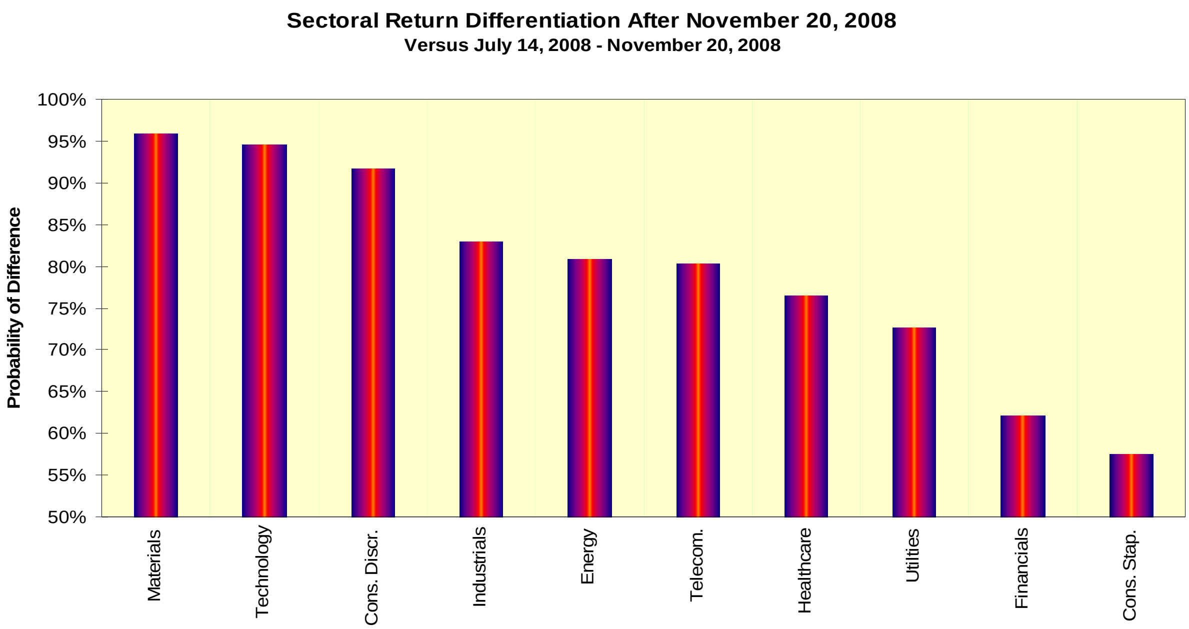
Living In A Material World

The most dangerous words in finance are, "It is different this time." They generally are uttered in justification of a bubble, real or imagined. But while assuming human nature and market cycles are different is just asking for it, any market analyst must pose the question statistically on a continuous basis.

The ability to assess whether a set of relationships has changed over a period or whether a directional move is in fact statistically significant is a partial defense against, in Nassim Taleb's words, being fooled by randomness. Without such rigor any lucky commentator can make his or her umpteenth call of a bottom over a two-year bear market and then run around like he or she discovered America when the market finally rises. Consistent and statistically non-zero correct calls over a period of time are required to tell us whether anyone is adding value or, liking mating elephants, simply making a lot of noise at a high level.

Before And After

The unfortunate sequence of events that unfolded from mid-2007 onwards left us with a large number of market regimes or micro-regimes (regimelets?). Let's use the July 14, 2008 de facto nationalization of Fannie Mae and Freddie Mac and its apparent link to a global currency deal as one date of significance and the November 20, 2008, rescue of Citigroup, not to be confused with any other rescues of Citigroup before or since, as another. Which economic sectors in the S&P 1500 Supercomposite have had statistically different returns between that July-November 2008 period and from November 2008 onwards?



The most significant changes in performance were in the basic materials, information technology and consumer discretionary sectors. The financials and consumer staples sectors witnessed the smallest changes in performance, which is truly amazing given the huge amount of attention given the financials.

Now let's break the sectoral performance down a little bit further to see which sectors have diverged in their relationship to every other sector. First, let's take a variance-covariance matrix of returns over the July-November 2008 period. The maximum covariance cell for each sector is highlighted in blue; the minimum in pink. The consumer staples sector tends to stand out as the least-correlated sector to its peers, while the consumer discretionary sector tends to be the most-correlated sector.

