

Risk Management, Return Enhancement and Portfolio Optimization – The Benefits of Managed Futures

Improving your portfolio's risk characteristics and long-term performance.

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Diversification, the proven philosophy that investors should construct a portfolio of assets that do not perform in tandem, is the mantra for risk management and long-term return enhancement. This philosophy has been widely documented and researched; however, application can be challenging. More often than not we find investors who believe their portfolios to be diversified, when in fact they may not be as diversified as they could be. This paper is intended to highlight the potential risk reduction and return enhancing benefits of managed futures and commodities investing. This paper is divided into two sections: 1). The Dynamics of Commodities Futures, and 2). Advanced Strategies in Commodities and Managed Futures. The first part provides a ground level discussion on commodities investing. The second part of this paper represents a compilation of research on the deployment of these strategies. Even those investors who understand this asset class tend to allocate insignificant percentages to an asset class that very well deserves attention as a major portfolio component. This paper is meant to examine the negative stigma surrounding commodity futures and to explore objectively the positive and negative attributes of this “lonely” asset class.

Part One: The Dynamics of Commodities Futures

Introduction

A relatively unknown and commonly misunderstood investment vehicle, commodity futures, plays a pertinent role in the financial industry. Extending beyond pork belly prices or orange juice futures, commodities futures have shown to be idiosyncratic, important, and beneficial as an addition to a traditional portfolio. While the reader may be somewhat familiar with commodities futures the following section provides a ground level yet important understanding of the dynamics of commodities beyond what is expressed in the mainstream media. Once we have established the essentials of commodity futures, we will further explore active management through Commodity Trading Advisors (CTAs).

Theoretically, any non-correlated asset class has a role in a portfolio. The impetus to focus on commodities and managed futures derives from their unique performance characteristics and positive correlation aspects. The real magic comes when they are introduced to a portfolio of traditional assets.

Figure 1

Performance and Risk from Jan 1975 - Sep 2004		
Asset Class	Annualized Return	Annualized Risk
Large Cap Stocks	13.54%	15.28%
Long Term Treasury Bonds	9.14%	10.21%
Commodities Futures	11.28%	8.35%

* Large Cap Stocks represented by the Standard and Poors 500 Index. Long Term Treasury represented by the Lehman Brothers Long Term Treasury Index. Commodities represented by the Mount Lucas Management Commodity Index.

What are Commodities Futures?

In order to understand commodity futures one must first recognize the difference between capital assets and real assets. Bonds and stocks are capital assets. The income received from bonds comes in the form of coupon payments or interest which decreases in real value (purchasing power) during inflationary economic periods. As an investment, stocks are the residual claim on a company's assets after bondholders are satisfied. Companies own real assets that are positively correlated with inflation in the long-run, e.g. real estate, plant and equipment and other hard assets should nominally rise in value. Companies also have the advantage of raising the price of their goods or services in response to inflation. This explains why stocks are inflationary hedges in the long-run even though they have exhibited difficulty in the short-run e.g. it is difficult for companies to adjust their prices immediately.

Real assets, an asset that has intrinsic value because of its utility such as real estate or commodities, by definition are insulated from the stripping effects of inflation. For many of the reasons pension plans have looked to real estate as a hedge, real assets play a pertinent role in portfolio composition. Over time, the price of real assets may change, but the exchange quantity stays consistent. In other words, the price of a barrel of oil may rise to \$50, but a barrel will always remain a barrel. The reciprocal is true of nominal assets: monetary output remains constant, yet the exchange value will often change. A bond will continue to pay \$100 annually, but as we witness 3% inflation rather than the expected 2% inflation, the value of that \$100 has decreased. (Ankrim 1993) For this reason, real assets serve as an effective hedge against inflation.

Commodity futures are contracts on real assets that include agriculture, livestock, industrial metals, precious metals, and energy. Energy represents approximately 70% of the world's economic production of commodities. Commodity futures allow producers that may be long or short a particular commodity to hedge some of their price risk and allow speculators to bet on future price movements.

