Silver and the Margin of Safety

Does anyone want to live through a repeat of the 2008 financial crash? Of course not. One of the major lessons learned – relearned, actually – was the futures exchanges’ tradition of setting performance bonds (initial and maintenance margins) worked. Unlike the over-the-counter markets where positions and therefore risks could be unknown and much larger than anyone expected, positions in the futures markets were known and both the long and the short positions had to post the appropriate amount of risk-based capital to maintain their trading positions.

You read about the government bailing out large financial institutions such as Bear Stearns and AIG and you lived through the consequences of the government not bailing out Lehman Brothers. You have paid for these directly through programs such as TARP and indirectly through the Great Recession and all of its consequences. Had these institutions been required to demonstrate their willingness and ability to pay for the risks of their positions in volatile markets such as mortgage derivatives by posting performance bonds, they might not have had what proved to be unsustainable risk levels and the rest would not have been history.

Is there any wonder the Dodd-Frank legislation of 2010 advocated placing as many markets as possible into organized and centrally cleared derivatives exchanges?

WHO SETS MARGINS AND WHY?

Unlike the case in stocks where the term “margin” refers to a down payment on an asset owned and the margins are established by the Federal Reserve under its Regulation T, the term “margin” in the futures industry refers to performance bonds posted by both the long and the short position that they can meet their obligation to take or make delivery of the underlying asset or its cash equivalent. For completeness, short-sales in stocks have their own margins.

Both the long and short positions in a futures contract have to keep the equity in their accounts at a maintenance level. This is done for everyone’s protection: The trader has to think about risk assumed if and when additional funds are required, the clearing firm has to think about the customer’s risk and how it affects their obligation and the exchange clearinghouse has to think about the ability of its clearing members to meet their obligations.

While Regulation T and various strategy-based margins remain and have remained fixed irrespective of risk, futures performance bonds rise and fall in direct response to risk. As the dollar value of risk rises or falls, margins rise or fall in response. Margin changes after the dollar value of risk changes, not before, and is essentially a function of two variables, the value of the underlying asset and its actual volatility.

Let’s take a look at the silver market from Federal Reserve chairman Ben Bernanke’s speech hinting at another round of quantitative easing from August 27, 2010 through May 5, 2011. The dollar value of a one standard deviation move in silver is calculated as \[\text{price} \times $5,000/\text{contract} \times 21\text{-day standard deviation}\]. The first in a series of margin increases is noted with a heavy red column. The dollar risk already had been increasing rapidly for two weeks prior to this increase, as highlighted by the green line and the price of silver had increased almost 20% over this very short period of time.

Anyone who had been short silver over this period was at increasing dollar risk and therefore presented an increased risk to all members of the clearing system. This category included: silver miners hedging their production, traders of the differently margined gold-silver spread, hedge funds trading silver against mining stocks and individual traders. Higher margins achieve two objectives: They lower systemic risk levels and force those on the wrong side of the price move to think, “Should I be doing something differently?”
Incredibly, many outside observers interpret an increase in margins not as a protective device for all parties involved but rather as a way to force a price reversal by “making silver more expensive to trade.” Anyone who was long “making silver more expensive to trade.” Anyone who was long silver over this recent rally, whereby the price more than doubled since September 2010, had a great deal of open equity in their position. Whether this open equity was sufficient to meet the higher margins all by itself depended on the individual position.

The real effect may have come from those who were short and on the wrong side of the market. Not only had they been meeting margin calls at the lower rates, they now had to confront an even higher cost to maintain their positions. The prospect of a last burst of short-covering leading to a final “blow-off top” may have encouraged the long positions to sell.

Finally, there is a story you will not hear, and it is the same one you have never heard. This is the story of clearing firms or of the CME Clearinghouse in particular, defaulting on their obligations and creating a big mess due to massive and unexpected losses from silver traders. Traders on the wrong side of the market had to support their positions each and every day at the appropriate risk-based level or take their finite losses. They may have lost but the system did not. It proved its mettle during extreme volatility once again and as a result, there will be an exchange-traded silver market for as long as people want to trade silver.