



Research on Public Fund Performance and Rating

Yaling Liu

Southwestern University of Finance and Economics (SWUFE), Chengdu, China

Liuyalingswufe@gmail.com

Abstract. With the continuous growth in the scale of public fund management and the number of products, fund selection and evaluation have become key components of investment decision-making. Individual investors typically rely on intuitive indicators such as performance and star ratings, while institutional investors place greater emphasis on a comprehensive analysis of fund performance and fund manager capabilities. Back testing results show that high-rated funds still perform well in the short term, confirming the reference value of ratings. Currently, institutional evaluations of fund managers mainly focus on their stock-picking ability, market-timing ability, and risk management skills, with stock-picking ability being particularly crucial. Through a systematic literature review and analysis, this study summarizes relevant evaluation models and empirical findings, revealing that stock-picking and market-timing abilities are generally negatively correlated, and that excellence in both is essential for achieving superior performance. On this basis, the paper proposes integrating subjective analysis strategies with quantitative approaches to synergistically enhance fund managers' stock-picking and market-timing capabilities, thereby offering a feasible path for the development of actively managed funds.

Keywords: Fund Performance; Fund Rating; Stock-Picking Ability; Market-Timing Ability

1 Introduction

In recent years, China's public mutual fund market has seen rapid growth and increasing diversification of investor profiles, bringing renewed attention to fund evaluation and selection. The effectiveness of strategies based on historical performance remains debatable, while rating systems offer a potentially more predictive alternative. Meanwhile, fund managers' stock selection and market timing abilities play a central role in performance, though a trade-off often exists between the two. This study empirically evaluates various fund selection strategies, analyzes the structure of managerial skill, and proposes a framework that integrates logic-driven stock selection with quantitative timing to enhance investment stability and returns.

2 Current Landscape of the Public Fund Market

According to data published by the Asset Management Association of China, as of the end of June 2022, the total assets under management of public mutual funds had reached RMB 26.79 trillion. The number of publicly available fund products surpassed the significant threshold of 10,000, totaling 10,010 funds—both figures representing historical highs. The 2021 annual report on public funds indicated that, by the end of that year, fund size rankings by category were as follows: money market funds, bond funds, hybrid funds, and equity funds. Notably, the growth in the scale of bond funds in recent years reflects a subtle shift in investors' risk preferences. As of year-end 2021, individual investors accounted for 53.84% of total public fund holdings. Since the inception of public mutual funds, individual investors have typically held a larger share than institutional investors. In terms of holding structure, individual investors are predominant in hybrid funds, whereas institutional investors maintain a significantly larger presence in bond funds. Given the inherently different risk-return profiles—higher risk and return for hybrid funds, lower risk and return for bond funds—this distribution highlights a divergence in preference: institutional investors tend to favor certainty in investment outcomes, while individual investors exhibit a greater appetite for potential high returns.

3 Fund Performance vs. Fund Ratings

A central question in fund evaluation is whether top-performing funds, based on historical returns, deliver better future performance than those with higher rating scores. Zhao Wei et al. [1] explored this issue by analyzing data across 23 reporting periods from 2014 to the third quarter of 2019, encompassing 59,466 fund-period observations covering actively managed equity, hybrid, and bond funds. To address this, they examined the period from 2015 to the third quarter of 2019, applying short-, medium-, and long-term performance evaluation criteria as three distinct fund selection strategies. For each reporting period, the top 15% of funds and the top 10 individual funds were identified according to each strategy, and their cumulative performances were tracked, as shown in Fig. 1. In parallel, an alternative portfolio consisting of five-star rated funds was constructed as a benchmark selection method, and its cumulative returns were evaluated over the same periods.

First, portfolios built from five-star rated funds tend to outperform those selected purely by past performance. This aligns with their higher chances of achieving top-quartile returns and lower risks of underperformance.

Second, selecting only the top 10 performers often fails to outperform portfolios formed from the broader top 15%—and can even underperform, especially in bond and hybrid funds. In the short term, top 10 equity and hybrid funds may do slightly better, but over medium and long terms, this narrow focus usually leads to lower or equivalent returns.