Futures Contracts

Investors typically invest directly in a financial asset, rather than a futures contract. A direct investment in physical commodities would be expensive and unrealistic for most investors as they would have to pay for storage and insurance. After all who wants to take ownership in a barrel of oil or a 100 head of cattle? Futures contracts are a derivative instrument on underlying real assets, traded in a regulated futures market. A futures contract, including commodity and financial futures (which we will investigate later), represents an agreement between two parties to transact financial instruments or physical commodities on a specified future date at a specified price. Buyers are agreeing to buy something; sellers are agreeing to deliver something, whether it has been produced at that point or not. The majority of commodity futures are not interested in gaining access to a particular commodity. In fact, 99% of futures contracts do not result in delivery of the underlying commodity. (Anson 2002) The futures market today is primarily used to hedge risk or speculate. (Anson 2002) A spot commodity is traded with the expectation of actual delivery, as opposed to a commodity futures contract which typically is not delivered but closed out with an opposing transaction.

Futures contracts are traded on a centralized exchange and have daily liquidity. Contracts are purchased with a down payment, called the initial margin, usually representing less than 10% of the full purchase price. The initial margin is different from that required for stocks and bonds. Margin on capital assets is a loan that accrues interest and allows an investor to leverage the value of their investment. Commodity margin is regarded as a “good-faith” deposit to cover adverse price movements that may occur in the value of the underlying commodity. (Peters 1997) Different from stock margin, an investor can receive interest on commodity margin. Contracts are priced daily, or marked to market, which is one of the fundamental reasons the futures markets are extremely liquid and considered a major financial hub. It is a good source for financial information and market sentiment indicators.

There are three primary participants in the futures markets: producers, primary consumers, and investors. Producers and primary consumers are referred to as commercials and hedgers. (Lightner 2003) For most commodities, an imbalance exists between producers and primary consumers. This in turn drives supply and demand in the market. Investors provide balance among commercials and hedgers and are often referred to as speculators. At any given time the size of the imbalance between producers and consumers dictates the need for outside investors and defines the market opportunity obtainable for those investors.

Hedgers

Commercial participants often want to hedge against price risk. Members include farmers, producers, manufacturers, consumers, importers, and banks. They are in the business of producing a good or service and do not like uncertainty about the price of their goods. They wish to secure a price for an item they plan to sell or buy in the future. The ability to hedge price risk of an underlying commodity is viewed as a valuable service by hedgers.

As an example, an automobile producer must secure a certain amount of steel at a predetermined time in order to produce their automobiles. The producer must sell the model at a price already established with their dealers six months in advance. If the price of steel were to rise the automobile producer would lose millions because they would not be able to produce the upcoming

model for a profit. Therefore, it is in the best interest of the automobile company to hedge this potential price risk. The company would use the futures markets to buy steel contracts, locking a price six months ahead of production. They are minimizing the risk of a steel supply shock. The more the automobile producer is hedged, the less they care about price volatility.

If steel prices were to fall below the agreed futures price the automobile producer would have been better off without the contract. This disadvantage is offset if you consider the volatility of the futures marketplace, and the simple fact the producer is shedding some of their financial risk by entering the contract. Many opponents of futures identify the futures markets to be a zero sum game in terms of profit and loss, where every man's gain is another's loss. The trade-off is considered a cost of the business and exactly what speculators look for in order to profit. This represents the argument against those claiming futures contracts are a zero sum game. Once again, risk transfer is a valuable service, much like obtaining insurance, and the payment is a transfer of trading profits.

