

A Comparative Evaluation of Active Versus Passive Decision-Making in Hedge Fund Management

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Received: 20/07/2024 | Accepted: 11/09/2025 | Published: 27/10/2025

Abstract: This study provides a comparative evaluation of active versus passive decision-making approaches in hedge fund management, with the aim of determining their relative effectiveness in generating risk-adjusted returns, managing volatility, and sustaining long-term portfolio performance. Hedge fund managers operate in complex and dynamic financial environments where strategic decisions—whether actively timed or passively structured—significantly influence investment outcomes. The study examines how active decision-making, characterized by frequent trading, market timing, and discretionary allocation, compares with passive strategies that rely on systematic models, index tracking, and long-term holding structures.

Using a comparative analytical framework grounded in modern portfolio theory and behavioural finance, the research evaluates performance differentials between the two approaches across varying market conditions, including periods of stability, recession, and high volatility. The study further investigates how managerial skill, information asymmetry, transaction costs, and behavioural biases affect the efficiency of both decision-making styles. Evidence from global hedge fund performance data suggests that while active strategies may yield superior returns during periods of market inefficiency, they are often associated with higher operational costs and increased risk exposure. Conversely, passive strategies demonstrate greater consistency and cost efficiency but may underperform in rapidly changing market environments where flexibility is essential.

The findings highlight that neither approach is universally superior; rather, effectiveness is contingent upon market conditions, managerial expertise, and fund objectives. The study concludes that a hybrid decision-making model integrating both active and passive elements may offer a more balanced framework for optimizing hedge fund performance. This research contributes to ongoing debates in investment management theory by clarifying the conditions under which each decision-making style is most effective and by providing insights for hedge fund managers, institutional investors, and financial regulators.

Keywords: Active vs Passive Investment Strategies, Hedge Fund Management, Risk-Adjusted Returns, Portfolio Optimization, Behavioral Finance.

Introduction

Hedge fund management occupies a central position in modern financial systems, operating at the intersection of sophisticated investment theory, high-frequency information processing, and strategic capital allocation. Unlike traditional investment vehicles, hedge funds are designed to pursue absolute returns irrespective of broader market direction, often employing complex instruments such as derivatives, leverage, arbitrage positions, and short-selling strategies. Within this context, managerial decision-making becomes a critical determinant of fund performance, shaping not only profitability but also exposure to systemic risk, liquidity constraints, and investor confidence. One of the most enduring debates in financial economics concerns the comparative effectiveness of active versus passive decision-making in hedge fund management, particularly in relation to efficiency, consistency, and risk-adjusted performance outcomes¹.

Active decision-making in hedge fund management refers to a discretionary investment approach where managers continuously interpret market signals, economic indicators, geopolitical developments, and firm-specific data to adjust portfolio

allocations. This style of management is grounded in the belief that financial markets are not perfectly efficient and that mispricing opportunities regularly emerge due to information asymmetry, behavioural biases, and institutional constraints. As a result, active managers attempt to exploit these inefficiencies through timing strategies, security selection, and tactical asset allocation. The underlying assumption is that superior analytical capability, access to information, and cognitive skill can generate consistent alpha, or returns exceeding benchmark indices².

In contrast, passive decision-making is characterized by a systematic, rules-based approach to investment management. Rather than attempting to outperform the market through continuous trading and forecasting, passive strategies aim to replicate market indices or follow predetermined models with minimal human intervention. This approach is grounded in the efficient market hypothesis, which argues that asset prices fully reflect all available information, making it extremely difficult for active managers to consistently outperform the market after costs are considered³. Passive decision-making therefore emphasizes long-term holding strategies, diversification, and cost minimization as primary drivers of performance. The tension between these two

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approaches has intensified over the past decades, particularly as empirical research has increasingly questioned the ability of active managers to consistently deliver superior returns. Numerous studies have shown that, after accounting for management fees, transaction costs, and survivorship bias, a significant proportion of actively managed funds underperform benchmark indices over extended time horizons⁴. However, hedge funds occupy a unique segment of the investment landscape because they are not constrained by traditional regulatory frameworks or benchmark tracking requirements. This flexibility allows hedge fund managers to engage in more aggressive and opportunistic strategies, which complicates direct comparisons with passive investment approaches.

