A different approach to investing in commodities

After a recent bull run in commodities and the availability of new commodity investment strategies and products, commodities are attracting more attention from the investment community

Large institutions that did not invest in commodities are now viewing them as a new asset class that diversifies their portfolio. Structured products are an increasingly popular channel for investors seeking to more efficiently broaden their exposure to commodities while enhancing their portfolio returns. Structured products are offered in a wide variety of formats such as notes, deposits, certificates and over-the-counter instruments, and can be designed to fit any risk-reward profile and investment objective.

Commodity prices

All sectors within commodities have experienced dramatic increases in prices. Recently, energy, metals and softs prices have all reached record levels; WTI crude oil prices have increased six-fold, from a low of 11$/bbl in 1998 to the high of 77$/bbl in 2006 and, since 2001, copper prices have increased 600% and gold prices increased by 260% .These dramatic increases were due to fundamental drivers such as the tremendous growth of the Chinese economy and the steady but robust performance of the US economy. The increased commodity demand came during a period of underinvestment in production and supply shortages, which led to a market imbalance and exacerbated market volatility.

Diversification and inflation hedge

Commodities as an asset class have exhibited low correlation with equities and bonds, particularly at times of major downturns in the market. In fact, since 1971 commodities posted positive returns in six of the eight years where S&P 500 returns were negative. In addition, commodity indices are also positively correlated with inflation surprises and are a good inflation hedge. A broad commodity index such as the Goldman Sachs Commodity Index (GSCI) generated positive returns in all seven years when inflation has surprised to the upside since 1990.

Commodity investment channels

Investments in commodities have historically been through indirect investments such as the ownership of the debt and equity of firms specialising in commodity production and distribution. These investments do not normally provide the best exposure to the underlying commodity as company securities are impacted by factors such as corporate governance, risk management strategies and financial market volatility.

A more direct channel for investing in commodities is through commodity exchanges, by commodity trading advisers (CTAs) and, more recently, specialist hedge funds. These participants have helped to improve liquidity on commodity exchanges.

The most significant development in commodity investment has been the development of commodity indices such as the GSCI, the Dow Jones-AIG (DJ-AIG) or the Rogers International Commodity Index, which track the performance of a basket of mostly short dated commodity futures. Recently, investment banks have also launched enhanced indices that optimise the rolling methodology and invest in different contracts along the futures curve.

The market for commodity-linked products has grown dramatically; in commodity mutual funds alone, assets under management are estimated to have grown from approximately $5 billion in 2004 to over $40 billion today (see figure 1). Index-linked products are estimated to be as much as $60 billion for the GSCI and $40 billion for the DJ-AIG.

Commodity returns

Commodity-linked structured products provide investors with exposure to the returns of commodity indices, sub-indices or commodities spot prices. The total returns to commodity index investments can be broken down into three elements: spot, roll and collateral. Spot return derives from changes in physical commodity futures prices. Roll return arises from rolling long futures positions through time along a sloping forward price curve. Collateral return is afforded by full collateralisation of the value of the index with T-bills or other cash instruments. Some investors may choose not to collateralise commodity investments and will look at unfunded excess return that is composed of the spot and roll return.

The disadvantage of passive indices is that the allocation to specific commodities is stable and remains independent of the shape of the future curve (backwardation or contango) and the cycle of each individual

commodity. As investors become increasingly selective in their sector and commodity allocations, they are seeking more sophisticated trading strategies, compared to traditional index-tracking methods.

In 2006, JPMorgan launched an algorithmic strategy called the Commodity Investable Global Asset Rotator (Commodity-IGAR). The strategy selects a different basket of commodities each month based on the commodities showing the best momentum. Momentum investing is based on the empirical tendency of outperforming assets to outperform again in the future. The product is a synthetic excess return strategy based on a dynamic basket of commodity sub-indices.

The main benefit of the rotator strategy is that the algorithm systematically selects the underlying assets based on their performance, unlike passive indices that have fixed components based on production weighting or market value. This strategy proved to be successful in generating substantial investor interest from large institutional clients and distributors.

