

ABSTRACT

In the stock market, there are two categories of investors: those who use a pattern approach to select stocks for investment based on historical stock price data, and those who use a comprehensive approach to analyze companies, such as financial statements. The most popular strategy that is often applied to the second approach is value investing. Value investors only purchase stocks offered below their fair price. This study aims to select stocks for a portfolio using an integrated strategy by combining historical data patterns in the form of return forecasts and value investing using various valuation models. Stock returns are predicted using the Long Short Term Memory (LSTM) method, and stock valuations are calculated using four valuation models, namely Price to Earnings (PE), Price to Book Value (PBV), Dividend Discount Model (DDM), and Discounted Cash Flow (DCF) model. The selected stocks are those that have the attractive predicted returns, and their market prices are below the valuation value calculated using the four techniques. The portfolio is then constructed from the selected stocks using the equal weight method. This study presents three scenarios for the experiment, the first is a portfolio that is updated annually using only stock valuations, the second is a portfolio that is updated annually using stock return forecasts as a factor in stock selection, and the third is a combination of both methods. This study found that portfolios combining stock price forecasting with valuation have higher average returns than those using valuation alone, but lower than those using only forecasting, across all thresholds from 0% to 10%. However, the combined approach carries lower risk than portfolios based solely on forecasting.

Keywords: Stock Valuation, LSTM, Fundamental, Indonesian Stock Exchange