One of the central arguments in favour of active hedge fund management is its adaptability in dynamic and volatile market environments. Financial markets are frequently disrupted by macroeconomic shocks, political instability, technological innovation, and liquidity crises. During such periods, passive strategies may become rigid and slow to respond, exposing portfolios to significant downside risk. Active hedge fund managers, on the other hand, are able to rapidly adjust positions, hedge exposures, and reallocate capital in response to changing market conditions. This responsiveness is particularly valuable during financial crises, where timely decision-making can significantly reduce losses or even generate positive returns in declining markets⁵. Despite these advantages, active decision-making is not without significant limitations. One of the most critical challenges is the impact of behavioural biases on managerial judgment. Cognitive distortions such as overconfidence, loss aversion, anchoring, and confirmation bias can lead hedge fund managers to make suboptimal investment decisions, particularly under conditions of uncertainty. These behavioural tendencies may result in excessive trading, under-diversification, or delayed response to market signals, ultimately eroding fund performance⁶. Furthermore, active strategies typically involve higher transaction costs, increased operational complexity, and greater exposure to timing errors, all of which can reduce net returns.

Passive decision-making, while often criticized for its lack of flexibility, offers several structural advantages. By minimizing trading frequency and relying on systematic allocation rules, passive strategies significantly reduce transaction costs and eliminate many of the emotional and cognitive errors associated with active trading. Additionally, passive approaches benefit from broad market exposure, which enhances diversification and reduces idiosyncratic risk. In efficient markets, where price movements are largely unpredictable, passive strategies may therefore provide more stable and predictable returns over long periods⁷. However, the applicability of passive strategies within hedge fund management is more complex than in traditional asset management. Hedge funds are often expected to deliver absolute returns rather than relative benchmark performance, which inherently requires some degree of active positioning. Moreover, hedge fund strategies frequently involve alternative asset classes, derivatives, and arbitrage opportunities that cannot be effectively captured through passive replication. As a result, while passive principles may inform certain aspects of hedge fund construction, pure passive management is rarely feasible within this sector.

The theoretical foundation of this study draws primarily from three major frameworks in financial economics. Modern Portfolio

Theory provides the basis for understanding diversification and risk-return optimization, suggesting that rational investors should construct portfolios that maximize expected return for a given level of risk⁸. The Efficient Market Hypothesis challenges the value of active management by asserting that asset prices already reflect all available information, thereby limiting opportunities for systematic outperformance³. In contrast, Behavioural Finance introduces a more nuanced perspective, emphasizing the role of psychological biases and irrational behaviour in financial decision-making, thereby providing justification for the existence of exploitable market inefficiencies⁶. Agency theory also plays a significant role in understanding hedge fund manager behaviour. In many hedge fund structures, managers are compensated through performance-based fee arrangements, commonly known as “2 and 20” models (2% management fee and 20% performance fee). While such structures are designed to align manager and investor interests, they may also incentivize excessive risk-taking, short-termism, or return-chasing behaviour. This creates a potential conflict of interest between hedge fund managers and investors, particularly when downside risks are not fully internalized by managers⁹.

In addition to theoretical considerations, empirical evidence on hedge fund performance presents mixed conclusions. Some studies suggest that skilled hedge fund managers are capable of generating persistent alpha, particularly in less efficient markets or during periods of economic stress. Others argue that observed outperformance is often the result of survivorship bias, leverage, and favorable risk exposure rather than superior skill. This ambiguity reinforces the need for a comparative evaluation of active and passive decision-making approaches within hedge fund management, particularly in terms of their performance consistency, risk efficiency, and adaptability across different market regimes. The importance of this study is further underscored by the growing influence of hedge funds in global financial markets. Hedge funds play a significant role in liquidity provision, price discovery, and risk transfer, often acting as counterparty participants in complex financial transactions. Their decisions can have systemic implications, particularly during periods of financial instability. As such, understanding the effectiveness of managerial decision-making styles is not only relevant for individual investors and fund managers but also for regulators and policymakers concerned with financial stability.

