



The Global Mark of Distinction in Alternative Investments

Commodities: Boom or Bust? The Case for a Strategic Allocation

Keith Black, PhD, CFA, CAIA



The Attraction of Commodities

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- Institutional investment in commodities has increased by 200% since 2005, now reaching \$250 billion.
- What is the attraction?
 - Equity-like returns (and volatility)
 - Inflation Protection
 - Low correlation to traditional investments reduces portfolio volatility



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Long-Term Commodity Returns

- A 45 year investment in stocks and commodity futures produced similar terminal wealth
- From July 1959 to December 2004,
 - Equity risk premium = 5.65%, Standard Dev = 14.85%
 - Commodity risk premium = 5.23%, Standard Dev = 12.10%



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Attractive Correlation Characteristics

- Commodity futures returns have attractive correlation characteristics over long time periods

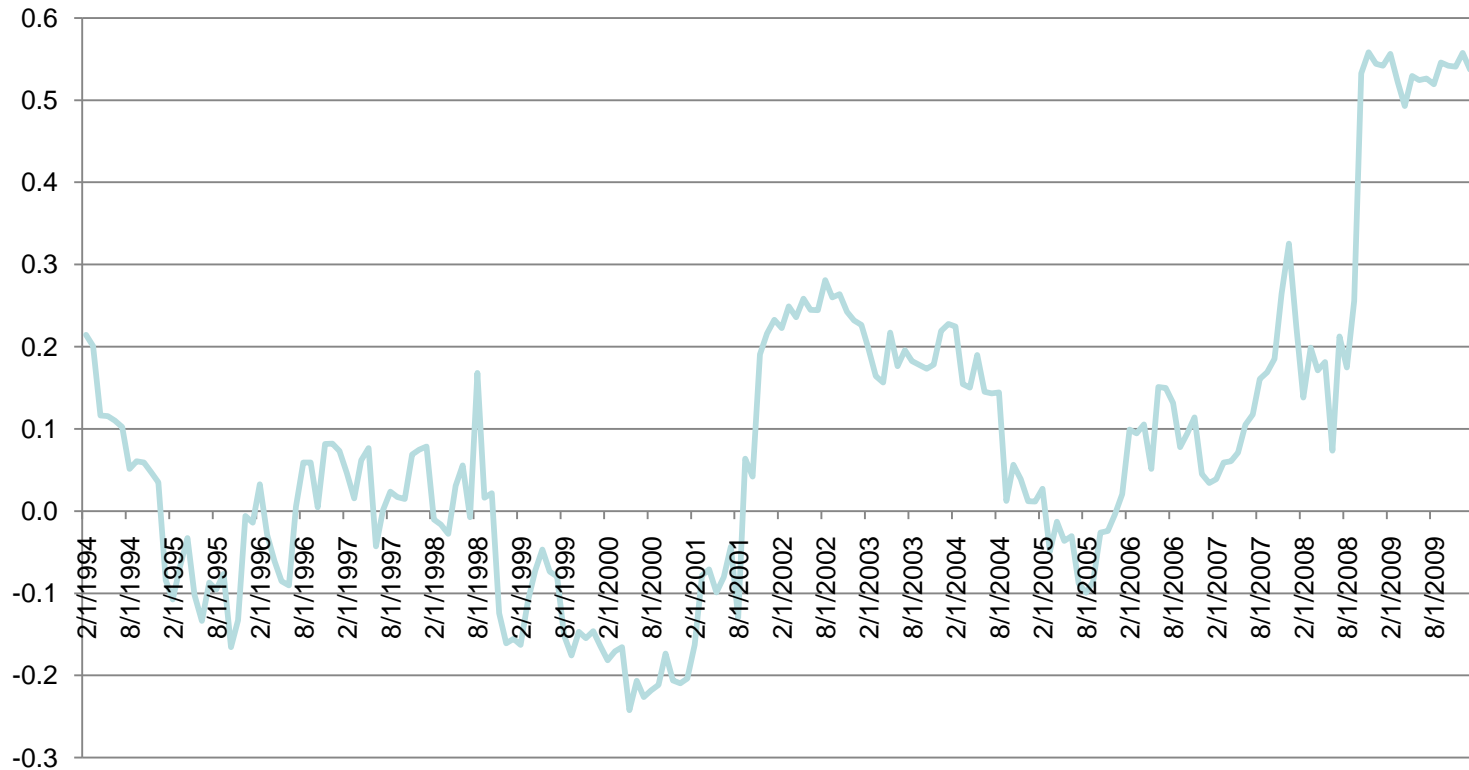
	Stocks	Bonds	Inflation
■ 1 Year	-0.10	-0.30	0.29
■ 5 Years	-0.42	-0.25	0.45



