Volume (1) No (12), 2025
Journal of Global Research in Multidisciplinary Studies (JGRMS)
Review Paper/Research Paper
Available online at https://saanvipublications.com/journals/index.php/jgrms/index

Comparative Performance Analysis of Active vs Passive Mutual Funds

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***Abstract*—This review paper will discuss the relative performance of both the active and passive mutual funds based on their performance in terms of returns, risk assumed, cost effectiveness and market environment on which their performance relies. Active funds seek to beat benchmarks by identifying the best securities and the best time to buy and sell securities, although their performance is frequently limited by larger expense ratios and lack of reliability in generating alpha. The passive funds which are used to track market indices enjoy the advantage of low costs, reduced turnover and the long-term growth of the market meaning that most investors have a stable investment. This paper summarizes empirical research in the world and in India to define tendencies in the performance of funds in different markets. The results show that passive strategies tend to perform better in efficient and stable markets whereas active funds can be beneficial during volatile markets or in less efficient markets. The review also identifies several critical determinants that influence investor decision-making and gives regions that need additional research in the emerging markets.**

Keywords—Active Mutual Funds; Passive Mutual Funds; Tracking Error; Expense Ratios; Market Efficiency; Emerging Markets; Investor Behavior.

I. Introduction

The argument on whether active or passive mutual funds are better at providing better performance has been heightened with the changing global markets and the change in investor preferences. Active funds strive to outperform benchmarks by stock selection and market timing whereas passive funds track indices at a lower cost [1]. The emergence of exchange-traded funds (ETFs) and index funds has brought more attention to the question of whether active managers should be paid higher fees because their risk-adjusted returns are better [2]. The recent changes in the market since the global financial crisis such as regulatory reforms, technological changes and the rise in the use of algorithmic trading have also played a role in the performance dynamics of both types of funds [3]. Large-cap markets with high efficiency have seen a high rate of passive investing. Nevertheless, the increasing prevalence of passive tactics empowers the price discovery and the stability of the market in the long run [4].

It is a more complicated situation in the emerging markets like India. Active managers can make money in specific segments because of market inefficiencies, liquidity limitations, and concentrated market structures [5], [6]. Meanwhile, the spread of ETFs and index funds has enhanced the accessibility of the low-cost investment [7]. This review is aimed at critically analyzing and comparing the performance of active and passive mutual funds by integrating international and regional empirical research. The article assesses risk-return features, cost architecture, tracking effectiveness, behavioural factors and performance in various market environments, including a crisis like the COVID-19 [8]. In contrast with descriptive reviews, this research has a critical perspective in pointing out the weaknesses, inconsistencies, and gaps in the current literature. The review will attempt to explain the consistency of the performance of one strategy as compared to the other or the performance might be superior depending on the market conditions, type of funds used and the horizon of the investment.

II. Literature Review

A. Tracking Efficiency and Passive Fund Performance

The studies of passive funds always focus on their lower cost and the precision of tracking, however, further research results prove that both factors are highly situational. Alamelu and Goyal [7] show a large tracking efficiency in Indian large-cap ETF, but implicitly assume that there should be adequate liquidity and institutional presence- a condition that may not necessarily be extended to mid-cap or sector-specific index, where tracking error is apt to increase. Similar results are reported by Bowes and Ausloos [9]. Which state positive risk-adjusted performance of smart beta ETFs but note that factor tilts have the unintended effect of distorting diversification, which is a structural weakness that is not generally noted in simplistic cost-based comparisons. To compound this, Easley et al. [3] believe that the fast growth of passive investing generates adverse externalities on market quality by diminishing price discovery and heightening fragility, which makes the argument one that puts a strain on the established narratives that passive strategies are purely positive. In line with this, Gârleanu and Pedersen [1]. Underline that passive dominance is paradoxical in that it presupposes active managers rectifying mispricings, which implies that passive outperformance cannot exist in isolation. Collectively, these results point to the fact that the advantages associated with passive funds, namely their low cost and tracking accuracy, should be contrasted with their system level impacts and their susceptibility to structural inefficiencies.