This study therefore seeks to conduct a comprehensive comparative evaluation of active versus passive decision-making in hedge fund management. It aims to assess their relative effectiveness in generating risk-adjusted returns, managing portfolio volatility, and adapting to changing market conditions. By integrating insights from modern portfolio theory, behavioural finance, and agency theory, the study provides a multidimensional framework for understanding how hedge fund managers make decisions and how these decisions influence overall fund performance. Ultimately, the research contributes to the broader discourse on investment management efficiency by clarifying the conditions under which each decision-making approach is most effective and by exploring the potential for hybrid models that combine the strengths of both active and passive strategies.

Literature Review

The literature on hedge fund management is both extensive and intellectually diverse, reflecting contributions from financial economics, portfolio theory, behavioural finance, institutional

governance, and empirical asset pricing. At its core, the academic discourse revolves around the efficiency of markets, the ability of managers to generate persistent abnormal returns, and the relative merits of active versus passive decision-making frameworks. Hedge funds occupy a unique position within this debate because they operate with fewer regulatory constraints, employ leverage, and use complex derivatives, thereby making their performance outcomes more sensitive to managerial decisions than traditional investment vehicles.

1. Active Hedge Fund Management and the Search for Alpha

A dominant strand of literature conceptualizes hedge fund management as an active pursuit of alpha generation. Sharpe¹ argues that active management, in aggregate, is a zero-sum game before costs and a negative-sum game after costs, implying that outperformance by some managers must necessarily be offset by underperformance by others. Despite this theoretical constraint, hedge funds continue to justify their existence on the basis of skill-based performance differentiation and market inefficiencies. Fung and Hsieh² provide a foundational contribution by demonstrating that hedge fund returns are better explained by exposure to alternative risk factors rather than traditional linear asset pricing models. They argue that hedge fund strategies often mimic option-like payoffs, meaning that returns are nonlinear and highly dependent on market conditions. This challenges conventional performance evaluation methods and complicates comparisons between active and passive approaches. Further empirical evidence by Kosowski et al.³ suggests that a small subset of hedge fund managers consistently demonstrate statistically significant outperformance even after adjusting for risk, fees, and survivorship bias. Their findings support the existence of genuine managerial skill, although they emphasize that such skill is rare and concentrated among a limited number of funds. Similarly, Agarwal and Naik⁴ show that hedge fund returns are highly strategy-dependent, with equity-oriented funds behaving differently from macro or arbitrage-based funds, reinforcing the idea that active management is heterogeneous rather than uniform.

However, this optimistic view of active management is counterbalanced by evidence suggesting that much of observed hedge fund performance may be attributed to hidden risk exposures rather than skill. Mitchell and Pulvino⁵ argue that hedge funds often earn returns by providing liquidity during market stress, effectively being compensated for bearing tail risk rather than generating pure alpha. This raises important questions about whether hedge fund managers are truly skilled or simply risk bearers in disguise.

2. Passive Investment Philosophy and Market Efficiency

The theoretical foundation for passive investment strategies is rooted in the Efficient Market Hypothesis (EMH), most notably advanced by Fama⁶. The EMH posits that financial markets efficiently incorporate all available information into asset prices, making systematic outperformance through active trading extremely difficult. Under this framework, passive investment strategies such as index replication become the optimal approach for most investors, as they minimize costs and avoid the pitfalls of speculative forecasting. Malkiel⁷ provides strong empirical support for this view, demonstrating that over long investment horizons, the majority of actively managed funds underperform passive benchmarks such as index funds. He attributes this underperformance primarily to high fees, excessive turnover, and

behavioural inefficiencies among managers. French⁸ further quantifies the cost of active management, estimating that investors collectively pay billions in fees for underperformance relative to passive alternatives. Despite this strong evidence, critics of strict market efficiency argue that markets are not always rational or fully informed. Shiller⁹ introduces the concept of “irrational exuberance,” highlighting how psychological factors and herd behaviour can drive asset prices away from fundamental values. This creates temporary inefficiencies that may be exploited by skilled active managers, particularly in less liquid or emerging markets.

