



## **Last Month**

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Rate of return for the most current month as reported by the CTA.

## **3 Months ROR**

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Compounded rate of return for the last three months.

## **Year To Date**

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Current year's return, calculated by summing the returns of current year months using the compounding effect.

## **12 Months ROR**

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Compounded rate of return for the last twelve months.

## **36 Months ROR**

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Compounded rate of return for the last thirty-six months.

## **Average ROR**

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This is a simple average return (arithmetic mean) which is calculated by summing the returns for each period and dividing the total by the number of periods. The simple average does not take the compounding effect of investment returns into account.

## **Sharpe Ratio**

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The Sharpe Ratio is a measure of the risk-adjusted return of an investment. We calculate the average monthly return and then calculate the standard deviation of the monthly returns over the same period. The next step is to calculate the excess return, which is the average return in excess of the risk-free rate of return (average monthly return - risk-free return). This is the extra return you receive by taking certain level of risk (risk is measured by the standard deviation of the returns, which is actually the variability of the returns). We use 5% per year as a risk-free return.

Then you calculate the Sharpe Ratio as follows:

Sharpe = (average monthly return - risk-free return) / annualized standard deviation

This gives you the monthly Sharpe you can annualize by multiplying it by the square root of 12.

## **Sortino Ratio**

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Return/risk ratio. The concept as in Sharpe ratio. The only difference is that it is calculated using standard deviation of negative returns only (returns below a minimum acceptable threshold).



## **Sterling Ratio**

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Return/risk ratio. Return is defined as the compound annualized rate of return over the last 3 years. Risk is defined as the average yearly maximum drawdown over the last 3 years less an arbitrary 10%.

## **Calmar Ratio**

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Return/risk ratio. Return is defined as the compound annualized rate of return over the last 3 years, risk as the maximum drawdown over the last 3 years.

## **Skewness**

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Skewness characterizes the degree of asymmetry of a distribution of returns 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**

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Kurtosis characterizes the relative peakedness or flatness of a distribution compared with the normal distribution. Positive kurtosis indicates relatively peaked distribution. Negative kurtosis indicates relatively flat distribution.

## **Drawdown**

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A drawdown is any losing period during an investment. It is defined as the percent retrenchment from an equity peak to an equity valley. A drawdown starts with the beginning of an equity retrenchment and continues until a new equity high is reached. (a drawdown encompasses both the period from the equity peak to the equity valley (length) and the time from the equity valley to the new equity high (recovery)). Maximum Drawdown is then the greatest cumulative percentage decline in equity.

## **Beta**

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Beta is the slope of the regression line. Beta measures the risk of a particular investment relative to the market as a whole (the "market" can be any index or investment you specify). It describes the sensitivity of the investment to broad market movements. For example, in equities, the stock market (the independent variable) is assigned a beta of 1.0. An investment which has a beta of 0.5 will tend to participate in broad market moves, but only half as much as the market as a whole.

## **Correlation and Correlation Coefficient**

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The correlation coefficient is a statistical measure of the degree of linear relationship between two variables. The correlation coefficient may take on any value between plus and minus one. The sign of the correlation coefficient (+, -) defines the direction of the relationship, either positive or negative. A positive correlation



coefficient means that as the value of one variable increases, the value of the other variable increases as well; as one decreases the other decreases too. Taking the absolute value of the correlation coefficient measures the strength of the relationship. Thus a correlation coefficient of zero indicates the absence of a linear relationship and correlation coefficients of one and minus one indicate a perfect linear relationship.

### **Stress testing**

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Stress testing is a method of determining how the program will behave during a period of financial crisis. We use the worst monthly S&P500 returns as a stress time. You can also use hypothetical scenarios (for example Monte Carlo simulation) or known historical events (for example Russian debt default in 1998 or 9/11 terrorist attacks).

### **Multifactor analysis**

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This technique is trying to determine the link that may exist between the program return and chosen factors.

### **Style analysis**

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This is a part of the multifactor analysis. We use the returns-based method developed by F.S.Lhabitant in 2001 which is an adjusted application of the analysis initially suggested by Sharpe in 1998. CS/Tremont hedge fund indices are used as factors and Beta coefficients are used as exposure to these style indices.

### **Value Added Monthly Index (VAMI)**

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This index reflects the growth of a hypothetical \$1,000 in a given investment over time. The index is equal to \$1,000 at inception. Subsequent month-end values are calculated by multiplying the previous month's VAMI index by 1 plus the current month rate of return.

### **Value at Risk**

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This is the maximum amount of capital that the position can expect to lose within a specified holding period (we use 1 month period) and with a specified confidence level (we use 95%). Example: if VaR is -10%, you can expect that 95% of the next month returns will be better than -10%.