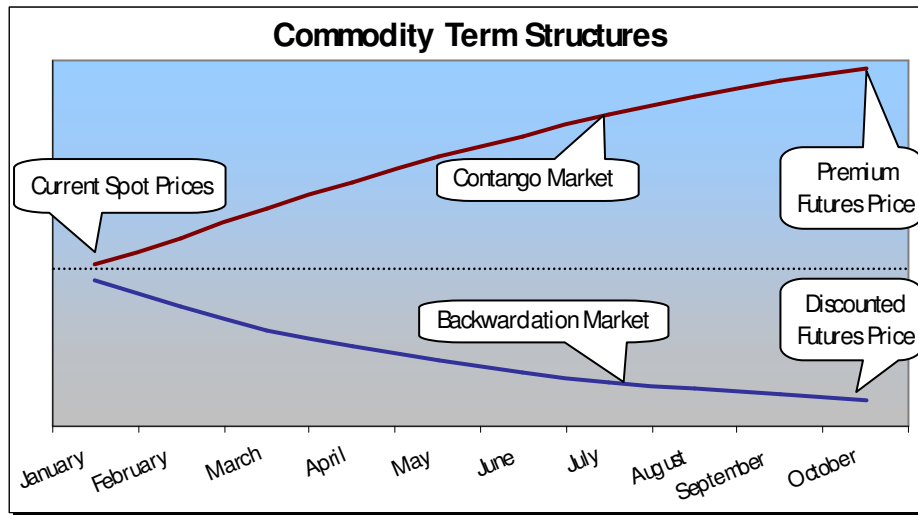
Speculators

Speculators represent the other side of the equation, and they endeavor to profit from the same price change hedgers are insulating themselves against. When a hedger removes their potential price risk they may also be leaving some potential price return on the table. If prices of commodities were not volatile, you would not expect producers to hedge risk. The inherently volatile nature of this asset class allows spectators to derive return from other's risk avoidance. Speculators do not necessarily intend to own the underlying commodity or financial asset, but they seek to profit by taking positions that offset rising and declining prices. Hedgers view futures as a means of risk avoidance, speculators view futures as a means of profit potential. It is this transference of risk that explains how their can be economic profits for a speculator in an asset class that is a zero sum game. One way of thinking about it is in terms of insurance. The hedger/producer is paying a premium to the speculator for the privilege of taking on the price risk of the commodity.

Backwardation

The theory of *Normal Backwardation* was first suggested by John Maynard Keynes in 1930 as the reason for the risk premium in futures contracts. Commodity futures exhibit an upward or downward sloping term structure much like that of interest rates. This term structure is dependant on supply and demand and the behavior of hedgers and speculators. Producers of commodities face two risks: price risk and business risk. Their business model often attempts to manage the business risk, but they more than likely look to the futures markets to manage the price risk. Once the producer enters a contract the speculator now is burdened with price risk in the open market, and to saddle this risk the speculator must be compensated. To make the contract attractive to speculators, hedgers will need to sell the contract for a price lower than the expected future spot price of the commodity. Keynes knew that producers of commodities would want to hedge the price risk of their commodity, and to do that they would be willing to accept a slightly lower price.

Figure 2



Backwardation has a downward sloping price curve represented in **Figure 2**. Dependent on the volatility of the underlying commodity, the discount offered to the speculator can be extreme in some cases and it will increase with the time horizon. This phenomenon has long been debated (Dusak 1973, Jagannathan 1985, and Bessembinder 1992), but still is mostly believed to be the best explanation of risk premiums. Commodity prices fluctuate with great volatility and this can dramatically turn against a speculator. If the commodity price fell, the speculator could suffer a large loss. This is representative of the risk the hedger has now removed and placed on the speculator's shoulders.

Contango

Represented in **Figure 2**, the reciprocal of backwardation, a contango market, has an upward sloping price curve. Contango will occur when the hedger is naturally short the commodity and desires to secure a price in the future. The speculator requires a premium for the inherent price risk and volatility.

The automobile producer example before would be a case of contango. The producer is naturally short steel and will need to cover this short and hedge price risk by entering a futures contract. To secure a price in the future and remove the burden of risk, the automobile producer may be forced to pay a higher price than the current spot price. A speculator would be interested in taking the other side of this trade if they felt the spot price would either fall or stay where it is, profiting from the premium the hedger paid. Once again, the degree of contango or backwardation is dependent upon global supply and demand of the underlying commodity and can change at any time.

However, futures markets are likely to be in backwardation. Mark Anson, the CIO of CALPERS, describes backwardation as the driving force to encourage producers to produce. (Anson 2002) If a producer, with the ability to wait out the market, could sell a commodity at \$25 now or \$23.45 in

six months they would chose to produce now and sell at the higher price. However, it is not unusual for supply or demand to outweigh the other, resulting in a change from backwardation to contango.