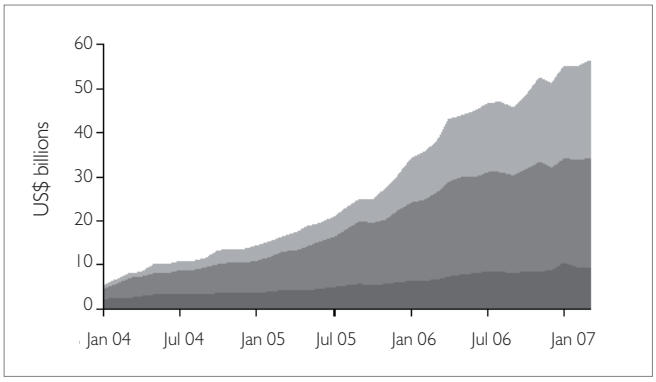
Commodity-IGAR methodology

From a universe of commodity sub-indices. The strategy is rebalanced monthly and synthetically invests in up to 12 sub-indices based on past performance and consistent momentum. The Commodity-IGAR strategies seek to take advantage of trends in the commodities markets driven by the business cycles, inelastic supply/demand and behavioural biases. The dynamic rotation of constituents based on momentum showed a stronger hypothetical performance than passive long-only commodity indices (see figure 2). Based on analysis for the period 1991–2007, the strategies yield higher hypothetical returns and lower volatility than benchmark commodity indices. Also, an implicit feature of the Commodity-IGAR is that it allows investors to have a tactical long exposure to commodities if the overall commodity market has shown recent positive performance, but a potentially reduced exposure in a persistently bearish market. Commodity-IGAR Conditional Long-Short and Commodity-IGAR Long-Short versions can also provide positive excess returns in the hypothetical case of a bear market.

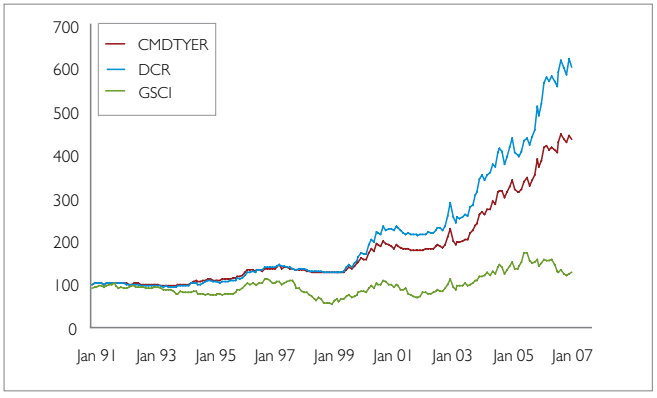
An extension of the rotator strategy is to add a management oversight component to the algorithmic model. JPMorgan has joined Diapason Commodities Management to introduce the Diapason Commodity Rotator (DCR) – a synthetic quantitative strategy based on momentum and mean reversion. The DCR provides access to a diverse set of commodities through an objective quantitative model provided by JPMorgan, where a basket is rotated monthly. Although the investment decisions are algorithmic, Diapason will review the strategy on a six-monthly basis and propose changes to a strategy committee to take account of developments in the commodities market. Investors benefit from the expertise of an independent commodity adviser, Diapason Commodities Management, who may make certain discretionary adjustments to the strategy to reflect changes in the underlying commodity market.

The product combines leading asset management capability in commodities with JPMorgan's index trading and innovative structured products capability. This is also the first time that an asset manager has been used to provide expertise to oversee the performance of a synthetic basket, an important development in the commodities structured products market.

1. Assets under management by fund type



2. Hypothetical performance of C-iGAR and DCR versus GSCI since 1991



Conclusion

In commodities, alternative investments (e.g., hedge funds, CTAs) and commodity asset managers (pure alpha players) have had a long history and have been leading the commodity space. The traditional long-only asset managers (beta players) are the newcomers to this space. As commodities become accepted as a legitimate asset class in portfolio construction, investor demand will grow strongly for products with a simple and transparent quantitative strategy, as compared to passive products. However, the pace of change in commodities and the opacity of some of the underlying markets will also create a need for products providing an element of discretionary management or an advisory component.

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