

MANAGED FUTURES EXPLAINED

An insiders guide to what they are, how they work, and who should invest in them



Presented by

Managed Account Research, Inc.

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Informed Alternative Investing
Series of Guides

Risk Statement

THE RISK OF TRADING COMMODITY FUTURES, OPTIONS AND FOREIGN EXCHANGE ("FOREX") IS SUBSTANTIAL. THE HIGH DEGREE OF LEVERAGE ASSOCIATED WITH COMMODITY FUTURES, OPTIONS AND FOREX CAN WORK AGAINST YOU AS WELL AS FOR YOU. THIS HIGH DEGREE OF LEVERAGE CAN RESULT IN SUBSTANTIAL LOSSES, AS WELL AS GAINS. YOU SHOULD CAREFULLY CONSIDER WHETHER COMMODITY FUTURES, OPTIONS AND FOREX IS SUITABLE FOR YOU IN LIGHT OF YOUR FINANCIAL CONDITION. IF YOU ARE UNSURE YOU SHOULD SEEK PROFESSIONAL ADVICE. PAST PERFORMANCE DOES NOT GUARANTEE FUTURE SUCCESS. IN SOME CASES MANAGED ACCOUNTS ARE CHARGED SUBSTANTIAL COMMISSIONS AND ADVISORY FEES. THOSE ACCOUNTS SUBJECT TO THESE CHARGES, MAY NEED TO MAKE SUBSTANTIAL TRADING PROFITS JUST TO AVOID DEPLETION OF THEIR ASSETS. EACH COMMODITY TRADING ADVISOR ("CTA") IS REQUIRED BY THE COMMODITY FUTURES TRADING COMMISSION ("CFTC") TO ISSUE TO PROSPECTIVE CLIENTS A RISK DISCLOSURE DOCUMENT OUTLINING THESE FEES, CONFLICTS OF INTEREST AND OTHER ASSOCIATED RISKS. . A HARD COPY OF THESE RISK DISCLOSURE DOCUMENTS ARE READILY AVAILABLE BY CLICKING ON EACH CTA'S "REQUEST DISCLOSURE DOCUMENT" BUTTON. THE FULL RISK OF COMMODITY FUTURES, OPTIONS AND FOREX TRADING CAN NOT BE ADDRESSED IN THIS RISK DISCLOSURE STATEMENT. NO CONSIDERATION TO INVEST SHOULD BE MADE WITHOUT THOROUGHLY READING THE DISCLOSURE DOCUMENT OF EACH OF THE CTAS IN WHICH YOU MAY HAVE AN INTEREST. REQUESTING A DISCLOSURE DOCUMENT PLACES YOU UNDER NO OBLIGATION AND EACH DOCUMENT IS PROVIDED AT NO COST. THE CFTC HAS NOT PASSED UPON THE MERITS OF PARTICIPATING IN ANY OF THE FOLLOWING PROGRAMS NOR ON THE ADEQUACY OR ACCURACY OF THE DISCLOSURE DOCUMENTS. OTHER DISCLOSURE STATEMENTS ARE REQUIRED TO BE PROVIDED TO YOU BEFORE AN ACCOUNT MAY BE OPENED FOR YOU.

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. PROSPECTIVE CLIENTS SHOULD NOT BASE THEIR DECISION ON INVESTING IN THIS TRADING PROGRAM SOLELY ON THE PAST PERFORMANCE PRESENTED. ADDITIONALLY, IN MAKING AN INVESTMENT DECISION, PROSPECTIVE CLIENTS MUST ALSO RELY ON THEIR OWN EXAMINATION OF THE PERSON OR ENTITY MAKING THE TRADING DECISIONS AND THE TERMS OF THE ADVISORY AGREEMENT INCLUDING THE MERITS AND RISKS

Professionally Managed Futures Accounts may be a valuable investment alternative. However, like any investment decision, prudent research and consideration should be made before investing. This guide will introduce you to managed futures. Your decision to invest in a managed futures program should only be made after a thorough research and analysis of managed futures and the risks and rewards this alternative investment presents.

