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Investing in Commodities: The Case for Active Management


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For more than a decade, institutional investors have increasingly sought broad commodities exposure to improve portfolio diversification, help protect against unexpected inflation, and participate in the bullish long-term outlook for the asset class. Although passive index-linked commodity strategies traditionally have been a popular way to gain exposure to the asset class, some institutional investors are moving toward active management for their commodity allocations.

In this paper, GE Asset Management's commodities investment team, which has been actively managing commodities since 2006, examines how actively managed commodity strategies can potentially allow managers to fully exploit individual commodities markets on an opportunistic basis, utilize roll yield management to protect capital in contangoed markets, and generate more alpha than passive strategies while providing the beta that an allocation to commodities can provide. Risk considerations for commodity investors are also discussed.

The Current Landscape

Investing in commodities continues to gain interest as the secular bull market in basic resources appears to be intact and could intensify over the next few years with the rebound in global growth. While commodities can offer compelling diversification benefits, appealing exposure to positive demographic trends in emerging economies, and the possibility of attractive returns, evidence suggests that institutional investors are now increasing allocations to the asset class to seek protection from unexpected inflation driven by historically low interest rates and accommodative fiscal policy.

Despite the sharp sell off in commodities over the second half of 2008, the asset class received record inflows of approximately $60 billion during 2009.[1] Barclays Capital estimates that assets under management in commodity-linked products reached $250 billion in February 2010, just short of the $270 billion high posted in July 2008, when oil spiked to record levels. Moreover, based on the results of a December 2009 Barclays Capital survey, institutional investors appear poised to increase commodity allocations. Nearly 60% of survey respondents indicated they had increased their commodities exposure in 2009, and 63% expected to increase their exposure over the next three years. When asked how they planned to invest in commodities over the next year, 40% of respondents looked to third-party active management, indicating a desire for suitable alpha strategies and reduced interest in long-only passive strategies.

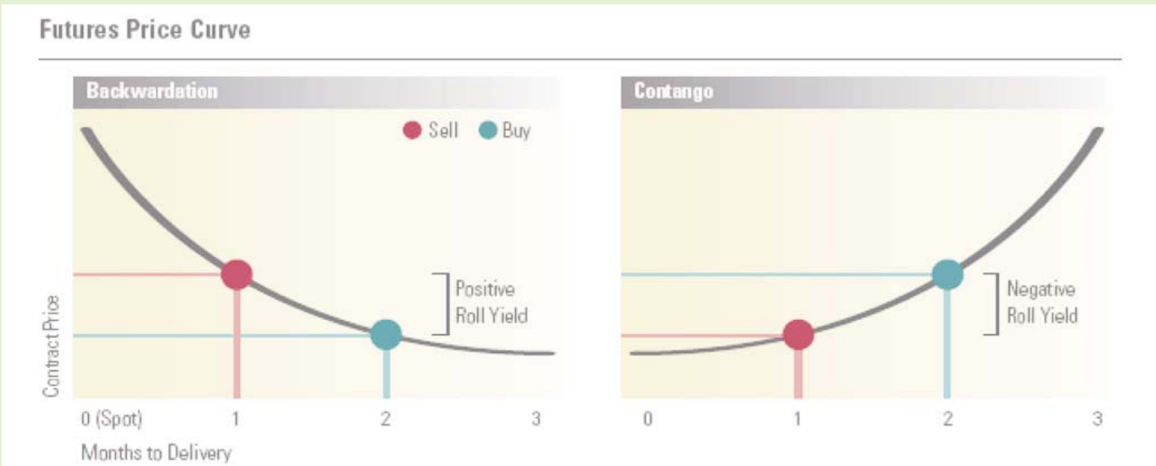
Over longer periods of time, commodity index strategies have provided high equity-like returns, portfolio diversification benefits, and protection against future inflation. Over the last several years, however, the investment returns of passive strategies have been significantly eroded by negative roll yield. In 2009, for example, the spot price of West Texas Intermediate (WTI) crude oil appreciated by 78%, yet a passive commodity investor realized just a 7% return after accumulating roll losses due to the upward sloping forward curve (contango). Explanations of roll yield and contango are provided in Figures 1 and 2.