3. Behavioural Finance and Managerial Decision Bias

Behavioural finance provides a critical lens through which to evaluate hedge fund manager behaviour. Kahneman and Tversky¹⁰, through Prospect Theory, demonstrate that individuals do not make decisions purely rationally but instead evaluate gains and losses asymmetrically. This leads to systematic deviations from expected utility maximization. In hedge fund management, such behavioural biases can have significant implications. Barber and Odean¹¹ show that overconfident investors tend to trade excessively, resulting in lower net returns due to transaction costs. This is particularly relevant for hedge fund managers, who often operate under pressure to deliver short-term performance, potentially amplifying overtrading behaviour.

Barberis and Thaler¹² extend this analysis by showing that behavioural biases not only distort individual decision-making but also contribute to market anomalies that can be systematically exploited. For instance, underreaction to news and overreaction to extreme events create pricing inefficiencies that active hedge fund managers may attempt to capitalize on. However, behavioural biases also introduce risks of misjudgment, especially in high-leverage environments typical of hedge funds. Anchoring to past performance, confirmation bias in research interpretation, and loss aversion in position management can all distort rational portfolio decisions and undermine long-term performance stability.

4. Risk Management and Strategic Exposure

Risk management is a central concern in hedge fund literature due to the inherently leveraged and complex nature of hedge fund strategies. Jorion¹³ emphasizes the importance of Value-at-Risk (VaR) models in quantifying potential portfolio losses under normal market conditions. However, he also notes the limitations of such models in capturing extreme tail events, which are particularly relevant in hedge fund collapses. Brown et al.¹⁴ find that hedge funds with stronger incentive structures tend to take on higher levels of risk, especially when performance fees are convex in nature. This introduces moral hazard, as managers may increase portfolio volatility to maximize compensation, even at the expense of investor protection. Additionally, Ackermann et al.¹⁵ highlight that hedge fund returns are often positively correlated with downside risk exposure, suggesting that higher returns may be compensation for bearing rare but severe losses. This challenges the conventional interpretation of hedge fund performance as purely skill-based.

5. Incentives, Agency Theory, and Governance Structures

Agency theory provides a foundational explanation for potential misalignments between hedge fund managers and investors. Jensen and Meckling¹⁶ argue that when ownership and control are separated, managers may pursue personal utility rather than

shareholder wealth maximization. In hedge funds, this is exacerbated by asymmetric fee structures such as the “2 and 20” model, which provides managers with significant upside participation but limited downside accountability. Goetzmann et al.¹⁷ argue that such incentive structures may encourage risk-shifting behaviour, where managers increase exposure to high-volatility assets in pursuit of performance fees. This creates systemic concerns, particularly during market booms when risk-taking behavior tends to intensify. Governance mechanisms in hedge funds are also relatively weak compared to mutual funds, with limited regulatory oversight and transparency requirements. This lack of external control increases the importance of internal risk controls and investor due diligence.

6. Comparative Evaluation of Active and Passive Strategies

The empirical comparison between active and passive strategies yields mixed and context-dependent results. Cremers and Petajisto¹⁸ introduce the concept of “active share,” which measures the extent to which portfolio holdings deviate from benchmark indices. Their findings indicate that only truly active managers with high active share consistently outperform, while “closet indexers” underperform after fees. Other studies suggest that passive strategies dominate in efficient and stable markets due to their low cost structure and reduced behavioural interference. However, during periods of financial stress, active strategies often outperform by providing downside protection and exploiting temporary mispricings created by market panic. This duality suggests that neither approach is universally superior; instead, effectiveness depends on market conditions, investor objectives, and managerial capability. Hybrid models combining systematic (passive) frameworks with discretionary (active) overlays are increasingly proposed as optimal solutions in modern portfolio management literature.

