



# Behind the Investment Curtain: Exploring Internal and External Factors Influencing Mutual Fund Investment Decisions in Indonesian Stock Market

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**Abstract.** Mutual funds are one of the most popular investment products in Indonesia. Several factors, such as the selection of stocks in the portfolio, the age or age of a mutual fund, and the current inflation rate in the money market, strongly influence the performance of mutual funds. This study aims to analyze the influence of these three factors on mutual fund performance. This study uses secondary data from 10 types of equity mutual funds from 2018 to 2022. The data was then analyzed using panel data regression. The results showed that stock selection in the portfolio has a significant positive effect on mutual fund performance. The age or age of a mutual fund also has a significant positive effect on its performance. In conclusion, investors should pay close attention to the selection of stocks in the portfolio and the age or age of a mutual fund to get optimal investment results from these investment products. However, other factors, such as macroeconomic conditions, must be examined further to improve investment performance through mutual fund products.

**Keywords:** Equity Mutual Fund- Stock Selection- Age of the Fund- Inflation Rate- Mutual Fund Performance.

## Introduction

Mutual funds are one of Indonesia's most popular investment instruments because they are relatively easy to access by the public. However, mutual funds are not as popular as other financial instruments in Indonesia, such as stocks and bonds. However, mutual funds are still popular among young investors, with 8.6 million investors as of April 2022. Mutual funds are investment instruments used to raise funds from the investor community to be invested in securities portfolios by investment managers. There are several types of mutual funds, including mixed, fixed-income, money market, and equity funds (Arridho et al., 2022).

Like any other investment, mutual fund performance is strongly influenced by certain factors. One crucial factor affecting mutual fund performance is the selection of stocks in the portfolio. A study conducted in Indonesia aimed to determine the ability of investment managers in-stock selection and market timing of equity mutual funds in Indonesia, as well as the most dominant factors affecting performance. However, the abstract does not provide specific findings or conclusions (Alexandri, 2015).

A study in India evaluated mutual fund performance for 50 mutual funds, 10 funds each from 5 categories: large-cap, small-cap, ELSS, index, and mixed funds. The study found no significant difference between mutual fund returns and market returns. Furthermore, among the categories, Index funds underperformed compared to the other categories. Moreover, following Fama's net selectivity model, most fund managers were found to have positive stock selection ability (Damani et al., 2017).

A study conducted in Indonesia analyzed the relationship between equity mutual fund performance and its influencing variables, including stock selection skill, market timing ability, expense ratio, fund size, and turnover ratio. The results showed that Stock Selection Skill and Market Timing Ability significantly positively affect equity mutual fund performance. Expense Ratio and Fund Size have no significant negative effect on mutual fund performance. In contrast, Turnover Ratio has no significant positive effect on the performance of equity mutual funds (Armanda & Syaichu, 2016).

Another study in Indonesia aims to measure the performance of equity mutual funds in Indonesia using the Paramita model. This study found that in the crisis period, during the bull market, most equity mutual funds in Indonesia had the best market timing and stock selection performance. During the bear market, some mutual funds only had the best market timing performance but poor stock selection performance. However, in the post-crisis period, most mutual funds showed poor market timing performance in both bullish and bearish market conditions. However, in bullish market conditions, most mutual funds show good stock selection performance (Paramita et al., 2017).

Another study in Indonesia aims to analyze the influence of stock selection ability variables, market timing ability, fund size, and portfolio turnover on equity mutual fund performance. The study found that the variables of stock selection ability and market timing ability positively affect the performance of equity mutual funds. In contrast, fund size and portfolio turnover do not affect the performance of equity mutual funds (Devi et al., 2021).

In addition, the age of a mutual fund also influences its performance. A mutual fund that has been operating for a long time usually has a better track record than one that has just been launched. A study conducted in

Indonesia aims to analyze how the age and size of mutual funds can affect the performance of mixed mutual funds. This study used the Sharpe Index as the research methodology and found that age and size influence the performance of mixed mutual funds in Indonesia (Purwanto, 2016).

Another study in Indonesia aims to analyze the effect of fund age, fund size, expense ratio, and past performance on the performance of fixed-income mutual funds from 2016 to 2019. This study found that fund age negatively and significantly affects fixed-income mutual funds. Meanwhile, fund size, expense ratio, and past performance do not significantly affect fixed-income mutual fund performance (Nur & Fernandika, 2022).

