

Research on the Relationship between the Performance of China's Open-end Funds and Investors' Behavior

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Abstract: Compared with closed-end funds, open-end funds refer to funds that can be traded jointly. With the development of financial market, fund has become an important investment channel. Fund performance reflects the historical growth, net capital and profit information of the fund, and it is also a reference index for investors to invest. The research shows that fund performance and investor behavior play an interactive role, with affecting the decision-making of investors' purchase or redemption. This paper mainly studies the relationship between the performance of open-end funds and investors' behavior, so as to make people more clearly about the relationship between the performance of open-end funds and investors' behavior.

Keywords: Open-end, Fund Performance, Investor Behavior

1. Introduction

Nowadays, the position of open-end funds is more and more important in the financial market. It has become the mainstream of the fund, and it is also a tool for people to invest and manage money. The earliest open-end funds in China can be traced back to Huaan Innovation in 2001, and then open-end funds developed rapidly, which not only occupied more and more fund shares, but also attracted a large number of investors. According to relevant statistics, in October 2019, the number of open-end funds in China has reached 5480, with a share of 11857.926 billion and a net value of 12638.699 billion yuan. The scale is very large. See Table 1 for details.

Table 1 Statistics of the number, share and net value of national open end funds from January to October in 2019

month	Number of funds	Share (100 million shares)	Net value (100 million yuan)
1	5041	126290.31	128429.12
2	5052	128515.99	133318.26
3	5126	123501.97	129678.63
4	5150	123085.37	129126.45
5	5220	121916.13	126875.43
6	5259	117894.34	123858.58
7	5296	119838.98	126382.28
8	5362	119982.91	127242.36
9	5448	118249.56	125663.56
10	5480	118579.26	126386.99

2. The Impact of Fund Performance on Investors' Purchase Behavior

We can divide investors into rational and irrational investors. For rational investors, if the conditions are uncertain, they will apply according to the principle of maximizing the expected utility. The two factors that affect the expected utility are the expected return and risk of the fund. The expected return and risk of the fund are generally judged according to the following points: the persistence of performance, information sources related to the fund, investors' preferences, and the ability to process investors' information. In general, rational investors have a strong ability to deal with information, and make judgments based on the historical performance of the fund. Irrational investors

will also follow the principle of utility maximization when they invest. However, irrational investors have insufficient ability to deal with information. They only judge whether to apply or not according to the recent performance information and their own experience.

2.1 When Rational Investors Are in the Majority

Rational investors can predict the trend of funds according to the development history of funds because of their strong information processing ability. For the sustainability of the fund, rational investors believe that if the fund has good performance, it can attract more investors and capital flow. If the fund has poor performance for a long time, it is difficult to obtain investors' capital. When the fund investment market is mainly rational investors, we can get the following prediction:

Good performance history represents future performance, and investors' purchase behavior is positively correlated with historical performance. On the contrary, if there is a significant reversal of fund performance, investors will predict the future trend according to the historical performance of the fund. At this time, it is a negative prediction. The better the past performance is, the worse the future performance may be. Short term investors are more concerned about whether there is a significant reversal of the fund, even if the historical performance is good, because the performance is about to reverse, investors will reduce the subscription; if the historical performance is poor, it will increase the subscription, so that the fund will profit when the performance is reversed.

When selecting funds, investors will consider the investment cost. Only when the certainty equivalence is greater than the participation cost, the fund will be applied for. Therefore, funds with excellent historical performance are more attractive to investors because of their high certainty equivalence. If the past performance is poor and the certainty equivalence is lower than the cost, the fund will not be applied for. Therefore, from the perspective of participation cost, if the participation cost is high, the focus of investment will be on the fund with excellent performance; if the participation cost is low, the focus of investment will be on whether the fund performance has good sustainability. If investors have rich fund knowledge and investment experience, it will reduce the cost of participation and make more accurate judgments.

2.2 When Irrational Investors Are in the Majority

Like rational investors, irrational investors also choose funds through the expected return and risk. However, due to the lack of the ability of irrational investors to deal with information, the development of the fund in the future and the possible risks should be judged by their own subjective experience. Therefore, this kind of investors show excessive confidence in fund purchase, and are also prone to some investment decision-making mistakes. Specifically speaking, irrational investors often judge according to the good or bad information they receive, so it is difficult to objectively analyze the fund performance and prone to excessive trading. For irrational investors, when analyzing fund performance, they may only pay attention to the current performance, and replace the trend of future fund performance by analyzing the current performance. Under the influence of this investment philosophy, even if there is no continuous fund performance, we will choose the fund with excellent performance in the short term or at present.

