IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)
An International Open Access, Peer-reviewed, Refereed Journal

Risk And Return Analysis Of Hedge Funds: A Comparative Study With Mutual Funds

[1]Ashutosh Sundar Morade, [2]Dr. Shilpa Bharadwaj Mishra,[3] Susri Skunday
[1]MMS Learner, Mumbai University ,Mumbai, India.
[2]Professor, Department of M.M.S., ARMIET, Thane, India
[3]Professor, Department of M.M.S., ARMIET, Thane, India.

Abstract: In the contemporary financial environment, investors face the dual challenge of maximizing returns while managing risk. Among the multitude of investment avenues available, **hedge funds and mutual funds** have emerged as dominant global instruments of collective investment. While both seek to create wealth through professional fund management, their **objectives, structures, strategies, and risk-return profiles** differ significantly.
This study titled “Risk and Return Analysis of Hedge Funds: A Comparative Study with Mutual Funds” provides a detailed quantitative and qualitative evaluation of the performance efficiency of these two categories of investment funds. Using real financial data obtained from credible sources such as **SEBI, AMFI, Bloomberg Hedge Fund Index, and SP Global SPIVA reports (2013–2023)**, the paper compares **annualized returns, standard deviation, Sharpe ratio, Treynor ratio, and Beta values** to understand their relative risk-return dynamics.
Findings reveal that hedge funds deliver **superior absolute and risk-adjusted returns** due to their flexibility and global diversification, but expose investors to greater volatility and limited transparency. Mutual funds, in contrast, offer **stable, regulated, and retail-friendly** investment opportunities that focus on long-term wealth accumulation. The study concludes that a **hybrid investment approach**, combining both instruments, can lead to optimal portfolio diversification and improved risk-adjusted performance.

Keywords : Hedge Funds, Mutual Funds, Risk-Return Analysis, Sharpe Ratio, Treynor Ratio, Beta, Financial Performance
Portfolio Diversification, Investment Strategy, SEBI Regulation.

I. INTRODUCTION

The world of investment has undergone dramatic transformation over the past few decades. The growth of capital markets, financial innovation, and technological progress have widened the spectrum of investment opportunities for individuals and institutions alike. Within this spectrum, hedge funds and mutual funds stand out as the most influential collective investment schemes. While both pool investor capital to generate returns, their philosophies and risk exposures differ fundamentally. Hedge funds are alternative investment vehicles that pursue aggressive strategies—such as leverage, arbitrage, short selling, and derivatives trading—to achieve positive returns in all market conditions. They operate in relatively unregulated environments and are usually accessible only to accredited or institutional investors.

Mutual funds, on the other hand, are highly regulated financial products, monitored by the Securities and Exchange Board of India (SEBI). They are designed to offer small and retail investors a structured and transparent way to participate in financial markets. Mutual funds emphasize diversification, liquidity, and professional management to provide sustainable long-term returns while maintaining moderate risk levels.

This paper aims to analyze the risk-return trade-offs between hedge funds and mutual funds, using both quantitative data and financial performance models. It also explores the implications of these differences for various investor categories, helping them make informed and strategic portfolio choices.

In recent years, the integration of global financial markets and the increasing participation of both institutional and retail investors have intensified the need to understand how different investment vehicles perform under varying market conditions. The proliferation of data-driven portfolio strategies and quantitative risk management techniques has further emphasized the importance of comparative performance studies. Hedge funds, with their flexibility and pursuit of absolute returns, represent the aggressive frontier of active investment management, while mutual funds, through their structure and regulation, continue to dominate as the most trusted medium for systematic wealth creation. The comparative evaluation of these two fund types is not merely an academic exercise but a practical necessity for investors, policymakers, and financial advisors seeking to design optimized portfolios in a volatile global environment. This research, therefore, bridges the theoretical principles of modern finance with real-world investment outcomes, offering actionable insights for sustainable portfolio diversification and risk-adjusted performance improvement.

Research Objectives

- To evaluate the impact of market volatility and macroeconomic factors.
- To analyze the portfolio diversification benefits.
- To assess investor perception, behavioral tendencies, and risk tolerance.

II. LITERATURE REVIEW

The literature on the risk and return dynamics of hedge funds and mutual funds provides a broad analytical foundation for understanding their performance characteristics, investment behavior, and strategic role in modern financial markets. Numerous studies have examined these instruments through the lenses of financial theory, empirical performance analysis, and behavioral finance.

1. Theoretical Background

The core principle of investment performance rests on the trade-off between risk and return, a concept deeply rooted in Modern Portfolio Theory (MPT) developed by Harry Markowitz (1952). According to this theory, investors can optimize their portfolios by selecting assets that maximize expected returns for a given level of risk, measured by the standard deviation of returns. This framework laid the groundwork for further performance measurement models, including the Sharpe Ratio (Sharpe, 1966), Treynor Ratio (Treynor, 1965), and Jensen's Alpha (Jensen, 1968) — all of which are used in this study.

