



Optimizing Asset Allocation in Investment Portfolios in Primary Consumer Sector Companies for the 2020-2022 Period

Devi Suci Lastari ^{1*}, James Marshall Sitinjak ¹, Tri Sulistiawati ¹, Alvito Auliansyah ¹,
Gusganda Suria Manda ¹

¹ Universitas Singaperbangsa Karawang

Article Info

Article history:

Received 30 November 2025

Revised 3 December 2025

Accepted 6 December 2025

Keywords:

Portfolio Optimization, Risk and Return, Diversification, Modern Portfolio Theory, Primary Consumer Stocks.

ABSTRACT

This study aims to determine the optimal portfolio composition for primary consumer sector stocks in Indonesia during the 2020–2022 period, a time marked by high market volatility due to the COVID-19 pandemic. The analysis focuses on two stocks: PT Sumber Alfaria Trijaya Tbk. (AMRT) and PT Indoritel Makmur Internasional Tbk. (DNET). Using a quantitative descriptive–explanatory approach, the research includes the calculation of returns, variance, covariance, correlation, portfolio formation with the Markowitz Model and Single Index Model, as well as performance evaluation using the Sharpe Ratio, Treynor Ratio, and Jensen’s Alpha. The results show that AMRT offers higher average returns but with greater volatility, while DNET provides more stable returns with lower risk. The negative correlation between the two stocks (-0.319) enables effective diversification. The minimum-risk portfolio is obtained with a composition of 13% AMRT and 87% DNET, achieving a risk level of 10.68%, which is lower than the risk of each individual asset. Meanwhile, the best-performing portfolio based on the Sharpe Ratio is achieved with a composition of 30% AMRT and 70% DNET, offering optimal efficiency between return and risk. These findings reinforce the relevance of Modern Portfolio Theory in the Indonesian market context and provide strategic recommendations for investors to optimize asset allocation through measurable diversification.

This is an open access article under the CC BY-SA license.



Corresponding Author:

Devi Suci Lastari | Universitas Singaperbangsa Karawang

Email: 2210631020109@student.unsika.ac.id