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What is a Managed Futures Account?

A professionally Managed Futures Account is a discretionary trading account where you give permission to a Commodity Trading Advisor (CTA) to make all trading decisions on your behalf through a revocable power of attorney or a third party trading authorization.

Investing in a managed account relieves you of the concerns associated with the trading facet of investing i.e. market timing, asset allocation, stop loss protection, etc. You make the large decisions of who to authorize to manage your account and how much risk capital to invest. To facilitate this, you review ranking, profile, and performance measurement reports and of course the individual CTAs disclosure document to screen and qualify the investment for your particular circumstances.

What is a CTA?

A CTA is professional trader known as a "Commodity Trading Advisor". A CTA is an individual or firm who, for pay, trades accounts for individual clients or for commodity pools and/or who provides analysis, reports or advice concerning futures and options trading. Traders with this designation are generally required by the US Government to submit a disclosure document which outlines who he or she is, states the fees and expenses charged to accounts and reveals the trader's performance track record. Additionally, information on the Advisor's trading program is explained, as well as any conflicts of interest or disciplinary history that may be material.

Why Managed Futures?

The ability of Managed Futures to offer a potential protection in periods when the stock markets are not performing well is one of the main strengths. This is the most important and valuable contribution and the main factor that attracts institutional investors. Additionally, investors' willingness to explore opportunities in new global markets has contributed to the growth of managed futures. Another major factor has been investors' willingness to accept the potential benefits of a professional, the CTA, trading their account.



While it is common for individuals to invest in the stock and bond market, it is not as common for individuals to invest in the futures markets. Moreover, it is difficult for an individual to successfully trade on their own in the futures markets. In fact, U.S. Government studies have suggested that up to 90% of individuals who trade futures by themselves -- meaning the individual makes the buy and sell decisions -- lose money. The reasons why are worth exploring.

When trading in any market, knowledge of the vehicle being traded is essential, and clearly people who know nothing about soybeans or crude oil trading are likely to be at a major disadvantage against professional traders. Moreover, the futures markets are volatile and highly leveraged, meaning a small price movement can have a tremendous impact on trading results. Is it any wonder, then, that individuals trading on their own often lose? An experienced CTA trading full-time on behalf of an individual may increase the chances of success. However, just as in any other investment, there is no guarantee of profits, and a CTA cannot eliminate the risk inherent to futures trading.

The following table illustrates what we believe are the primary reasons why individual traders success in the futures market has been inferior. While the following characteristics are not true for all CTA's or all individual traders, we believe that the vast majority exhibit these types of traits based on our twenty plus years in the futures industry, as well as interviews with both CTA's and individual traders we have had the opportunity to be associated with.

CTA/Individual Trader Comparison

	CTA	Individual Trader
Definitive Strategy	<p>Follows a long-term plan based on extensively tested research. Attempts to limit losses on losing positions, while letting profits run on profitable positions. This patient, disciplined approach can pay big dividends: though, with any investment, risk of loss exists.</p> <p>The CTA requires what he believes to be an acceptable minimum account size for his trading approach. Knows that an account properly funded may help enable him to absorb losses while waiting for profitable trades.</p> <p>Often has diversified trading positions covering as many as 25 markets or more, while typically committing only 10-25% of his account's equity to the market at any given time.</p>	<p>Usually in the markets seeking instant gratification. Because he lacks a definitive game plan he often changes his approach midstream, resulting in impatience and chaos.</p> <p>Often undercapitalized and can only absorb a few losses before his trading capital is depleted, usually in just a short period of time.</p> <p>Often commits 100% of an account's equity to the markets. He commonly trades only one commodity resulting in an overly concentrated position.</p>
Timing	<p>Commits attention to following a definitive system, which may look at market prices and trends, and therefore acts immediately upon signals and market knowledge.</p>	<p>Usually can pay only part-time attention to the markets. He misses news, often acts on impulses that lack proper timing.</p>
Discipline	<p>Expects his fair share of both winning and losing trades. Neither result will influence him to deviate away from his preset buy and sell signals. He attempts to cut his losses short while allowing profits to run. Knows market conditions may prevent him from limiting losses to a specific amount.</p>	<p>Believes his destiny is to predict the direction of the market rather than manage risk. This win-it-back at all costs mindset inevitably could lead to his downfall. He hangs on to losing positions hoping they will come back. Conversely, he will take profits prematurely to validate his prediction.</p>

