

Determinants Of Investment Behavior In India: A Behavioral Finance Perspective On Risk Preference And Demographic Factors

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ABSTRACT

This study examines the determinants of investment behavior amid retail investors in India in the context of increasing financial awareness and digital participation. The research focuses on understanding how demographic factors (age, income, and education) and behavioral factors (risk preference) influence investment decisions, particularly the proportion of monthly income allocated to investments. The study used a descriptive design, with primary data collected through structured survey instruments. Statistical techniques including correlation and regression analysis were employed to evaluate the relationships between variables. The findings unveil that risk preference is the prime predictor of investment behavior, showing a positive and statistically meaningful relationship with the percentage of income invested. In contrast, demographic characteristics (such as age, income, and education) exhibit relatively weak influence. The study also highlights the function of financial education (literacy) and digital adoption in enhancing investor decision-making. The results emphasize the importance of behavioral factors over demographic characteristics and suggest that financial advisors and policymakers should focus on personalized, risk-based approaches to improve investment outcomes.

Keywords: Retail Investors, Investment Behavior, Risk Preference, Financial Literacy, Behavioral Finance, India

INTRODUCTION:

Due to growing financial awareness, the availability of digital trading platforms, and technical improvements, retail investor engagement in India has grown exponentially in recent years. This transformation has shifted investment behavior from traditional asset classes toward diversified financial instruments. However, despite this growth, retail investors exhibit heterogeneous behavior influenced by both demographic and behavioral factors. Understanding these determinants is critical for financial institutions, policymakers, and investors themselves.

For many years, the Indian stock market was perceived as accessible only to the wealthy and finance experts. Traditional investment preferences leaned towards safer choices like fixed deposits, gold, and real estate. Limited financial education, slow offline trading processes, and restricted access prevented widespread retail participation. However, online emergence of trading platforms, improved regulations, and better financial information availability since the early 2000s, retail investment in equities has grown rapidly. Over the last decade, especially with mobile apps and increased financial literacy, retail investors—particularly younger individuals and first-timers—have become a significant force shaping the Indian stock market.

This study adopts a behavior-oriented perspective by positioning investment behavior as the primary outcome variable. Instead of focusing solely on demographic

characteristics, the research emphasizes the role of individual risk preference in shaping financial decision-making among retail investors.

1. Background of the Study

The surge in demat accounts—from 2.3 crores to over 15 crores in recent years—reflects a growing confidence in the equity markets among Indian households. Retail Investors are actively participating in financial markets beyond traditional saving instruments. However, retail investors differ broadly in knowledge, attitudes, and behaviors, influenced by demographics and sources of financial information. Risk tolerance is a key factor affecting their investment decisions, influencing how they respond to market fluctuations and choose financial instruments.

2. Importance/Relevance of the Topic

Understanding retail investors' behaviour has critical implications for personal wealth creation and broader market dynamics. As retail participation grows, their collective choices affect market trends. Yet, many retail investors lack formal financial education and may fall prey to emotional biases or misinformation. Linking this knowledge vent can improve decision-making, enhance market stability, and promote financial inclusion.

3. Research Gap

Although preceding research have addressed demographic and psychological factors influencing investment behavior, there is limited insight into how the growing digital adoption and new financial literacy initiatives impact the diverse Indian retail investor base.

Existing studies often overlook nuanced behavioral patterns related to emerging investment options and the use of technology, presenting an opportunity to explore these evolving dynamics.

4. Problem Statement

Retail investors in India exhibit varied investment preferences shaped by incomplete financial knowledge, differing risk appetites, and demographic factors. This paper seeks to determine the extent to which these parameters govern investment behavior and identify the information sources and assist mechanics that can aid retail investors navigate financial decision-making more effectively.

1. Objectives of the Study

- To determine which investment choices are most favoured by individual investors.
- To analyse the effect of age, income, and education on investment behaviour
- To ascertain comfort-ability of retail investors with varying degrees of financial risk
- To furnish workable acumen for financial advisors, Fintech companies, and policymakers to better cater to retail investors

LITERATURE REVIEW

The research's literature analysis thoroughly looks at earlier research on the financial risk tolerance, decision-making practices, and impact of psychological and demographic characteristics of retail investors. A thorough synopsis of the main ideas from every source discussed in the essay is provided below.

