

OPTIMIZING EQUITY MUTUAL FUND PORTFOLIO FORMATION

Using Mean-Semivariance Method Based on Bareksa Barometer

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Portfolio

Minimise risk by diversifying funds into several equity Mutual funds

- O1 Analyze the characteristics of each return of the mutual fund.
- O2 Selecting the mutual funds composing the portfolio.
- O3 Calculating the proportion of each mutual fund.
- O4 Calculating portfolio risk.
- O5 Analysing the performance of the portfolio formed.
- O6 Recommend scenario of the portfolio.

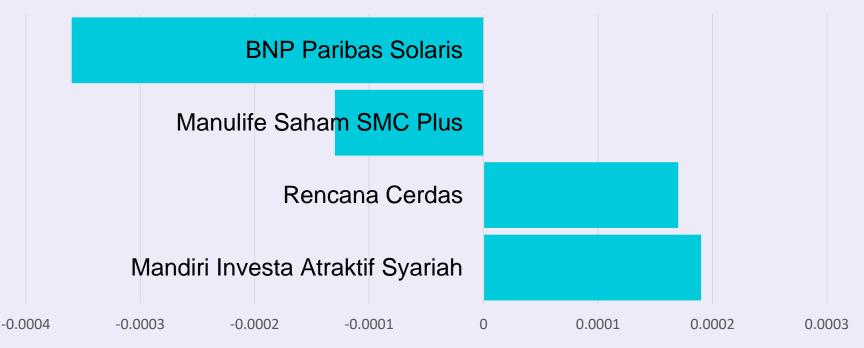


Background

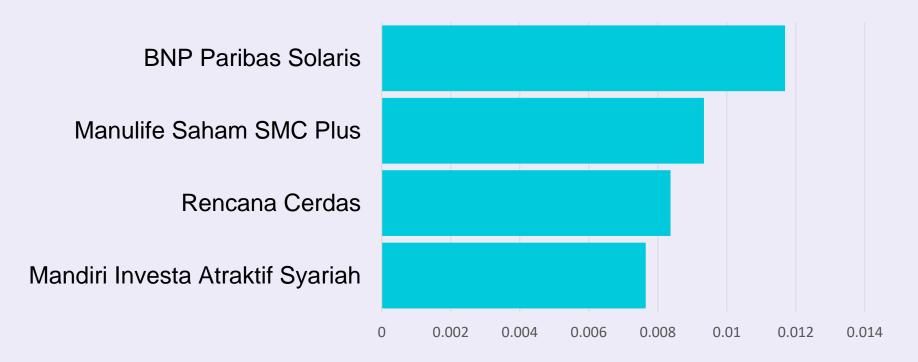
The most popular investment product today is mutual funds. One of the factors in selecting mutual funds is the low investment risk. This risk can be minimized again by combining several assets and then compiling them into a portfolio. The portfolio formation method used in this study is the Mean-Semivariance method and the Sharpe Index to calculate portfolio performance.

Characteristics of Each Return of the Mutual Fund





Standard Deviation of Mutual Fund



Based on calculations using R software, it is known that:

- Manulife Saham SMC Plus and BNP Paribas Solaris mutual funds have a negative expected return.
- Mandiri Investa Atraktif Syariah and Rencana Cerdas mutual funds have a positive value
- The highest expected return is owned by Mandiri Investa Atraktif Syariah mutual funds, which is 0.00017.
- The standard deviation of BNP Paribas Solaris mutual fund is greater than other equity mutual funds. This means that BNP Paribas Solaris Mutual Fund has the highest fluctuation risk value among other mutual funds.

