E-A-R.©'s

Flash Note I Commodities

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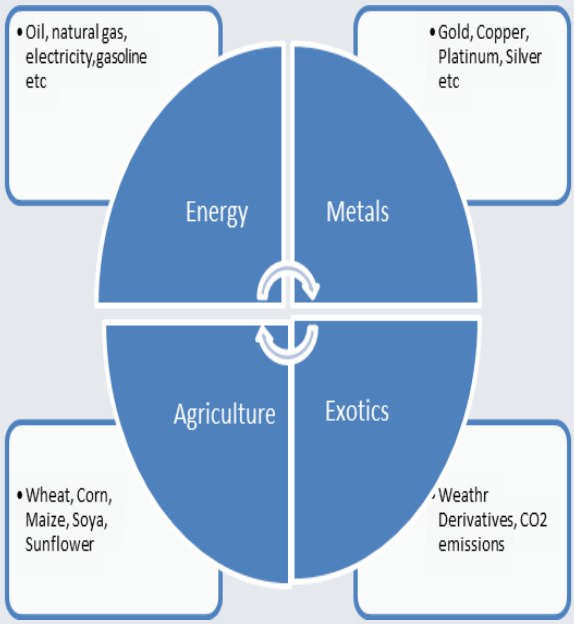
Flash Note - Commodities Introduction (Part 1)

Most global strategic asset allocations consist mainly of allocations to the three "traditional" asset classes which are equities, bonds and cash/or short-term money market instruments. From a risk-return principle, there is a need to expand the investable universe beyond these three "traditional" asset classes as this could enhance the risk-return characteristics of strategic asset allocation (both at an institutional and individual investor level). More often than not, commodities are excluded from the opportunity set of investable asset classes. Potential reasons for this are ambiguity over what constitutes an asset class, the lack of an understanding of the inherent return of commodities and the lack of a "widely accepted" commodity pricing model. Commodities are a unique asset class and this uniqueness creates questions regarding their role in asset allocation. A commodity is something physical that is widely used. Commodities are part of a growing category of asset classes referred to as "real return asset classes[1]". These include Inflation linked bonds and real estate. Therefore, commodities are real return assets that are part of both the consumable/transformable super asset class and the store of value super asset class[2]. As alluded to earlier on; most asset allocation strategies focus mainly on capital assets, the first of the super asset classes.

EAR is of the view that investors should be sensitized about this asset class and thus, based on their respective level of investment return/risk tolerance, gain exposure to alternative asset classes. Equally, it is important for investors to understand the types of asset classes that EAR seeks to expound on through both fundamental and quantitative research. This may require some brief introduction in the form of sequential "flash notes" and to some extent a "refresher"; of what the major commodities are, the quantitative techniques applied to price and model spot and future commodity prices and most importantly how investors can get access to such real return assets.

Major Commodities



Exposure to Commodities and the Sources of Returns

Unlike other financial assets (i.e. equities and bonds), where exposure to the underlying asset class is relatively clear; it is not the case with commodities. The primary methods of gaining access to commodities include direct physical

[1] Real return assets classes are physical assets that derive their value from their substance and characteristics
[2] Store of value super asset class is not a capital asset because there are no cash flows associated with owning commodities

investment and commodity futures. These two primary methods require potential investors to buy active/passive products designed to track the performance of a commodity index[3] or get exposed to futures' contracts[4]. Two major types of commodity indices exist; spot price and total return-fully collateralized indices. Spot price indices measure the price movement in a basket of commodities (it could be a basket of agricultural commodities). Total return – fully collateralized indices accommodates an investment strategy that invests in a basket of commodity futures contracts that are rolled over into new commodity futures contracts. In this regard, the term "fully collateralized" indicates that an amount equivalent to the notional investment is set aside as collateral. The commonly used total return commodity future indices are; Goldman Sachs Commodities Index (GSCI), the Dow Jones-AIG Commodity Index (DJ-AIGCI) and Reuters/Jefferies Index (RJCRB).

The vast majority of retail investors are not equipped to invest directly in spot commodities. Meaning they are not in a position to store oil, grain, platinum, etc. Therefore, a desired exposure to commodities would be gained via some proxy holding in the futures markets. This therefore exposes the investor to three main sources of returns (in so far as commodity investing is concerned); and these are:

- *The change in spot price of the commodity* – this relates to the directional exposure to a particular commodity or basket. For example, if the index has a "long position[5]" to the oil price and the price of oil increases, the position is deemed profitable.
- *The collateral returns* – For an unleveraged position; as an example; for every R10 in commodity future exposure, an investor sets aside R10 in some money market fund (so as to earn some interest). It matters how much interest the collateral earns!
- *Roll yield* – This concept ushers the introduction of concepts such as Backwardation and Contango as they relate to the pricing of commodity futures:
  i. When a futures contract's price is at a discount to the spot price, the shape of the futures curve is referred to as backwardation. **S(t) > F(t,T)**.
  ii. When the futures contract's price is at a premium to the spot price, the shape of the futures curve is referred to as contango. **S(t) < F(t,T)**.

In a backwardated futures market, a futures contract is said to "roll up"/converge to the spot price as the delivery date approaches. Therefore, an investor earns some "roll yield". The opposite is true in a market that is in contango; an investor would lock in losses as the futures contract rolls to a lower spot price. Futures' returns are a combination of spot-price returns and the effect of the futures' price converging to spot.

Conclusion

The above analysis calls for a thorough understanding of the drivers of commodity assets; such as the cost of storage which, to some degree determines the probability of the commodity trading in backwardation or contango and what this implies to the different players in the commodities market. Over the long term, whether a commodity trades in backwardation or contango depends on how difficult it is to store the commodity. For instance, gold is relatively easy and cheap to store; it is therefore likely to trade in contango. The question then arises; would investors prefer gaining exposure through

[3] A stock index or stock market index is a measurement of the value of a section of the financial market. It is computed from the prices of selected assets (typically a **weighted average**). It is a tool used by most investors to describe the market performance. An example is the All Share Index (ALSI).

[4] A futures contract is a contract between two parties where both parties agree to buy and sell a particular asset of specific quantity and at a predetermined price, at a specified date in future

[5] A long position is the action of buying a security anticipating the stock's value will rise over time

gold futures or spot price indices? It is this unconventional approach to investing and wealth creation that EAR hopes to promote. Subsequent features will reflect on correlations in the broader commodity space relative to other assets; hopefully to confirm or dispel, through observed evidence, the hypothesis that commodities offer portfolio diversification benefits. Furthermore, different modelling techniques for the different commodities based on their respective characteristics will be explored. Moreover, EAR seeks to distinguish between markets that provide a hedge for producers or potential investors in commodity producing companies (backwardated markets) and markets that provide a hedge for consumers or those who would like to buy commodities (markets that are in contango).

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