7. Synthesis and Identified Research Gap

The literature reveals a fundamental tension between theoretical efficiency and empirical observation. While EMH supports passive investment as optimal, behavioural finance and empirical hedge fund studies suggest that inefficiencies do exist and can be exploited under certain conditions. Active management, therefore, remains relevant but highly conditional on skill, timing, and market environment. A key gap in existing literature is the lack of integrated comparative frameworks that simultaneously evaluate performance outcomes, behavioural influences, and risk dynamics within hedge fund decision-making. Most studies isolate either performance metrics or behavioural explanations without fully connecting them to decision-making structures (active vs passive). Furthermore, limited research has been conducted on how these approaches interact dynamically across different market cycles within hedge fund environments. This study addresses this gap by providing a comprehensive comparative evaluation of active and passive decision-making in hedge fund management, focusing on performance efficiency, risk exposure, behavioural constraints, and adaptability across market conditions.

Theoretical Framework

This study on A Comparative Evaluation of Active Versus Passive Decision-Making in Hedge Fund Management is grounded in several interrelated financial and behavioural theories. These theories collectively explain how hedge fund managers make decisions, how markets behave, and why performance differences

arise between active and passive investment approaches. The integration of these theories provides a multidimensional lens for evaluating managerial effectiveness, risk-taking behaviour, and investment outcomes.

1. Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis is one of the most influential theories in modern financial economics. It posits that financial markets are efficient in processing and reflecting all available information in asset prices, making it impossible to consistently achieve abnormal returns through active trading strategies¹.

Fama distinguishes three forms of market efficiency: weak, semi-strong, and strong. In semi-strong form efficiency, all publicly available information is already incorporated into prices, limiting the ability of hedge fund managers to outperform using publicly disclosed data. This theory strongly supports passive decision-making strategies such as index tracking and buy-and-hold approaches.

Within this study, EMH is used as a benchmark theoretical foundation to evaluate passive decision-making. If markets are efficient, then active management becomes costly and inefficient due to transaction costs, fees, and informational disadvantages. However, hedge funds challenge this theory by attempting to exploit temporary inefficiencies, making EMH both a supporting and contested framework in this research context.

2. Modern Portfolio Theory (MPT)

Modern Portfolio Theory, developed by Harry Markowitz, provides a mathematical framework for constructing optimal portfolios based on risk-return trade-offs². MPT emphasizes diversification as a key mechanism for reducing unsystematic risk while maximizing expected returns. The theory assumes that investors are rational and seek to optimize portfolios along an efficient frontier.

In the context of hedge fund management, MPT is used to evaluate how both active and passive managers construct portfolios. Active managers attempt to shift the portfolio along the efficient frontier through timing and selection, while passive managers typically maintain broad diversification to minimize risk exposure. This theory is essential for assessing whether active decision-making truly improves risk-adjusted performance or simply increases complexity without improving efficiency.

3. Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model extends Modern Portfolio Theory by introducing a systematic relationship between risk and expected return. It explains that expected return on an asset is determined by its exposure to systematic risk, represented by beta³.

CAPM is crucial for performance evaluation in hedge fund research because it provides a benchmark for measuring abnormal returns (alpha). Hedge fund managers often justify active strategies based on their ability to generate positive alpha after controlling for market risk.

In this study, CAPM is used to assess whether active hedge fund managers genuinely outperform passive benchmarks or whether observed returns are simply compensation for higher systematic risk exposure.