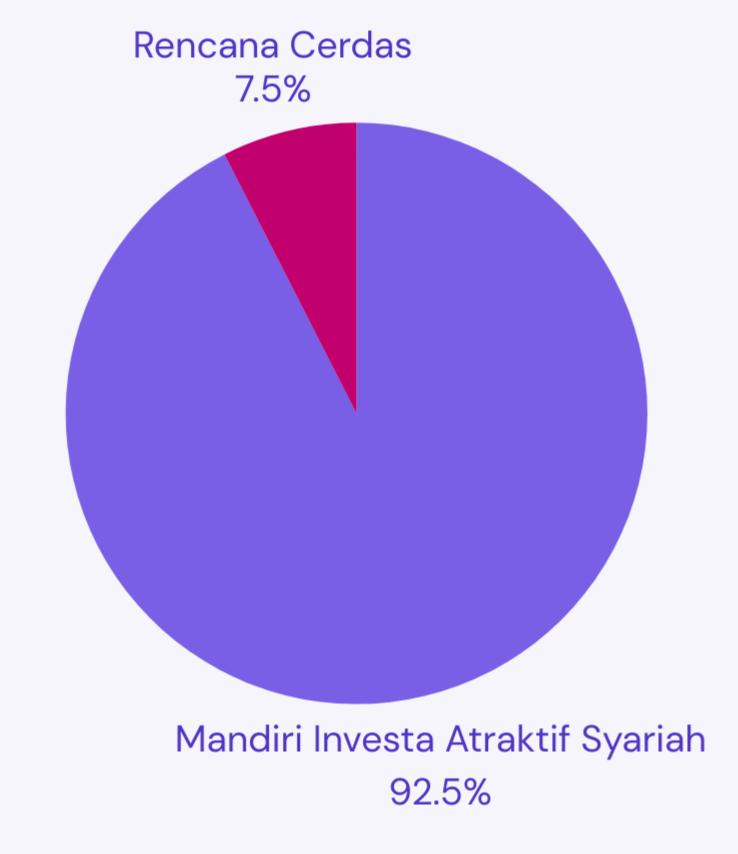
Mutual Funds Selection



Based on mutual fund characteristics, Mandiri Investasi Atraktif Syariah and Rencana Cerdas mutual funds show positive return expectations, indicating potential future gains. In contrast, the Manulife Saham SMC Plus and BNP Paribas Solaris mutual funds show negative expected returns, indicating potential future losses. To minimise risk, this portfolio excludes Manulife Saham SMC Plus and BNP Paribas Solaris mutual funds, and only focuses on Mandiri Investasi Atraktif Syariah and Rencana Cerdas mutual funds as portfolio constituents.

Proportion of Portfolio

Mandiri Investa Atraktiv Syariah is the mutual fund with the largest proportion in the portfolio.



Risk of the Portfolio

0.0001

Based on the calculation results, the risk in the Mean–Semivariance portfolio that has been formed is 0.00001.

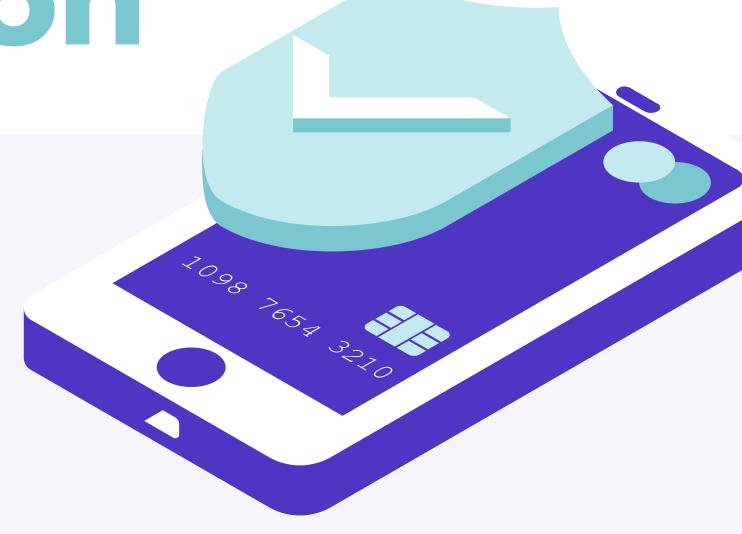
Performance of the Portfolio

0.02022

From the positive Sharpe Index value, it can be said that the Mean-Semivariance portfolio has good performance and can be recommended to investors to invest their funds according to the weight of the portfolio formed.

Recommendation

The portfolio that has been formed is suitable for investors who want to invest long-term because the investment value takes time to provide satisfactory results/returns and takes time to be converted into cash. Especially moderate investors and aggressive investors because both investors have no problem with the possible risks borne and fluctuations in the value of portfolio assets.





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