# Commodities Super-Cycle: Is It Coming To An End?

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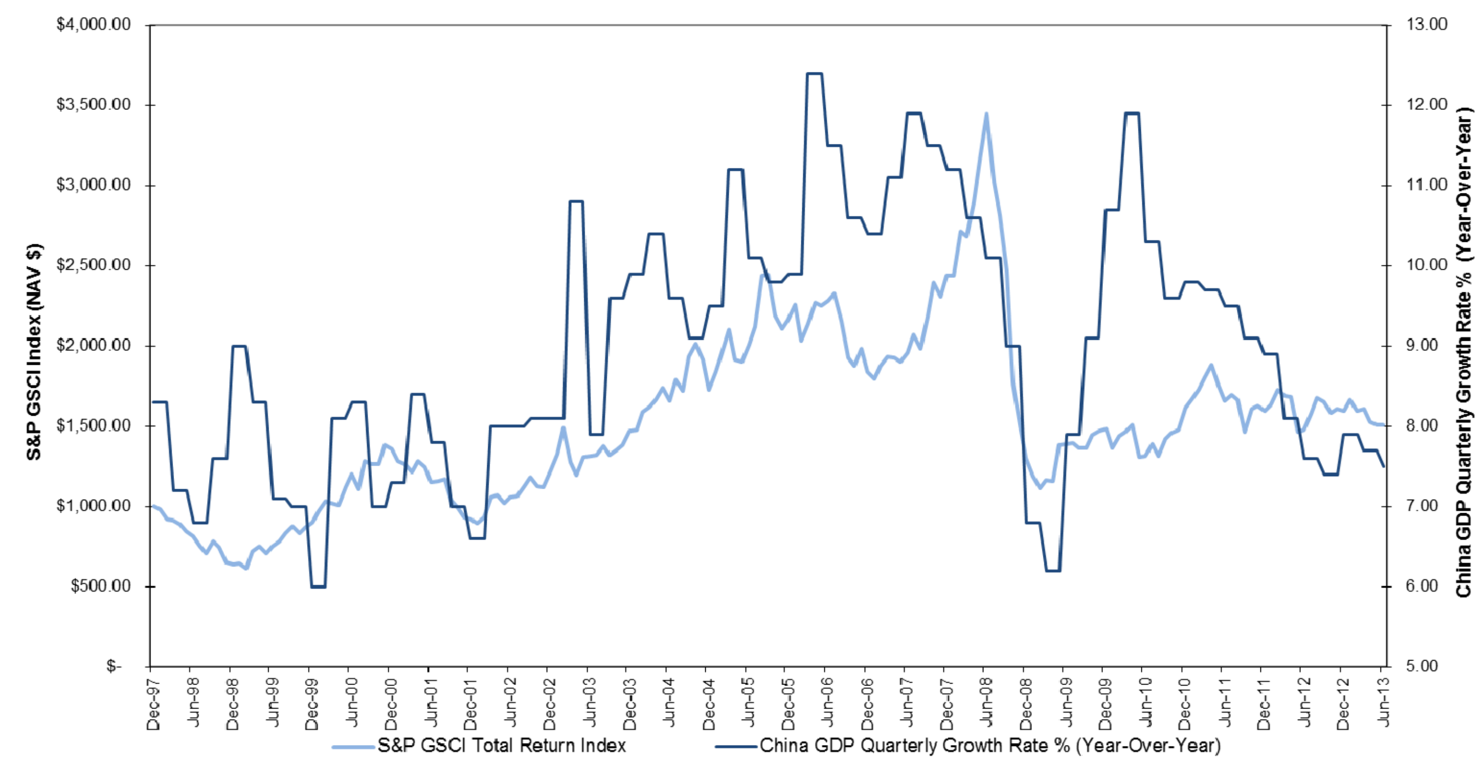
## The Commodities Super-Cycle Defined

A commodities supercycle is an approximately 10-35 year trend of rising commodity prices. The commodities super-cycle is based on the assumption that population growth and the expansion of infrastructure in emerging market nations drive long-term demand and higher prices for industrial and agricultural commodities. Infrastructure buildout requires raw materials such as copper, aluminum, steel, and lumber, which have finite supplies. A burgeoning global middle class adds to demand for agricultural commodities, including proteins/meats, corn, soybeans, and wheat, as well as soft commodity "luxury items" such as cocoa and coffee. Meanwhile, energy demand rises in tandem with expanding economies.