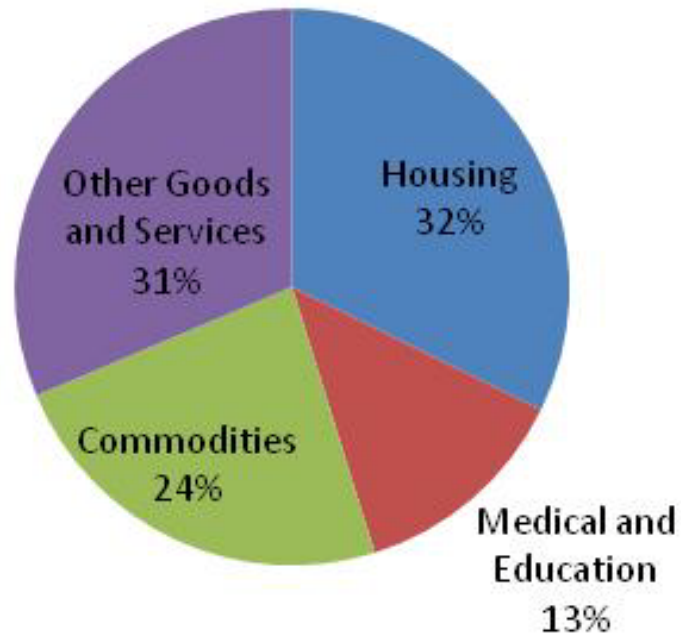
Correlation Changes Over Time

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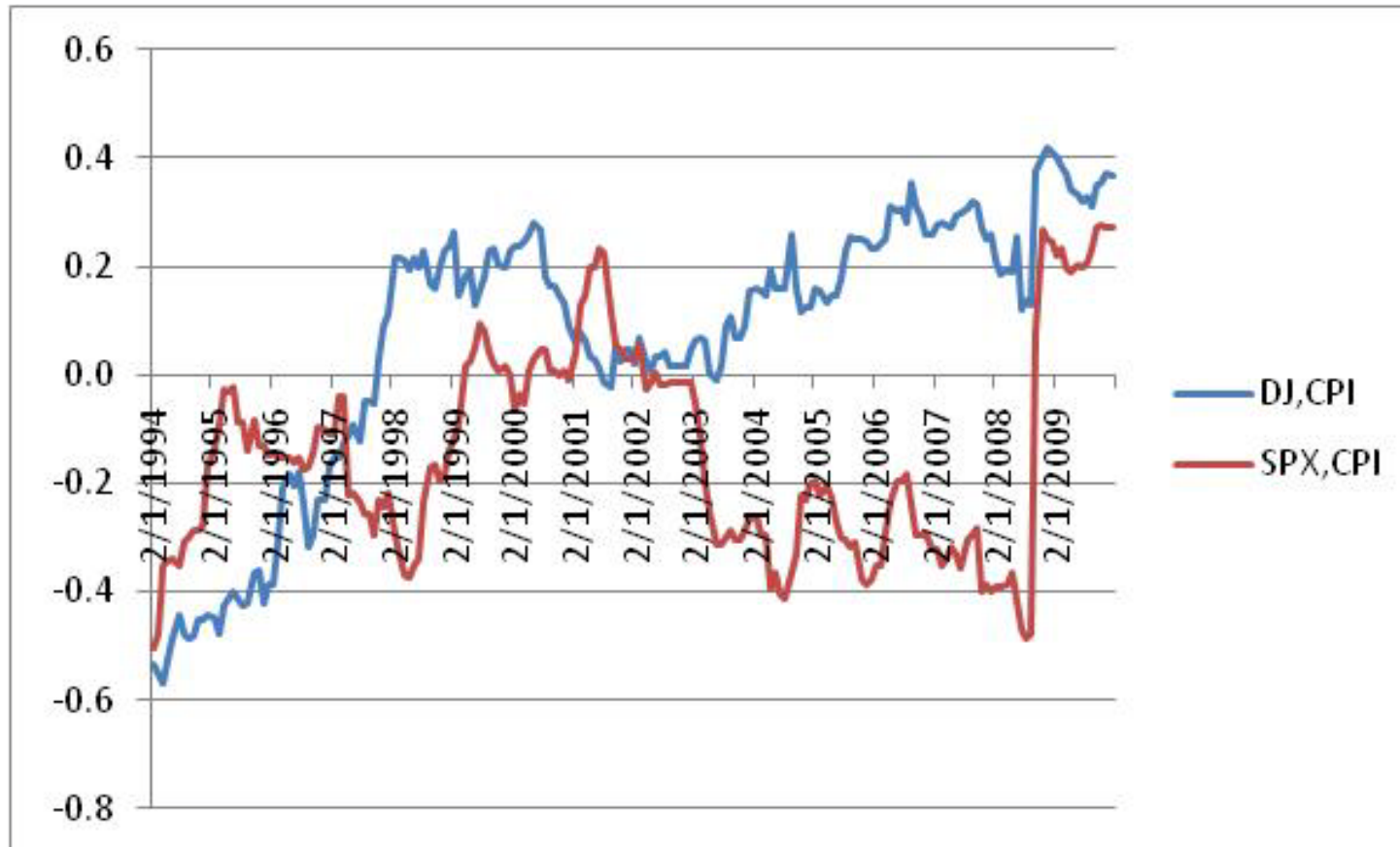
36 Month Rolling Correlation S&P 