# Can You Create A Corporate Bond Bubble?

Who would bat an eye at the notion people like to eat, drink and be merry in whatever order you choose? The non-puritanical amongst us simply regard this as part of the human condition and frown only when such behavior reaches a point of excess. Should we apply the same sanguine attitude toward the creation of financial bubbles? A whole body of academic research has suggested these patterns of self-reinforcing behavior are far more part of the natural order of financial markets than the puritans from the efficient markets school of thought might wish to accept.

A financial bubble is no more difficult to create under laboratory conditions than is a soap bubble. All you need to do is have an early participant experience some success with an investment and pretty soon everyone else abandons their initial caution and starts buying in response to the higher price. We know how these end, but we all participate in them because we all believe we can be the first ones to exit at the top. We also know the sheer weight of money chasing performance can push prices higher and once we observe one bubble in formation, we soon seek similar investments thinking they will afford low and rational entry prices. One observer recalls being at a conference in Geneva five years ago, a time when all of the exchange stocks were soaring, and being importuned by a hedge fund manager whether a startup exchange with no real chance would be selling seats. Yes, and if they do they will be in no rush to sell them cheaply to you.

## **Nothing Succeeds Like Excess**

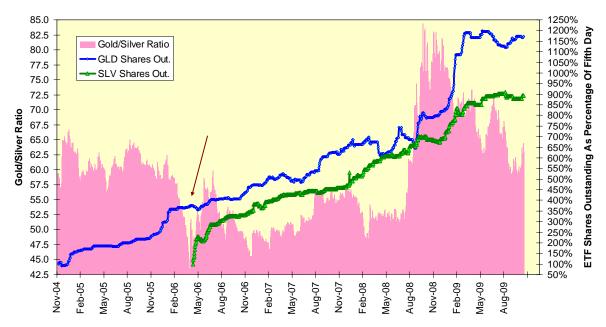
The financial services industry, like Hollywood, is notorious for taking a good idea and beating it to death through the frantic rollout of decreasingly worthy imitations. The original exchange-traded funds such as the Standard & Poor's Depository Receipts took an idea then in good repute, the long-term buy-and-hold of the S&P 500 index, and transformed it from a product accessible only by futures, options or open-end mutual funds priced at the end of the day into a product that traded continuously through the day without being subject to the considerations of futures and options trading or the tax and trading inefficiency of a mutual fund. We now have hundreds of specialized ETFs, some so thinly traded they have had to dissolve or were proven to having unacceptable tracking error during the financial crisis.

Some specialized "alternative" ETFs turned out to be justifiably popular. One of these, the SPDR Gold Trust (GLD), launched in November 2004 and was backed by gold bullion. It now has more than 1,100 metric tons in the vaults, and consistently ranks in the top ten holders of bullion in the world.

On the theory what is good for gold must be great for silver, an ETF backed by physical silver was proposed and immediately ran into a torrent of protest from the Silver Users Association. The SUA argued that while gold is mined to be reburied in vaults, silver has numerous industrial uses and can disappear from circulation.

Anticipation of the ETF's ultimate approval to launch in April 2006 led to a hoarding effect in silver and a large jump in its price relative to gold. If we map the gold/silver ratio against the growth in the number of shares outstanding for the GLD and SLV ETFs expressed as a percentage of its shares outstanding after five days of trading, we see a large anticipatory drop in the gold/silver ratio, highlighted with an arrow in Chart 1. Just as indexation affects stock prices, ETFs can affect commodity prices.

Chart 1: Silver Rallied Sharply Before SLV Introduction



### **Corporate Bond ETFs**

Bond mutual funds have frustrated their investors for years if for no other reason than bonds always mature while their buyers frequently do not. This means the maturity of the portfolio will decrease with each passing day unless it is maintained by selling existing bonds and buying new bonds with different coupons and longer maturities. In a rising interest rate environment, this can be lethal; the longer duration of a refreshed portfolio makes it riskier. Moreover, if the mutual fund is held in a taxable account, the constant buying and selling of issues creates tax headaches with long- and short-term capital gains and the payment and receipt of accrued interest.