We believe the diminishing returns of passive commodity index strategies are a cause for concern as they have been a popular means of achieving commodities exposure in recent years. Thus, some institutional investors are taking a closer look at actively managed commodity strategies that incorporate fundamental analysis, long-short strategies, and roll yield management in an effort to generate alpha through periods of steep contango, as well as cycles of declining prices.

1 Estimate by Barclays Capital.

Figure 1: Spotlight On Roll Yield

For passive long-only index strategies, the process of continually rolling over expiring futures contracts can be either a good way to pick up consistent yield or a costly activity that slowly eats away at returns depending on the shape of the futures price curve. In a backwardated commodities market, nearby contracts have a higher price than later-month contracts, and the term structure of the forward curve is naturally downward sloping as shown in the chart below. Thus, investors buy later month contracts at a lower price spread to spot, which slowly converge or roll up to the spot price as the contracts approach maturity, allowing returns to accrue to the holder. This is the positive roll yield that an investor captures for bearing commodity price risk by taking the long side of the trade and providing commodity producers with a form of "insurance" against falling spot prices. Even if the spot price stays constant, one will earn returns from buying discounted later month contracts that continuously roll up to the constant spot price. The reverse occurs when a commodity market is in contango, meaning that the forward curve is upward sloping. Because the later month contract's price is at a premium to the spot price, the investor continuously locks in losses from later month contracts converging to a lower spot price as they approach expiration.



Source: Paul Kaplan, "Beyond Beta-Passive Alternatives to Active Commodities Strategies", Morningstar Indexes ©2008.

Figure 2: Backwardation Versus Contango

Backwardation and contango refer to the relationship between the spot price for a commodity and the futures price.

Contango describes a market where the price of a commodity for future delivery is higher than the current price. In this case, passive strategies that must roll their futures positions forward every month are likely to produce negative returns as they replace expiring contracts with new contracts that cost more. Contango markets can arise under conditions where 1) there is an excess supply of a commodity in the spot market; 2) storage costs are significant; or 3) spot prices are expected to rise due to future shortages.

Backwardation is the opposite situation. It is used to describe a market where the current price of a commodity is higher than the futures price. Backwardation implies a buyer is willing to pay a premium to have a commodity now rather than the firm promise of future delivery of the commodity. Steep backwardation typically indicates an immediate shortage of a specific commodity. Some commodities markets are more likely to be in contango, while others are usually backwardated. It is also possible for a commodity market to frequently shift from backwardation to contango and then back again.

Advantages of Fundamental Analysis and Active Implementation

In our view, one of the key advantages of an active approach to commodity investing is the ability to incorporate fundamental analysis and research into the decision-making process. By combining fundamental views with the flexibility of an active approach, an investment team can strategically set individual commodity weights.

In contrast to passive long-only strategies, active commodity managers make their investment decisions market by market and may choose to take no position or a short position in commodity markets where their analysis predicts a low likelihood of unexpected price increases. By seeking to capture alpha opportunities in each individual market, active managers have the flexibility to implement a long position only in markets with favorable fundamentals, while avoiding or selling short in markets with less favorable dynamics. In this manner, their active strategies seek to outperform passive long-only commodity benchmarks while protecting capital in down or contangoed markets.

In addition to taking directional views, active commodity managers can consider the shape of the forward curve in an attempt to capture the optimal roll yield. They can also employ spread trades in an effort to exploit relative fundamental dislocations between commodities, capture producer margins, and benefit from an expected shift in the curve structure. Such inter- and intra-commodity spread trades, along with roll yield management, can potentially be significant sources of alpha for actively managed portfolios.

The Importance of Roll Yield and the Shape of the Forward Curve

The total returns generated from investing in commodities come from three sources: 1) the spot return, or simply the change in market price of the physical commodity; 2) the collateral yield, or the interest made on the cash held in the account; and, 3) the roll return or roll yield. Roll yield is derived from the price differential of rolling expiring contracts into longer-dated contracts to avoid delivery and maintain exposure to each individual market.

