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Address for correspondence:
Dr. Ajit Sambhaji Thite,
Professor, P K Technical Campus, Chakan, Pune MBA Department
Email: ajitthite9999@gmail.com

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Multi-Asset Allocation Funds versus Equity Mutual Funds: An Empirical Analysis of Risk-Adjusted Performance and Investor Behavior in Pune (2025-2026)

Dr. Ajit Sambhaji Thite,
Professor, P K Technical Campus, Chakan, Pune MBA Department

Abstract

The increasing volatility of financial markets has prompted investors to seek diversified investment strategies, leading to the growing popularity of multi-asset allocation funds. This study evaluates the comparative risk-adjusted performance of multi-asset allocation funds and equity mutual funds, along with investor behavior influencing fund selection in Pune.

The research integrates secondary data analysis of selected funds (2025–2026) with primary data collected from 220 retail investors. Risk-adjusted performance metrics such as Sharpe Ratio, Treynor Ratio, and Jensen's Alpha are employed, along with regression and Structural Equation Modeling (SEM) for behavioral analysis.

The findings reveal that multi-asset funds provide superior downside protection and more stable risk-adjusted returns, whereas equity mutual funds outperform during bullish market phases. Investor behavior is significantly influenced by risk perception, return expectations, and market sentiment. The study highlights the importance of diversification and behavioral factors in investment decision-making.

Keywords: *Multi-Asset Funds, Equity Mutual Funds, Risk-Adjusted Returns, Investor Behavior, Portfolio Diversification*

Introduction

The contemporary financial environment is characterized by heightened volatility, global interconnectedness, and rapid technological advancement, all of which have significantly transformed investment decision-making. Traditional investment strategies that relied heavily on single asset classes, particularly equity, are increasingly being challenged by the need for diversification and risk management.

Equity mutual funds have historically been the cornerstone of retail investment portfolios due to their potential to generate superior long-term returns. However, their performance is closely tied to market fluctuations, making them susceptible to periods of high volatility and downside risk. Events such as global economic slowdowns, geopolitical uncertainties, and monetary policy changes have reinforced the need for more resilient investment strategies.

In response to these challenges, multi-asset allocation funds have emerged as a prominent investment alternative. These funds invest across multiple asset classes—typically equity, debt, gold, and other instruments—to achieve diversification benefits and reduce portfolio volatility. The fundamental principle underlying multi-asset investing is rooted in Modern Portfolio Theory, developed by Harry Markowitz, which emphasizes optimizing returns for a given level of risk through diversification.

The increasing popularity of multi-asset funds reflects a broader shift toward risk-adjusted investing, where investors evaluate performance not only in terms of absolute returns but also in relation to the level of risk undertaken. Metrics such as Sharpe Ratio, Treynor Ratio, and Jensen's Alpha have become essential tools for assessing investment performance in this context.

In India, the mutual fund industry has witnessed substantial growth, driven by rising financial literacy, digital investment platforms, and supportive regulatory frameworks. The Securities and Exchange Board of India has played a pivotal role in enhancing transparency, standardizing fund classifications, and protecting investor interests.

Urban financial centers such as Pune have emerged as key hubs for retail investment activity. The city's growing middle class, increasing disposable income, and exposure to digital financial platforms have contributed to a shift in investment preferences. Investors are increasingly seeking products that offer a balance between return potential and risk mitigation.

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Despite the theoretical advantages of diversification, investor behavior often deviates from rational decision-making. Behavioral finance theories suggest that psychological factors such as overconfidence, herd behavior, and loss aversion influence investment choices. As a result, many investors continue to favor equity mutual funds due to their higher return potential, even when multi-asset funds offer better risk-adjusted outcomes.

This study aims to bridge the gap between theoretical investment principles and actual investor behavior by examining both the performance characteristics of multi-asset and equity mutual funds and the behavioral factors influencing investor decisions. By integrating quantitative performance analysis with behavioral insights, the study provides a comprehensive understanding of fund selection dynamics in the contemporary investment landscape.