B. Issues of Active Fund Performance and Benchmark

There is also a split in evidence on active fund performance, where the findings are extremely dependent on methodological decisions (particularly the choice of benchmark). Numerous studies which report continuing underperformance ignore the possibility of benchmark mismatches, which Cremers, Fulkerson and Riley [10] point out is corrected by greater accuracy in benchmarking the strategy of each fund; under these circumstances, estimates of alpha will increase substantially. Their criticism denies decades of literature which has held benchmark alignment as a process but not a result. They however make their conclusions based mostly on the U.S. markets, which casts doubt on the generalisability of the findings to markets with weaker disclosures. Climent, Molla and Soriano [11] extend this point of view by demonstrating that Islamic mutual funds tend to be equal or even higher than conventional benchmarks, indicating that the limitations that are imposed by the mandates can contribute to a higher degree of discipline. Ji et al. [12] also report that BRICS mutual funds based on the idea of carbon-neutrality provide competitive returns, which means that active strategies based on themes and sustainability can provide structural benefits. However, there is still a large-scale evidence that is sceptical: Elton and Gruber [13] find that only a small group of active managers outperforms after costs, highlighting the challenge of enduring alpha generation. The discrepancies of these studies indicate that active performance depends on category, time-sensitive and very dependent on market structure thus making it difficult to make universal assertions of dominance or inferiority.

C. Market Conditions and Crisis Performance

Crises in markets are a natural laboratory to test the resilience of funds, and results in this area are as inconsistent as the rest of the literature. Pastor and Vorsatz [14] report that active managers were doing better than during the COVID-19 crash because active managers do tactical rebalancing and active risk management, which suggests that active flexibility is a value when volatility is at its peak. Nonetheless, Ottavainen [15] notes that passive funds in Finland regained their lost ground faster after the crisis, indicating that short-term recovery does not always result in an excellent long-term recovery. These contradicting findings demonstrate an unexplored fine-tuning: the crisis-time performance becomes determined by the regulatory, structural, and liquidity situation that is specific to the markets. There is a large research gap because the literature of comparative studies of pre-crises, crisis and post-crisis has not been undertaken well, particularly in the emerging markets where the shock is more intense and recovery is more volatile. Therefore, evidence of crisis demonstrates the importance of not generalising the results of single-market or short-window studies.

D. Emerging Markets Evidence

The emerging markets create additional complexity as they bring about greater inefficiency, fragmented liquidity and concentrated ownership systems, which can allow skilled managers to create alpha. Indian mid-cap active funds, Shreekant et al. [5] find that the outperformance is consistent and directly goes against years of U.S and European research rejecting active management. However, the weaknesses of their study such as coverage of only a short time frame and limited categories limit its extrapolation. The authors demonstrate that timely advantages in markets in terms of dynamics of active sector funds during particular cycles support the fact that the informational inefficiency has the potential to enhance the advantage of active managers [16]. Nonetheless, the data on the developed markets contradict this story. Jokiniemi, Chowdhury, and Vaihekoski [17] discover that passive funds in the U.S. outcompete their active counterparts in most segments, indicating that structural variations, including liquidity depths and market regulation, are the main factors that can predetermine the dominance of a particular strategy. Therefore, the evidence in emerging markets cannot be easily transferred to developed-market studies and has to be considered in the institutional environment.