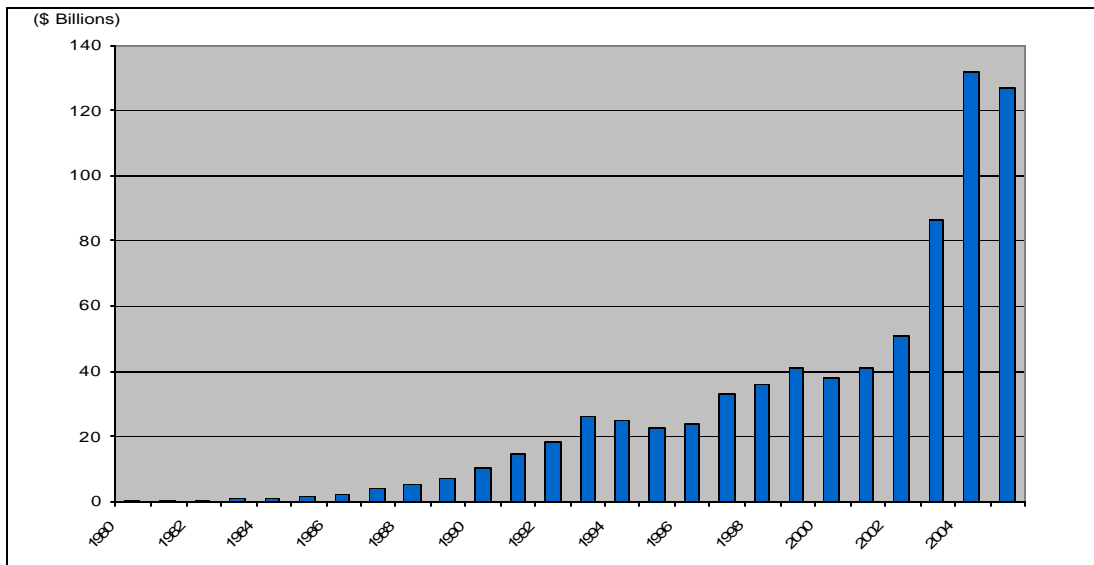
Growth of Managed Futures

A number of factors have been responsible for the growth in managed futures trading:

- The stock markets in the U.S. experienced the first consecutive three-year decline in 60 years, and still have not surpassed the highs made in 1999. Because of the disappointing equity returns and a current economic environment which we believe to be favorable to CTAs, investors are drawing their attention again to Managed Futures.
- Sophisticated investors have sought more effective methods of diversification. A number of studies indicate a portfolio including managed futures may yield more stable returns over a period of time relative to portfolios including only stocks and bonds.
- The enormous expansion of futures to encompass stock indexes, debt instruments, currencies, and options as well as conventional commodities has created new categories of profit opportunities. The global nature of today's futures markets also has expanded the scope of investment possibilities.
- Studies conducted by the Chicago Mercantile Exchange (CME) indicated that Managed Futures accounts may be more profitable on the average than accounts that individuals trade on their own.

In the last 20 years, investor participation in the world's stock and bond markets has dramatically increased in large part due to the growth of mutual funds, individually managed stock accounts and trading technologies. Similarly, investor participation in alternative investments has increased through investor participation in futures markets, which include managed futures accounts.

The chart below demonstrates the growth in managed futures since 1980.



Over the last several years, a growing number of institutions and individual traders/investors have allocated billions of dollars into managed futures.

According to The Barclay Group, money under management during the 4th quarter 2004 was \$131.9 billion, a 12.06% increase from the previous quarter. This represents a 52.49% increase in assets since the beginning of 2004.