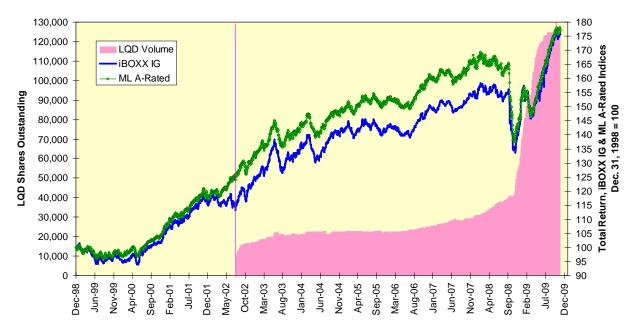
Enter the corporate bond ETF, specifically an investment-grade one trading under the ticker LQD and a high-yield one trading under the ticker HYG. These launched in July 2002 and April 2007, respectively, and are based on the iBOXX investment-grade and high-yield indices, respectively. As both of these indices have an extraordinarily small number of issues out of the thousands of corporate bonds in existence, 260 for the investment-grade and 242 for the high-yield index at the time of this writing, the question has to arise whether a flood of money coming into these ETFs could distort the relationship between the iBOXX indices and the much broader Merrill Lynch A-rated and High-Yield Master II indices. We can answer this by running a regression between the Merrill Lynch indices against the independent variables of the iBOXX indices and ETF shares outstanding for the periods before and after the introduction of the ETFs and comparing the results.

First, let's put the size problem in perspective. The largest issue in the HYG, for example, is the Chesapeake Energy 9.5% due February 15, 2015, and it has a face value of \$1.425 billion. The largest issue in the LQD, a Wells Fargo 5.625% due December 11, 2017, has a face value of \$3 billion. That Wells Fargo bond would rank as the 448<sup>th</sup> largest stock in the S&P 500 at the time of this writing.

#### The LOD

The number of shares outstanding for the LQD jumped after the depth of the financial crisis in October 2008. We can see as well in Chart 2 how the iBOXX and Merrill Lynch index returns converged after the mid-September 2008 bankruptcy of Lehman Brothers. However, the two indices were linked closely before the July 2002 introduction of the LQD. As a result, the two regressions were similar with 93.8% confidence. We can, therefore, reject the notion the flow of funds into the LQD changed the iBOXX investment-grade index' relationship with the Merrill Lynch Arated index.

Chart 2: Comparing The iBOXX IG And ML A-Rated Indices



### The HYG

The answer is different for the high-yield case. The number of shares outstanding for the HYG has increased rapidly since its April 2007, with much of the increase coming after the September-October 2008 financial crisis. Prior to that crisis, the relationship between the iBOXX and Merrill Lynch high-yield indices was weak, but as we can see in Chart 3, it tightened both visibly and statistically since October 2008. The two regressions are different at virtual 100% confidence.



Chart 3: Comparing The iBOXX HY And ML High-Yield Indices

We must emphasize this does not prove the flow of funds into the HYG caused the convergence; it is, however, consistent with the hypothesis. Does this mean the massive decline in high-yield option-adjusted spreads to Treasury bonds seen between December 2008 and November 2009 was produced by the flow of funds? Here again, not necessarily; we were in a financial panic at the end of 2008, and panics cannot last forever.

But we should be aware the strong returns in the HYG over this period, more than 30%, have the potential to attract funds into a thin market, and this is how bubbles are created. What, then, is the solution? The best answer is the

toughest answer, and that is liquidating existing holdings into strength. You do not have to be out of a bubble at its peak to avoid the inevitable calamity; all you should hope to do is reduce your holdings down to an appropriate allocation for your portfolio. This will vary with your age, income, wealth level and risk preference, but in the case of high-yield bonds is unlikely to exceed 5-10%.