500, Dow Jones-UBS Commodity Index



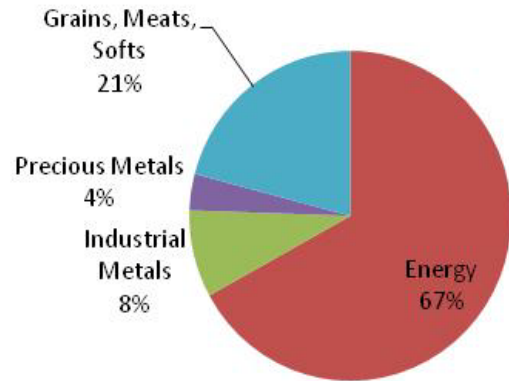
Consumer Price Index, June 2010



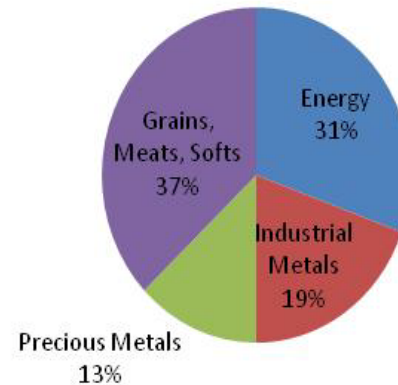
36 Month Rolling Correlation to Inflation