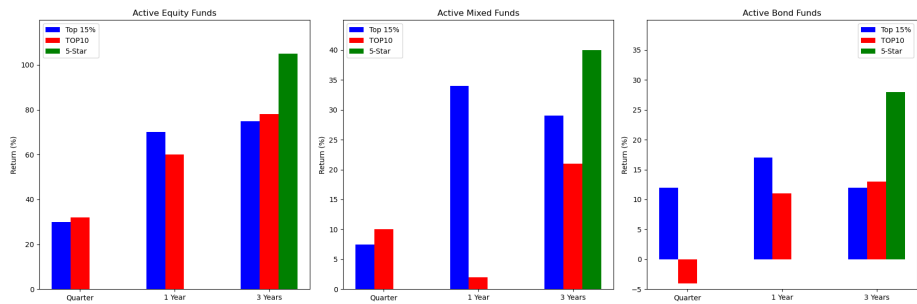


Fig. 1. Comparison of the Performance of the Top 10 Funds vs. the Top 15% Funds of Different Types

Overall, these findings suggest that extreme performance-based rankings do not guarantee better results. Instead, fund evaluation methods that consider managerial skill tend to produce more stable and reliable outcomes.

Therefore, from an empirical standpoint, fund ratings demonstrate rationality and validity, and should be considered a more reliable reference metric for investors when making fund selection decisions.

4 **Research on Fund Manager Ability**

Based on the public fund research report published by Financial Wudaokou, the following conclusions can be drawn: Only 26% of active equity fund managers show stock selection ability, while the majority do not. Moreover, the longer the investment horizon and the more market cycles (bull and bear markets) involved, the fewer managers display such ability. Regardless of whether the evaluation period is 3, 5, or 7 years, at least 95% of fund managers lack market timing ability. Predicting market trends is inherently difficult, and managers who can successfully time the market are extremely rare.

Notably, whether the manager is still employed or has left the firm, there is a strong negative correlation between stock selection and market timing abilities. Fund managers with strong stock-picking skills often lack market timing ability, and vice versa. It is rare for a manager to perform well in both areas.

In recent years, evaluating fund manager ability has become a key topic in academic research. Treynor and Mazuy [3] conducted one of the earliest studies on market timing, proposing the T-M model to measure timing and forecasting skills. Their study of U.S. equity funds showed that most managers could not respond effectively to market changes. Merton and Henriksson [2] later simplified the T-M model and applied it to over 100 funds, finding that 62% of managers had negative market timing ability. Romacho and Cortez [4] assessed both stock selection and market timing, concluding that managers generally lacked consistent ability in either, with many showing negative timing performance.

Most of these studies used monthly or annual data. However, Goetzmann [5] pointed out that such frequencies may miss the impact of short-term timing decisions, as managers often adjust market exposure more frequently than monthly. To examine this, Bollen [6] compared daily and monthly data. Both frequencies led to rejection of the null hypothesis that managers lack timing ability, with daily data providing stronger results. Jagannathan and Korajczyk [7] argued that if fund returns behave like options, traditional timing tests may falsely reject the null. To address this, they built a synthetic portfolio without timing ability. Results showed that 34.2% of managers demonstrated strong timing skills.

Laura Andreu Sánchez [8] used portfolio holdings data and a performance attribution model to evaluate the impact of stock selection and market timing on mutual fund performance. The study focused on two components. The first assessed the value added by past momentum strategies, such as adjusting positions in stocks with specific returns, which generally had a negative impact. The second measured the value from predicting unexpected stock performance, which was usually positive and the main contributor to fund performance.

Market timing was divided into two parts: predicting market direction and passive timing [9]. The former showed little significance, with nearly zero contribution. Performance attribution also varied by fund ranking. The best-performing funds had both good stock selection and market timing abilities, while the worst performers were mainly impacted by poor timing decisions.

Weiyi Liu [10] analyzed fund data from 2007 to 2017, summarizing the abilities of fund managers. Results showed that 95% of funds had positive stock selection ability, while 97% had negative market timing ability. This supports previous findings that market timing is often estimated as negative. In 95% of funds and 91% of the time periods analyzed, the correlation between the two abilities was negative. The most common pattern was positive stock selection paired with negative market timing. When stock selection was positive, 98% of timing abilities were negative. On average, market timing was negative in 90% of the time periods.

