

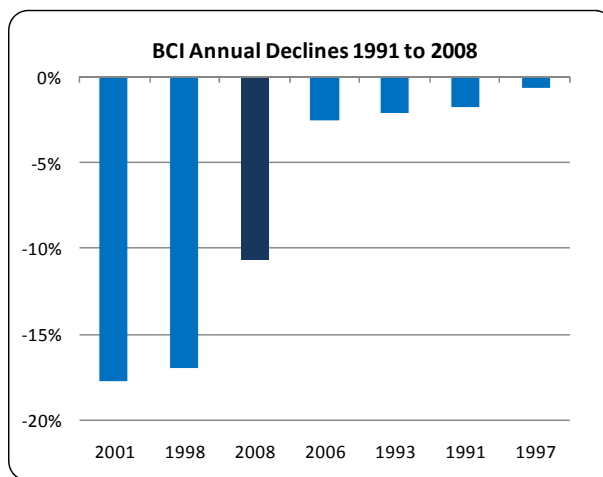
Prospects for Commodity Performance in 2009

Commodity Research Report

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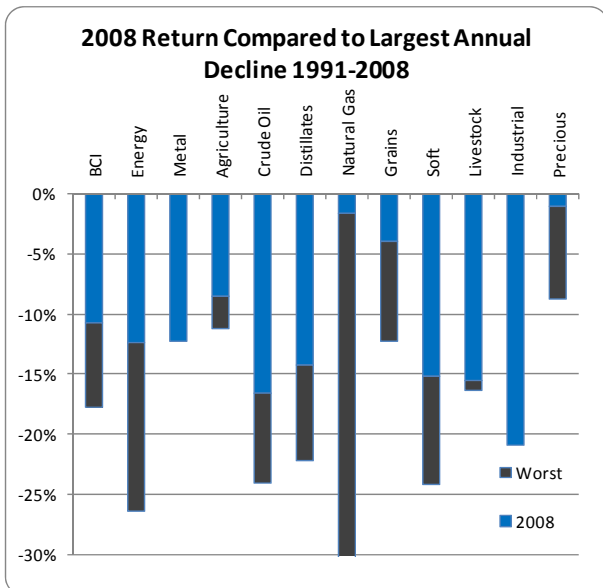
Overview: *This research report examines past declines in commodity prices. Commodity market declines are not unusual events. When they occur, they tend to be steep but relatively brief. The longest peak-to-trough decline in commodity markets since 1991 was just 16 months and the average decline lasted 12 months. The broad-based decline that started in July 2008 has been steep. It remains to be seen if this decline will, like its predecessors, also be relatively brief.*

Commodity prices declined in 2008. The Bache Commodity Index (BCI) posted a 31.4% decline in the final six months of the year, erasing a strong first-half performance. When the dust finally settled, the BCI was down 11.4% for the year. The second-half decline was the worst six-month period for the BCI on record. However, because commodity prices rose in the first six months of 2008, the annual return for the BCI in 2008 was not exceptional by historical standards. It was only the third-worst year since 1998. This is shown on the chart to the right, which plots all of the negative calendar years for the BCI Total Return Index from 1991 to 2008.



Source: Bache Commodities Ltd.

Another way to put 2008 in perspective is to look at the performance of commodity sectors. The chart at right shows the performance in 2008 for each sector and sub-sector (the lighter portion of the bar) compared to the worst annual performance for that sector in the 1991-2008 period (the darker portion of the bar).



Source: Bache Commodities Ltd.

For the metals sector, 2008 was the worst year since in the entire period. Within the metals sector, industrial metals also posted the worst year in 2008. Prior to 2008, the worst year for metals was a -8.6% return in 1998. Energy sectors all posted negative returns. However, for the energy sector as a whole, the 2008 decline was only 12.4% -- less than half of the worst annual decline for this sector, which was -26.4% in 2001. The agriculture sector posted a decline of -8.5% in 2008, which was not far from the largest annual decline of -11.4% set in 1998. This sector was driven by a large decline in livestock.