Sources of Return

Collateralized commodity futures historically have performed inline with equities with similar Sharpe Ratios. There are three primary sources of returns for unleveraged commodity futures indices. A more obvious source would be the change in spot prices on the underlying commodity determined by supply and demand. Lesser known is the interest earned on Treasury bills used to collateralize futures contracts, and the roll yield derived from the futures term structure.

Spot Prices

The spot price is the current price (usually denotes one month or less in time prior to expiration) of a commodity. Changes in the spot price directly affect the relative futures price. There are both positive and negative supply and demand shocks to physical commodities. Collectively producers will attempt to manage these shocks by managing inventory levels and output so they mostly result in positive price changes. Stated more simply, if demand for a commodity were to fall or supply were to rise, the commodity producer could store the surplus (this does not include perishable inventory) and only increase supply when demand returns. This results in only marginal movements in price. However, if supply dramatically drops, there is only one thing that can happen: suppliers cannot produce more, at least in the short run, so prices must go up.

Inflation is primarily reflected in spot prices of commodity futures. This is only one area of return for commodities. Regardless of inflation, producers and consumers still need to hedge exposure which allows for roll yield.

Roll Yield

As previously stated, when a market is in backwardation the futures price is below the expected spot price. As a futures contract gets closer to maturity, prices converge and the futures price increases to the spot price, becoming more valuable. A commodities investor could essentially enter contracts 6 months out and reverse their position as it gets closer to maturity generating a positive return. This is referred to as “rolling up the yield curve,” or “roll yield.” All else equally, roll yield can add to overall return.

Collateral Yield

One of the largest vehicles for commodity futures investments are commodities futures indices. A commodity futures index is unleveraged; meaning the basket of futures contracts is collateralized with U.S. Treasury bills. Commodity indices have become an attractive passive way to access commodities futures. The index is diversified among commodities, and for every dollar of commodity exposure there is an equal amount invested in U.S. Treasury bills. The interest earned on the Treasury bills is called collateral yield. Changes in interest rates will be reflected in collateral yield due to the short-term nature of U.S. Treasury bills, proving to be an additional hedge against interest rate changes. Collateral yield is only available in collateralized commodities futures indices.

Each source contributes to the total return of the commodity index. Over the period from 1970-2000, the Goldman Sachs Commodity Index (GSCI) spot returns ranged from -30.5% to +48.7%; roll yields ranged from -14.6% to +21.4% and collateral yield ranged from +2.7% to +13.2%. Overall, on average the GSCI's average annual total return was 15.3%. (Anson 2002)

Figure 3

Performance, Deviations, Skewness and Drawdowns from 1/ 1980 to 9/ 2004							
Index	Annualized Return	Standard Deviation	Gain Deviation	Loss Deviation	Monthly Skewness	Worst Drawdown	2nd Worst Drawdown
S&P 500 Index	13.3%	15.5%	9.4%	11.1%	-0.6%	44.7%	29.6%
Wilshire 5000 Index	12.8	15.8	9.1	11.7	-0.8	44.1	29.8
MLM Commodity Index	10.9	7.4	5.5	4.5	0.2	10.9	8.9
Barclay CTA Index	13.1	16.8	16.0	7.3	2.0	15.7	15.5

Data provided by Pertrac.