Another study in Indonesia examines the relationship between equity mutual fund performance and five variables that influence it: stock selection ability, market timing ability, mutual fund age, mutual fund cash flow, and mutual fund size. The study found that market timing ability significantly positively impacts mutual fund performance. Stock selection ability has a significant negative impact on performance, but Fund Longevity and Fund Size do not significantly negatively impact mutual fund performance (Syahid & Arfianto, 2015).

Another critical factor is the current inflation rate in the money market. The inflation rate can affect the currency exchange rate and the prices of goods and services during trade transactions. A study conducted in Indonesia found that the Jakarta Composite Index (JCI) and interest rates affect the performance of equity mutual funds. However, inflation has a negative but insignificant effect on the performance of equity mutual funds. This study also found that JCI, interest rates, and inflation jointly affect the performance of equity mutual funds (Aryadi & Setyono, 2022).

Another study in Indonesia aims to determine the effect of market timing ability and inflation rate on asset allocation and performance of Islamic mutual funds. This study found that partially, market timing ability and inflation rate do not affect asset allocation and mutual fund performance. In contrast, asset allocation has a negative effect on mutual fund performance (Prasetyo & Sutrisno, 2022).

A study examined internal and external factors of mutual fund returns, including inflation, and found that managed funds, Sharpe ratio, and inflation have a significant effect on equity mutual fund returns and fixed income mutual fund returns, but managed funds and inflation have a negative effect (Pratama, 2021).

Another study in Indonesia aimed to investigate the effect of mutual fund factors and macroeconomic factors on equity mutual fund performance. This study found that mutual fund factors and macroeconomic factors affect the performance of equity mutual funds in Indonesia. The expense ratio variable, market timing ability, economic growth, and money supply have a significant effect on the performance of equity mutual funds, while the fund size variable, turnover ratio, and inflation have no significant effect on the performance of equity mutual funds (Wulandari & Arifin, 2021).

A study aims to analyze the determinants of Islamic equity mutual fund performance and compare the performance of Indonesian Islamic equity mutual funds with Malaysian Islamic equity mutual funds. This study found that inflation positively affects the performance of Islamic equity mutual funds. This study also shows a significant difference between the performance of Indonesian and Malaysian Islamic stock mutual funds, where Malaysian Islamic stock mutual funds are superior to Indonesian Islamic stock mutual funds in 2017-2019 (Al Arif, 2021).

Therefore, investors must consider these three factors for optimal investment returns from mutual fund products. However, the limited number of studies on the influence of these three factors on mutual fund performance makes this research topic relevant for further study. Therefore, this study aims to analyze the effect of stock selection in mutual fund portfolios, mutual fund age and inflation rate on the performance of these investment products.

## Research Methods

This research uses the panel data regression analysis method to analyze the effect of stock selection in portfolio, mutual fund age, and inflation rate on mutual fund performance. The secondary data used in this study were taken from 10 types of equity mutual funds from 2018 to 2022. First, classical assumption tests were conducted, including normality, homoscedasticity, multicollinearity and autocorrelation tests. Then, the panel data regression model is estimated by considering both fixed and random effects. Furthermore, a regression coefficient significance test is conducted to determine the effect of independent variables partially on the dependent variable. In addition, a hypothesis test is also conducted to test whether there is a simultaneous influence between the three factors on mutual fund performance.

## Results and Discussion

The test results in this study use a fixed effect model. The results show the multicollinearity test, as seen in Table 1. Shows that all dependent variables have no relationship with other dependent variables. It can be interpreted that this research model does not show symptoms of multicollinearity.

**Table 1. Uji Multikolinieritas**

|     | PS       | URD      | INF      |
|-----|----------|----------|----------|
| PS  | 1        | 0.051276 | 0.311173 |
| URD | 0.051276 | 1        | 0.012550 |
| INF | 0.311173 | 0.012550 | 1        |

**Table 2 t-Test**

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | 3.121295    | 2.571592   | 1.213760    | 0.2285 |
| PS       | 0.085226    | 0.487415   | 3.174852    | 0.0467 |
| URD      | 0.023315    | 0.019956   | 2.168316    | 0.0285 |
| INF      | 0.457811    | 0.091479   | 5.004559    | 0.0000 |

The results of Table 2 above show that all dependent variables affect financial performance. With the probability obtained smaller than 0.05 from the variable stock selection, mutual fund age, and inflation partially affect the performance of mutual funds. The whole model can be seen in Table 3, which shows that the probability in the F test shows that all variables together have the same effect on mutual fund performance, with an r squared of 0.625 or 62.5% of all variables that affect mutual fund performance can be predicted by the variables used in this study.