Performance in the Year following a Decline

Consecutive annual declines in commodity markets are rare. Since 1991 this has happened only once, when a small loss in 1997 (-0.6%) was followed by a sizeable decline in 1998 (-17.0%). The chart at right shows each annual decline (in gray) paired with the annual return that followed (in blue). The three recent annual losses (1998, 2001, and 2006) were followed by annual gains that exceeded 20%. In years immediately following a decline, the average annual return of the BCI has been 14.6% average for all years (11.6%).

Analysis of Major Declines

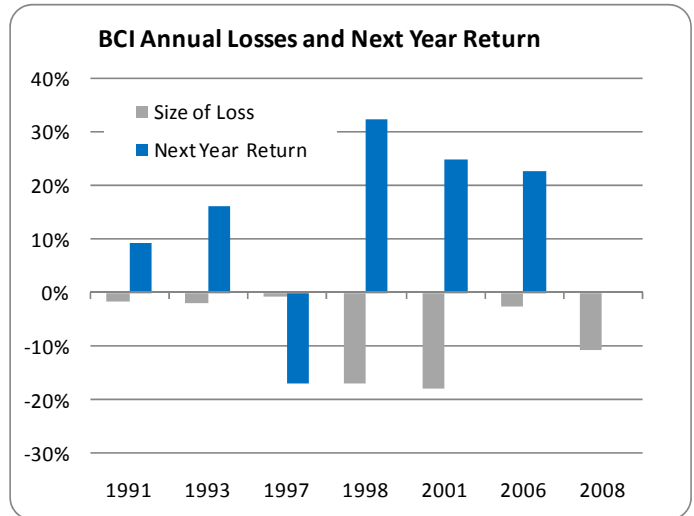
There have been several sizeable declines in the Bache Commodity Index since 1991. The three largest declines bottomed in 1998, 2001, and 2006. Analyzing these declines may offer helpful insights into the current decline, which is already the largest peak-to-trough decline since 1991.

- What is the typical length of a broad-based commodity decline?
- What are the economic factors that contribute to its decline?
- Which commodity sectors tend to lead a rebound and which tend to lag?
- What is the relationship between commodity price declines and stock market declines?

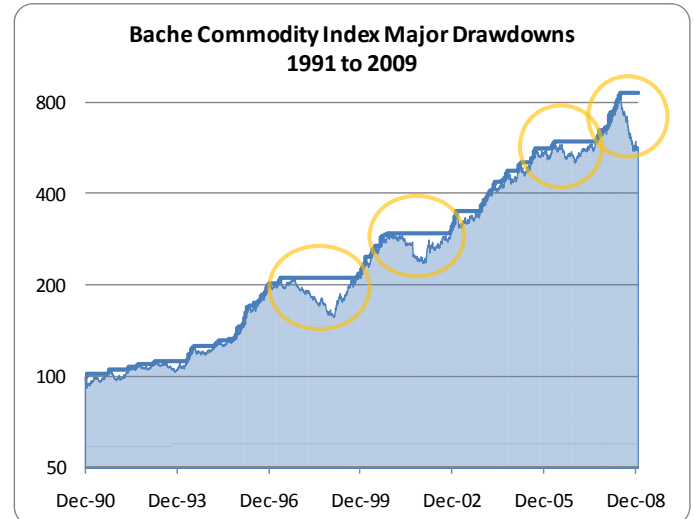
The two charts at right highlight these drawdowns. The top chart shows the BCI Total Return Index from January 1991 to February 2009. The four largest declines are highlighted. The lower chart is called an underwater chart. It plots the difference between the BCI index value and the most recent peak as a way to accentuate the declines.

