

VOLATILITY AND BANK SAFETY

by [Steve Brown](#)

Volatility is the measure of the state of instability. In finance, it is often used to measure the dispersion of returns for any given instrument, be it agency bonds, construction loans or checking accounts. The more prices jump around, the more volatile an instrument is. This week marks the first time since Aug. 29th, that bank volatility measures (we track the volatility for Libor, swaps, mortgage backed securities, municipal bonds, agency bonds and bank stocks and roll it into an index) have started to settle down to something closer to their long-term average. Consider that normally our Bank Volatility Index ("BVI") averages around 19, it was in the 70's for most of the Oct. and is now down to 42.

The important implication of high volatility relates to the much derided "value at risk" models ("VAR") that measure the risks attached to liabilities, loans, investments, bank hedging and bank safety. When we discuss the safety of a particular bank, we model their assets and liabilities (we can do this down to the instrument level), apply both credit and interest rate stress and see what the consolidated value does. The more negative movement a bank has, the higher probability that they will have a liquidity event at the same time, thereby resulting in failure.

During 2005, for example, our volatility was below 15 and bank values were rock solid. This created an impression that it was safe for banks to extend massive volumes of credit. Investment portfolios shrank, underwriting standards dropped and loan volumes increased. When we ran a value at risk evaluation on a bank, rarely did they violate their capital levels. This gave the impression to all that banks had risk well in hand. Back then, we wrote a series of articles warning bankers that volatility was going to revert to its mean (back to the 19 to 25 range) and banks should have increased their balance sheet diversification.

Once you move volatility from 19 to 70, it is a whole new ballgame. For example, for the month of Oct. because of the structure of the balance sheet, thousands of banks (and even more credit unions we surmise) were technically insolvent for most of the month. Critics argue that we collectively arrived at this problem because we derived too much comfort from risk models. While partially true, that attitude misses the point and leads to an even faultier conclusion - that models are worthless. The exact opposite is true. Volatility is a geometric progression and the higher it gets, the more inaccurate predictions become. Many risk models, like ours, were built around asset price swings between 5 and 40 volatility. Once volatility rose above 30, accuracy decreased precipitously. While undoubtedly risk models could have been more accurate, it is difficult to model an environment that you have never seen before, let alone make sure your assumptions are moved to an area that the world has never experienced. Had we moved volatility to the 50 range and started signaling that banks were on the verge of insolvency back at the end of 2005, we would have been quickly labeled "wing nuts." In other words, models could have been perfectly accurate and it wouldn't have made a difference.

Now, given updated levels of asset price volatility and re-calibration of analytics, models will become more accurate. After seeing first hand of how markets can dislocate, we are all believers, at least for the moment. It would be a mistake to discount risk modeling at this point. In fact, with greater

accuracy, risk modeling will be even more important going forward. The more important question is - are you ready to believe them?

TARP CAPITAL PURCHASE PROGRAM MODEL

For banks interested, we have updated our TARP cost of capital model and offer it free to community banks. The model allows for dividends, the expensing of option costs (utilizing 2 methods) and ROE/EPS simulation. To receive the model click: <http://www.zoomerang.com/Survey/?p=WEB228FXDCG43W>

BANK NEWS

Reserve Interest

The Fed announced that it will move the rate of interest that it pays on excess reserve balances from the lowest target rate less 35bp to the lowest target rate flat. The higher rate takes effect starting today and will narrow the "corridor" in which Fed Funds trade. The bad news is that the move has served to dry up liquidity in the market, as many banks choose to leave monies with the Fed.

European Rates

The Bank of England cut its key rate by 1.5% to 3.0%, the lowest level since 1955. The ECB followed and reduced its reference rate by 50bps to 3.25%.

Gaining Ground

Only 36% of small business owners are entirely satisfied with their large bank compared to almost 50% of those who use a community bank. About 1/3 of small businesses now designate a community bank as their primary financial relationship.

Drowning?

According to a recent FRB study, based a review of previous housing downturns, loans that exceed a property's value, as a single factor, doesn't necessarily lead to default unless coupled with the borrowers inability to make payments.

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