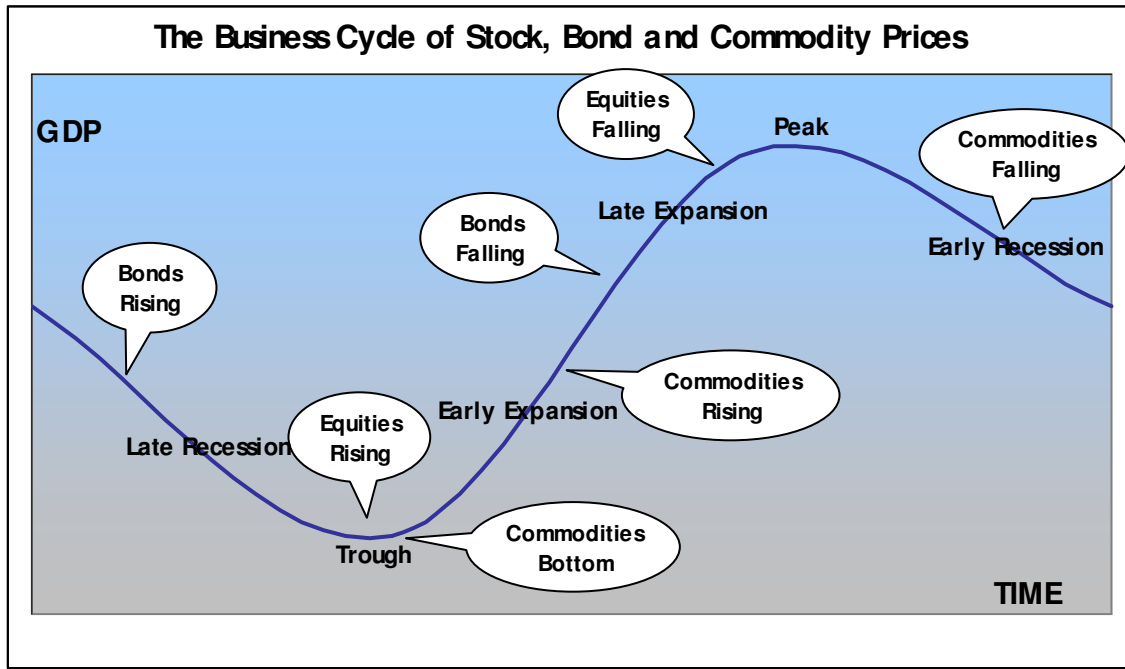
Volatility

Commodity futures are often perceived as inappropriate investments, as they are thought by most to represent a high risk asset class. Many investors accept at face value that commodity futures are more volatile than equities. Depending on the time frame analyzed this is true in some respects; however, empirical evidence over long periods of time does not support the argument that commodity futures are more volatile than equity investments. This is one of the many misconceptions of this asset class. This stigma may have derived from the fact that many participants use significant leverage in this space, volatility can be greater enhanced. It is typically this “leveraged” behavior that pundits are referring to when discussing the riskiness of the asset class.

Commodity futures have exhibited an asymmetric distribution. Most of the volatility has been on the upside, e.g. positive volatility or skewness. (See **Figure 3**.) This is consistent with the earlier thesis that most shocks result in positive price movements. With both the CTA (active management of both commodity and financial futures) and Commodity Index, volatility is experienced more with positive gains than losses. In the case of active CTA traders the ratio is 2 to 1.

We will discuss later how this volatility statistic overstates risk of loss with commodity futures. (See Skewness in Part 2: Advanced Concepts of Managed Futures)

Figure 4



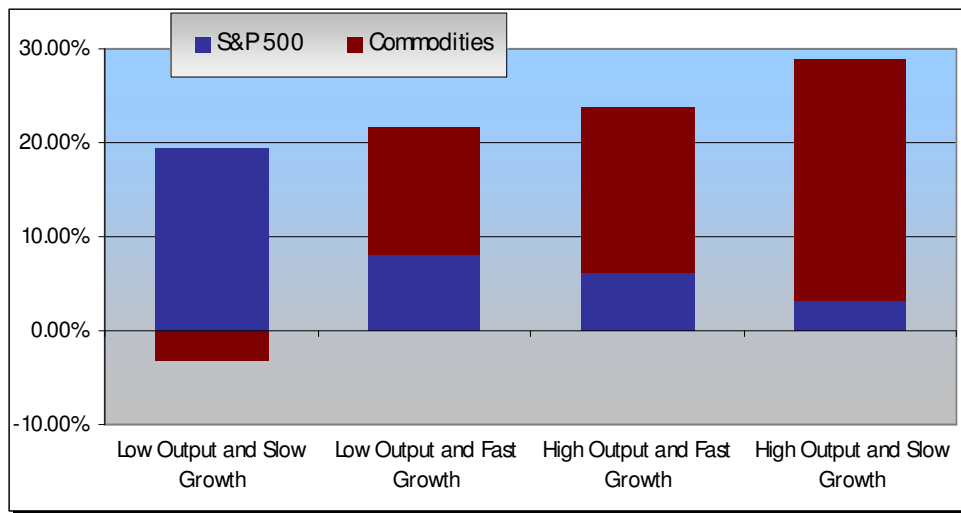
Seasonality of Returns and Business Cycle