Duration of Previous Declines

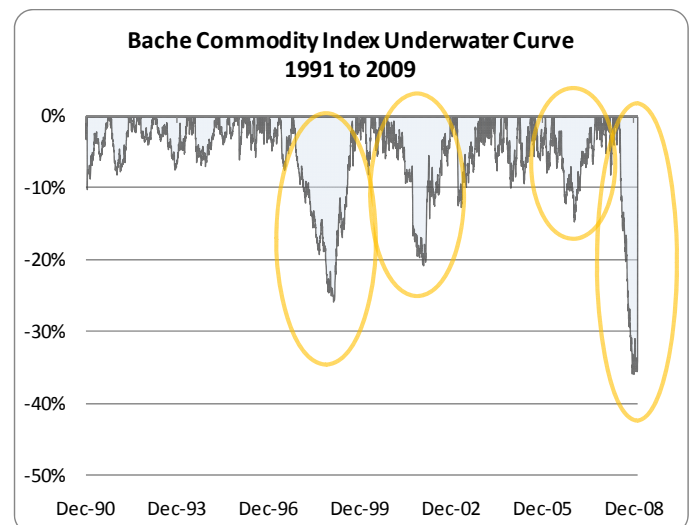
When compared to other asset classes, commodity market declines tend to be short-lived. In recent years, the time from the start of a bear market to the eventual bottom of the decline was as little as 7 months (2006) and as long as 16 months (2008). The average time from peak-to-trough for the



Source: Bache Commodities Ltd.



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largest declines was 12 months. This can be seen the table below, which highlights the peak-to-trough decline of the major declines as well as the performance of the BCI in the 12 months following a reversal.

Performance in the 12 Months Following a Trough

As shown in the table at right, the BCI earned an average of 33.2% in the twelve months following a trough in commodity prices. The largest decline (1998) of -25.7% was followed by a return of 49.2% in the subsequent 12-month period. In each of the three major declines analyzed, the recovery was both faster and stronger than the decline.

Differences in Sector Performance

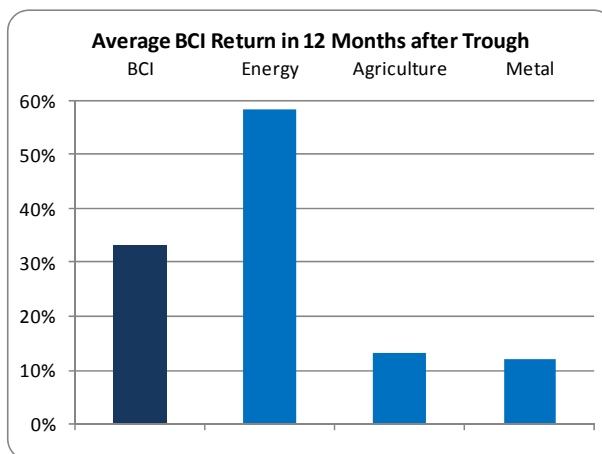
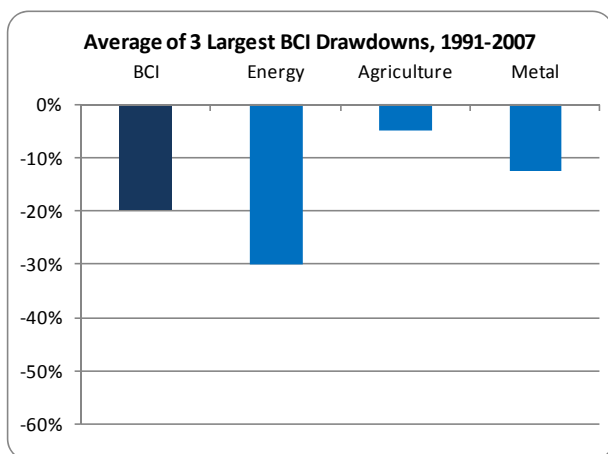
The energy sector leads declines as well as recoveries. This is unsurprising. The energy component of the BCI is the largest, most volatile sector of the index, and it would be difficult to have a sustained decline in the BCI without a sustained decline in energy prices. What is surprising is the intensity of

energy market rallies after a sustained decline. The average 12-month return of the BCI Energy index following a large decline is 58.5%. This is more than three times the average annual return of the BCI Energy index (17.5%). Returns in other sectors are more modest. The average increase in the BCI Agriculture index is 13.0% and the average return of the BCI Metals index is 12.0%.