Historically, there has been evidence of four commodities super-cycles: 1894-1932 (peaking in 1917), 1932-1971 (peaking in 1951), 1971-1999 (peaking in 1973), and the one we are currently experiencing[1]. The current commodities boom, which economists believe began at the start of the 21st century, has often been attributed to the industrialization of the BRIC (Brazil, Russia, India, China) nations, particularly China. Figure 1 illustrates the strong relationship between China's GDP growth and commodity prices (as illustrated by the S&P GSCI Total Return Index, a leading measure of the global commodities markets).

*Figure 1* S&P GSCI Total Return Index v. China GDP Quarterly Growth Rate (Year-Over-Year) (December 1997-June 2013)




Data sources: S&P GSCI Total Return Index from PerTrac Solutions. China GDP data from Bloomberg. See Appendix for index definitions.

[1] Erten, Bilge, and Jose Antonio Ocampo (2012). "Super-cycles of commodity prices since the mid-nineteenth century." *UN/DESA Working Paper No. 110.*

## Current Outlook: Signs Pointing to a Waning Cycle

### *Softening Growth in China*

Until recently, China experienced decades of unprecedented growth, driving up commodities prices amid rising demand. Following the credit crisis of 2008 when total bank loans doubled in three years, China underwent an investment boom which led to the amount historically spent on infrastructure over a seven year period to be spent in just three years. However, recent data suggests that infrastructure spending in China may have already peaked. The world's second biggest economy posted disappointing growth of 7.7% during the first quarter of 2013, following the slowest rate of annual growth in 13 years in 2012[2]. Likewise, the International Monetary Fund cut its 2013 growth outlook for China from 8% to 7.75%[3], also prompting concern about a slowdown in China's demand for commodities. Given that China is often cited as a significant driver of the commodities boom, the country's softening growth prompts concern about a weakening of the super-cycle.

### *Rising Interest Rates*

Global easing of monetary policies following the financial crisis of 2008 fueled a surge in investment in both developing and emerging market economies. With interest rates forecasted to rise[4], the increasing cost of credit is projected to hinder growth rates. Higher costs of borrowing constrain foreign investment in emerging market nations, slowing the industrialization process and reducing demand for raw materials. Developed nations can also be affected by a rise in financing costs as new housing starts typically decelerate and infrastructure improvement projects slow.

### *Unwinding of Central Bank Stimulus Programs*

Economic stimulus programs that have been in place since the 2008 credit crisis have helped to prop up emerging market growth and commodities prices. As central banks and governments around the world inevitably begin to unwind their stimulus programs, these price supports for the commodities markets should begin to taper out. Markets will likely return to being more dependent on underlying fundamental factors such as supply and demand.

### *Increasing Supplies*

As common in previous super-cycles, commodities supplies have been catching up with demand because of strong investment in technology and increased production. For example, new technologies deployed in North America to extract previously untapped oil and gas sources will be utilized in other parts of the world, adding to future supplies. Hydraulic fracturing ("fracking") has proliferated as a technique to release enormous supplies of oil and gas from shale beds, increasing global oil and gas resources by an estimated 11%[5]. Meanwhile, mines have been ramping up extraction efforts in order to potentially profit from rising prices. GlencoreXstrata, one of the world's leading producers of commodities, recently reported a 20% increase in copper production year over year as of H1 2013[6]. In agricultural commodities, weather patterns have generally proved to be less extreme than forecast so far this year, resulting in bigger-than-expected supplies. Grain inventories have also experienced a recent surge on the back-end of historically high prices (i.e. corn and soybeans) as farmers seek to plant more profitable crops.