Variance-Covariance Matrix Of Returns
July 14, 2008 - November 20, 2008

	FINL	ENRS	MATR	INFT	INDU	CONS	COND	HLTH	UTIL	TELS
FINL	0.0031									
ENRS	0.0018	0.0027								
MATR	0.0017	0.0020	0.0018							
INFT	0.0015	0.0014	0.0012	0.0011						
INDU	0.0016	0.0014	0.0013	0.0010	0.0011					
CONS	0.0010	0.0010	0.0008	0.0007	0.0007	0.0006				
COND	0.0017	0.0014	0.0013	0.0011	0.0011	0.0008	0.0013			
HLTH	0.0012	0.0012	0.0010	0.0008	0.0008	0.0006	0.0009	0.0007		
UTIL	0.0012	0.0015	0.0011	0.0009	0.0008	0.0007	0.0009	0.0008	0.0010	
TELS	0.0015	0.0014	0.0012	0.0010	0.0010	0.0008	0.0011	0.0009	0.0010	0.0013

If we repeat the exercise between the November low and last Friday, a similar set of minimum and maximum covariance pairs emerge.

Variance-Covariance Matrix Of Returns
November 21, 2008 - April 3, 2009

	FINL	ENRS	MATR	INFT	INDU	CONS	COND	HLTH	UTIL	TELS
FINL	0.0037									
ENRS	0.0015	0.0012								
MATR	0.0016	0.0010	0.0011							
INFT	0.0015	0.0008	0.0009	0.0008						
INDU	0.0016	0.0009		0.0008	0.0010					
CONS	0.0007	0.0004	0.0004	0.0004	0.0004	0.0003				
COND	0.0017	0.0009	0.0009	0.0008	0.0009	0.0004	0.0010			
HLTH	0.0009	0.0005	0.0005	0.0005	0.0005	0.0003	0.0005	0.0004		
UTIL	0.0008	0.0006	0.0005	0.0005	0.0005	0.0003	0.0005	0.0003	0.0004	
TELS	0.0012	0.0007	0.0007	0.0006	0.0007	0.0003	0.0007	0.0004	0.0004	0.0007

Now let's ask the question, "Which sector's covariance of returns has diverged most from one time period to the next?" Here the answer is quite apparent; the energy and healthcare sectors' performance vis-à-vis their peers has changed significantly, with the energy sector's performance changing most on a relative basis from one period to the next.

Probability Covariance Of Returns Is Different Between Periods
(At 90% Confidence Or Greater)

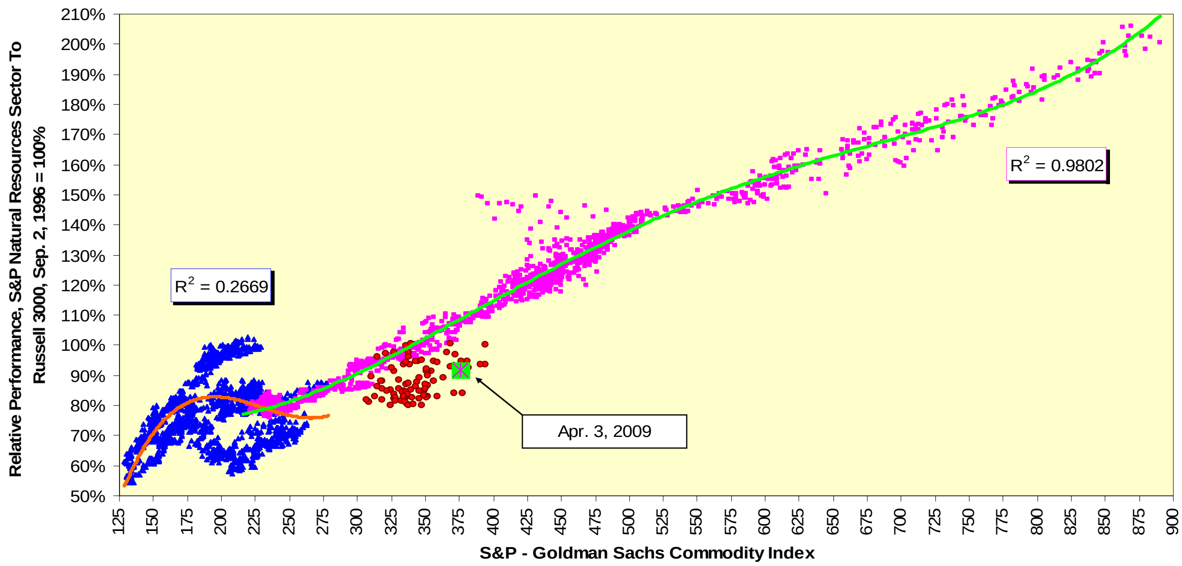
	FINL	ENRS	MATR	INFT	INDU	CONS	COND	HLTH	UTIL	TELS
FINL										
ENRS										
MATR		97.0%								
INFT		100.0%	94.5%							
INDU	90.4%	100.0%	96.5%							
CONS	92.4%	99.4%		99.0%	91.7%					
COND		100.0%	100.0%							
HLTH		93.4%		99.9%	93.8%	96.0%	98.3%			
UTIL										
TELS		99.9%						98.9%		