4. Arbitrage Pricing Theory (APT)

The Arbitrage Pricing Theory, developed by Stephen Ross, extends CAPM by allowing multiple macroeconomic risk factors to influence asset returns⁴. Unlike CAPM, which relies on a single market factor, APT recognizes that returns may be affected by inflation, interest rates, industrial production, and other systematic forces.

APT is highly relevant to hedge fund management because many hedge fund strategies—such as macro funds and multi-strategy funds—are explicitly designed around exploiting multiple risk factors. Active managers often rely on factor-based forecasting to position portfolios, while passive strategies typically ignore such dynamic adjustments.

This theory supports the argument that hedge fund performance may depend on factor exposure rather than pure managerial skill, thereby complicating the distinction between active and passive decision-making.

5. Behavioral Finance Theory

Behavioural Finance Theory challenges the assumption of fully rational investors by incorporating psychological and emotional influences into financial decision-making⁵.

Kahneman and Tversky's Prospect Theory demonstrates that individuals evaluate gains and losses asymmetrically, leading to irrational risk-taking behaviour. In hedge fund management, behavioural biases such as overconfidence, herding, and confirmation bias significantly influence active decision-making.

This theory is particularly important in this study because it explains why active managers may underperform despite access to superior information. It also provides justification for the existence of market inefficiencies, which passive theories like EMH fail to account for. Therefore, behavioural finance bridges the gap between theory and observed market anomalies.

6. Agency Theory

Agency Theory explains the relationship between principals (investors) and agents (hedge fund managers), focusing on conflicts of interest that arise due to differing objectives⁶.

Research Gaps

1. A major gap in existing literature is the absence of integrated comparative frameworks that simultaneously evaluate active and passive decision-making within hedge fund management. Most studies tend to isolate either active strategies, focusing on alpha generation, manager skill, or behavioural biases, or passive strategies, focusing on efficiency, cost minimization, and index tracking, without directly comparing them under a unified analytical structure. This fragmentation limits the ability to draw holistic conclusions about which decision-making approach performs better under specific market environments. There is therefore a need for a structured comparative model that evaluates both approaches using consistent performance, risk, and behavioural indicators.

2. Another key gap is the insufficient focus on hedge fund-specific decision contexts. Much of the existing research is derived from mutual funds, pension funds, or equity market studies, with limited emphasis on hedge funds as a distinct investment category. Hedge funds operate under unique conditions, including high leverage,

derivative-based strategies, short-selling flexibility, alternative asset exposure, and relatively light regulatory oversight. However, many studies generalize findings from traditional asset management to hedge funds, which may lead to incomplete or misleading conclusions. There is therefore a need for research that specifically isolates hedge fund environments when evaluating active and passive decision-making.

3. A further gap lies in the inadequate analysis of hybrid decision-making models. Existing literature largely treats active and passive decision-making as mutually exclusive categories, yet in practice many hedge funds combine systematic, quantitative models with discretionary managerial overlays. These hybrid structures blend passive-like factor models with active judgment and tactical adjustments. There is limited empirical research examining whether such hybrid models outperform pure active or pure passive approaches, particularly in terms of risk-adjusted returns and stability across market cycles.

4. There is also a weak empirical link between behavioural biases and actual hedge fund decision outcomes. While behavioural finance literature extensively documents cognitive biases such as overconfidence, herding, anchoring, and loss aversion, there is limited direct measurement of how these biases translate into hedge fund portfolio decisions and performance outcomes. Most studies remain theoretical or experimental rather than applied to real hedge fund trading behaviour. This creates a gap between behavioural theory and practical investment decision-making.

5. Another significant gap is the limited focus on market cycle and crisis-based comparisons. Many studies rely on long-term average returns, which mask important variations in performance across different economic conditions. There is insufficient research on how active and passive strategies perform during financial crises, bull markets, bear markets, and periods of liquidity stress. Understanding how decision-making effectiveness changes across market regimes is critical for a more accurate evaluation of hedge fund strategies.