## Investment Opportunities

While data on futures trading during the entirety of the first three commodities super-cycles is too limited to be statistically significant, we can examine data beginning in 1987 (the inception date of the Barclay BTOP50 Index, a broad index of performance within the managed futures industry). Figure 2 shows the periods during which the S&P GSCI Total Return Index ("S&P GSCI") experienced drawdowns of over 10% and how the Barclay BTOP50 Index performed during those time periods.

The average drawdown of the S&P GSCI during those periods when the drawdown was greater than 10% is -33.97%, lasting 14 months on average. Meanwhile, Commodity Trading Advisors (CTAs, as measured by the Barclay BTOP50 Index) have, on average, experienced double-digit returns during those same drawdown periods. This indicates the ability of CTAs to provide diversification and add alpha during bear market periods in commodities (past performance is not a guarantee of comparable future results).

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[2] Source: World Bank
[3] Source: International Monetary Fund
[4] For more information, see "Alternative Investments in a Rising Rate Environment," published by the Morgan Stanley Wealth Management Alternative Investments Group in July 2013.
[5] "Shale oil and shale gas resources are globally abundant," U.S. Energy Information Administration, June 10, 2013.
[6] "2013 Half-Year Production Report," GlencoreXstrata plc, August 14, 2013.

*Figure 2* Drawdown Analysis of S&P GSCI Total Return Index (January 1987-June 2013)

| Period | S&P GSCI Total Return Index Drawdown | Drawdown Length (Months) | Barclay BTOP50 Index Returns |
|---|---|---|---|
| June 2008-February 2009 | -67.65% | 8 | 4.85% |
| October 1997-February 1999 | -48.25% | 16 | 17.53% |
| November 2000-January 2002 | -35.42% | 14 | 13.48% |
| September 2005-January 2007 | -26.41% | 16 | 8.58% |
| September 1990-December 1993 | -26.05% | 39 | 35.86% |
| February 2003-April 2003 | -19.66% | 2 | -4.28% |
| October 2004-December 2004 | -14.34% | 2 | 4.68% |
| **Average** | **-33.97%** | **14 Months** | **+11.53%** |

Data source: PerTrac Solutions. January 1987-June 2013. See Appendix for index descriptions.

Figure 3 examines data beginning in 2000 (the inception date of the Newedge Commodity Trading – Trading Sub Index, a measure of the performance of commodity trading strategies). The average drawdown of the S&P GSCI during those periods when the drawdown was greater than 10% is **-32.70%**, lasting 8 months on average. Meanwhile, the Newedge Commodity Trading – Trading Sub Index returned, on average, **+6.13%** during those same drawdown periods.

*Figure 3* Drawdown Analysis of S&P GSCI Total Return Index (January 2000-June 2013)

| Period | S&P GSCI Total Return Index Drawdown | Drawdown Length (Months) | Newedge Commodity Trading – Trading Sub Index Returns |
|---|---|---|---|
| June 2008-February 2009 | -67.65% | 8 | -10.47% |
| November 2000-January 2002 | -35.42% | 14 | 18.44% |
| September 2005-January 2007 | -26.41% | 16 | 29.03% |
| February 2003-April 2003 | -19.66% | 2 | -7.65% |
| October 2004-December 2004 | -14.34% | 2 | 1.29% |
| **Average** | **-32.70%** | **8 Months** | **+6.13%** |

Data source: PerTrac Solutions. January 2000-June 2013. See Appendix for index descriptions.

## Conclusion

Although it is difficult to determine the exact timing of the culmination of the current commodities super-cycle, even a short-term slowdown may offer investment opportunities. Investors may want to consider leveraging the expertise of investment managers with substantial experience in the commodities markets or with the ability to actively establish both long and short positions in the markets. Discretionary commodities managers have a certain expertise in the markets due to trading experience, understanding of the commodities supply and distribution chain, and relationships with producers. Meanwhile, CTAs with systematic strategies are able to short the markets during bear periods and capture price trends.