Once again, for all of the attention paid to the financial sector, the real differentiation of returns has occurred in sectors affected by policy changes, such as healthcare, or by the end of devastating price deflation, such as energy and basic materials.

The Resource Trade

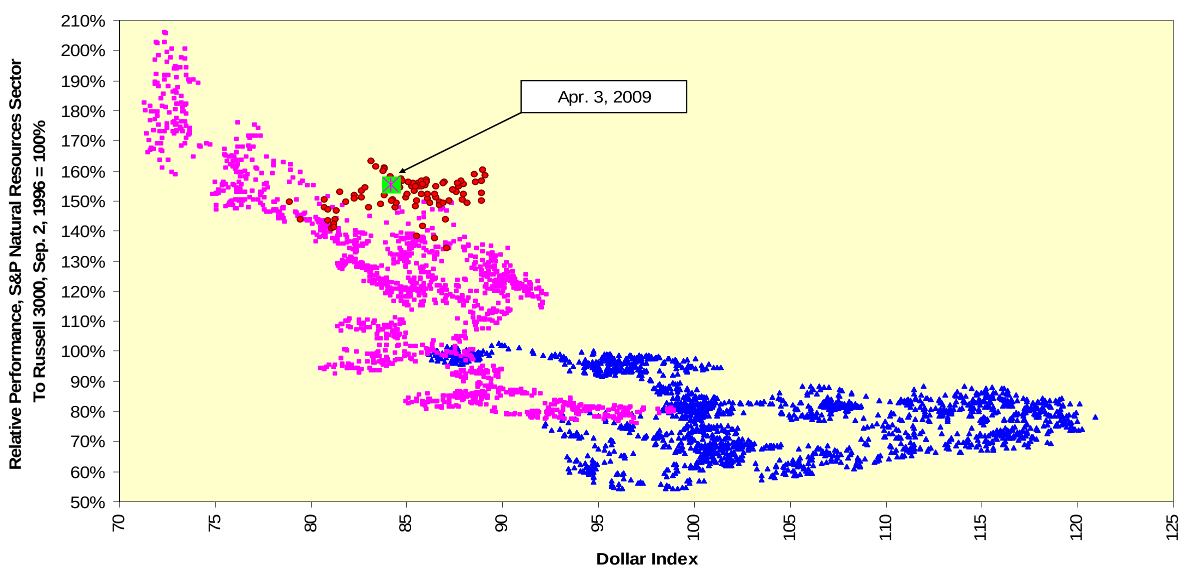
Does this performance differential create an investment opportunity? Let's return to an analysis introduced in January 2006 relating the relative performance of commodity-linked equities to the S&P/Goldman Sachs commodity index. As before, we can conclude the relative performance of the S&P/Goldman Sachs natural resources index as a function of the commodity index was random prior to the Federal Reserve's declaration of war on deflation on May 6, 2003, as indicated with the blue markers. Between May 2003 and November 2008, the relationship, here noted with magenta markers, became very direct. After November 2008 and inclusive of the Federal Reserve's second declaration of war on deflation, the relationship, marked in red, indicates natural resource stocks, primarily in the energy and basic materials sectors, have underperformed.

Commodity-Linked Equities Underperforming Post-May 2003 Trend



If we take the same relative performance measure and map it against the dollar index, we see the resource stocks are unexpectedly strong and may in fact be anticipating some measure of dollar weakness once the "crisis bid" on the dollar disappears.

Commodity-Linked Equities Remain A Dollar Trade



It is never different this time. The last declaration of war on deflation led to a prolonged global commodity boom. While I do not anticipate an exact repeat given the extent of macroeconomic damage suffered in the past year, I do anticipate the natural resources issues to continue their divergent performance, catch up to their relative performance trend and afford some measure of protection against dollar weakness while simultaneously providing a direct play on any restoration of global economic growth.