Benefits of Managed Futures

- **Reduced Portfolio Volatility Risk:** One of the key views of Modern Portfolio Theory, as developed by the Nobel Prize economist Dr. Harry M. Markowitz, is that more efficient investment portfolios can be created by diversifying among asset classes with low to negative correlations. The primary benefit of adding managed futures to a diversified investment portfolio is that it may decrease portfolio volatility risk. This risk-reduction contribution to the portfolio is possible because of the low to slightly negative correlation of managed futures with equities and bonds.
- **Potential for Enhanced Portfolio Returns:** While managed futures can decrease portfolio risk, they can also potentially enhance overall portfolio performance. This is supported by various academic research studies, beginning with the landmark study of Dr. John Lintner of Harvard University, in which he wrote that "the combined portfolios of stocks (or stocks and bonds) after including judicious investments in leveraged managed futures accounts show substantially less risk at every possible level of expected return than portfolios of stocks (or stocks and bonds) alone." When observed as an independent investment, managed futures have compared favorably with U.S. stocks and bonds over the last twenty years.
- **Ability to Profit in Any Economic Environment:** Because of the diverse investment vehicles managed futures trading advisors participate in, the advisors have the ability to profit in various economic conditions. Managed futures trading advisors can take advantage of price trends. They can buy futures positions in anticipation of a rising market or sell futures positions if they anticipate a falling market. For example, during periods of hyperinflation, hard commodities such as gold, silver, oil, grains, and livestock have tended to do well, as do the major world currencies. During deflationary times, futures provide an opportunity to profit by selling into a falling market with the expectation of buying, or closing out the position, at a lower price. Trading advisors can even use sophisticated strategies that use a mix of futures and options on futures contracts that allow for profit potential in flat or neutral markets.
- **Ease of Global Diversification:** The establishment of global futures exchanges and the accompanying increase in actively traded futures contracts, have allowed trading advisors to diversify their portfolios by geography as well as by individual commodity market. For example, managed futures can participate in at least 150 different markets worldwide, including stock indexes, financial instruments, agricultural and tropical products, precious and nonferrous metals, currencies, and energy products. Trading advisors have many possible opportunities to profit from the broad array of non-correlated markets.
- **Professional Management:**

The benefits that professional management offers with managed futures are similar to those experienced with mutual funds and other investment advisors. These include:

- Full-time dedication to the markets
- A disciplined trading approach
- Money management techniques that seek to control losses and protect profits
- Strategies that attempt to balance risk and reward

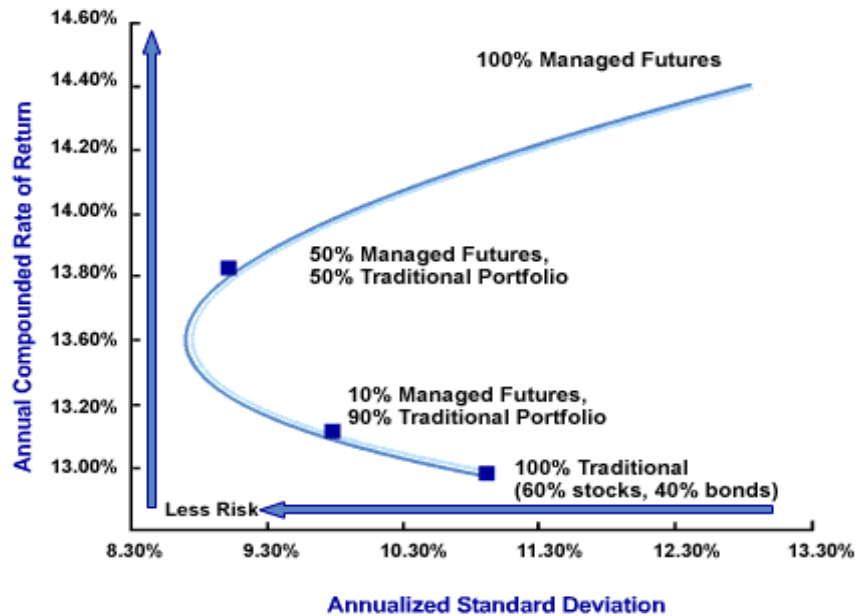
Independent Research on Managed Futures

"Portfolios...including judicious investments...in leveraged managed futures accounts show substantially less risk at every possible level of expected return than portfolios of stocks (or stocks and bonds) alone"