**S&P GSCI Commodity Index,
October 2010 Weights**



**Dow Jones-UBS Commodity Index,
2010 Target Weights**





Portfolio Returns

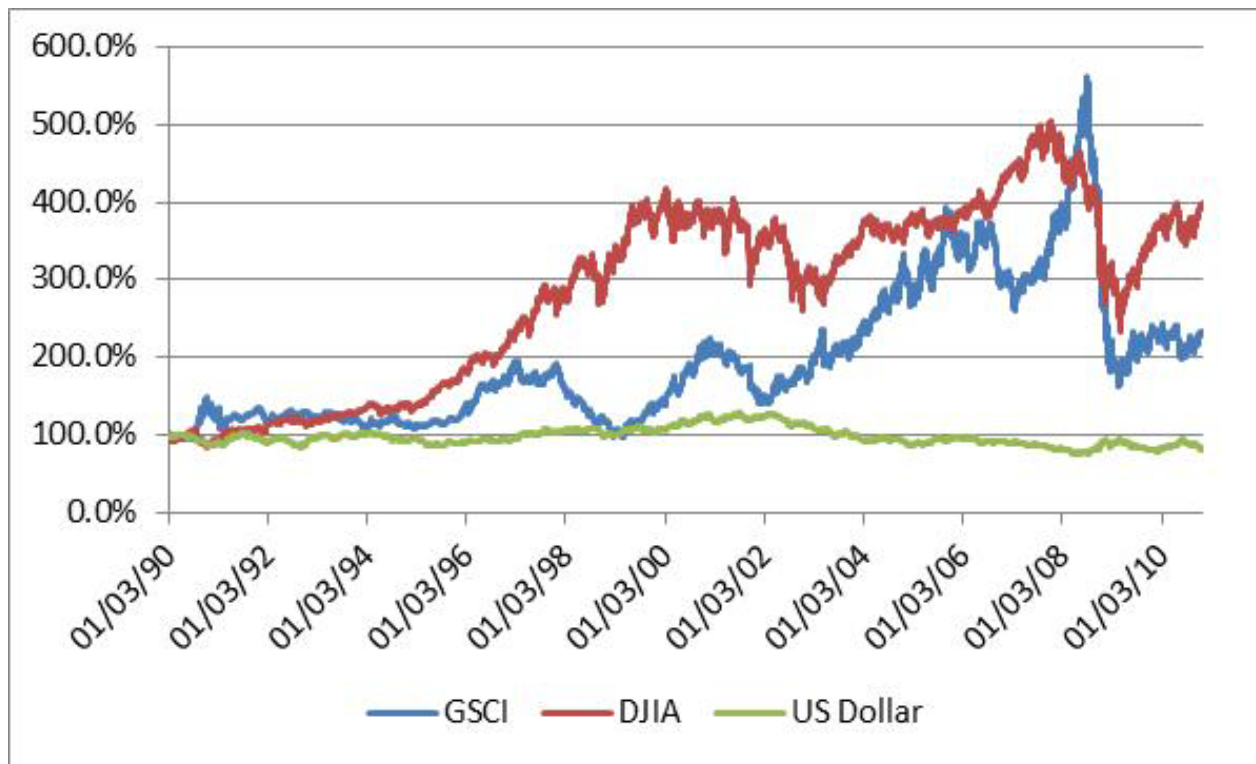
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- The last decade has not been kind to equity oriented investors
- From 2/1998 to 7/2009, commodity investments reduced portfolio volatility

	Average Annual Return	Standard Deviation
60% S&P 500 40% Barclays Agg Bond	0.93%	8.87%
55% S&P 500 35% Barclays Agg Bond 10% DJ-UBS Commodity	0.79%	8.13%
S&P 500	-2.71%	14.75%
DJ-UBS Commodity Index	1.07%	17.57%

