

## New Research Shows That Wall Street Speculators Are Driving Up Food and Fuel Prices and That Commodity Index Funds Should Be Banned

Research analyzing commodity markets for the last 27 years shows that Wall Street's speculative trading through commodity index funds is causing market disruptions, interfering with price discovery, increasing the costs for businesses to hedge, and needlessly pushing prices higher for all Americans. It shows how the biggest banks, all bailed out by the taxpayers in 2008, are lining their pockets at the expense of America's families and farmers.

Since 2005, there has been historically high commodity price volatility, with prices swinging up and down at persistent levels that are not justified by supply and demand. That wasn't always the case. Prior to 2005, big price swings, when they happened, were typically the result of a supply or demand event like a war or a hurricane.

Importantly, as commodity price volatility has increased, there has also been a massive inflow of new funds into these markets, particularly from so-called commodity index funds, which is all speculative trading, as opposed to buying and selling by actual producers and consumers. While the precise amounts invested are hard to determine, there is at least \$200 to \$300 billion invested in various speculative trading funds.

We do know, however, that these speculative trading funds, while a relatively new type of market player, now collectively make up the single largest group of non-commercial traders in the commodities futures markets. These speculative trading funds, which represent giant pools of capital, have in recent times been the single largest group of traders, outweighing both commercial business hedgers (producers and consumers of commodities) and traditional "speculators," who take short-term directional bets and provide liquidity.

Given both the very large size and the common trading strategies of these speculative trading funds, many market observers have concluded that there is a high likelihood that they are distorting price formation in commodities markets. It has been suggested that this distortion has directly led to the more recent "boom and bust" price cycles and higher prices for many food and energy commodities in markets around the world.

Historically, under typical trading activities in the commodity markets, price curves in the commodities futures markets have been predominantly "backwardated." That is just a fancy way of saying longer-dated contracts are most often priced *lower* than shorter-dated contracts. This traditional price curve structure is commonly explained in terms of

"convenience yield" i.e. price volatility can make it hard to produce sufficient product at short notice. Therefore, if you want your commodity sooner, you must pay a premium.

Therefore, the further out in time a contract is, the lower the premium. Put another way, futures prices should slope downwards. Everyone in the market knows this doesn't necessarily mean prices are actually going to decline over time. Rather, the traditional pricing signal in a backwardated market is that prices over time will stay fairly steady, all else being equal.

However, this changes once speculative trading funds start pouring hundreds of billions of dollars into the futures markets. In fact, the price curve is basically turned upside down. The traditionally backwardated price curves become upward sloping. This is known as "contango," where the longer-dated contract prices are relatively *higher* and continue to go up.

This shouldn't happen as a routine matter given the premium built into the price of near-dated futures contracts. When buyers and sellers see a price curve in contango, it tells them that *even with the convenience yield built into today's price, tomorrow's price will almost certainly be higher*. That tells producers to delay production, and consumers to buy more now (even if this doesn't necessarily show up in patchy data on inventories). This causes exaggerated scarcity in the short run, which pushes prices up sharply. In the long run, when the delayed production comes on to the market while at the same time demand declines because consumers have already stocked up or cut back, the bubble bursts, and prices come crashing down.

Although there were some fundamental supply and demand events that appeared to give a partial explanation of the change in the price curves (e.g. crude oil delivery bottlenecks at Cushing, OK), their occurrence did not seem to match accurately either the timing or magnitude of the shift. Therefore, we decided to use a new set of analytic approaches to look at what the speculative trading funds were doing. The dramatic change in price curves seemed to coincide with their trading, but was it coincidence or causation? Our research and analysis was all directed at trying to answer this question.

Specifically, we examined the behavior of futures price spreads before, during and after the time each month that the speculative trading funds closed out their expiring futures contracts and purchased new futures contracts. <sup>1</sup> This is referred to as "rolling" contracts into the future and we call the period in question the "Roll," "Roll Period," or "Roll Cycle." For example, the largest group of speculative trading funds is based on the Standard & Poor's Goldman Sachs Commodity Index (GSCI), which must roll forward their expiring futures contracts during a set period of each month, from the 5<sup>th</sup> to 9<sup>th</sup> business day.

Futures contracts expire at regular periods. Traditional hedgers simply close out their contracts for cash at expiration, or make or take delivery. However, speculative commodity index funds are designed to keep bets on the table for long periods of time. That is what gives rise to the necessity of "rolling" those expiring contracts into new futures contracts every month. This requires massive trading every month as these funds liquidate all expiring contracts and replace them, swamping the market repeatedly.

These speculative trading funds are misleadingly labeled "commodity index funds," presumably intentionally to make people think of benign, passive, low cost stock index funds. The commodity funds bear little resemblance to the stock index funds. Crucially, one cannot buy and hold a futures contract forever like a stock, so every month hundreds of transactions are required simply to keep a commodity index fund invested.

Our analysis found overwhelming evidence that the GSCI Roll Cycle systematically distorts forward commodities futures price curves towards a contango state. As explained above, this causes speculative "boom-bust" cycles by changing the incentives of producers and consumers of storable commodities, and also by sending misleading and nonfundamental price signals to the market.

The analysis looked very closely at the behavior of prices during the monthly GSCI Roll Period. The primary commodities studied were NYMEX WTI Crude Oil and CBOT Wheat. The analysis was also extended to NYMEX Heating Oil, CBOT Corn, NYMEX Natural Gas, and CME Live Cattle.

The research found that during the Roll, the price spread between the expiring contract and the new longer-dated contract (which the speculative trading fund must buy) increases, creating a "contango" price curve. The data also show that this bias towards contango is generally absent during the rest of the trading month, clearly suggesting that the persistent contango that has been witnessed in many commodities over the last several years is generated by the speculative trading funds activity rather than supply and demand conditions.

The analysis also found that the contango bias during the Roll period did not exist prior to the rapid expansion of Commodity Index Funds in 2004. The research specifically analyzed the same trading dates on which the Roll now occurs, going back more than 25 years. Bias towards contango simply was not present prior to the creation of the commodity index fund.

This clearly indicates that there is indeed a hugely misleading price signal generated by the activities of the commodity index funds and other speculators who may be trading around the Roll. The persistent contango of recent years is not the result of some preexisting phenomenon, whether fundamentals- or market-based. Since this price signal is not related to actual supply and demand fundamentals, the consequence is to drive prices away from their true value. Because the phenomenon is persistent, and is not arbitraged away, it has significant long-term implications, and tends to promote boom-and-bust price cycles.

In conclusion, speculative trading through commodity index funds is causing market disruptions, interfering with price discovery, increasing the costs for businesses to hedge, and needlessly pushing prices higher for all Americans. The way to prevent these market damaging events is to ban commodity index funds.