There have been numerous academic and professional studies written on managed futures and their role in a diversified investment portfolio, however, none more widely read and accepted by the alternative investment community than the landmark paper presented to the Financial Analysts Federation by Prof. John K. Lintner of Harvard University, "The Potential Role of Managed Commodity-Financial Futures Accounts (and/or Funds) in Portfolios of Stocks and Bonds". In addition to the Dr Lintner' statement above, the research paper stated that *"the improvements from holding an efficiently-selected portfolio of managed accounts or funds are so large, and the correlation between returns on the futures portfolios and those on the stock and bond portfolios are so low (sometimes even negative), that the return/risk tradeoffs provided by augmented portfolios...clearly dominate the tradeoffs available from portfolio of stocks alone or from a portfolios of stocks and bonds."*

The relationship between risk and reward is commonly measure by volatility. Because managed futures traditionally offer a high risk / high reward investment profile, investors need to be informed about the possibility of significant losses that may accompany high returns.

The following chart illustrates the potential impact of adding managed futures to a traditional portfolio of stocks and bonds can improve returns, as well as reduce portfolio risk or volatility.



The ability of futures to enhance the returns of traditional investments has also been documented in a study conducted by Goldman Sachs. Covering a 25-year period, the study concluded that by "allocating only 10% of a securities portfolio to commodities, investors can improve their performance." Goldman Sachs' conclusion, concerning the value of commodities, was supported by another study published by the Chicago Mercantile Exchange (CME), one of the world's pre-eminent futures exchanges. According to the CME study, "Portfolios with as much as 20% of assets in managed futures yield up to 50% more than a portfolio of stocks and bonds alone."

Managed Futures Investment Opportunities

According to the Barclay Group, as of the 2nd quarter 2005, it is estimated that over \$125 billion is under management by futures and FX trading advisors worldwide. There has been dramatic jump in investor participation recently, since 2001 investments in this arena have risen fourfold. Currently, there are three primary categories that make up managed futures and managed FX investments that are available to the public.

- **Individually Managed Futures Accounts** permit investors to open a private trading account in his or her name with a Futures Clearing Merchant (FCM). The investor authorizes a professional trading advisor to direct trading in this account based on the trading strategy presented in the advisors disclosure document. This type of participation allows investors the most transparency and liquidity. Because an individual account is opened in the investors'



name, activity can be monitored daily if necessary and trading authorization can be revoked at anytime. Most advisors have minimum required investments before they will trade an individual account on their behalf, these minimums range from as little as \$25,000 to as much as \$10 million for some advisors.

- **Private Investment Pools** are investment trusts, syndicates, or similar forms of enterprise operated for the purpose of trading commodity futures or option contracts. Typically thought of as an enterprise engaged in the business of investing the collective or "pooled" funds of multiple participants in trading commodity futures or options, where participants share in profits and losses on a pro rata basis. It is common for many pools to have certain restrictions that limit the number of investors that can be involved in the pool or the financial suitability of the individual investors. Additionally, these pools may be restricted from advertising to the public, consequently, obtaining information about their availability may be difficult. These pools usually allow for admission-redemption on a monthly or quarterly basis. Most pools have minimum investments ranging from \$25,000 to \$250,000.

- **Public Funds and Pools** provide a means for small investors to participate in the commodity markets. These funds are usually setup as public funds and are often marketed like mutual funds, there are some differences. It's not uncommon for commodity funds to have upfront fees or "loads" for startup and administrative fees. Like individual managed accounts and private pools, the advisor also participates in profit sharing in the form of his incentive fee.