Equity and debt are contingent claims on the wealth of a firm and can be valued on the basis of the net present value of expected futures cash flows. These expected cash flows along with discount rates are the primary inputs in determining their value. Unlike capital assets (equity and debt), commodities are not as directly affected by changes in discount rates. Commodities cannot be valued on the same basis because they do not provide a claim on future cash flows. They are a transformable or consumable asset that provides economic value, but not an ongoing stream of revenue. (Anson 2002) Because global commodity prices are dollar-denominated current prices, they are determined by global economic factors rather than regional factors. Unlike financial assets, most commodities have seasonal cycles. **Figure 4** displays the business cycle of commodities versus other financial assets.

The addition of commodities to a portfolio provides diversification at the most crucial points in time. Isolating performance, during different segments of the business cycle, strong disparity is evident between equities and commodities. From 1970 to 2003, in a study by Stefan Weiser, Executive Director, Goldman Sachs, he found during periods when the economy was operating below full capacity with slow growth, equity returns averaged 19.3%. During the same periods, commodities averaged -3.3%. When growth in the economy increased, commodities picked up steam returning on average 13.6%, and equities lagged averaging 8.1%. In extreme cases, when the economy exceeded trends, the dispersion increased and commodities went higher 17.7%, while equities continued to lag behind -6.1%. Disparity reached a high point when the economy began to slow before a recession. During these periods, commodities returned on average 26% and equities a low 3%. As economic activity increases, returns for commodities trend upward. The results of this

study are displayed in **Figure 5**. From the discussion above, are commodities the perfect equity diversifier? Empirical evidence seems to point that way. (Weiser 2003) Due to the differences in business cycle timing, it seems evident that commodities are a good diversifier for traditional portfolios.

Figure 5



Business Cycle and Returns 1970-2003 (Weiser Study)

Description of the Business Cycle	S&P 500	Commodities *
Low Output and Slow Growth	19.29%	-3.27%
Low Output and Fast Growth	8.11%	13.63%
High Output and Fast Growth	6.13%	17.73%
High Output and Slow Growth	3.29%	25.71%

Description of the Business Cycle	S&P 500	Commodities *
Low Output and Slow Growth	19.29%	-3.27%
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High Output and Slow Growth	3.29%	25.71%

* Commodities represented by the Goldman Sachs Commodity Index.

Table represents data prepared in a previous study by Weiser (2003).

Correlation

One of the most attractive advantages of incorporating commodities into traditional portfolio assets is the historically low correlation (Edwards and Liew 1998) For the period 1970-2003, the correlation between stocks and commodities was -0.27; between bonds and commodities -0.14. (Weiser 2003) Not only are commodities uncorrelated to traditional asset classes, but the primary factors driving the future price of cattle are different from the future price of oil. (Greer 2000) The supply and demand variables of each commodity are different from one another demonstrating the lack of correlation of each commodity within the asset class itself.

Figure 6

Correlation Coefficient Jan-1990 to Sep-2004	Barra S&P 500	Lehman Long Term Treasury	Wilshire 5000 Total Market	MSCI World Ex USA - Net	HFFI Equity Hedge	HFFI Fund of Funds Comp.	MLMI Unlevered	MLMI Leveraged	Barclay CTA Index	CISDM-Private Pool Index
Barra S&P 500	1.00									
Lehman Long Term Treasury	0.09	1.00								
Wilshire 5000 Total Market	0.98	0.07	1.00							
MSCI World Ex USA - Net	0.66	0.04	0.67	1.00						
HFFI Equity Hedge Index	0.66	0.05	0.75	0.53	1.00					
HFFI Fund of Funds Comp.	0.43	0.08	0.49	0.38	0.75	1.00				
MLMI Unlevered	-0.25	0.13	-0.25	-0.15	-0.13	0.00	1.00			
MLMI Leveraged	-0.25	0.12	-0.25	-0.14	-0.14	-0.01	1.00	1.00		
Barclay CTA Index	-0.16	0.26	-0.18	-0.13	-0.06	0.22	0.35	0.35	1.00	
CISDM-Private Pool Index	-0.23	0.32	-0.25	-0.12	-0.13	0.13	0.40	0.40	0.82	1.00

Data provided by Pertrac.

