broke our preconceived notion that people who are investing less are more likely to take higher risks.

The finding which we had estimated that came out right was that majority of the investors are willing to be medium risk taker, i.e.: they are open to risks but to a certain limit only as almost 47% of the sample fell in this bracket.

4. The Investment Holding Period of Investors

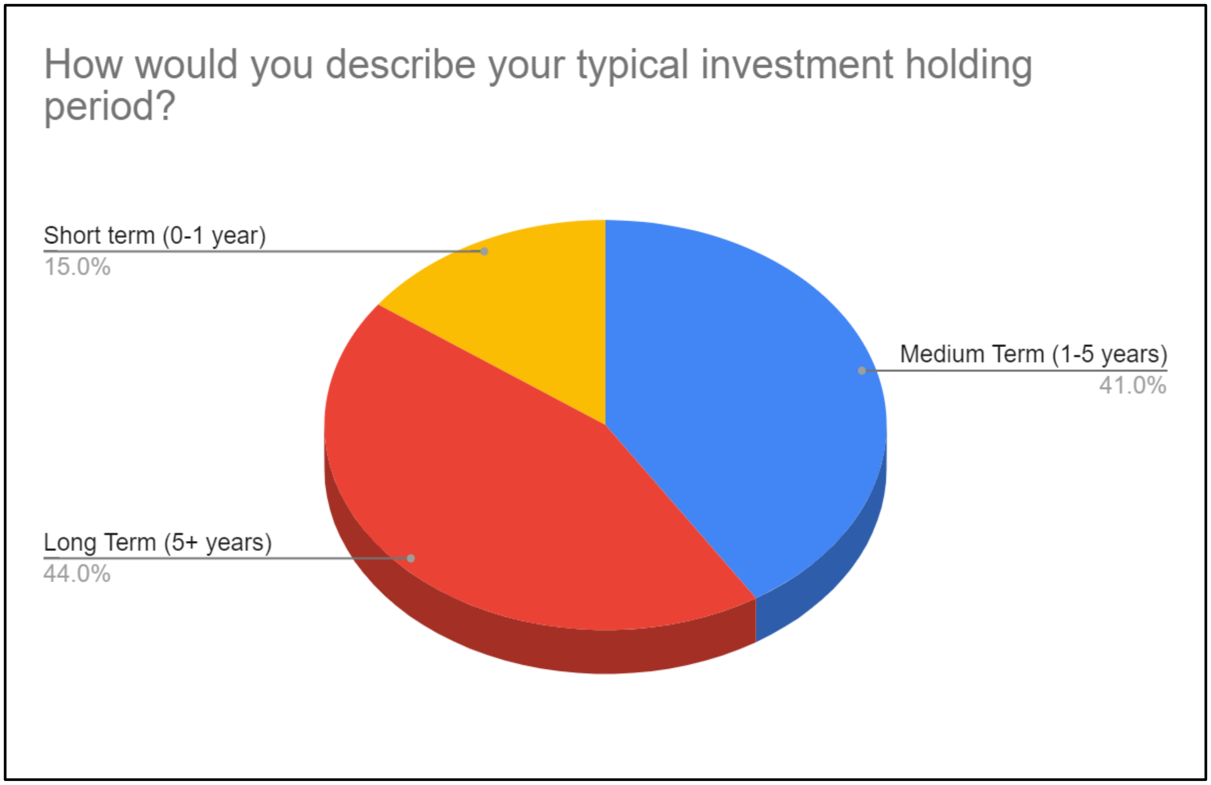

Figure 4. The Investment Holding Period of Investors

How would you describe your typical investment holding period?	Percentage %
Long Term (5+ years)	44.0%
Medium Term (1-5 Years)	41.0%
Short Term (0-1 Year)	15.0%

Interpretation:

The majority of the respondents i.e., 44.0% hold their investments for the Long Term(5+ years), while 41.0% hold for the Medium Term (1-5 years), and 15.0% respondents hold their investments in the short term (0-1 year).

5.Investment opportunities being considered.