Markowitz emphasized that diversification can reduce unsystematic risk without necessarily reducing returns. This idea is crucial to both mutual funds and hedge funds — the former typically diversifies across asset classes to minimize risk, while the latter diversifies across strategies to enhance returns.

2. Evolution of Mutual Funds

Mutual funds have long been recognized as one of the most important innovations in the financial services industry. They offer investors access to professionally managed portfolios, liquidity, and diversification at relatively low cost. According to Sharpe (1994), mutual funds democratized investing by allowing small investors to access professional management that was once exclusive to institutions. SEBI's Mutual Fund Regulations (1996) marked a turning point for the Indian mutual fund industry, ensuring investor protection and transparency. The Association of Mutual Funds in India (AMFI) and SEBI have played significant roles in developing the mutual fund market, promoting retail participation, and improving governance. Reports from AMFI (2023) highlight that the industry's Assets Under Management (AUM) have crossed ₹50 trillion, reflecting strong investor confidence and systematic investment behavior in India.

Empirical studies such as Brown and Goetzmann (1995) found that mutual funds tend to follow herd behavior and show persistence in performance over short time periods but often revert to the mean in the long run. Similarly, Malkiel (1995) argued that few mutual funds consistently outperform the market index, reinforcing the Efficient Market Hypothesis (EMH) proposed by Fama (1970).

3. Evolution and Performance of Hedge Funds

Hedge funds originated in the United States in 1949 when Alfred Winslow Jones introduced the first fund combining long and short equity positions to minimize market exposure. Over the decades, hedge funds evolved into a diverse and complex sector encompassing multiple strategies, including global macro, event-driven, equity long-short, and arbitrage funds.
According to Ackermann, McEnally, and Ravenscraft (1999), hedge funds exhibit higher performance than mutual funds due to active management and the ability to use leverage. However, these advantages come with increased risk and lower transparency. Fung and Hsieh (1997) proposed a model identifying seven major factors that explain hedge fund returns, including equity market exposure, interest rate risk, and volatility trends. Their research concluded that hedge funds, while more volatile, provide non-linear payoffs that can improve portfolio diversification when combined with traditional assets.

Recent data from Hedge Fund Research (HFR, 2023) shows that global hedge funds generated average annualized returns of 14.2% from 2013 to 2022, outperforming major equity benchmarks. However, they also experienced sharper drawdowns during global financial crises, such as the 2008 recession and the COVID-19 market shock in 2020.

4. Comparative Studies Between Hedge Funds and Mutual Funds

The comparative literature between hedge funds and mutual funds emphasizes the differences in regulatory environment, investor base, and performance consistency. Agarwal and Naik (2000) conducted one of the earliest comparative studies, finding that hedge funds delivered superior returns with higher volatility. Their study highlighted the importance of strategy selection and manager skill as key determinants of hedge fund success. In contrast, Elton, Gruber, and Blake (1996) observed that mutual funds often underperform market benchmarks after adjusting for management fees and expenses. This underperformance is primarily attributed to higher administrative costs and limited investment flexibility due to regulatory constraints. A more recent analysis by SP Global SPIVA (2022) supports these findings in the Indian context, showing that 83% of actively managed Indian equity mutual funds underperformed their respective benchmarks over a 10-year horizon. Conversely, HFR’s 2022 Global Hedge Fund Index revealed that hedge funds outperformed by achieving superior Sharpe ratios, indicating better risk-adjusted efficiency.

Furthermore, Capocci and Hübner (2004) found that hedge fund managers generate significant positive alpha, demonstrating superior market-timing and stock-selection abilities. They also argued that hedge funds are less correlated with traditional asset classes, offering diversification benefits to institutional portfolios.

5. Risk Management and Regulatory Framework

Risk management is central to both hedge funds and mutual funds, but the frameworks differ significantly. Mutual funds operate under SEBI (Mutual Funds) Regulations, 1996, which emphasize investor protection, transparency, and liquidity. These regulations limit the use of leverage and derivatives, ensuring that mutual funds maintain moderate risk exposure. Hedge funds, on the other hand, operate in a lightly regulated environment, often domiciled in offshore jurisdictions to avoid restrictions. This freedom allows them to employ complex strategies, but also exposes them to operational and liquidity risks.

According to Agarwal, Daniel, and Naik (2009), risk-adjusted returns of hedge funds depend heavily on manager skill, strategy type, and incentive structures such as performance fees. Regulatory studies, including IOSCO (2019), have urged global oversight mechanisms to enhance transparency in hedge fund reporting to

mitigate systemic risks.

6. Behavioral and Investor Perspectives

Behavioral finance literature provides further insight into how investors perceive and choose between hedge funds and mutual funds. According to Barberis and Thaler (2003), investor behavior is influenced by cognitive biases such as overconfidence, herd behavior, and loss aversion. Mutual fund investors, particularly in developing markets like India, are driven by trust, brand recognition, and long-term safety rather than short-term performance. Statman (2002) emphasized that while mutual fund investors prioritize transparency and steady returns, hedge fund investors value exclusivity, innovation, and high-risk, high-reward profiles. This difference in psychology has a significant impact on fund inflows and redemption cycles.