Within the paradigm of behavioral finance, which highlights the influence of psychological, demographic, and cognitive aspects in financial decision-making, investor behaviour has been extensively researched. According to prospect theory, people assess profits and losses asymmetrically, which frequently results in risk-averse or risk-seeking behaviour depending on the situation (Kahneman & Tversky, 1979). In a similar vein, portfolio theory emphasizes how crucial diversification is to risk management and return optimization (Markowitz, 1952).

According to empirical research, fiscal decisions to a great extent influenced by emotional intelligence and impulsivity, with emotionally stable investors exhibiting superior risk management skills (Dhiman et al., 2021). Demographic and psychological variables like age, income, optimism, and anxiety also influence financial risk tolerance (Roy & Singh, 2020; Kannadhasan, 2021). Furthermore, personality traits and behavioral biases, including overconfidence and loss aversion, are instrumental in shaping investor behavior (Rao & Lakkol, 2024). Studies also reveal that sound financial habits contribute to higher risk tolerance and improved investment outcomes (Bunyamin & Abdul Wahab, 2022). However, Perceived risk frequently carries more weight on investors than actual risk, leading to sub-optimal decision-making (Bairagi & Chakraborty, 2021).

In the Indian context, recent evidence highlights that a majority of retail investors lack sufficient financial literacy, particularly in high-risk segments such as derivatives trading (Securities and Exchange Board of India, 2023). This underscores the growing importance of financial education in enhancing investment decision-making (Lusardi & Mitchell, 2014).

Existing literature within the domain of behavioral finance highlights the role of both demographic and psychological factors in shaping investment decisions. Yet, there is restricted verifiable evidence integrating risk preference with actual investment allocation behavior, particularly in the Indian context. The report attends to this gap by analyzing influence of demographic characteristics and behavioral factors on investment decisions among retail investors.

Prior research found that although demographic variables contribute to investment behavior, behavioral factors—especially risk preference—tend to exert a more dominant influence. This behavioral finance perspective forms the foundation for conceptual framework improvement and formulation of hypotheses in the present study.

Proposed Conceptual Model

Based on the literature and study objectives, a conceptual framework is developed to investigate the link between demographic factors, behavioral factors, and investment behavior. Population characteristics including age, income, and education are anticipated to have a relatively weaker influence on investment decisions. In contrast, risk preference, as a behavioral factor, is anticipated to play a stronger role in determining investment behavior. Investment behavior is measured through the percentage of monthly income invested, choice of financial instruments, and investment objectives. Additionally, financial literacy and digital adoption are considered as moderating factors that enhance investor awareness and decision-making capability.

The framework provides the foundation for hypothesis formulation and empirical analysis.

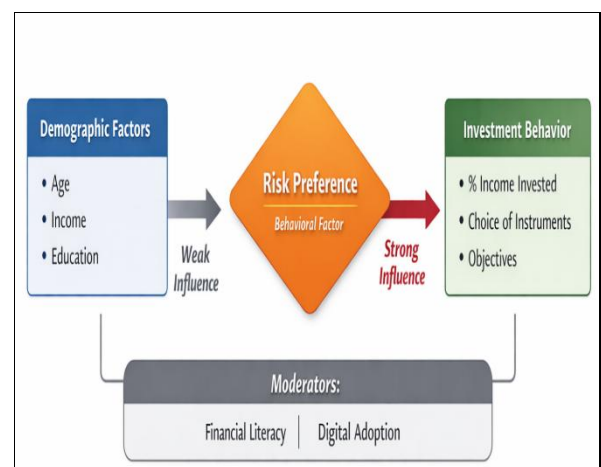


Figure 1: Conceptual Model of Investment Behavior among Retail Investors

2. Research Methodology

The study adopts a quantitative approach using structured survey data and applies inferential statistical techniques to

test hypothesized relationships.

a. Research Design

The study uses a descriptive research design, which is appropriate for examining retail investors' attitudes, behaviour, and demographic trends. Rather than establishing causal linkages, the primary goal is to comprehend the investment patterns and risk tolerance of regular retail investors.