Major Declines in the Bache Commodity Index, 1991 to 2009

Avg. of Major Drawdowns		BCI	Energy	Agric.	Metal
Peak-to-trough	Average Return	-19.9%	-30.1%	-5.0%	-12.7%
Next 12 Months	Average Return	33.2%	58.5%	13.0%	12.0%
1997-1999 Decline		BCI	Energy	Agric.	Metal
Peak-to-trough	10/97 to 2/99	-25.7%	-36.4%	-13.9%	-14.4%
Next 12 Months	2/99 to 2/00	49.2%	108.0%	2.0%	12.3%
2000-2001 Decline		BCI	Energy	Agric.	Metal
Peak-to-trough	11/00 to 12/01	-19.4%	-29.7%	-10.1%	-6.6%
Next 12 Months	12/01 to 12/02	21.5%	34.2%	9.2%	7.3%
2006-2007 Decline		BCI	Energy	Agric.	Metal
Peak-to-trough	5/06 to 1/07	-14.6%	-24.1%	9.0%	-17.0%
Next 12 Months	1/07 to 1/08	29.0%	33.4%	27.8%	16.5%
Current Drawdown		BCI	Energy	Agric.	Metal
Started July 2008	As of 3/09	-33.0%	-42.7%	-24.1%	-19.7%

Source: Bache Global Commodities Ltd.



Source: Bache Commodities Ltd.

Comparing Commodity Declines with Equity Market Declines

Equity markets are less volatile than commodity markets, and as such are less likely to enter into a large drawdown. There have been five major drawdowns in equity markets since 1970 (including the current decline). Three of these required more than 20 months from peak-to-trough (1974, 1982, and 2002). One (1987) took just three months before bottoming. The current that started in November 2007 will be at least 18 months.

Number of Months from Peak to Trough in Major Drawdowns for the SP500 Index

<u>Trough</u>	<u>Months from Peak</u>
9/2002	26
9/1974	22
7/1982	21
3/2009*	18
10/1987	3

*Months since current drawdown began.

Source: Bloomberg, LP

Compared to equity markets, commodity index declines are shorter, averaging just 12 months. The longest peak-to-trough decline in the BCI was 16 months. Four of the five equity declines required at least 1 ½ years before beginning a recovery.

Economic Factors

The two major declines in commodity prices in recent years – in 1998 and 2001 – took place during periods of economic stress. The 1998 decline coincided with the Russian default, the Asian currency crisis, and the LTCM credit crisis. While the U.S. was not in recession during this period, much of the rest of the world did enter a recession. The 2001 commodity price decline started when the U.S. entered an economic recession in late 2000 and bottomed out in early 2002. The low in commodity prices was set about 8 months before the eventual stock market low in September 2002. While the global economic situation in early 2009 is more troubling than in either 1998 or 2001, there are nonetheless a number of similarities. Growing inventories of basic materials, both now and then, resulted in both large declines in spot prices. Production cuts were required in order to balance supply to the reduced demand. Historically, the cycle of production cuts takes about a year to play out, at which point prices stabilize and then move sharply higher.

Implications for Commodity Markets in 2009

Commodity price declines are usually nasty but short -- lasting about a year. In the past 20 years, none of the declines lasted more than 16 months from peak to trough. The current decline started in July 2008. If history repeats, the trough will occur sometime before November 2009.

Once a trough was made, commodity prices gained an average of 33.2% in the next 12 months. A sizeable portion of the gains occur in the early stage of the rally. In the first three months following a major trough the Bache Commodity Index gained more than 4% per month. The average gain over the next 9 months was a more moderate 2.3% per month. If this pattern persists, commodity prices may be higher by the end of 2009 and will be significantly higher by the middle of 2010.