**Table F and R-squared Test**

| Cross-section fixed (dummy variables) |          |                    |           |
|---------------------------------------|----------|--------------------|-----------|
| Root MSE                              | 1.042830 | R-squared          | 0.625139  |
| Mean dependent var                    | 1.914959 | Adjusted R-squared | 0.421101  |
| S.D. dependent var                    | 1.710217 | S.E. of regression | 1.301226  |
| Akaike info criterion                 | 3.637201 | Sum squared resid  | 133.7619  |
| Schwarz criterion                     | 4.643186 | Log-likelihood     | -179.6879 |
| Hannan-Quinn criteria.                | 4.045829 | F-statistic        | 3.063834  |
| Durbin-Watson stat                    | 2.806156 | Prob(F-statistic)  | 0.000008  |

Stock selection is an essential factor that can affect mutual fund performance. Several studies in Indonesia found that stock selection ability and market timing positively affect the performance of equity mutual funds. A study on Islamic equity mutual funds found that stock selection significantly affects the performance of these mutual funds (Gusni et al., 2018). In addition, another study shows that the performance of equity mutual funds in Indonesia is influenced by stock selection ability (Pant et al., 2022). In the context of stock selection, it is important to note that fund managers' stock selection skills are better than their market timing skills. Most fund managers have been shown to have positive stock selection ability (Ariswati et al., 2021). However, research also shows index funds have lower performance than other mutual fund categories (Alexandria, 2015; Damani et al., 2017; Armanda & Syaichu, 2016; Paramita et al., 2017; Devi et al., 2021).

Mutual fund age has a significant positive impact on performance. A study in Nepal found that mutual fund age contributes positively to mutual fund performance (Pant et al., 2022). The study showed that mutual funds that have been in operation for an extended period tend to have a better performance record than newly launched ones. Studies have also found that the age and size of mutual funds influence the performance of mixed mutual funds in Indonesia (Purwanto, 2016; Nur & Fernandika, 2022; Syahid & Arfianto, 2015).

Inflation has a relationship with mutual fund performance as one of the macroeconomic variables. A high inflation rate indicates a considerable investment risk and can reduce the rate of return for investors (Gusni et al., 2018). A study using inflation as an intervening variable in stock mutual fund performance found that market timing affects performance, while stock selection skills have no effect (Ariswati et al., 2021). The Treynor-Mazuy conditional model can be used to calculate market timing and stock selection skills. In research on Islamic Mutual Funds in Indonesia, it was found that the ability of investment managers to allocate securities portfolios based on systemic risks such as exchange rates and inflation, calculated using Treynor-Mazuy Condition regression, did not affect the performance of Islamic mutual funds (Wigusniarto, 2020). Several studies have found that inflation

has a negative but insignificant effect on the performance of equity mutual funds. Studies also show that the inflation rate affects the performance of equity mutual funds (Aryadi & Setyono, 2022; Prasetyo & Sutrisno, 2022; Pratama, 2021; Wulandari & Arifin, 2021; Al Arif, 2021).

Overall, factors such as stock selection, mutual fund age, and inflation significantly influence mutual fund performance. Stock selection and market timing skills can contribute positively to mutual fund performance, while the age of a mutual fund can affect its track record and performance. Although research results are inconsistent, inflation rates can also affect mutual fund performance. Investors must consider these factors when investing in mutual funds and make informed decisions based on in-depth analysis.

## Conclusion

Based on the research, it can be concluded that stock selection, mutual fund age, and inflation significantly influence mutual fund performance. Stock selection and market timing skills are important in improving mutual fund performance, while mutual fund age can be a better indicator of track record. Although research results are inconsistent, inflation rates can also affect mutual fund performance. Based on these findings, investors need to conduct an in-depth analysis of the stock selection in their mutual funds. Understanding the fund manager's ability to select stocks effectively can help in selecting mutual funds that have the potential to produce good performance. Investors also need to consider the age of the mutual fund as a relevant factor. Mutual funds that have been in operation for an extended period of time tend to have better performance records. However, it is important to consider the quality of management and investment strategies that suit your investment objectives.

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