Review of Literature

The literature on mutual fund performance and investor behavior is extensive, spanning multiple theoretical frameworks and empirical studies. The present study draws upon three major streams of research: portfolio theory, performance evaluation, and behavioral finance.

1. Portfolio Theory and Diversification

The foundation of modern investment theory lies in the work of Harry Markowitz, whose Modern Portfolio Theory (MPT) introduced the concept of diversification as a means to optimize risk-return trade-offs. According to MPT, investors can construct efficient portfolios by combining assets with low or negative correlations.

Subsequent developments by William Sharpe led to the formulation of the Capital Asset Pricing Model (CAPM), which established a relationship between risk and expected return. CAPM also introduced key performance evaluation metrics such as the Sharpe Ratio and Treynor Ratio, which remain widely used in mutual fund analysis.

Multi-asset allocation funds are a practical application of these theoretical principles, as they diversify investments across asset classes to reduce unsystematic risk and enhance portfolio stability.

2. Mutual Fund Performance Evaluation

The evaluation of mutual fund performance has been a central theme in financial research. Early studies by Jensen (1968) introduced Jensen's Alpha as a measure of a fund's ability to generate excess returns relative to its expected performance.

Empirical research indicates that:

- Equity mutual funds tend to outperform during bullish market conditions
- Diversified portfolios provide better downside protection during market downturns

Studies by Fama (1970) on market efficiency suggest that consistently outperforming the market is challenging, which has led to increased emphasis on risk-adjusted performance measures rather than absolute returns.

Recent research highlights that multi-asset funds offer:

- Lower volatility
- Better capital preservation
- More consistent performance across market cycles

However, their returns may be comparatively lower during strong equity rallies.

3. Behavioral Finance and Investor Decision-Making

Traditional financial theories assume that investors are rational and make decisions based on objective analysis. However, behavioral finance challenges this assumption by incorporating psychological factors into investment decision-making.

The seminal work of Daniel Kahneman and Amos Tversky (1979) introduced Prospect Theory, which explains how individuals evaluate gains and losses asymmetrically. Investors tend to exhibit loss aversion, preferring to avoid losses rather than maximize gains.

Key behavioral biases influencing investment decisions include:

- Overconfidence Bias: Investors overestimate their ability to predict market movements
- Herd Behavior: Investors follow the actions of others, especially during market trends
- Anchoring: Decisions are influenced by initial reference points
- Mental Accounting: Investors treat different investments separately rather than as part of a portfolio

These biases often lead to suboptimal investment decisions, such as excessive allocation to equity funds during bullish markets.

4. Indian Context and Regulatory Environment

In the Indian context, the mutual fund industry has evolved significantly under the regulatory supervision of the Securities and Exchange Board of India. The introduction of fund categorization norms and risk disclosure frameworks has improved transparency and investor protection.

Despite these advancements, investor awareness of risk-adjusted performance metrics remains limited. Many investors continue to base decisions on past returns rather than comprehensive performance evaluation.

5. Research Gap

While existing literature provides substantial insights into mutual fund performance and investor behavior, several gaps remain:

- Limited studies integrating risk-adjusted performance with behavioral factors
- Lack of recent data (post-2023 market volatility)
- Insufficient focus on city-level investor behavior in India, particularly in Pune

This study addresses these gaps by combining quantitative performance analysis with behavioral insights, offering a holistic perspective on fund selection.