As mentioned earlier, negative roll yield occurs as a result of contangoed markets and has become a significant drawback for passive commodity index strategies in recent years. As a result, their investment returns have sometimes lagged spot commodity prices. For example, the most popular commodity index, the S&P GSCI Index, accumulated roll losses each year from 2005 through 2009 (Figure 3). Over this 5-year period, a passive long-only strategy tracking the S&P GSCI (cumulative total return) would have lost approximately 14.0% despite spot prices being up 69.0%.[2]

Figure 3: Three Components of S&P GSCI Total Returns

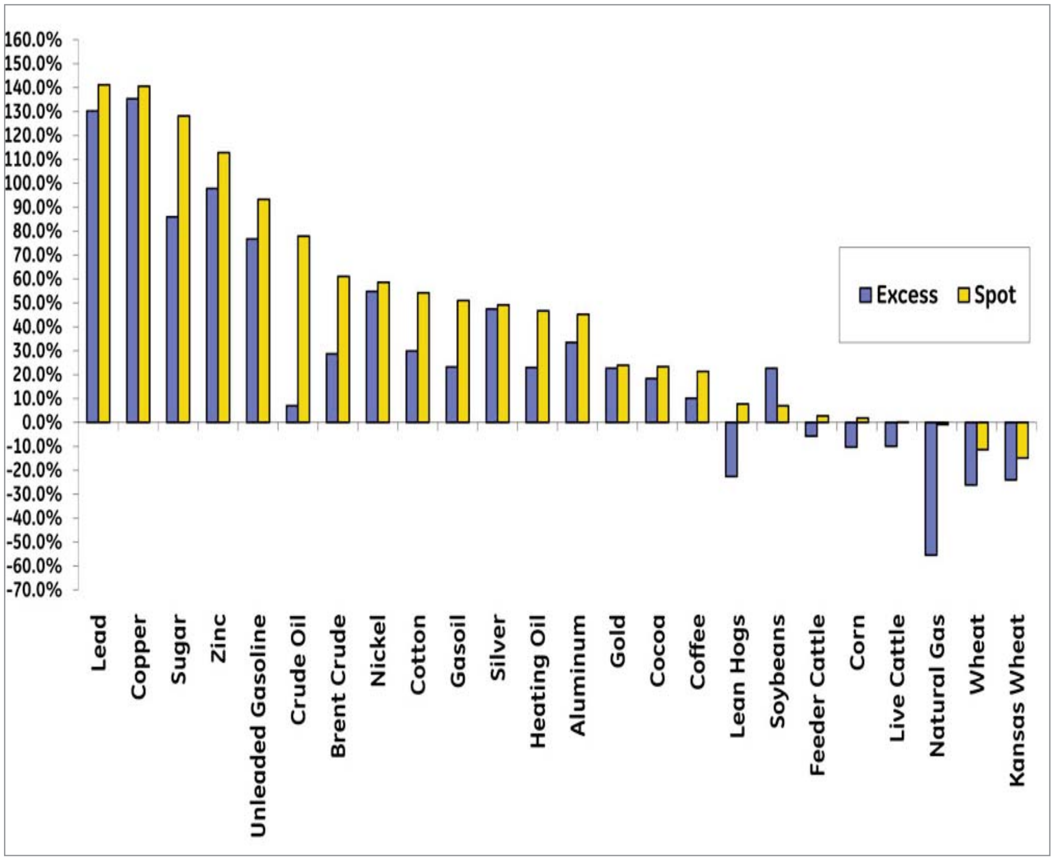
	2005	2006	2007	2008	2009
S&P GSCI (Spot Return)	39.06	0.45	40.71	-42.80	50.30
S&P GSCI (Roll Return)	**-17.45**	**-19.52**	**-13.90**	**-4.49**	**-37.00**
S&P GSCI (Excess Return)	21.61	-19.07	26.81	-47.29	13.30
S&P GSCI (Collateral Yield)	3.95	3.98	5.87	0.80	0.19
S&P GSCI (Total Return)	25.55	-15.09	32.67	-46.49	13.49

Source: Bloomberg©

[2] Investors cannot invest directly in an index. The total return of the S&P GSCI Index does not reflect the actual cost of investing in the instruments that comprise it. The S&P GSCI is designed as a benchmark for investment in the commodity markets and as a measure of commodity market performance over time. It is also designed as a "tradable" index that is readily accessible to market participants. The index represents 24 commodities whose weights are based on world production quantities over the last five years.