b. Data Collection Methods

- i. **Primary Data:** Gathered through a structured questionnaire shared online (e.g., Google Forms) for participants with internet access.
- ii. **Secondary Data:** Includes reliable sources such as SEBI reports, academic journals, and financial websites to provide context and enable comparison with prior studies.

c. Sampling Technique & Sample Size

- A mixed sampling approach is used:
 - **Stratified Random Sampling** so that the different age category, earnings, and educational backgrounds are represented.
 - **Convenience Sampling** for including readily accessible and willing participants.
- The target sample size is between **250 to 300 participants**, with a minimum acceptable response range of **100 to 150**, depending on practical reach.

d. Variables Used

- **Independent Variables:** Age group, monthly income, educational level, occupation, risk preference (risk appetite).
- **Dependent Variables:** Investment behavior including types of instruments chosen, percentage of monthly income invested, and investment objectives.

Financial literacy is treated as a contextual factor influencing investor awareness rather than a direct explanatory variable

Variable Type	Variable	Description
Dependent	Investment Behavior	Percentage of monthly income invested
Independent	Age	Age group of respondents
Independent	Income	Monthly income level
Independent	Education	Educational qualification
Independent	Risk Preference	Level of fiscal peril endurance

e. Analytical Instruments

Applied mathematical instruments such as correlation analysis, regression analysis to examine relationships and differences between variables. Analysis performed using software tools suited for such statistical tests (implied usage of software like SPSS or Excel, though not explicitly specified).

3. Hypothesis, Results and Discussion

This section highlights the findings from observations, followed by interpretation aligned with the study objectives and conceptual framework. The analysis focuses on understanding how demographic and behavioral factors influence **investment behavior**, measured through the percentage of monthly income invested.

Based on the conceptual framework, the following hypotheses are formulated:

- **H1:** Age influences investors' risk preference.
- **H2:** Age contributes to variations in investment behavior.
- **H3:** Income level affects investors' risk preference.
- **H4:** Income level influences investment behavior.
- **H5:** Risk preference is a key determinant of investment behavior.

Relationship	Pearson Correlation (r)	p-value	Interpretation
Age & Risk Preference	0.080	0.194 (>0.05)	Weak, not significant
Age & Investment Behavior (% income)	0.254	0.003 (<0.05)	Weak but significant
Income & Risk Preference	0.212	0.010 (<0.05)	Weak but significant
Income & Investment Behavior	0.153	0.047 (<0.05)	Weak but significant
Risk Preference & Investment Behavior	0.399	0.000 (<0.05)	Moderate and significant

Interpretation:

The outcome shows that risk attitudes do not change based

on age, suggesting that risk-taking behavior is not strongly dependent on age. However, age shows No evidence of effect with investment behavior, indicating slight variations in investment allocation across age groups.

Income demonstrates a low but statistically relevant association with both risk preference and investment behavior, suggesting that higher income may slightly increase both investment participation and risk-taking tendency.

Most importantly, risk preference shows a moderate and meaningful positive association with investment behavior, signals that risk seeking investors tend to allocate a larger proportion of their income toward investments.

Regression Analysis of Investment Behavior

Model Specification

To align with the objectives of the study, regression analysis is conducted by treating **investment behavior (percentage of monthly income invested)** as the dependent variable. Demographic factors and risk preference are considered as independent variables. Among the independent variables, risk preference is expected to have a stronger influence on investment behavior compared to demographic factors.

Model:

$$\text{Investment Behavior} = \beta_0 + \beta_1(\text{Age}) + \beta_2(\text{Income}) + \beta_3(\text{Education}) + \beta_4(\text{Risk Preference}) + \varepsilon$$

Where:

- **β_0 (Intercept):** Represents the baseline level of investment behavior when all independent variables are equal to zero.
- **β_1 (Age Coefficient):** Indicates the change in investment behavior associated with a unit change in age group, holding other variables constant.
- **β_2 (Income Coefficient):** Reflects the effect of changes in monthly income on investment behavior.
- **β_3 (Education Coefficient):** Captures the influence of educational level on investment behavior.
- **β_4 (Risk Preference Coefficient):** Represents the impact of an investor's risk-taking tendency on investment behavior and is anticipated as the influential variable.
- **ε (Error Term):** Accounts for other factors affecting investment behavior excluded in the model.