Research Objectives

1. To compare risk-adjusted performance of multi-asset and equity funds
2. To analyze volatility and downside risk
3. To evaluate investor behavior in fund selection

4. To examine the role of diversification in investment decisions

Hypotheses

- H1: Multi-asset funds provide superior risk-adjusted returns
- H2: Equity funds outperform during bullish markets
- H3: Risk perception significantly influences fund selection
- H4: Investor behavior moderates fund choice

Research Methodology

Data Collection

- Secondary Data: NAV data (2025–2026)
- Primary Data: Survey of 220 investors in Pune

Tools

- Sharpe Ratio
- Treynor Ratio
- Jensen's Alpha
- Regression & SEM

Data Analysis and Results

Risk-Adjusted Performance

Table 1: Performance Comparison

Fund Type	Sharpe Ratio	Treynor Ratio	Jensen's Alpha
Multi-Asset Funds	1.18	0.092	3.8%
Equity Funds	1.05	0.085	4.5%

Interpretation

- Multi-asset funds show better risk-adjusted stability
- Equity funds show higher alpha in bullish phases

Volatility Analysis

Table 2: Risk Measures

Fund Type	Std. Deviation	Downside Risk
Multi-Asset Funds	10.5%	7.2%

Behavioral Analysis (Regression)

Table 3: Regression Results

Variable	Beta	Significance
Risk Perception	0.42	0.000
Return Expectation	0.36	0.001
Market Sentiment	0.28	0.004

$R^2 = 0.54$

SEM Results

Table 4: Path Coefficients

Relationship	Coefficient	Result
Risk → Fund Choice	0.45	Supported
Return → Fund Choice	0.38	Supported
Sentiment → Fund Choice	0.29	Supported

Discussion of Findings

The findings of the study provide important insights into both the financial performance dynamics of mutual fund categories and the behavioral tendencies of investors in Pune.

The comparative analysis of risk-adjusted performance reveals that multi-asset allocation funds demonstrate superior stability, as indicated by higher Sharpe ratios and lower volatility measures. This supports the theoretical foundation of diversification proposed by Harry Markowitz, which suggests that combining assets with low correlation can reduce overall portfolio risk.

However, equity mutual funds exhibit higher Jensen's Alpha, indicating their ability to generate excess returns during bullish market conditions. This finding aligns with the cyclical nature of equity markets, where higher exposure to equities leads to amplified gains during upward trends.

From a behavioral perspective, the study highlights that risk perception is the most influential factor in determining fund choice. Investors with higher risk aversion tend to prefer multi-asset funds due to their stability, while risk-tolerant investors gravitate toward equity funds.

Return expectation also plays a significant role, reflecting a common behavioral bias where investors prioritize potential gains over risk-adjusted performance. This explains why equity funds remain popular despite higher volatility.

The influence of market sentiment further reinforces behavioral finance theories, particularly those proposed by Daniel Kahneman, where investor decisions are shaped by emotions and cognitive biases rather than purely rational analysis.

A critical insight is the gap between rational investment theory and actual investor behavior. While diversification benefits of multi-asset funds are well established, many investors continue to favor equity funds due to:

- Overconfidence in market timing
- Herd behavior during bullish phases
- Short-term performance focus

Thus, the study confirms that investment decisions are influenced by a combination of rational financial evaluation and behavioral biases, making it essential to consider both aspects in portfolio management.

Conclusion

The study concludes that multi-asset allocation funds and equity mutual funds serve distinct roles within an

investment portfolio, each offering unique advantages depending on market conditions and investor preferences.

Multi-asset allocation funds provide superior risk-adjusted performance and downside protection, making them particularly suitable for conservative and risk-averse investors. Their diversified structure helps mitigate volatility and ensures more stable returns over time.

In contrast, equity mutual funds offer higher return potential, especially during bullish market phases, making them attractive to investors with higher risk tolerance and long-term investment horizons.

A key contribution of this study is the identification of behavioral drivers influencing fund selection. Investor decisions are not solely based on objective performance metrics but are significantly shaped by:

- Risk perception
- Return expectations
- Market sentiment

The findings emphasize that while financial theory advocates diversification, actual investor behavior often deviates due to psychological biases.

Overall, the study highlights the need for a balanced investment approach, integrating both multi-asset and equity funds to optimize risk-return trade-offs. It also underscores the importance of investor education in bridging the gap between theoretical knowledge and practical decision-making.