E. Behavioural and Cost-Based Determinants

Other than the performance measures, costs and behavioural are other factors that play important roles in fund performance and choices made by investors. The authors concur that such behavioural biases, as overconfidence, anchoring, mental accounting, and familiarity biases, are the reasons why most investors make irrational decisions by investing in high-cost active funds despite a lack of empirical evidence supporting passive funds [18]. Such prejudices drive rational decision-making the wrong way and cripple performance-based structures. The picture is also complicated by the cost behaviour research. Ballas, Naoum and Vlismas [19] demonstrate that the asymmetric patterns of SG&A expenditures are dependent on strategic decisions, and organisations behaviour impacts the cost structure of funds. The operations of active funds, which are characterized by the use of research, naturally have a greater cost asymmetry. In line with this, Pan et al. [20] demonstrate that market efficiency can also moderate the cost productivity, which means that active managers can only justify higher costs when the market is sufficiently inefficient. These lessons underscore the fact that performance cannot be studied out of context of behavioural and organisational contexts.

F. ESG, Thematic, and Broader Investment Trends

The current ESG and thematic investment patterns offer novel performance relationships that do not respect conventional active-passive distinctions. Yesuf and Aassouli [21], identify high levels of synergies between Islamic and socially responsible investment (SRI) funds and both types of funds provide competitive returns or better returns as a result of changing investor values. Ji et al. [12] provide the same information, indicating that carbon-neutrality-oriented funds within BRICS markets produce positive performance, which implies that ESG-oriented strategies could perform better because of structural momentum and not necessarily active skill. Even though Zhang et al. [22]do not analyse the returns of mutual funds directly, their results on the policy of foreign aid and evolution of mutual benefits in China point to the impact of geopolitical and policy changes on the mutual investment flows based on a specific theme. Collectively, these researchers suggest that ESG/thematic investments form new performance sources that do not rely on the active-passive dichotomy, and this is another gap of the current research models that continue to look at funds classifications in conventional terms.

A Gap and a Contradiction in Literature

Through the streams of research, there are still some major contradictions: active outperformance in times of crisis [14] is met by accelerated passive recovery in the aftermath of crisis. The behavioural studies demonstrate that investor behaviour often contradicts performance logic altogether. These contradictions indicate the existence of persistent gaps: a lack of long-term emerging-market data, a lack of cross-country crisis-cycle data, a lack of research into behavioural distortions, and a lack of integration of ESG and thematic trends into performance-evaluation models [15]. Overall the literature indicates that both active and passive funds do not have any universal performance advantage, rather, performance is highly contextual specific and determined by market structure, behavioural biases, regulatory environment and investment philosophy.

III. Conceptual Framework

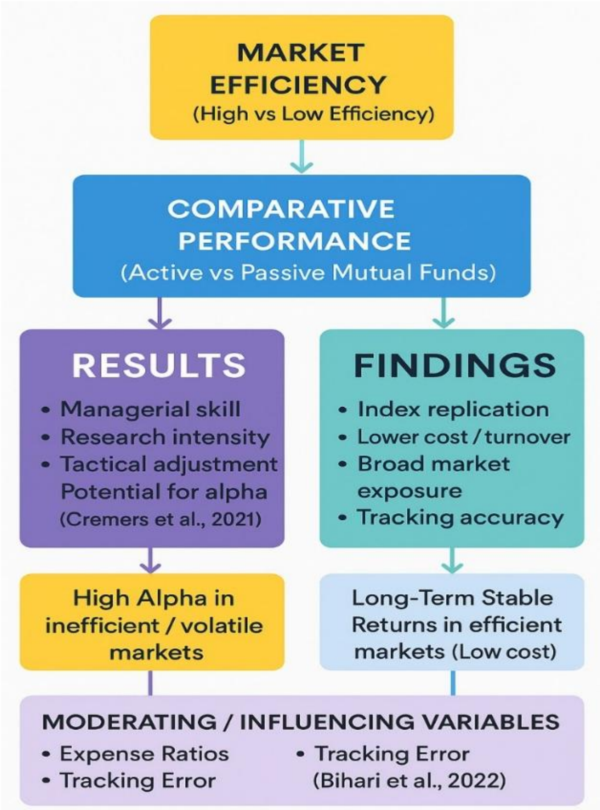

Fig. 1. Conceptual Framework: Comparative Performance of Active and Passive Mutual Funds