Interpretation:

Regression analysis confirms that increased risk preference drives investment behavior, implying that investors having higher appetite for risk tend to allocate a larger share of their income to investments.

In contrast, Sample characteristics, including age, income, and education exhibit relatively weaker influence on investment behavior. While income shows a slight positive tendency, it does not independently explain variations in investment allocation in a strong manner.

The overall model suggests that investment behavior is influenced more by behavioral factors than by

demographic characteristics.

4. Findings

- Low-risk investments such as fixed deposits, PPF, and insurance dominate (49.2%), followed closely by moderate-risk options like mutual funds (41.5%) and a sizable portion investing in high-risk instruments (39%).
- While education is skewed toward professionals and graduates, age and wealth have little but statistical correlation with risk liking and investment volume.
- Majority identify as risk-averse to moderate risk takers (over 85%), with 15% being aggressive or very aggressive investors.
- The percentage of monthly income invested exhibits a moderate and statistically +ve connection with risk preference.
- Expert advice and financial education are highly valued by investors as support mechanisms; structured education is underutilized.
- The work support the principles of behavioral finance, which emphasize the psychological factors relevance in financial decision-making. The results present that risk orientation is a key determinant of investment behavior, whereas Socioeconomic characteristics such as age and income have limited explanatory power.
- This suggests that investors' decisions are driven more by their risk propensity rather than their demographic profile. Furthermore, the increasing importance of financial skill and digital access indicates that informed investors are more capable to make rational investment choices.

Hypothesis Summary:

Hypothesis	Statement	Result
Hy1	Age influences risk preference	Not Supported
Hy2	Age influences investment behavior	Supported (weak)
Hy3	Income influences risk preference	Supported (weak)
Hy4	Income influences investment behavior	Supported (weak)
Hy5	Risk preference influences investment behavior	Supported (strong)

Overall Interpretation

The findings indicate that while demographic variables contribute to investment decisions to some extent, their influence remains limited. In contrast, risk preference emerges as the key driver of investment behavior, reinforcing the relevance of behavioral finance in understanding investor decision-making. Investment choices are shaped more by individual attitudes toward risk than by demographic characteristics alone.

RECOMMENDATIONS

- **For Businesses and Financial Advisors:** Rather than depending only on demographics, customize goods and advisory services to each person's risk profile and degree of financial understanding. Enhance personalized investment preparation and communication.
- **For Policymakers:** Promote accessible and engaging financial training workshops aimed at improving understanding of risk, diversification, and long-term planning among retail investors. Encourage clear and transparent disclosures by financial service providers.
- **For Investors:** Concentrate on increasing financial literacy and risk awareness. To match investments with individual objectives and risk tolerance, review investment portfolios on a regular basis and seek professional advice as necessary.

SCOPE

- Expand sampling to include more diverse age groups, income brackets, and geographic regions for broader applicability.
- Investigate the influence of psychological traits and cognitive biases more thoroughly in retail investing decisions.
- Study the long-term evolution of risk tolerance and investment behaviors with longitudinal data.
- Examine the effectiveness of specific financial education interventions and advisory models on improving retail investor outcomes.

LIMITATIONS

- The sample is heavily skewed towards young, educated investors, limiting generalizability to populations that are older or less educated.
- The survey banks on self-reported data, which is vulnerable to response biases.
- Some psychological and contextual factors influencing investment behavior were not deeply explored.
- The cross-sectional design captures behavior at one point in time, not changes over time.

CONCLUSION

According to the data, investors who are comfortable accepting risks tend to dedicate a larger portion of their income to investments, indicating that risk appetite has a greater influence on investment behaviour than age or income. While low-risk options remain the most preferred, a growing number of investors are showing openness toward moderate and high-risk instruments, reflecting increasing financial maturity and portfolio diversification. The findings further indicate that age and income exert only weak to moderate influence on investment choices, underscoring the importance of individual mindset and financial awareness. Moreover, although most investors actively manage their portfolios

and seek expert advice, formal financial education remains underutilized, highlighting a gap in investor literacy. Overall, investment decisions emerge as a complex interplay of psychological, demographic, and experiential factors, emphasizing the necessity for personalized financial advisory and enhanced investor education programs. The research sheds light on the necessity to transition from demographic-based segmentation to behavior-based investment advisory frameworks

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