Diversification in a Portfolio Context

Previously, we learned about futures and how they function. What does this mean to the investor primarily investing in stocks, bonds, and cash? We will now explore the benefits commodities bring to an individual investor or institution. Many sophisticated investors look to commodities futures for their diversification advantage and portfolio risk reduction.

Inflation Hedge

The change in the rate of inflation is the primary determinant of the impact of inflation has on asset returns, rather than the level of inflation itself. (Weiser 2003) Real assets, such as commodity futures contracts, are a natural hedge against inflation. (See Bodie [1983], Froot [1995], and Gorton and Rouwenhorst [2004]) On a fundamental level, commodity prices are included in the consumables that create the inflationary pressures felt by the nation. Higher inflation means higher commodity prices and vice versa. With this in mind, commodities are upward biased because Central Banks target “inflationary” economics. Historically we rarely see deflationary periods. We live in a greatly leveraged global economy. It makes sense for a sovereign nation to have a slight inflationary stance to decrease the nominal value of nominal assets. In a deflationary environment the amount one has to pay back for those nominal bonds becomes huge. Global economies want some inflation to lessen that. The problems that occur with stagflation, deflation, and extreme inflation are because economics are not an exact science and miscalculations do occur.

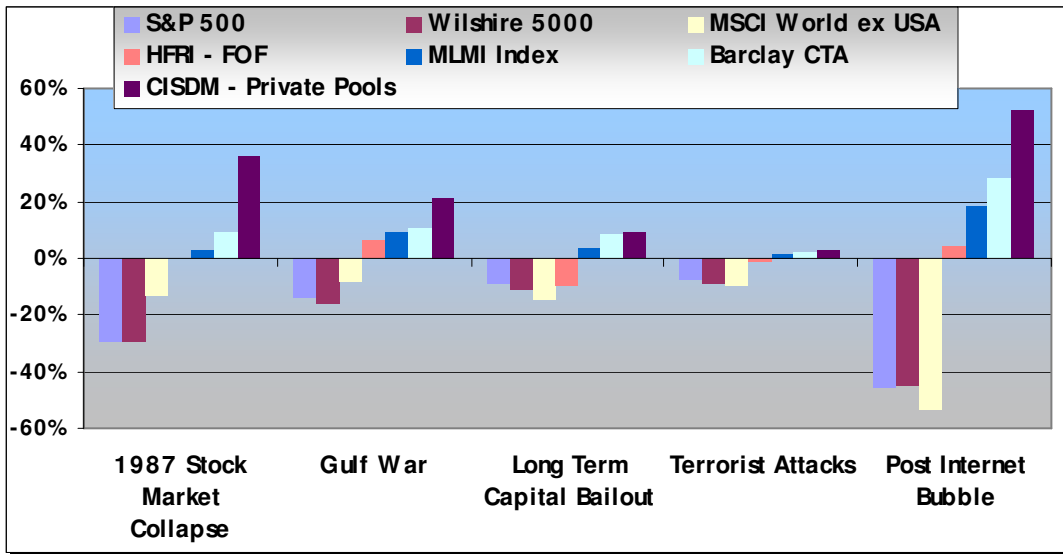
Market Hedge

The following table represents different extremely challenging periods in the equity market and how various asset classes reacted. The U.S. stock market is represented by both the S&P 500 Index and the Wilshire 5000 Total Market Index. Global equity markets are represented by the Morgan Stanley World Index (MSCI World). Managed Futures is represented by Barclay’s CTA Index and the CISDM – Private Pool Index. During periods of extreme unexpected market stress, many strategies intended to insulate securities become highly correlated with the equity markets. In every stressful market period managed futures had the opposite reaction.