Irrational investors usually focus their attention on the most attractive funds, only focusing on the access to fund information, rather than analyzing the information contained in fund performance. From the perspective of capital operation, the best or worst performance fund information is easy to obtain, and also easy to get the attention of irrational investors.

Compared with institutional investors, individual investors have lower ability to collect and analyze information, and have higher participation costs, so they are prone to misjudgment in investment decision-making. Institutional investors have more comprehensive information and good information analysis ability, which can comprehensively analyze the performance of the fund as a reference for fund purchase. Therefore, when individual investors make investment decisions, they are often vulnerable to subjective factors, while institutional investors are more geographical. If there are more irrational investors, the focus of investment will be on those funds with good performance in the short term or at present.

As a kind of financial products, fund has the characteristics of security, profitability and liquidity. However, these characteristics often have internal contradictions. Investors can only choose the most important aspect. For example, if investors pay attention to the safety of funds, then the inevitable

return will decline; if investors pay attention to the return, then they will have to bear greater capital risk. Fund performance represents the expected return of the fund. When investors value the return, they will pay attention to the historical performance of the fund and choose the fund with better historical performance.

When investors invest, there are also differences between short-term investment and long-term investment. Some investors pursue short-term returns and want to obtain certain returns in the short term, they will inevitably pay attention to the current or recent performance of the fund. If they hold for a long time, they need to integrate historical performance to make fund selection.

In addition, in addition to fund performance, investors' fund purchase behavior is also affected by fund information disclosure, such as fund size, fund manager's working time, fund management fees, fund dividends and so on. The more information they give, the more investment decisions they make will be affected, thus reducing the impact of fund performance on fund purchase. Therefore, if the fund has more disclosure information, then investors will accept the impact of information and reduce the sensitivity to fund performance.

3. The Impact of Fund Performance on Fund Redemption

From the operating principle of fund investment, fund redemption and subscription are two relative operations. The response mechanism of fund redemption operation to fund performance is the same as that of subscription. But in practice, there are more differences between fund redemption and subscription, and fund performance will also affect fund redemption in varying degrees.

From the perspective of participation cost, the participation cost of fund redemption is lower than that of purchase decision. When applying for funds, investors are faced with all kinds of funds, different types of funds and different performance of funds. It takes a lot of time and energy to select funds or fund portfolios. They need to collect and sort out fund performance rankings, master various information of fund management companies and fund managers, and screen them one by one. Therefore, the cost of participation is relatively high. When the fund is redeemed, investors only need to pay attention to the performance of the fund they hold, so the cost of participation is lower. Once the performance of the fund fails to meet the expectations of investors, it will be redeemed. In the process of fund purchase, because the investors didn't get any profit from the fund and didn't receive any loss at that time, they can maintain a stable psychological state and have more rational investment. In the process of fund redemption, investors will make repeated comparisons according to the performance and psychological expectations of the fund. At this time, the investors' funds have gained or lost, and their behavior will be affected by the gains and losses. If the income is high, want to pocket for security, take the way of redemption, to avoid the risk of decline. If there is a loss, there will be regret. Because investors are not willing to bear the loss, they will not choose to redeem, but continue to hold until the fund performance turns into profit.

To sum up, the fund performance will also affect the redemption of the fund. If the fund performance has good persistence and good performance, investors will choose to continue to hold or make fixed investment; if the fund performance gets worse, they will choose to redeem. However, if the fund performance persistence is poor and the current performance turns better, investors will consider that the good performance persistence is not long and choose to redeem for profit. If the fund performance continues to be poor, it may continue to hold, waiting for the fund performance reversal.

4. The Reaction of Investor Behavior to Fund Performance

Fund performance affects the purchase and redemption of investors. Similarly, the investment behavior of investors will react on fund performance. Investor behavior will affect the size of the fund, and then affect the performance of the fund. If the fund is in the state of scale economy, investors' Redemption of funds will reduce the scale of the fund, which will have a negative impact on the performance of the fund; if the fund is in the state of scale diseconomy, the ability of fund managers cannot achieve the management of the amount of funds. Although redemption reduces the scale of the fund, it can match the management ability of investors with the scale of the fund, and it is also possible to improve the performance of the fund Kim's performance.

5. Conclusion

To sum up, there is a certain relationship between the performance of China's open-end funds and the behavior of investors. Fund performance affects investors' purchase and redemption, and investors' behavior has a negative effect on fund business. Therefore, in order to promote the development of the fund, we can take corresponding ways to promote and attract investors' purchase, so as to promote the market share of the fund.

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