

ABSTRAK

Risiko dan *return* merupakan hal yang sangat penting untuk diperhatikan oleh para investor ketika melakukan investasi. Risiko yang tinggi pasti akan menghasilkan *return* yang tinggi pula. Namun demikian, kebanyakan investor menginginkan adanya tingkat *return* yang tinggi dengan tingkat risiko yang rendah. Maka dari itu, investor melakukan diversifikasi dengan membentuk portofolio untuk mengurangi tingkat risiko dan tetap mendapatkan tingkat *return* sesuai dengan harapan. Tujuan dari penelitian ini adalah untuk mengukur *risk adjusted performance* portofolio menggunakan Indeks *Sharpe*, Indeks *Treynor*, dan Indeks *Jensen's Alpha* dan menguji perbandingan antara kinerja portofolio DEA-RFS dan Indeks Manufaktur yang digunakan sebagai *benchmark* dari kinerja pasar.

Pemilihan saham portofolio dalam penelitian ini menggunakan metoda *Data Envelopment Analysis* berdasarkan indikator *Relative Financial Strength* yang memperhatikan kinerja perusahaan secara fundamental dengan harga saham historis. Kinerja portofolio diukur dengan Indeks *Sharpe*, Indeks *Treynor*, dan Indeks *Jensen's Alpha*. Semakin besar atau positif nilai dari Indeks, maka semakin baik pula kinerja portofolio yang dihasilkan. Setelah itu, hasilnya akan diuji dengan uji statistik nonparametrik *Mann Whitney/U-test* untuk mengetahui apakah ada perbandingan antara kinerja portofolio DEA-RFS dan Indeks Manufaktur.

Hasil penelitian ini menunjukkan bahwa kinerja portofolio DEA-RFS dapat mengungguli kinerja indeks manufaktur, baik secara per tahun maupun secara 3 tahun. Pernyataan tersebut didukung oleh hasil kinerja Indeks *Sharpe*, Indeks *Treynor*, dan Indeks *Jensen's Alpha* dan hasil uji statistik dari tiap-tiap sampel yang menunjukkan hasil positif dan signifikan.

Kata kunci: portofolio, *data envelopment analysis*, indeks *Sharpe*, indeks *Treynor*, dan indeks *Jensen's Alpha*

ABSTRACT

Risk and return are the most important things that should be considered by the investors while doing investment in some securities. Several experts said that high risk would give high return yet most investors expect to get a high return with lower risk. There is a way that can be done by the investors to reduce the risk and get the return as expected, that is by formed portfolio diversification. There are two purposes of this research, which is to measure the risk-adjusted performance of the portfolio using Sharpe, Treynor, and Jensen's Alpha and to evaluate the difference between DEA-RFS portfolio performance and Manufacturing Index as a benchmark of market performance.

In this research, portfolio stock selection is using Data Envelopment Analysis under Relative Financial Strength indicator, based on fundamental analysis of a firm and historic stock price. Then, the portfolio is measured by Sharpe, Treynor and Jensen's Alpha to evaluate the performance of a stock portfolio. The higher or the more positive Sharpe, Treynor, and Jensen's Alpha value, the better portfolio performance. The result of the risk-adjusted performance of portfolio will be calculated by using non-parametric statistic named Mann-Whitney / U-test to measure whether there is a difference between DEA-RFS portfolio and Manufacturing Index.

The research found that portfolio performance based on Data Envelopment Analysis under Relative Financial Strength can beat the market that represented by manufacturing index, both annually and in 3 years. This statement is supported by the result of risk-adjusted performance using Sharpe, Treynor, and Jensen's Alpha. However, the statistic result of each sample showed that there is positive and significant result between portfolio based on Data Envelopment Analysis under Relative Financial Strength and Manufacturing Index.

Keywords: Portfolio, Data Envelopment Analysis, Sharpe, Treynor, and Jensen's Alpha