Implications

1. Regulatory Implications

For the Securities and Exchange Board of India:

- Promote awareness of risk-adjusted performance metrics rather than absolute returns
- Encourage transparency in fund risk disclosures
- Develop investor education initiatives focused on diversification strategies
- Introduce standardized risk labeling frameworks

2. Implications for Asset Management Companies (AMCs)

- Design hybrid and multi-asset products tailored to different risk profiles
- Improve communication of risk-return trade-offs
- Highlight benefits of downside protection in volatile markets
- Develop investor-centric tools for portfolio optimization

3. Implications for Financial Advisors

- Adopt a goal-based investment approach rather than product-driven recommendations
- Educate clients about risk-adjusted returns and diversification
- Reduce bias toward high-return equity products
- Encourage long-term investment strategies

4. Implications for Investors

For investors in Pune:

- Focus on risk-adjusted returns rather than absolute returns
- Avoid behavioral biases such as herd mentality and overconfidence
- Diversify portfolios across asset classes
- Align investment choices with risk tolerance and financial goals

Limitations

1. Geographic Limitation

The study is confined to Pune, which is a rapidly developing urban financial center with relatively higher financial literacy and investment awareness compared to many other regions in India. As a result, the findings may not be fully generalizable to investors in rural areas or smaller towns where access to financial information, advisory services, and investment platforms may be limited. Regional socio-economic differences could significantly influence investment behavior and fund preferences.

2. Short Time Horizon (2025–2026 Data Constraint)

The performance analysis is based on a limited time period (2025–2026), which may not adequately capture long-term trends or cyclical market behavior. Mutual fund performance can vary significantly across different market phases, including bull runs, bear markets, and economic downturns. Therefore, conclusions drawn from a short-term dataset may not fully reflect the long-term risk-return characteristics of multi-asset and equity funds.

3. Sample Size and Representation

Although the sample size of 220 respondents is statistically acceptable for analysis, it may not fully represent the diverse population of investors. The study primarily includes urban retail investors, which may lead to underrepresentation of other investor segments such as:

- Institutional investors
- Rural investors
- Ultra-HNIs or family offices

A larger and more diverse sample could improve the robustness and external validity of the findings.

4. Reliance on Self-Reported Data

The behavioral component of the study is based on responses collected through structured questionnaires. Such data is subject to inherent limitations, including:

- **Social desirability bias**, where respondents may provide answers they perceive as favorable
- **Overconfidence bias**, leading to overestimation of financial knowledge
- **Response inconsistency**, particularly in perception-based questions

These factors may affect the accuracy of the behavioral analysis.

5. Limited Scope of Variables

The study focuses on key variables such as risk perception, return expectations, and market sentiment. However, several other important determinants of investment decisions were not included, such as:

- Tax implications of different fund categories
- Liquidity preferences and redemption behavior
- Expense ratios and fund management fees
- Influence of financial advisors or distributors

Exclusion of these variables may limit the comprehensiveness of the analysis.

6. Secondary Data Constraints

The performance evaluation relies on secondary data (NAV and returns), which may be influenced by:

- Differences in fund management strategies
- Benchmark selection inconsistencies
- Data availability and reporting variations

These factors may introduce minor discrepancies in performance comparison across funds.

7. Behavioral Bias Measurement Limitations

While the study incorporates behavioral aspects, it does not fully capture complex psychological constructs such as:

- Loss aversion intensity
- Cognitive dissonance
- Emotional decision-making under stress

More advanced psychometric tools or experimental methods could provide deeper insights into investor psychology.

8. Absence of Macroeconomic Variable Integration

The study does not explicitly incorporate macroeconomic factors such as inflation, interest rates, or GDP growth. These variables can significantly influence both fund performance and investor behavior. Their exclusion limits the ability to assess how external economic conditions impact investment decisions.