6. Data limitations and survivorship bias also represent a major gap in the literature. Hedge fund datasets often suffer from incomplete reporting, voluntary disclosure bias, and exclusion of failed funds, which leads to survivorship bias. This can artificially inflate performance estimates and distort comparisons between active and passive strategies. Additionally, inconsistent classification of hedge fund types further complicates empirical analysis. There is therefore a need for more robust datasets and methodologies that correct for these biases.

7. Another gap is the underdeveloped research on emerging and frontier markets. Most hedge fund studies are concentrated in developed financial markets such as the United States and Western Europe. Emerging markets, where inefficiencies are more pronounced, information asymmetry is higher, and liquidity constraints are more severe, remain under-researched. This limits understanding of whether active or passive decision-making is more effective in less efficient market environments.

8. There is also a lack of longitudinal studies tracking hedge fund managers over time. Most existing research uses static or cross-sectional datasets, which do not capture how managerial decision-making evolves. There is limited understanding of whether hedge fund managers transition between active and passive strategies over time, how learning effects influence performance, and

whether consistent decision styles are associated with long-term success.

9. Finally, there is limited emphasis on risk-adjusted decision efficiency as a comparative measure. While many studies focus on returns, fewer examine how returns are generated relative to the level of risk taken. Measures such as drawdowns, volatility-adjusted performance, and stability of returns are often underexplored in comparative studies of active and passive hedge fund strategies. This results in an incomplete understanding of true performance efficiency.

In summary, the existing literature does not adequately integrate active and passive decision-making within a unified hedge fund framework. Key gaps exist in comparative modelling, hedge fund-specific analysis, hybrid strategy evaluation, behavioural measurement, market cycle sensitivity, data reliability, geographical scope, longitudinal behaviour tracking, and risk-adjusted efficiency assessment. Addressing these gaps is essential for developing a more comprehensive and context-sensitive understanding of hedge fund managerial effectiveness.

Recommendations

Hedge fund managers should consider adopting a hybrid decision-making model that integrates both active and passive strategies. Purely active approaches expose funds to higher behavioural risk, operational costs, and inconsistent performance, while purely passive approaches limit flexibility in responding to market inefficiencies. A blended structure—combining systematic, rules-based portfolio construction with selective discretionary adjustments—can improve risk-adjusted returns and enhance adaptability across different market conditions.

1. Investment firms should strengthen risk management frameworks to ensure that active decision-making does not lead to excessive exposure to leverage, liquidity risk, or tail events. Advanced risk tools such as stress testing, scenario analysis, and dynamic Value-at-Risk modelling should be institutionalized to reduce vulnerability during periods of market volatility. This is particularly important in hedge fund environments where rapid position adjustments can amplify both gains and losses.

2. There is a need for improved governance and incentive alignment mechanisms within hedge fund structures. Performance-based compensation systems should be redesigned to balance reward and long-term stability rather than short-term returns alone. Introducing deferred compensation structures and risk-adjusted performance metrics can help reduce excessive risk-taking and moral hazard problems associated with active management.

3. Hedge fund managers should place greater emphasis on behavioural discipline and cognitive bias mitigation. Training in behavioural finance should be integrated into professional development programs to reduce the impact of overconfidence, herd behaviour, and emotional decision-making. The use of algorithmic support systems and decision-checking frameworks can further enhance rationality in active investment decisions.

4. Regulators and institutional investors should encourage greater transparency and reporting standards in hedge fund operations. Improved disclosure of risk exposure, strategy classification, and performance attribution would reduce information asymmetry and allow for more accurate comparisons between active and passive strategies. This would also enhance investor protection and market stability.

5. Investors are advised to adopt a more evidence-based allocation approach, evaluating hedge fund managers not solely on historical returns but on risk-adjusted performance, consistency, and strategy transparency. Overreliance on short-term performance indicators should be avoided, as they often fail to capture underlying risk dynamics and behavioural distortions. Further investment should be made in data analytics and technology-driven decision systems, including artificial intelligence and machine learning tools. These technologies can enhance both active and passive decision-making by improving market prediction accuracy, reducing emotional bias, and increasing processing efficiency of large datasets.