Figure 4 takes a closer look at the spot and excess returns for the 24 commodities in the S&P GSCI Index in 2009. In what was a generally strong year for commodities, only three markets posted negative spot returns. But what makes this picture much less attractive is the impact that roll yield had on excess returns. Excess returns incorporate both the spot return and the roll yield components and represent the actual return an investor realizes when buying anything other than the physical commodity itself. In 2009, every commodity except soybeans was negatively impacted by the roll yield, and the accumulated roll losses were quite severe in several markets. Overall, the spot return of S&P GSCI Index rose 50.3% in 2009. However, after factoring in the roll yield, the excess return of the index was only 13.3%.

Figure 4: GSCI Index Spot and Excess Returns in 2009



Source: Bloomberg©

While there have been periods of time when commodity index returns have benefited from positive roll yield, the above examples show why passive index-linked strategies may not always be the best option for commodities investors, particularly in contangoed markets. In contrast, active commodity managers do not solely depend on prices going up. They can seek to offset contango and mitigate negative roll yield by buying longer-dated contracts where the curve may not be as steep and the cost of rolling forward could be reduced.

Utilizing Spread Trades to Generate Additional Alpha

Skilled active managers have significant opportunities to generate profits from their trading activities. But how do they identify and act on these profit opportunities? The following are two hypothetical trade examples that illustrate how an active manager can use fundamental research to employ spread trades that express relative views between two or more commodities.

Trade Example 1: Calendar Spread -West Texas Intermediate (WTI) Crude Oil Futures

In 2008, the price of WTI crude peaked in July and then collapsed to its lows in December based on expectations that demand for oil would be severely weakened by the global recession. As a result, the WTI futures curve went from being slightly backwardated to a steep contango (Figure 5). By the end of 2008, the spread between December 2011 WTI futures and December 2009 WTI futures reached almost $16 per barrel.

Given the shape of the futures curve and the uncertainty in the market, the manager did not want to make a directional bet on crude prices, but did have conviction that the spread between the two contracts would begin to narrow again and shift back to a more normal range. In this hypothetical example, the manager entered into a calendar spread; going long the December 2009 WTI futures contract and short the December 2011 WTI contract. While the curve for WTI crude remains in contango, it flattened meaningfully and the trade would have been profitable. In addition to illustrating how an active commodities strategy can make money in a contangoed market, this hypothetical trade example shows how a manager can use fundamental analysis to understand what is driving the shape of the curve and then establish positions appropriate for the opportunity.

Figure 5: WTI bull spread

Source: Bloomberg©

Trade Example 2: Inter-commodity Spread – gasoline crack spread

Certain commodity spread trades represent a producer's margin. An example is the gasoline crack spread, which is the difference between the wholesale gasoline prices (i.e., a refiner's output) and crude oil prices (i.e., a refiner's input). In the fourth quarter of 2008, the U.S. refining industry experienced persistent negative gasoline crack spreads (Figure 6). The main cause of this rare event was record high crude oil prices in the face of deteriorating gasoline demand driven by weakening economic conditions. In this hypothetical example, the manager recognized that the negative margin the refiners had endured for three months was not sustainable. Expecting that the refiners would begin to reduce output rather than produce at a loss, the manager decided to buy the crack spread, which entails selling crude oil against buying gasoline. Shortly thereafter, the refiners took steps to curtail production and the trade would have been profitable. This hypothetical trade is an example of combining fundamental research and a long/short spread strategy to capture an anticipated relative change between two commodities.[3]

Figure 6: Crack spread (WTI vs. Gasoline)

Source: Bloomberg©

Risk Considerations

No commodity investment is without risk regardless of whether the strategy is actively or passively managed. While commodities carry risk levels comparable to equities, their prices can be impacted by a wide range of forces, including demographic and technological changes as well as weather and geopolitical events, which may create substantial uncertainties in the marketplace. These uncertainties can cause individual commodity prices to move sharply higher or lower exposing an investment to volatility that may not be suitable for all investors.

Summary

For institutional investors seeking the diversification benefits of commodities, GE Asset Management (GEAM) believes an actively managed commodity strategy may offer more compelling opportunities than passive long-only approaches. In our view, the investment returns of many passive index-linked strategies have been severely diminished in recent years by negative roll returns. More importantly, we believe these passive strategies ignore the principal drivers of commodity price returns, namely the fundamentals of supply and demand, which skilled active managers can exploit in an effort to generate alpha for investors.

