



Common/Key Terms:

Annualized Return:

The annualized return is the geometric mean of the returns with respect to one year.

Excess Return:

The difference between the manager return and the benchmark return. A positive excess return implies that the manager outperformed the benchmark.

Skewness:

Skewness characterizes the degree of asymmetry of a distribution around its mean.

- *Positive skewness indicates a distribution with an asymmetric tail extending toward more positive values.*
- *Negative skewness indicates a distribution with an asymmetric tail extending toward more negative values.*

Kurtosis:

Kurtosis characterizes the relative peakedness or flatness of a distribution compared with the normal distribution.

- *Positive kurtosis indicates a relatively peaked distribution.*
- *Negative kurtosis indicates a relatively flat distribution.*

Alpha:

Alpha is the mean of the excess return of the manager over beta times benchmark. Generally, the returns generated by a manager not just attributable to market movement via the benchmark volatility.

Beta:

Beta is a measure of systematic risk, or the sensitivity of a manager to movements in the benchmark. A beta of 1 implies that you can expect the movement of a manager's return series to match that of the benchmark used to measure beta.

Value at Risk:

Based on a probability distribution, Value at Risk quantifies the expected loss under extreme market conditions. In the context of the Zephyr's classification system, VaR measures tail risk based on the historical profile of the returns being examined.

Significance Level:

The significance level of a manager series vs. a benchmark series indicates the level of confidence with which the statement "the manager's annualized excess return over the benchmark is positive" or "the manager's annualized excess return over the benchmark is negative," as the case may be, holds true.

Standard Deviation:

Standard deviation of return measures the average deviations of a return series from its mean, and is often used as a measure of risk. A large standard deviation implies that there have been large swings in the return series of the manager.

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Semi Standard Deviation and Upside Deviation:

The semi standard deviation and upside standard deviation differ from the ordinary standard deviation insofar as the sum is restricted to those returns that are less than the mean (semi standard deviation) or more than the mean (upside deviation).

Optimal Risk/Return Profile:

When reviewing portfolio risk statistics such as Sharpe Ratio and Information Ratio vs. that of the benchmark, higher numbers are better. A higher (positive) Sharpe or Information ratio in essence says that you are adding value when the returns are adjusted for risk versus the risk free rate (Sharpe Ratio) or the benchmark (Information Ratio).

Risk Assets: Asset classes outside of investment grade fixed income such as equities and high yield bonds. These assets are historically more volatile than are investment grade bonds

Investment-Grade Fixed Income:

Fixed income is a type of investment debt security (aka bond) that pays investors fixed interest payments until its maturity date, when the principal investment amount is repaid. Fixed Income bonds are evaluated by rating agencies on the probability that the issuer will repay its debt. Any issuer or bond with an investment-grade rating are considered highly likely to repay debt by the maturity date.

Peer Group:

Companies that are competitors in the same industry sector and/or are similar size.



Key Ratios/Metrics:

Sharpe Ratio:

The Sharpe Ratio of a manager series is the quotient of the annualized excess return of the manager over the cash equivalent and the annualized standard deviation of the manager return. The Sharpe Ratio is a risk-adjusted measure of return which uses standard deviation to represent risk.

Sortino Ratio:

The Sortino Ratio is a modification of the Sharpe ratio but penalizes only those returns falling below a user-specified target, or required rate of return, while the Sharpe ratio penalizes both upside and downside volatility equally. It is thus a measure of risk-adjusted returns that treats risk more realistically than the Sharpe ratio. Thus, the ratio is the actual rate of return in excess of the investor's target rate of return, per unit of downside risk.

Pain Ratio:

The Pain Ratio is a modification of the Sharpe ratio which uses the Pain Index as the measure of risk instead of Standard Deviation.

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Information Ratio:

The Information Ratio of a manager series vs. a benchmark series is the quotient of the annualized excess return and the annualized standard deviation of excess return. The Information Ratio measures the consistency with which a manager beats a benchmark.

Expense Ratio:

The annual fee that all funds or exchange traded-funds charge their shareholders. Determined by dividing the fund's operating expenses by the average dollar value of its assets under management.

Loss Ratio:

The losses an insurer incurs due to paid claims (as a percentage of premiums earned).

Combined Ratio:

A measure of profitability for insurance companies; calculated by taking the sum of incurred losses and expenses, then dividing them by the net earned premium.

Operating Ratio:

Measures a company's net retained premium in relation to its surplus (or net position) and exposure to pricing errors in its current book of business.

Financial Leverage Ratio:

Indicates the total liabilities to surplus (or net position). This measures a company's exposure to unpaid obligations, unearned premiums, and exposure to reserving errors.

Gain to Loss Ratio:

The ratio of the average gain in an up period to the average loss in a down period.

**Key Performance Measures:**

Up & Down Capture:

The up and down capture is a measure of how well a manager was able to replicate or improve on phases of positive benchmark returns, and how badly the manager was affected by phases of negative benchmark returns.

Upside & Downside Deviation (Using MAR):

Here, MAR stands for "minimum acceptable return." To calculate this, we first determine the sum of the squared distances between the returns and the MAR constant, where the sum is restricted to those returns that are more than MAR (upside deviation) or less than the MAR (downside deviation). Used to test return volatility based on an expected hurdle rate of expected return.

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Pain Index:

The Pain Index is the area enclosed by the drawdown graph and the zero drawdown line, divided by the length of the time interval. The more, the bigger, and more often the icicles, the greater the pain index.

Omega:

The ratio of the likelihood of getting a return over the MAR to the likelihood of getting a return below the MAR. So, in essence, it is a benefit/cost ratio. For a given MAR, higher Omegas are always better, but this can change at different MARs.

Average Up/Down Returns:

The returns are partitioned into two parts, one made up of the positive returns, the other of the zero and negative returns. The average up and down returns are the respective averages of these two series.

Batting Average:

The batting average of the manager is the ratio between the number of periods where the manager outperforms a benchmark and the total number of periods.

Maximum Drawdown:

This is the maximum loss (compounded, not annualized) that the manager incurred during time period being analyzed. Conceptually, this is the biggest “peak to trough” loss.

About Strategic Asset Alliance

SAA is an independent investment consulting firm that works exclusively with insurance companies and pooling organizations. Founded in 1994 by our President Alton Cogert, our experience and focus enables us to help our clients improve their investment process and enhance the value added by their portfolios which are critical components of their business.

We provide insurers and risk pools with independent investment consulting services to aid their board members and senior executives in meeting fiduciary responsibilities, along with strengthening their investment program.

Our consultants are former senior investment executives at insurers and bring broad, deep expertise across the various lines of business. We have also worked with Pooling organizations for more than 15 years. We combine a knowledge of investments with an understanding of the insurance and pooling businesses.

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