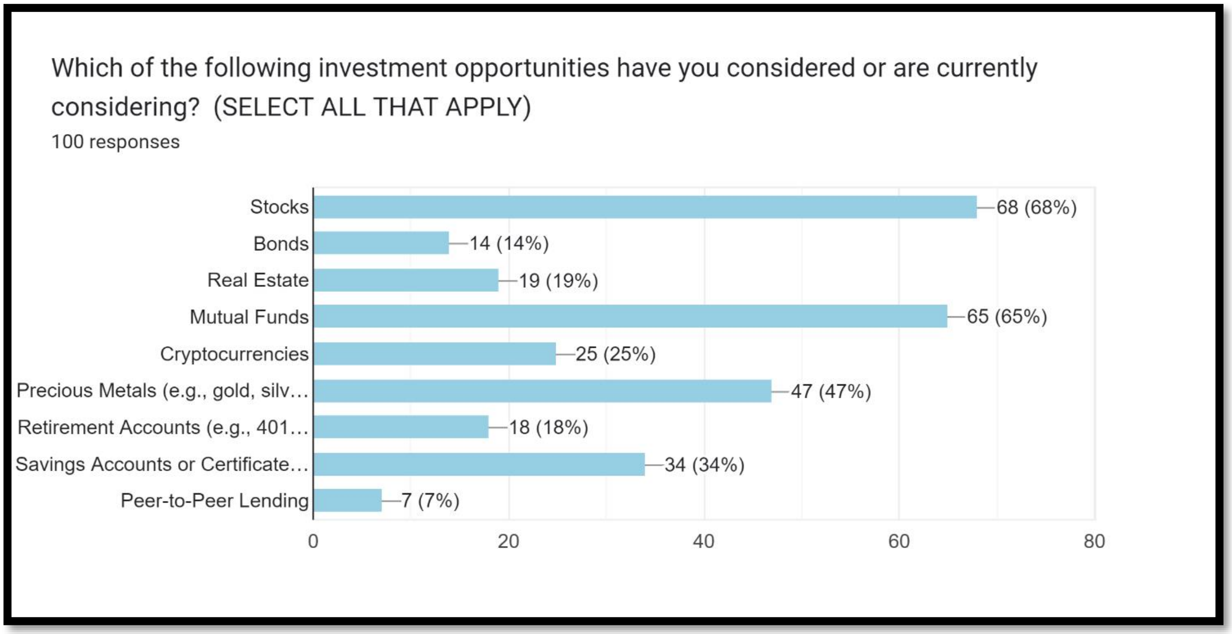

Figure 5. The Investment opportunities being considered.

Investment options considered	Number of people
Only 1	11
Between 1 and 2	22
More than 2	67

Interpretation:

This question helped us understand the various investment options the people are considering with the major chunk of people selecting the expected options of stocks, metals, and mutual funds. However, on further breaking down the data we came to know that people are more inclined towards diversifying their holdings by keeping it at multiple places rather than just at one place. Here we can see only 11 people, i.e.: only 11% people invest in only 1 area while it doubles to 22 for people investing in 2 areas and then the major chunk of the sample comprising of 67% of the sample are considering to invest their funds in more than 2 areas. It not only helps in diversification of the portfolio but also helps in reducing the risks of losing money by splitting the money in various areas.

This argument can be supported by our next data which has captured the response of people on the question, “Suppose you have 3 lakh rupees for the purpose of investment. Where are you most likely to invest the funds?”