Figure 1 shows the theoretical framework that combines the key factors that determine the relative performance of active and passive mutual funds, which are tied to strategy, cost structure, market efficiency, and the risk-reward dynamics [13]. Active funds rely on the ability of managers, research intensity, and tactical changes and have the potential to produce alpha in volatile or inefficient markets. Passive funds are based on the copying of indices and they have the advantage of lower prices, low turnover, and wide market coverage [7]. The performance outcome is the result of expense ratios, tracking error, liquidity conditions, and behavioural biases. This model elucidates when every strategy will work best and serves to compare.

IV. Research Methodology

The review paper follows a qualitative research approach in order to examine and integrate the available evidence on the relative performance of active and passive mutual funds. The design adopted is an integrative review design which allows incorporation of various empirical evidence, theoretical discourses, and market-based simulation in both the global and emerging markets. Academic databases related to the topic such as Google scholar, Scopus, SSRN, science direct and Taylor and Francis were searched using the following keywords; active vs passive mutual funds, mutual fund performance, tracking error, alpha generation, expense ratios, market efficiency and ESG mutual funds. Preferential access was given to studies published between 2018 and 2025 as they would guarantee current relevance, and some of the foundational literature (i.e. [13]) were used where needed to put into perspective the theoretical background of fund performance.

These criteria included that the study sample of interest must produce first-hand evidence or conceptual information on returns, risk, cost structure, behavioural determinants, or market conditions that can affect active and passive funds [7]. Analysis by itself of non-related asset classes, out-of-date data, opinion based information, or non-comparable investment instruments was avoided because it did not have methodological coherence and reliability. The screening was done through the title, abstract and full-text screening to ascertain the inclusion of the objectives of the review. The selected papers were then thematically coded into a set of categories, including tracking efficiency, benchmark alignment, alpha-generation capability, crisis-period performance, market efficiency, ESG and thematic trends and behavioural influences [18]. This was a thematic grouping that allowed a systematic comparison of different market structures and methodological approaches.

The qualitative synthesis method has been used to synthesize the findings, find common patterns, reveal inconsistent findings, and assess the contextual determinants of liquidity, volatility, cost asymmetry, regulatory environments and long-term market efficiency [14], [16]. The approach backs up a critical and holistic perspective of when and why active or passive strategies work better. In general, the methodology guarantees analytical rigour, transparency, and replicability and allows identifying unresolved gaps, especially in the emerging markets where evidence is scarce or inconsistent with each other.

V. Results And Findings

A. Return Comparison

The returns in market structures and types of funds differ significantly. Passive funds typically provide higher returns in the long term as they have lower expense ratios and are able to replicate benchmarks correctly [7]. They can perform better in large and most efficient markets, where active mispricing can work on only a small number of opportunities [1]. This dominance however dies in new or less-researched segments. In India, evidence indicates that mid-cap active funds can produce consistent alpha [5], which proves that informational inefficiencies may increase active returns. Active managers have an added benefit when their market narratives fit thematic and ESG-driven strategies [12]. Passive strategies are, therefore, more successful in liquid or stable markets whereas active strategies are more effective in fragmented or volatile markets.

B. Risk Comparison

Active funds share the total systematic risk of the market index since they track the market indices regardless of their volatility. This causes further drawdowns during periods of downturns. Active managers on the other hand are able to rebalance holdings on a tactical basis, carry cash or hedge selectively which may reduce downside risk [14]. But, this benefit cannot be uniform since the case of poor timing decisions can rather elevate the portfolio risk instead of the risk reduction [13]. Moreover, post-crisis market evidence demonstrates that passive funds are frequently recovered rapidly, implying that active risk reduction could be a temporary process [15]. As such, active risks benefits are dependent on the competency of managers and the market environment.