Hedge fund strategies should be context-sensitive and market-cycle aware, meaning that managers should explicitly adjust their reliance on active or passive decision frameworks depending on macroeconomic conditions. Active strategies should be prioritised during periods of high volatility and inefficiency, while passive approaches should dominate during stable and efficient market phases.

Finally, academic and industry collaboration should be strengthened to develop standardized comparative evaluation models for hedge fund performance. Such models should incorporate behavioural, structural, and risk-based indicators to provide a more comprehensive assessment of managerial effectiveness beyond traditional return-based measures. Overall, the recommendations emphasize that optimal hedge fund management is not achieved through exclusive reliance on either active or passive decision-making, but through a disciplined integration of both approaches, supported by strong governance, advanced risk management, behavioural awareness, and technological innovation.

Conclusion

This study set out to conduct a comparative evaluation of active versus passive decision-making in hedge fund management, with a particular focus on performance outcomes, risk efficiency, behavioural influences, and adaptability across different market conditions. The analysis has demonstrated that the distinction between active and passive strategies is not absolute, but rather reflects two complementary approaches to investment management shaped by differing assumptions about market efficiency, managerial skill, and information processing.

1. The findings indicate that active decision-making in hedge fund management is primarily justified by the existence of market inefficiencies and the potential for skilled managers to generate alpha. Active strategies provide flexibility, responsiveness, and the ability to exploit short-term mispricing opportunities. However, their effectiveness is highly dependent on managerial competence, quality of information, and timing accuracy. In addition, active approaches are exposed to behavioural biases, higher transaction costs, and increased risk volatility, which can significantly erode net performance.

2. In contrast, passive decision-making demonstrates strong advantages in terms of cost efficiency, consistency, and long-term stability. By relying on systematic, rules-based investment structures, passive strategies minimize emotional interference and reduce behavioural distortions in decision-making. The evidence suggests that in efficient and stable markets, passive approaches often outperform active strategies on a risk-adjusted basis due to lower costs and reduced operational complexity. However, passive

strategies are less flexible and may underperform during periods of rapid market change or financial disruption.

3. The study further concludes that market conditions play a decisive role in determining the relative effectiveness of each approach. Active strategies tend to perform better in volatile, uncertain, or inefficient markets where pricing anomalies are more prevalent, while passive strategies are more effective in stable, information-efficient environments. This reinforces the view that no single decision-making model is universally optimal across all market regimes.

4. Behavioural finance insights highlight that cognitive biases significantly influence active hedge fund decision-making, often leading to suboptimal outcomes such as overtrading, mispricing of risk, and inconsistent portfolio adjustments. Passive strategies inherently reduce exposure to these biases by limiting discretionary intervention, thereby improving decision discipline and reducing emotional decision errors.

5. From a theoretical perspective, the integration of Efficient Market Hypothesis, Modern Portfolio Theory, Arbitrage Pricing Theory, Behavioural Finance, and Agency Theory provides a comprehensive framework for understanding hedge fund decision-making. These theories collectively demonstrate that performance outcomes are shaped not only by market conditions but also by structural incentives and psychological factors affecting managerial behaviour.

6. The comparative analysis ultimately suggests that neither active nor passive decision-making is inherently superior. Instead, their effectiveness is conditional and context-dependent. While active strategies offer potential for superior returns under specific conditions, passive strategies provide reliability, cost efficiency, and risk control advantages over the long term. A balanced or hybrid approach that integrates elements of both strategies may therefore represent the most effective model for hedge fund management.

In conclusion, hedge fund performance is best understood as the outcome of an interaction between market structure, managerial behaviour, and strategic decision-making style. The study establishes that optimal investment outcomes are not achieved through exclusive reliance on either active or passive strategies, but through adaptive decision frameworks that respond to changing market environments while maintaining disciplined risk control and cost efficiency.

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