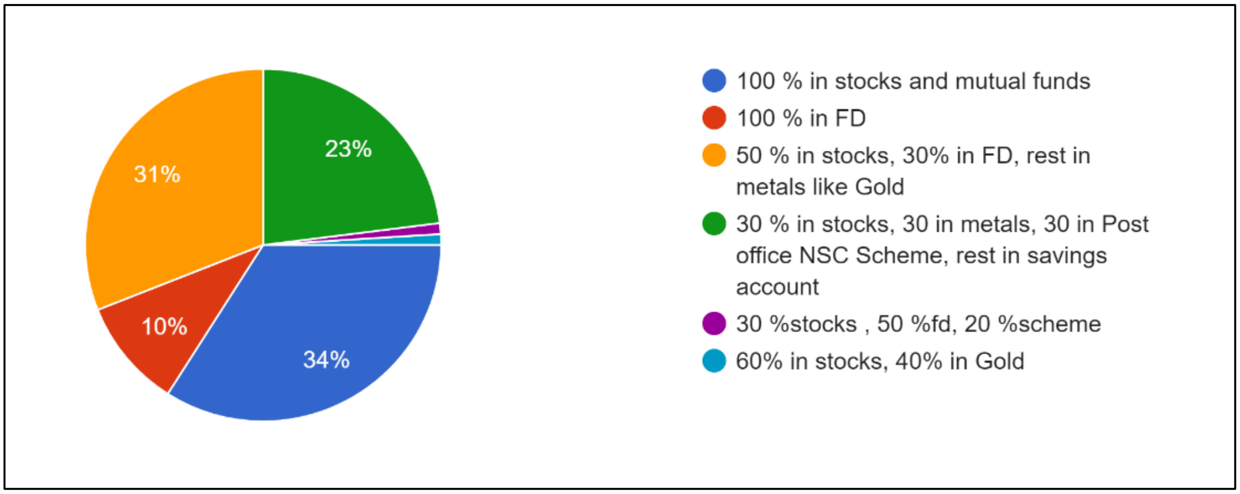

Figure 6. Where Is the person most likely to invest funds of 3 lakhs in.

In this pie we can see that only 10% people have selected investing only in FD as the option while rest all of them have opted for investing in various options.

6.The Percentage of Income investors willing to invest in any finance instrument.

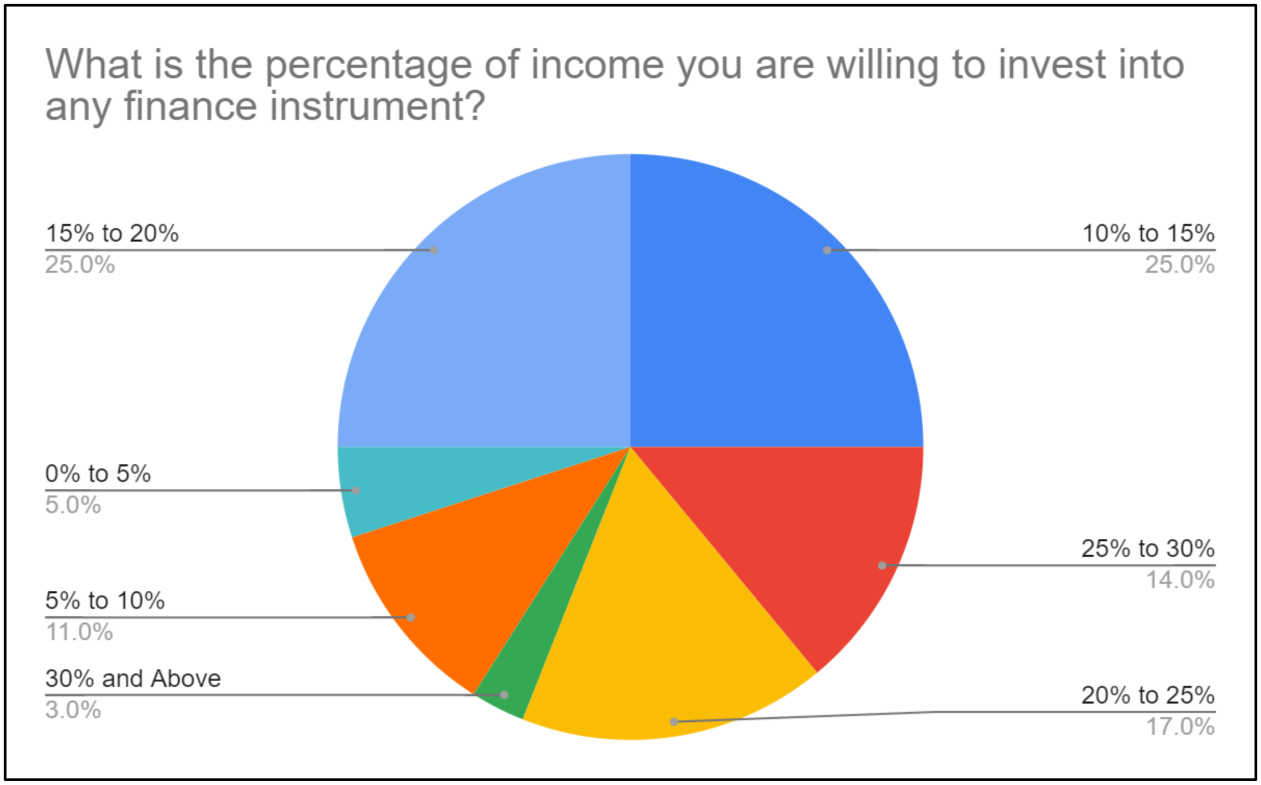

Figure 7. The Percentage of Income investors willing to invest in any finance instrument.

