

ABSTRACT

This research aims to simulate the effectiveness of Dollar-Cost Averaging (DCA) investment strategies compared to lump sum and Augmented Dollar-Cost Averaging (ADCA) in the Indonesian stock market. The input is a comparison of investment performance using historical stock data, and the output is a recommendation for the appropriate strategy. Investors are often confused about choosing the right strategy in the dynamic stock market. Previous research is limited to historical analysis, lacking exploration of various market scenarios. The knowledge gap regarding the performance of DCA, lump sum, and ADCA under various market conditions in Indonesia motivates this study. The varying stock price movements and market conditions necessitate an adaptive investment approach. This study utilizes historical stock data from the Indonesia Stock Exchange (IDX) to simulate three market conditions: an uptrend (BBRI), stagnant (BBTN), and downtrend (SCMA), as well as 33 stocks within the LQ45 index. Evaluation is conducted through descriptive statistical analysis and performance comparisons (mean return, standard deviation, Sharpe ratio). ADCA is adjusted based on monthly inflation data. The simulation results indicate that lump sum tends to provide the highest return in an uptrend market, but with higher risk. DCA and ADCA provide more stable performance with controlled risk, but with lower return potential. Adjusting for inflation in ADCA does not provide a significant advantage over DCA. In stagnant or downtrend markets, no strategy is optimal, with all strategies showing similar Sharpe ratios. This study contributes to providing understanding of the comparison of investment strategies under various market conditions in Indonesia

Keywords: Strategi investasi, Dollar cost averaging, lump sum, augmented dca, Capital Market