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Treynor Portfolio Performance Measure

Treynor performance measure is the first composite measure of portfolio performance developed for investors based on risk (Bacon). The objective of Treynor portfolio performance measure is to identify a measurement that suitable for all investors regardless of their risk preferences. Treynor focused his portfolio performance measure based on two components, risk associated with fluctuations in the market and risk associated with changes in individual securities. Treynor’s first concept, security market line that focused on the definition of the relationship between market rate returns and portfolio returns. In this theory, the slope of the market line measures the volatility of returns between the market and portfolio, which is represented by the beta coefficient (Bacon). The beta coefficient measures the instability of the portfolio to the market where the risk-return trade-off is better when the slope of the line is greater. The following formula can determine Treynor ratio:

Treynor ratio =

Sharpe Portfolio Performance Measure

Sharpe portfolio performance measure is the measurement of the fulfillment of a portfolio based on the aspect of risk (Friend and Blume). Sharpe portfolio performance measure is the same to that of Treynor, except the risk identified is measured based on the concept of standard deviation. Sharpe's concept shows how well investment of a particular return of security can compensate for the risk taken. The Sharpe portfolio performance measure can be determined by measuring the excess return per unit of deviation. Sharpe’s concept can be illustrated by the following formula:

Sharpe ratio =

Therefore, when comparing two securities based on a standard benchmark, the security with the highest Sharpe ratio will provide a better return for the same risk. The return of the investment depends on the accuracy of the data obtained (Friend and Blume). The primary challenge for Sharpe ratio is the notion that risk equals volatility and volatility reduce the potential for return. However, this concept is inaccurate because the more an investor reduces volatility, the less likely to gain higher yields.

Jensen Portfolio Performance Measure

Jensen portfolio performance measure is a measure of excess return that a portfolio generates over the portfolio’s expected return based on the concept of capital asset pricing model (CAPM) (Jonas). Michael Jensen first introduced Jensen portfolio performance measure as a measure of the mutual funds in 1968. The portfolio measure is based on the concept that riskier asset should have higher returns than a less risky asset. According to the idea of Jensen portfolio performance measurement, if a security or an asset has a higher yield than its risk-adjusted then the security or asset has abnormal returns. In finance, investors are more attracted towards securities that have higher alpha. Mutual funds managers in the evaluation of mutual funds and portfolio manager performance are still using Jensen Alpha concept (Jonas).

In an organization, Jensen alpha is used to measure how much of the portfolio’s rate of return can associate with the ability of the manager to deliver high returns with the adjusted market risk (Jonas). Jensen alpha portfolio performance measure be calculated using the following formula;

Jensen alpha = portfolio return – benchmark portfolio return;

Where, benchmark return (CAPM) = risk free rate of return + Beta

Beta = return of the market – risk-free rate of return

The higher the Jensen alpha ratio, the better the risk-adjusted return. Therefore, a portfolio with a consistent positive alpha has a higher return than a portfolio with a negative alpha.

Information Ratio Performance Measure

Information ratio is a performance measurement of a portfolio by how much return an investor can get from the investment of a particular security about the risk the investor has taken. Information ratio can be used to measure the performance of investment managers in areas such as mutual funds and hedge funds (Friend and Blume). In this case, information ratio measures aspect such as performance consistency, repeatability, a record of accomplishment and adjustment for risk from the managers in mutual funds and hedge funds. Information ratio tends to focus more on the performance of the managers based on their consistency over a period. Due to this, information ratio can be used to justify whether a manager is active in his or her role in an organization (Friend and Blume). In information ratio, the higher the ratio, the better the returns for an investor and if the ratio is below zero, the manager is less active in performing their task in the organization. The following formula can determine information ratio:

Information ratio =

Where, = return of the portfolio

= return of the index or benchmark

= tracking error

Tracking error (standard deviation) = returns of the portfolio – returns of the index

Despite the objective of information ratio in the measurement of the ability of the manager to generate excess returns about the benchmark, this ratio also focuses on identifying if the investor is also consistent with his or her investment (Friend and Blume).

# Works Cited

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