What is the percentage of income you are willing to invest into any finance instrument?	Percentage (%)
30% and above	3.0%
25% to 30%	14.0%
20% to 25%	17.0%
15% to 20%	25.0%
10% to 15%	25.0%
5% to 10%	11.0%
0% to 5%	5.0%

Interpretation:

The percentage of income you're willing to invest in financial instruments reflects your financial risk tolerance and investment strategy. If you allocate 30% or more, you are considered a high-risk investor. Those allocating 25% to 30% are moderately aggressive, while the 20% to 25% group is moderately conservative. Investors dedicating 15% to 20% or 10% to 15% fall into the conservative category. Those putting 5% to 10% are considered very conservative, and those allocating 0% to 5% are extremely risk-averse. It's crucial to align your investment percentage with your financial goals, time horizon, and risk tolerance for a well-balanced and tailored approach to wealth-building.

Chapter 6 – Conclusion

The behavioral aspects of investments in financial instruments play a crucial role in shaping investment decisions and outcomes. Psychological biases, emotions, and cognitive errors often influence investment choices, potentially leading to suboptimal results. Emotions such as fear, greed, and overconfidence may result in making impulsive choices during market volatility, leading to buying high and selling low, contrary to rational investment principles.

Herding Behavior: Investors often follow the crowd, leading to herd behavior which can result in exaggerated market movements. Mitigating the impact of herd behavior is essential for long-term investment success.

Loss Aversion: The fear of losses often outweighs the desire for gains. Managing loss aversion is crucial for maintaining a disciplined investment approach.

Anchoring: Investors often anchor their decisions based on past reference points and this can lead to suboptimal decision-making, as investors may hold on to losing positions for too long, hoping for a recovery.

Confirmation Bias: Investors tend to seek information that confirms their pre-existing beliefs and ignore information that contradicts them.

Regret Aversion: The fear of making a wrong decision can lead investors to avoid necessary risks. It is important to acknowledge and learn from both successes and failures.

Considering these behavioral aspects, investors and financial professionals should be aware of their own biases and implement strategies to counteract them. This may involve setting clear investment goals, diversifying portfolios, and employing systematic investment processes. Additionally, education and awareness programs can help investors make more informed and rational decisions. By combining traditional financial analysis with insights from behavioral finance, investors can strive to enhance their decision-making processes and achieve better long-term financial outcomes.

Limitations Of the Study

1. There is a time constraint that has impacted the study's findings, which is the first restriction.
2. This research was just conducted for people in Maharashtra, India, limiting our analysis to only Maharashtra while rest of India gets ignored.
3. Only 100 people were surveyed, which is too small to draw any conclusive results.
4. This research is not able to fully account for people with different spending and financial capabilities i.e., people’s income levels and savings level are not constant.

Chapter 7 – Annexure

Name

Age Group

- **18-24**
- **25-35**
- **36-46**
- **47 and above**

What is your monthly savings range for Investment?

- Less than 1000/-
- 1000/- to 2500/-
- 2500/- to 7500/-
- 7500/- to 15000/-
- 15000/- and above

What is your Risk Appetite for Investing?

- Low risk
- Medium Risk
- High Risk

Which of the following investment opportunities have you considered or are currently considering?

- Stocks
- Mutual Funds
- Precious Metals (Gold, Silver)
- Savings account or Certificates of deposits
- Real estate

How would you describe your typical investment holding period?

- Short-term (0-1 year)
- Medium Term (1-5 years)
- Long term (5+ years)

What are your primary investment goals?

- Wealth accumulation
- Creating emergency fund
- Funding for a specific personal goal
- Education Fundings
- Tax benefits through deductions

Suppose you have 3 lakh rupees for the purpose of investment. Where are you most likely to invest the funds?

- 50 % in stocks, 30% in FD, rest in metals like Gold
- 30 % in stocks, 30 in metals, 30 in Post office NSC Scheme, rest in savings account
- 100 % in stocks and mutual funds
- 30 %stocks, 50 % FD, 20 %scheme
- 100 % in FD

What platform do you prefer for all your investing activities?

- Banking Application
- Upstox
- Zerodha
- Groww
- Angel Broking

What is the percentage of income you are willing to invest into any finance instrument?

- 30% and above
- 25% to 30%
- 20% to 25%
- 15% to 20%
- 10% to 15%
- 5% to 10%
- 0% to 5%