Figure 7

Index Performance During Recent Market Stress					
	1987 Market Collapse	Gulf War	Long Term Capital Bailout	Terrorist Attacks	Post Internet Bubble
Equity Markets					
S&P 500	-29.8%	-14.3%	-9.1%	-8.1%	-46.1%
Wilshire 5000	-29.9%	-16.2%	-11.2%	-9.0%	-44.9%
MSCI World ex USA	-13.7%	-8.2%	-14.9%	-10.1%	-53.8%
Hedge Funds					
HFR - FOF	N/A	6.1%	-10.2%	-1.6%	4.5%
Commodities					
MLMI Index	2.8%	9.1%	3.8%	1.1%	18.4%
Barday CTA	8.9%	10.6%	8.8%	1.8%	28.4%
CISDM - Private Pools	36.2%	21.5%	9.1%	2.5%	52.6%

Data provided by S&P, Wilshire, CISDM, MLM, and MSCI, HFR



Portfolio Hedge

Commodities are often characterized as defensive asset classes because of their low to negative correlations to traditional assets. (LAM 2004) Due to commodity futures' lack of correlation to both stocks and bonds they significantly add to portfolio diversification by reducing portfolio volatility and acting as a surrogate for other equity-like returns. There is no question, the less volatility a portfolio experiences over time adds to overall performance. If commodity futures can reduce overall volatility, as well as further hedge against extreme market environments like above, the power of compounding can do its job more effectively.

Appendix:

Investable Indices

Unlike many of the alternative asset classes, commodity futures offer several investable indices from which to choose. The majority of available research on commodity futures is conducted using one of these diversified indices. The investable indices allow investors exposure to a variety of commodity futures contracts. Following is an overview of a few of these indices.

GSCI

The Goldman Sachs Commodity Index (GSCI) is the largest commodity index. It is long-only portfolio of physical commodities and is fully investable and tradable. It was introduced in 1991; however, Goldman Sachs has calculated historical returns going back to 1970. The index is limited to physical commodities futures contracts on real assets, no financial futures, that are inputs of the global production process. The index currently includes 26 physical commodities across five main groups of real assets. These include: precious metals, industrial metals, livestock, agriculture, and energy. The commodity weights are based on five year moving averages of world production. Because of the large world production of energy resources energy has the highest weighting, around 70%.

JPMCI

JPMorgan Commodity Index (JPMCI) represents an optimized index where its weightings are chosen after studying the monthly correlation with stocks and bonds. It is comprised of only three commodity sectors: energy, industrial metals, and precious metals. The index was designed to maximize the negative correlation with stocks and bonds while increasing index returns.

MLMI

Mount Lucas Management Index (MLMI) is a fully collateralized index. The index includes futures contracts on financial and commodity futures, but excludes equities futures. The index is equal weighted and, using a numerical algorithm, they attempt to simulate a trend following strategy. The index allows both long and short positions within the index. Mount Lucas Management evaluates the moving averages of certain commodities and decides whether to go long or short based on their current range.

Regulation and Registration

In order to curtail manipulative trading practices, Congress enacted a governing body for the futures industry. The Commodity Exchange Act (CEA) was created in 1974 and established the Commodity Futures Trading Commission (CFTC), as the regulatory authority for the futures industry. This includes commodity pool operators (CPOs), commodity trading advisors (CTAs), futures commission merchants (FCMs), and introducing brokers. All futures exchanges are also regulated by the CFTC. The CFTC has delegated registration requirements to the National Futures

Association (NFA), the congressionally authorized self-regulatory authority for the futures industry subject to CFTC oversight. Registration for CPOs as well as other business associated with the futures industry is filed with the NFA.

The CEA also established disclosure, record keeping, and reporting rules for all of those under the CFTC and NFA umbrella. A commodity pool operator (CPO), simply put, is anyone who collects money for the purpose of investing the money collectively in commodity futures. Commodity trading advisors (CTAs), actively trade futures contracts and forward contracts on commodities, financial assets, and currencies to profit from the changes in futures prices. CTAs typically manage separate accounts for wealthy and institutional investors. In many cases, futures managers must register as both CPOs and CTAs. Futures commission merchants (FCMs) are members of an exchange and are also regulated by the exchanges in which they are members. Firms and individuals that violate NFA rules of professional ethics and conduct, or that fail to comply with strictly enforced financial and record-keeping requirements can, if circumstances warrant, be permanently barred from engaging in futures-related business with the public. The enforcement powers of the CFTC are similar to those of other major federal regulatory agencies, including the power to seek criminal prosecution by the Department of Justice. [National Futures Association]

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