Within these groups there is a wide variety of choices among available managed programs. Programs can be selected by style, strategy and market focus. When selecting a managed futures account that is right for you, investors should first develop a set of requirements that meet their individual investment needs, then search, screen and select the programs that will meet their objectives.

Managed Futures Participants

In order to assist investors with managed futures investments, there are several industry professionals qualified to help in the evaluation, selection, investment and monitoring of managed futures product.

- **Commodity Trading Advisors (CTAs)** are responsible for the actual trading of the managed accounts. A CTA is a person or entity who, for compensation or profit, directly or indirectly advises others as to the advisability of buying or selling futures or commodity options. Providing advice includes exercising trading authority over a customer's account. A CTA is generally required to be registered if he holds himself out to the public as a trading advisor and manages 15 or more persons. As of September 2005, there are over 700 CTAs registered with the National Futures Association (NFA), which is the industry's self-regulatory organization for futures and options markets.



- **Futures Commission Merchants (FCMs)** are the brokerage firms that maintain the managed accounts, as well as execute, clear and carry CTA-directed trades on the various commodity exchanges worldwide. FCMs are required to meet minimum capitalization requirements, as set by the Commodity Futures Trading Commission (CFTC). As of September 2005, there are over 150 FCMs registered with the NFA.



- **Commodity Pool Operators (CPOs)** assemble commodity funds and pools. These are usually setup in the form of limited partnerships. CPOs generally act as the general partner of commodity pools. CPOs usually hire independent CTAs to handle daily trading decisions. They are generally responsible for the pool's administration, structure, and selecting and monitoring the traders who conduct transactions using the fund's money. As of September 2005, there are approximately 500 CPOs registered with the NFA.
- **Advisor Consultants (ACs)** are available to assist investors in the process of selecting a CTA. ACs can be a valuable resource for learning about managed futures programs and helping establish relationships with CTAs, CPOs and FCMs. These consultants provide both individual and institutional investors with customized investment solutions. These solutions can expose investors to top managed futures and alternative investment talent, capacity and performance. Many ACs have proprietary advisor databases, as well as ranking and asset allocation software that can help investors' search, screen and select professional advisors that meet their individual requirements. Investors should be cautioned to only work with ACs that registered in some capacity with the NFA.

Selecting a Managed Futures Program

Before participating in a managed futures investment, an investor should determine his financial situation, which may include available risk capital, risk tolerance and investment time horizons as well as how this investment fits into his overall investment portfolio. Once an investor has determined his personal situation and needs, an investor needs to evaluate this investment space and make some important considerations, and much of this information can be found in the CTA's disclosure document as well as from independent performance measurement tracking services. Disclosure documents must be provided to an investor upon request. The disclosure documents contain important information about the CTA's trading program or style, strategy and fees, as well as any material facts that should be disclosed. Before investing in any managed program, an investor is required to read and confirm receipt of the CTAs Disclosure Document.

The Trading Program

It is important to know the type of trading program operated by the CTA you are researching. There are largely two types of trading programs among the CTA community, systematic and discretionary. Within these two groups CTAs can be further categorized between trend-followers or market-neutral strategies. Trend-followers use proprietary technical or fundamental trading systems, which provide signals of when to go long or short in certain futures markets. The goal of most trend-followers is to profit from extended price movement in either direction, though some CTAs may only capture very small trends or short-term moves in the market. Market-neutral traders tend to look to profit from either arbitrage or spreading different commodity markets. Included in market-neutral strategies are the options-premium sellers who may use delta-neutral programs. The arbitragers, spreaders and premium sellers aim to profit from sideways or non-directional trading markets. In addition to styles and strategies, CTAs may trade diversified portfolios of as many as 100 world-wide commodity markets or they may be market specific and specialize in only one market like the S&P 500.

Drawdowns

Although most investors tend to look at the returns a particular trading program has generated over time, a drawdown spectrum (a list of cumulative declines in equity) may provide an investor insight into the type of risk he may have to absorb in order to realize those returns. A list of historical losses, however, does not mean drawdowns will remain the same in the future (drawdowns can get larger or smaller in the future), but can provide historical information on the depth, length and time of recovery of each of the drawdowns. Obviously, the shorter the time required to recover from a drawdown the better the performance profile. Regardless of how long a drawdown lasts, CTAs are only allowed to assess incentive fees on new net profits (that is, they must clear what is known as the "previous equity high watermark" before charging additional incentive fees).