Moreover, Chakrabarti and Roy (2019) highlighted that Indian investors are gradually becoming more risk-aware and are beginning to include alternative investments such as hedge funds and PMS (Portfolio Management Services) in their portfolios, signaling a structural evolution in India's financial ecosystem.

7. Summary of Literature Insights

From the collective review, the following key insights emerge:

- Hedge funds generally provide superior returns but at the cost of higher volatility and lower transparency.
- Mutual funds offer consistent, regulated, and diversified options for long-term investors, aligning with financial inclusion goals.
- The performance of both fund types is influenced by managerial skill, strategy design, market conditions, and regulatory environments.
- Diversification across both fund types enhances risk-adjusted performance and supports the goals of portfolio optimization as per Modern Portfolio Theory.

III. CONCLUSION

The reviewed studies collectively indicate that while mutual funds remain the backbone of the retail investment landscape, hedge funds continue to attract institutional investors seeking excess returns. However, the integration of hedge funds into diversified portfolios can significantly improve overall efficiency.

The literature thus provides a theoretical and empirical foundation for the present study, justifying the comparative evaluation of hedge funds and mutual funds in the context of risk-return trade-offs, investor behavior, and financial regulation. This sets the stage for the subsequent sections of data analysis and interpretation in this research.

IV. RECOMMENDATIONS

- Retail Investors: Prioritize mutual funds for regular savings and goal-based investing.
- High-Net-Worth Individuals (HNIs): Consider limited hedge fund exposure for diversification.
- Financial Advisors: Utilize Sharpe, Treynor, and Beta ratios in client recommendations.
- Regulators (SEBI): Introduce a framework for regulated hedge fund participation in India.
- Future Researchers: Conduct longitudinal studies to examine post-2025 trends in hybrid fund structures.

V. REFERENCES

[1] Ackermann, C., McEnally, R., & Ravenscraft, D. (1999). The performance of hedge funds: Risk, return, and incentives. Journal of Finance, 54(3), 833–874. https://doi.org/10.1111/0022-1082.00129

[2] Agarwal, V., & Naik, N. Y. (2000). Multi-period performance persistence analysis of hedge funds. Journal of Financial and Quantitative Analysis, 35(3), 327–342.

[3] Agarwal, V., Daniel, N., & Naik, N. (2009). Role of managerial incentives and discretion in hedge fund performance. Journal of Finance, 64(5), 2221–2256.

[4] Association of Mutual Funds in India (AMFI). (2023). Mutual Fund Fact Book. Retrieved from

https://www.amfiindia.com
[5] Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. Handbook of the Economics of Finance, 1(B), 1053–1128.
[6] Bodie, Z., Kane, A., & Marcus, A. J. (2021). Investments (12th ed.). McGraw-Hill Education.
[7] Brown, S. J., & Goetzmann, W. N. (1995). Performance persistence in mutual funds. Journal of Finance, 50(2), 679–698.
[8] Capocci, D., & Hübner, G. (2004). Analysis of hedge fund performance. Journal of Empirical Finance, 11(1), 55–89.
[9] Chakrabarti, R., & Roy, S. (2019). Behavioral aspects of Indian retail investors: A study on risk perception. Indian Journal of Finance and Management, 13(2), 41–52.
[10] Elton, E. J., Gruber, M. J., & Blake, C. R. (1996). The persistence of risk-adjusted mutual fund performance. Journal of Business, 69(2), 133–157.
[11] Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. Journal of Finance, 25(2), 383–417.
[12] Fung, W., & Hsieh, D. A. (1997). Empirical characteristics of dynamic trading strategies: The case of hedge funds. Review of Financial Studies, 10(2), 275–302.
[13] Hedge Fund Research (HFR). (2023). Global Hedge Fund Index Performance Summary. Retrieved from https://www.hedgefundresearch.com
[14] International Organization of Securities Commissions (IOSCO). (2019). Report on hedge funds oversight. Retrieved from https://www.iosco.org
[15] Jensen, M. C. (1968). The performance of mutual funds in the period 1945–1964. Journal of Finance, 23(2), 389–416.
[16] Malkiel, B. G. (1995). Returns from investing in equity mutual funds 1971–1991. Journal of Finance, 50(2), 549–572.
[17] Markowitz, H. (1952). Portfolio selection. Journal of Finance, 7(1), 77–91.
[18] Securities and Exchange Board of India (SEBI). (2023). Annual Report. Mumbai: SEBI. Retrieved from https://www.sebi.gov.in
[19] Sharpe, W. F. (1966). Mutual fund performance. Journal of Business, 39(1), 119–138.
[20] SP Global. (2022). SPIVA India Scorecard. Retrieved from https://www.spglobal.com
[21] Statman, M. (2002). Lottery players, stock traders, and the greater fool. Financial Analysts Journal, 58(6), 14–21.