C. Cost Advantage and Expenditure Ratios

The two strategies are highly differentiated by being cost efficient. Passive funds also enjoy the advantage of little research and trading, which causes low expense ratios and turnover [7], [23]. Such savings multiply with time and have a significant positive impact on net returns. Active funds have a higher fee rate as they are more intensive in research, analyzing portfolios, and having high levels of trading [10]. Ballas, Naoum and Vlismas [19] demonstrate that strategic decisions cause unequal SG&A behaviour which may further exaggerate costs. These increased costs decrease net performance in efficient markets, where alpha opportunities are limited. Therefore, active funds are only worth their fees in a setting where mispricing is significant to counteract the cost of operation.

D. Favourable Market Conditions of Each Strategy

Market efficiency and volatility are determining factors. Passive strategies are successful in markets when the price rapidly reflects the information and the chances of mispricing are minimal [1], [24]. They also work well in prolonged bull markets where they have the advantage of exposure and compounding over a long period. Active strategies are advantageous in the volatile, uncertain, or inefficient markets, when the pricing anomalies are revealed through the research-based revelations [16]. The circumstances arising in the crisis period, including COVID-19, indicate the instances when active flexibility facilitates performance [14][25]. Nevertheless, it is harder to assess because of quicker passive recovery during steady post-crisis times [15]. Therefore, strategic superiority is not general, but rather contingent.

E. Investor Behaviour and Decision Patterns

Psychology of the investors plays a major role in fund selection and performance. Investors tend to choose active funds when they should select passive funds because of two bias factors (behavioural): overconfidence, familiarity bias, and mental accounting [4], [18]. . On the other hand, passive funds are favored because they are simple and considered safe by some investors. The direction of behavioural driven fund flows affects the market price and can strengthen the performance trends [26], [27]. These biases should be understood, as there are many instances where decisions based on emotions will hinder the best portfolio results.

VI. Discussion

The review indicates that the comparison between active and passive mutual funds does not perform as well as conventional arguments imply. Passive funds are very beneficial in terms of cost effectiveness, long term consistency and appropriateness in efficient markets [9]. Their low charges and low turnover enable them to outperform most of the active managers in large-cap, liquid and information-efficient environments. But when passive vehicles rely too much on them, this could eventually destroy market price discovery, creating systemic risks [3]. Passive investing, therefore, as beneficial as it is, does not have extended impacts on the market. Active strategies generate value in particular circumstances. They are more advantageous in emerging markets and mid-cap segments and when the market experiences volatility and the informational inefficiencies provide knowledgeable managers with a chance to exploit market prices [5]. The implications of tactical rebalancing and increased flexibility to mitigate drawdowns are demonstrated by evidence of the COVID-19 crisis. Although they have these strengths, high fees and poor performance hinder their reliability in the long term [10]. To an investor, it means that they should choose funds based on the goals, risk levels and market conditions than on a blanket preference between the two strategies. To meet the changing market environments, fund managers need to increase transparency, become more skilled with strategies based on skills, incorporate ESG themes [21], and minimize unjustified expenses. The active versus passive debate finally implies being complementary but not opposing: the two strategies play different parts in the diversified portfolios.

VII. Conclusion and Future Research

The conclusion of this review is that active and passive mutual funds do not have universal superiority, as they perform differently depending upon the efficiency of the market, cost structure, behavioural tendencies, and the overall economic environment. Passive funds tend to perform better in extremely efficient markets and in long-term investment horizons, which is backed by low charges and constant tracking of the benchmark. However, active funds perform better in volatile times, in emerging markets and in specialised or thematic funds where managers have the opportunity to profit on mispricing. Although much research is available, available evidence is still constrained with brevity in study horizons, regional focus and lack of consideration of behavioural and ESG-related variables. Future work must be focused on long-term, multi-market comparisons, the development of how fund performance changes during entire cycles of crisis and recovery and the growing role of sustainability, climate-related requirements, and thematic investing on active and passive strategies. These changes will explain the suitability of each approach in the changing global investment conditions.

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