Annualized Rate of Return

The annualized rate of return, which is required to be presented always as net of fees and trading costs by the CTA, is the returns an investment program has generated in the past. These performance numbers must be provided in the disclosure document, however they may not be the most recent month performance. CTAs must update their disclosure document no later than every nine months, when performance is not up to date in the disclosure document, you can request information on the most recent performance, which the CTA should make available. Additionally you would also want to know if there have been any drawdowns that are not showing in the most recent version of the disclosure document.

Risk-Adjusted Return

After determining the type of trading program you are interested in, which would include type of strategy, markets traded, and the potential reward given past performance (by means of annualized return and maximum peak-to-valley drawdown in equity), an investor should expand his evaluation using various Risk-Adjusted methods to get more a complete picture of the program. The NFA (National futures Association) requires CTAs to use standardized performance capsules in their disclosure documents, which is the data used by most of the tracking services, like CTA-Info.com

Selecting a Managed Futures Program (cont.)

The most important measure you should use to compare different trading programs, is return on a risk-adjusted basis. For example, a CTA with an annualized rate of return of 35% might look better than one with 10% at first glance, however, simple comparisons of return may be quite deceiving. The CTA with 35% returns may have had numerous drawdowns in excess of 50% of equity to generate his returns, while the CTA with 10% returns may have had only minor drawdowns of less than 2%. In order to evaluate and determine the trading program that is right for you, several statistical measures have been developed to help investors compare trading programs on a risk-adjusted basis.

- Sharpe Ratio-a ratio developed by Nobel Laureate Bill Sharpe to measure risk-adjusted performance. It is calculated by subtracting the risk-free rate from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns.

The Sharpe ratio tells us whether the returns of a portfolio are because of smart investment decisions or a result of excess risk. This measurement is very useful because although one portfolio or fund can reap higher returns than its peers, it is only a good investment if those higher returns do not come with too much additional risk. The greater a portfolio's Sharpe ratio, the better its risk-adjusted performance has been.

- Sterling Ratio-a ratio used mainly in the context of hedge funds and managed accounts. This risk-reward measure determines which investments have the highest returns while enduring the least amount of volatility. The formula is as follows:

$$= \frac{\text{Compounded Annual Return}}{\text{Average Maximum Drawdown} - 10\%}$$

This formula uses the average for risk (drawdown) and return over the past three years. Drawdown is calculated at the maximum potential loss in the given year.

Just like the Sharpe ratio, a higher Sterling ratio is generally better because it means that the investment is receiving a higher return relative to risk.

- Calmar Ratio-a ratio used to determine return relative to drawdown (downside) risk in a hedge fund or managed account. Calculated as:

$$= \frac{\text{Compounded Annual Return (past 3 years)}}{\text{Maximum Drawdown}}$$

A higher the Calmar ratio is generally better. Some programs have high annual returns, but they also have extremely high drawdown risk. This ratio helps determine return on a downside risk adjusted basis. Most people use data from the past 3 years.

Volatility

Volatility is a statistical measure of the tendency of an investment to rise or fall sharply within a period of time. Standard Deviation is one of the most commonly used statistics in determining the volatility of a trading program. A trading program that is volatile is also considered higher risk because its performance may change quickly in either direction at any moment. The standard deviation of a program measures this risk by measuring the degree to which the program fluctuates in relation to its mean return (the average return of a trading program over a period of time).

Correlation

The correlation of a trading program to other investments is an integral part of building a successful investment portfolio. Not only is it important to not be correlated to other CTAs in the portfolio, it also very important that the CTA you are considering fits in your traditional stock and bond portfolio. The goal of a well-balanced investment portfolio is that when some assets are losing value, the other assets are gaining value.

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