

Sharpe Index

The Sharpe Index is a statistic developed to measure risk-adjusted return performance of a portfolio (it could be applied to an investment or even an individual). It is similar to the Jensen Index and the Treynor Index. All three of these indexes are based on CAPM and all three try to capture the phenomenon known as alpha, or risk-adjusted return.

However, the Sharpe Index is generally considered to be superior to both the Jensen Index and the Treynor Index because it is sensitive to the number of stocks placed in a portfolio. If an investor places too few stocks in a portfolio, it will be reflected in the Sharpe Index.

The Sharpe Index is almost identical to the Treynor Index, except beta is replaced with standard deviation. The index is computed by dividing the risk premium for the portfolio by its standard deviation. The formula for the Sharpe Index is given by

$$S_p = \frac{\bar{r}_p - r_f}{\sigma_{rp}}$$

S_p = Sharpe Index for the Portfolio

\bar{r}_p = Expected Return of Portfolio

r_f = Risk Free Rate

σ_{rp} = Standard Deviation of the Portfolio