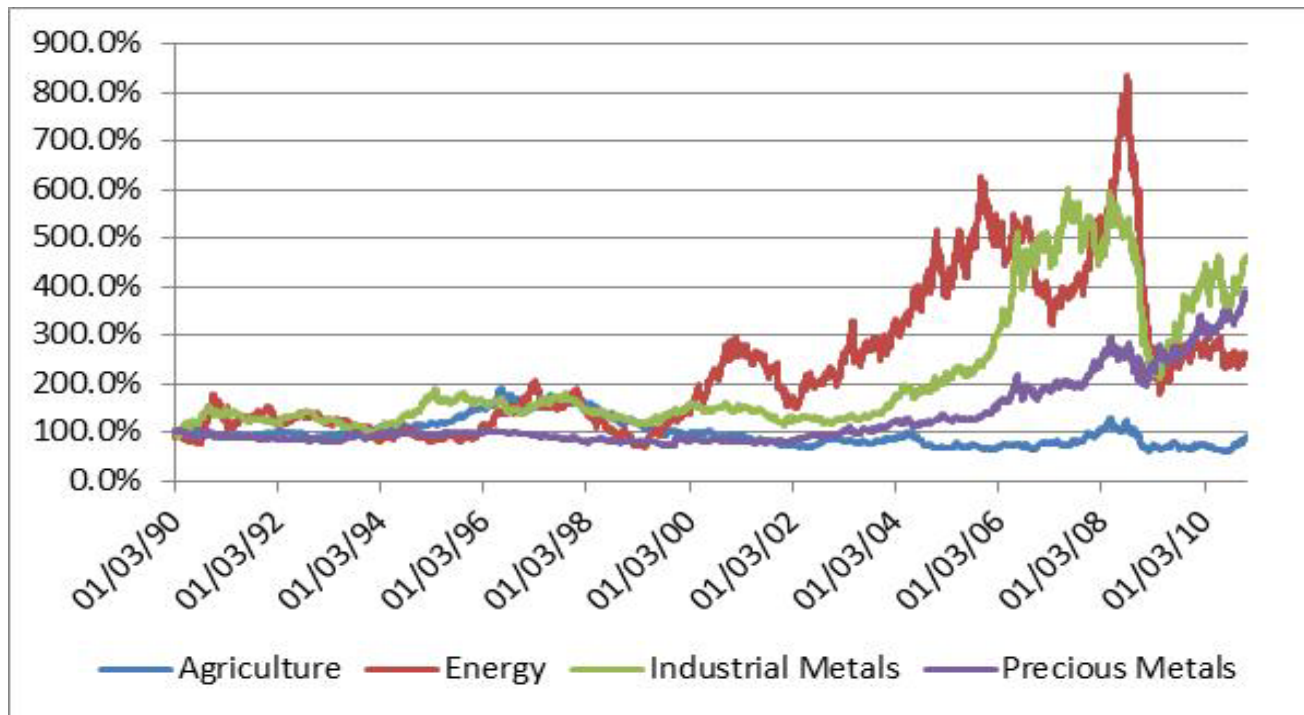
The role of the US Dollar

- Commodities have a near zero correlation to equities, but -0.15 correlation to the US Dollar



Diversification Across Commodities

- Commodities have surprisingly little correlation to each other, only 0.2 to 0.3 across sectors





Timing Commodity Investments

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■ Average Returns by Stage of the Business Cycle, 1959-2004

	Stocks	Commodities
Early Expansion	16.3%	6.8%
Late Expansion	10.4%	16.7%
Early Recession	-18.6%	3.7%
Late Recession	19.7%	-1.6%



Supply Constraints

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- Commodities with supply constraints can have higher volatility and greater upside potential
- Energy and Industrial Metals (Volatility of 32% and 21%)
 - These commodities have the greatest supply constraints, as production is subject to location, mining/drilling, refining and environmental issues
- Agriculture (Volatility of 18%)
 - Supply shortages tend to be short lived, as next year's growing/breeding season may overcome this year's shortages
- Precious Metals (Volatility of 16%)
 - Supply has little impact, as metals are held for centuries as a store of value and little is consumed



The Role of Emerging Markets

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- The prices of many commodities are tied to the demand from Asian emerging markets
- India and China are rapidly gentrifying nations with over 2.5 billion of the world's 6.8 billion citizens
- In 2008, the International Energy Agency projected that “China and India combined may increase their oil consumption to 23.1 mbpd in 2030 from 9.3 mbpd in 2005” (vs 2010 global consumption of 85.2 mbpd)¹
- From 2003 to 2008, China alone was responsible for 31% of the world's increased demand for energy, 64% for copper, 70% for aluminum and 82% for zinc¹
- China is said to consume 50% of the world's cement production, as well as 36% of steel, 30% of coal, and 36% of copper. Should the industrialization and urbanization of China slow, materials demand and prices could decline significantly



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