In summary, stock selection is the main contributor to fund performance, showing consistent positive effects across different time periods and models. Market timing contributes little overall and varies by sample period. Although differences in market timing exist between the best and worst funds—especially during crises—mutual funds generally do not show effective market timing. While strategy effectiveness may differ across samples, stock selection remains a stable and important factor, whereas passive timing shows little value.

Moreover, many studies suggest a trade-off between the two abilities. Overemphasis on one often reduces the other. This may be due to the cost of focusing too much on stock selection—similar to the trade-off between CAPM alpha and skewness—which can lead to high timing costs. Since both abilities are important for long-term performance, strategies should aim for a balance. Doing so may reduce trade-off costs and improve portfolio stability and returns.

5 How to Improve Both Stock Selection and Market Timing Abilities?

In recent years, as investment team structures have gradually improved, stock selection and market timing abilities can complement each other within a team. Additionally, the development of quantitative finance has provided valuable tools for investment decisions.

Different types of funds employ varying investment strategies. This section focuses on actively managed equity funds for analysis.

Value investing can be summarized as seeking the "three good" companies: "good business, good company, good price." The standards for selecting "good business" and "good company" are generally consistent, and consensus on companies such as Kweichow Moutai and Hengrui Medicine is high. However, most investors have not made substantial gains from these companies. The underlying challenge lies in determining the "good price," i.e., how to value these companies in different market conditions.

From another perspective, valuation problems translate into the issue of "when to buy and when to sell," or stock timing. There are many methods for stock timing, including valuation methods (such as PE/PB band), event-driven strategies (based on favorable or unfavorable events), and technical analysis (based on volume and price). The greatest difficulty in active timing is not cognitive, but rather execution—how to overcome human emotions like greed and fear.

The best way to overcome human biases is through computational tools, i.e., quantitative methods. Quantitative market timing can be understood as timing based on specific indicators. Trend-following indicators are suitable for trending markets, while oscillation indicators are more suited for range-bound markets. However, a major challenge for quantitative timing systems is their inability to determine whether a market has a trend, which is precisely where logic-driven active stock selection strategies can offer solutions.

For the stock market, which tends to exhibit long-term trends, utilizing trend-following indicators to capture upward market movements has a higher success rate. These indicators, largely derived from moving averages, are long-term in nature and primarily affect the risk-reward ratio of trades, rather than their win rate. The key to improving model performance lies in identifying assets with trends.

Unfortunately, trend models themselves cannot determine if prices are trending. This is an area where logic-driven stock selection strategies can provide an advantage. While active stock selection strategies may struggle with determining "good price" (short-term timing), they have an irreplaceable advantage in selecting "good business, good companies" (long-term trends), as they are more likely to identify industries or stocks with potential upward trends.

In conclusion, a combination of logic-driven active stock selection strategies (focused on long-term trends) and quantitative market timing strategies (focused on short- to medium-term trends) can effectively complement each other. On one hand, quantitative market timing solves the issue of identifying "good prices," potentially capturing gains from widely recognized companies like Kweichow Moutai and Hengrui Medicine, as well as industries or companies with clear directional trends that are hard to

value. On the other hand, active stock selection driven by logic, supported by quantitative predictions, can filter out stocks and industries with upward trends, thus helping trend-following quantitative timing models achieve higher win rates.

6 Conclusion

This paper follows a clear logic, starting from investors' main concerns—fund performance and ratings. Analysis of hit rate data suggests that star ratings hold greater significance. What defines these ratings? Leading institutions typically evaluate fund managers based on market timing, stock selection, and risk management. By reviewing the indicator system and empirical studies, the paper concludes that stock selection is the key driver of performance, consistently contributing positively. In contrast, market timing has limited impact and varies by sample period. Moreover, there is a trade-off between these two abilities, and strong performance requires excellence in both. A promising direction for fund teams is to integrate quantitative and active strategies. This study does not introduce new indicators or methods but instead focuses on reviewing and synthesizing existing research, aiming to support future studies. Future research may explore three directions: (1) the influence of investor sentiment on fund performance, especially how performance-chasing behavior affects outcomes; (2) real-world pressures on fund managers, such as performance targets; (3) building evaluation systems to track changes in manager ability.

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