## **ABSTRACT**

Optimal portfolios have become a major concern in the world of finance, especially in the investment context. This research aims to explore the concept of an optimal portfolio by applying beta, alpha and variance methods, as well as considering active and passive strategies. The background to this research involves the ever-evolving complexity of financial markets, where investors are faced with the challenge of creating portfolios that can provide optimal returns with acceptable levels of risk.

The aim of this research is to identify and analyze the factors that influence the formation of an optimal portfolio. The methods used include beta measurement as a measure of systematic risk, alpha calculation as an additional performance measure, and the use of variance to measure portfolio volatility. Active and passive strategies are then applied to understand the impact of strategy choices on portfolio performance.

The findings of this research highlight the importance of understanding market dynamics and effective strategies to achieve investment goals. This research provides in-depth insight into how to use beta, alpha and variance methods in an integrated manner to design optimal portfolios with strategies that suit investor preferences and goals.

The contribution of this research lies in presenting a comprehensive framework for developing optimal portfolios, combining elements of active and passive strategies. The results of this research can provide practical guidance for investors in making more informed investment decisions and can improve their portfolio performance.

Keywords: Stock, portfolio, beta, alpha, variance