## Alternative Investments Group Platform Offerings

Morgan Stanley Wealth Management's Alternative Investments Group platform offers a varied selection of single- and multi-manager funds for investors seeking to access discretionary commodities managers and systematic CTAs. Managed futures are not suitable for all investors. You should be a sophisticated investor and able to understand the complex investment strategies sometimes employed. If you have any questions or would like information about investment opportunities, please contact your Morgan Stanley Financial Advisor or Private Wealth Advisor. To invest in managed futures you must be an Accredited Investor[7].

[7] Minimum net investment assets of $1 million (excluding primary residence) for individual investors (or a gross annual income in excess of $200,000 if single; $300,000 if joint) and $5 million for entities.

# Appendix

**Index Definitions**

**S&P GSCI® Index**: measure of general price movements and inflation in the world economy. The index represents market beta and is world-production weighted. It is designed to be investable by including the most liquid commodity futures, and provides diversification with low correlations to other asset classes.

Three S&P GSCI™ indices are published: excess return, total return and spot. The excess return index measures the returns accrued from investing in uncollateralized nearby commodity futures, the total return index measures the returns accrued from investing in fully-collateralized nearby commodity futures, and the spot index measures the level of nearby commodity prices. Thus, the excess return and total return indices provide useful representations of returns available to investors from investing in the S&P GSCI™. In fact, the total return (i.e., the return on the S&P GSCI™ total return index) is the measure of commodity returns that is completely comparable to returns from a regular investment in the S&P 500 (with dividend reinvestment) or a government bond, while the return on the excess return index is comparable to the return on the S&P 500 above cash.

**Barclay BTOP50 Index**: index that seeks to replicate the overall composition of the managed futures industry with regard to trading style and overall market exposure. The BTOP50 employs a top-down approach in selecting its constituents. The largest investable trading advisor programs, as measured by assets under management, are selected for inclusion in the BTOP50. In each calendar year the selected trading advisors represent, in aggregate, no less than 50% of the investable assets of the Barclay CTA Universe. To be included in the BTOP50, the following criteria must be met: program must be open for investment, manager must be willing to provide us daily returns, program must have at least two years of trading activity, program's advisor must have at least three years of operating history, the BTOP50's portfolio will be equally weighted among the selected programs at the beginning of each calendar year and will be rebalanced annually.

**Newedge Commodity Trading – Trading Sub Index:** Designed to represent investment strategies that profit from price moves in commodity markets. Managers follow a trading orientated approach, typically involving the trading of physical commodity products and/or of commodity derivative instruments in either directional or relative value strategies.

**Past performance is not a guarantee or prediction of comparable future results.** The index returns shown are for illustrative purposes only. They do not represent the results of any specific investment. Index returns do not include any fees, expenses or charges that would reduce returns. The indexes are unmanaged and an investor cannot invest directly in an index.

**Risks associated with investing in commodities:** The commodities markets may fluctuate widely based on a variety of factors including, but not limited to, changes in supply and demand relationships; governmental programs and policies; national and international political and economic events, war and terrorist events; changes in interest and exchange rates; trading activities in commodities and related contracts; pestilence, technological change and weather; and, the price volatility of a commodity.

# Risk Disclosures

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- Futures, forwards, and options trading is speculative, volatile, and involves a high degree of leverage. You could lose a substantial portion or all of your investment.
- Managed Futures fund(s) will not provide any benefit of portfolio diversification unless the fund itself is successful.
- The manager's trading strategy may not perform as it has performed in the past. The manager's performance has been volatile and substantial trading losses have been incurred for client accounts from time to time.
- Regardless of trading performance, the fund will incur brokerage and management fees.
- Conflicts of interest exist in the management of the fund.
- No public market exists for units. You may redeem units only on a monthly basis.
- You will be taxed on your share of the fund's income even though the fund does not intend to make any distributions.
- Use significant leverage
- Are generally illiquid
- Have substantial charges
- Subject investors to conflicts of interest
- Suitable only for the risk capital portion of an investor's portfolio

Before investing in any fund and in order to make an informed decision, investors should read the applicable offering documents carefully for additional information, including charges, expenses and risks. Fees may be higher than the fees investors would be charged for other investments, including mutual funds.

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