[3] Hypothetical trade examples are for illustrative purposes only and have many inherent limitations, including but not limited to the fact that they are prepared with the benefit of hindsight. No representation is being made that any account will, or is likely to, achieve profits or losses similar to what is described in the examples. There are usually sharp differences between the performance of hypothetical trades and the actual results achieved by any trading strategy. No reliance should be placed on these examples when making an investment decision.

GEAM's Actively Managed Approach

Since 2006, GEAM has managed a commodity portfolio for GE Company's defined benefit U.S. pension plan using an actively managed strategy based on fundamental research. Over this period, the strategy has outperformed the two most widely used passive benchmarks (the S&P GSCI Index and DJ-UBSCI) with slightly less volatility, while preserving the diversification benefits of commodities in terms of their low correlation to equity and fixed income benchmarks, as well as the U.S. dollar.[4]

GEAM now offers its active commodities strategy to other institutional investors. The strategy seeks to outperform the Dow Jones-UBS Total Return Commodity Index, provide portfolio diversification and inflation protection, and achieve uncorrelated equity-like returns over time.[5]

GEAM's approach to managing investments across all of its investment strategies is rooted in fundamental research carried out by over 160 experienced investment professionals around the globe. The results of our active commodity strategy are driven by that same fundamental research process and are grounded in the investment team's knowledge and experience in commodity markets and the many fundamental factors affecting them. The team gathers and analyzes consumer and producer intelligence by leveraging their relationships with public companies and strategic counterparties and by performing on the ground due diligence. The investment team also generates original commodity research centered on in-depth supply/demand and inventory analysis. Their research is shared across GEAM's global research platform, which includes a cross-asset class team of resource-related research analysts and portfolio managers. In addition, by tapping into GE's global network of business and sourcing leaders, country executives, and R&D specialists, the investment team gains access to critical economic and political insights, sector trends, and individual commodity market information.

Based on this research, the investment team seeks to strategically set individual commodity weights to express their fundamental views. Their universe includes the 19 commodities in the Dow Jones-UBS Total Return Commodity Index, in addition to out-of-benchmark commodities that meet specific liquidity guidelines.

The portfolio is constructed largely through the use of listed futures contracts but from time to time will incorporate listed options and ETFs. When implementing a directional view, the investment team can incorporate the shape of the futures curve in an effort to capture the optimal roll yield. The investment team can also employ spread trades to express relative views between two or more commodities or along an individual commodity's forward curve. While we view fundamental research as the primary driver of the strategy's performance, roll yield management and spread trades have proven to be important components of the team's active approach that can potentially generate alpha for investors.

Key features of GEAM's Active Commodities Strategy

- Active management driven by fundamental analysis and research
- Largely a futures strategy benchmarked to the DJ/UBS Total Return Commodity Index with up to 30% allocated to long/short pair trades
- Broad and diversified portfolio with exposure to over 20 commodities in the energy, industrial & precious metals, agriculture, and livestock sectors
- Robust investment process with rigorous risk management
- Experienced investment team
- Fully collateralized on a net notional basis
- Managed with the risk appetite of the institutional investor in mind

4 Inception to date performance (5/15/06 - 2/28/10). Past performance does not guarantee future results. The results achieved in the commodity portfolio managed by GEAM for the GE pension plan would not necessarily equate to another client because no fee was charged.

5 The Dow Jones-UBS Commodity Index (DJ-UBSCI) is a broadly diversified index composed of futures contracts on physical commodities. It currently includes 19 commodity futures in five groups. No one commodity can comprise less than 2% or more than 15% of the index and no group can represent more than 33% of the index (as of the annual reweighting of the components).

About GE Asset Management

With an 80-year heritage of investment experience and more than $118 billion in assets under management (as of 12/31/09), GE Asset Management Incorporated (GEAM) offers equity, fixed income, and alternative investments to investors around the world. GEAM is a wholly-owned subsidiary of General Electric Company and is the investment manager behind GE's $42 billion (as of 12/31/09) U.S. pension plan.

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