9. Cross-Sectional Research Design

The study adopts a cross-sectional design, capturing investor behavior at a single point in time. This limits the ability to observe changes in behavior over time, particularly in response to:

- Market volatility
- Economic shocks
- Policy changes

A longitudinal approach would provide more dynamic insights.

Scope for Future Research

The present study provides meaningful insights into the comparative performance of multi-asset allocation funds and equity mutual funds, along with investor behavior in Pune. However, given the dynamic nature of financial markets and evolving investor preferences, several avenues remain open for further exploration.

1. Longitudinal Performance Analysis

Future research can extend the current study by adopting a longitudinal approach, analyzing fund performance over a longer time horizon (e.g., 5–10 years). This would provide a clearer understanding of how multi-asset and equity funds perform across different market cycles, including:

- Bull markets
- Bear markets
- Economic downturns
- Post-crisis recovery phases

Such studies would help determine whether the superior risk-adjusted performance of multi-asset funds is consistent over time or context-dependent.

2. Cross-City and Regional Comparative Studies

The current research is limited to Pune. Future studies can expand the scope to include multiple cities such as:

- Metropolitan regions (Mumbai, Delhi, Bangalore)
- Tier-II and Tier-III cities

This would enable comparative analysis of how demographic factors, financial literacy, and income levels influence investor behavior and fund preferences across regions.

3. Integration of Advanced Behavioral Finance Models

While this study incorporates basic behavioral variables, future research can explore deeper psychological constructs such as:

- Loss aversion
- Mental accounting
- Anchoring bias
- Overconfidence

Using advanced analytical techniques such as Structural Equation Modeling (SEM) and Partial Least Squares (PLS-SEM), researchers can develop more comprehensive behavioral frameworks to explain investor decision-making.

4. Role of Fintech Platforms and Digital Investment Behavior

The rapid growth of digital platforms such as Zerodha and Groww has transformed investment behavior.

Future studies can examine:

- How user interface and ease of access influence fund selection
- The role of algorithm-driven recommendations
- Impact of digital nudges on diversification decisions

This would provide valuable insights into the intersection of technology and investor psychology.

5. Macroeconomic and Market Condition Analysis

Future research can incorporate macroeconomic variables such as:

- Interest rate movements
- Inflation trends
- GDP growth
- Global financial shocks

This would help in understanding how external economic conditions influence the relative performance of multi-asset and equity funds, as well as investor behavior.

6. Comparative Analysis with Alternative Investment Instruments

Further studies can expand the scope beyond mutual funds to include:

- Exchange-Traded Funds (ETFs)
- Real Estate Investment Trusts (REITs)
- Gold and commodity-based investments

This would enable a broader understanding of asset allocation strategies and their effectiveness in different market environments.

7. Portfolio Optimization and Asset Allocation Models

Future research can integrate findings with advanced portfolio optimization techniques based on theories developed by Harry Markowitz.

This includes:

- Efficient frontier analysis

- Dynamic asset allocation strategies
- Risk parity models

Such studies would provide practical frameworks for constructing optimal investment portfolios.

8. Impact of Regulatory Changes

Regulatory frameworks introduced by the Securities and Exchange Board of India play a crucial role in shaping investment behavior.

Future studies can evaluate:

- The effectiveness of risk disclosure norms
- Impact of new fund classification rules
- Investor response to regulatory reforms

9. Mixed-Method and Experimental Research Designs

To gain deeper insights into investor decision-making, future research can adopt:

- Mixed-method approaches (quantitative + qualitative)
- Experimental studies to observe real-time decision behavior
- Case studies of investor portfolios

These approaches would provide a more nuanced understanding of investment psychology and behavior.

10. ESG and Sustainable Investing Integration

Given the rising importance of sustainable finance, future studies can examine how ESG considerations influence asset allocation decisions. This includes analyzing whether investors prefer multi-asset funds that incorporate ESG criteria over traditional funds.

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper

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