

Lower Interest Rates Help But What Else Can the Fed Do?

By David Patterson

THE MARKETS HAVE LEFT THE FED BEHIND

Much has been said over the past few weeks about how financial innovation led to the current credit crisis. Another interpretation of the recent events is that the central banking framework has lacked the flexibility to match the pace of the creation of new instruments. The market has changed and the Fed and other central banks should pursue new forms of intervention that can influence the new reality of off-balance sheet markets, just as it does with on-balance sheet markets.

One of the central changes in markets of the past fifteen years has been the shift in the role of banks from lenders to originators of loans. There were good reasons behind such a shift, not least of which was the need to reinforce bank solvency and profitability. As regulators moved towards risk-based capital requirements, banks had every motivation to try and remove risk from their balance sheets. But there were unintended consequences in this new regulatory model and we are currently living them.

The result of this shift is that well over half of the markets for mortgages, credit cards, car loans and personal lines of credit and a large portion of corporate loans have moved from bank balance sheets to various forms of securitizations. Until recently, this massive new section of the market has functioned smoothly and economically. But with the recent turmoil, lenders no longer have the capital capacity even to operate the temporary warehouses needed to continue many of these markets.

Most importantly, there has ceased to be any end-buyers for the systematic risk that is behind these markets. In these new markets the risk of individual securities tends to be sold separately from the risk of the market or system as a whole. And both risks must be sold for the market to clear. Without a home for the system-wide risk no originator can operate because that system risk would pile up on its own balance sheet.

Currently the Fed has no tool to operate in these markets but before suggesting a new role for the Fed it is crucial to delve into the world of securitizations and correlation trading to grasp just how stressed the market for systematic risk has become.

NEW INSTRUMENTS IN THE CREDIT MARKETS HAVE CHANGED THE GAME

Loans to corporations used to be mainly a business dominated by the banks. But the method of making loans to corporations has shifted dramatically over the last 15-years. Now, when a bank makes a loan, it is likely to simultaneously buy a credit default swap (CDS) to protect it from the borrower defaulting on the loan. It thereby removes the credit risk from the bank's balance sheet. The credit default swaps are packaged up in portfolios and then the portfolio risk is sold to various players with different risk appetites. Something similar happens with the corporate bond market. Credit default swaps are written on the bonds so that bond portfolios can be tailored to meet the specific risk/return needs of various investors.

For instance, a portfolio with 100 different investment grade corporate names might be packaged and then sold in pieces. The first three percent of the losses on such a portfolio might be taken by a hedge fund in return for earning a 20% return on the money invested. And then, the losses ranging from 3% to 7% might be taken by another aggressive investor, with the losses from 7% to 10% taken maybe by an insurance company earning an extra spread. All this progresses until the losses from 0% to 100% are assigned to a buyer. Naturally the so-called 'super senior tranche,' which takes all the losses from 30% to 100%, is the largest but it has only miniscule risk. These possible losses are measured after recovery, so a 30% loss would imply 60% of the borrowers have gone bankrupt (if the recovery rate is 50%), which is highly unlikely. That is comparable to 300 of the S&P 500 defaulting on their debt.

This breaking up of credit into tranches, aside for allowing a better match between investors' risk and reward tolerance, also opens an important, new door. Correlation can now be added as a parameter and it can be traded as fluidly as market direction and market volatility.

Imagine a foot soldier having to cross a field with 10 landmines hidden in it. He would prefer to have all the landmines in a line because if he walks across the field he might miss the line. However, a soldier crossing the field in a tank might rather have the mines dispersed because his tank may be able to sustain a few hits but not repeated hits. The foot soldier is long correlation and the tank driver is short correlation. Now the foot soldier is like the hedge fund manager mentioned above, who is taking the risk of the first losses in the credit portfolio. The super senior buyer only takes losses if many of the borrowers go bankrupt so he is like the driver of the tank.

In the credit markets, the super senior buyer is the 'lender of last resort.' But it is exactly this buyer who has disappeared, and that is calamitous. No one is willing to cross the field in a tank although there are investors still willing to cross on foot. The lingering fear is for a system-wide meltdown. Unfortunately, unless there are buyers of both kinds of risk, the market will not function. In the current market, the price of 'foot soldier risk' has gone up a little. However, the market's view of the system risk has gone up ten-fold. The main reason is that no investor is big or strong enough to convince the market that they can sustain the losses of the system as a whole. This is exactly what would happen if there were no deposit insurance and no lender of last resort to the banks. Banks would be immediately in doubt and would collapse in depositor runs.

To see how extreme the move in the system risk price is look at the CDX.IG.9 30-100% tranche for 7 years. The CDX.IG.9 is an on-the-run index of 125 investment grade bonds. The comparable on-the-run index traded as low as 2 to 3 basis points in 2006 and the first half of 2007. In November this traded out to 26 basis points and now in the last two weeks has moved out to 32 basis points.

THE FED SHOULD BE LENDER OF LAST RESORT IN THESE NEW MARKETS

Central Banks have traditionally served the function of regulating the creation of money and acting as the lender of last resort. Money is mainly created in our economies through the act of borrowing and lending. When a loan is created by a bank it takes money in deposit accounts and lends it out to borrowers. When the money gets re-deposited it can be lent again, increasing the money supply. The Fed mechanisms control the on-balance sheet creation of money but not the off-balance sheet money creation. So credit greatly expanded over the last few years and overshot the system's ability to absorb it. And now credit is collapsing in the off-balance sheet markets with no effective response from the Fed.

To reduce the current pressure on markets the Fed should extend its range to include securitizations. If the Fed expanded its open market activities to include periodic bids for the super senior pieces of credit structures it could assist the survival of the system without bailing out participants at uneconomic prices. In fact, such activity could be highly profitable to the Fed at the current market levels. By taking the risk of total market meltdown the Fed would be instilling confidence in the market. It would thereby allow other market participants to continue to extend credit to individual borrowers.

Central banks often use targets. One of the targets that should be uppermost in their minds is the price of the 30% to 100% tranche of the investment grade bond structure. This is the price the market is putting on the failure of the system - the failure of the Fed. The move from 2 to 3 basis points to 32 basis points expresses the market's view.

There is one more reason for the central banks to take this risk: they already have it. If 50% or more of the investment grade corporates in Europe and America default on their bonds the central banks will have multiple bank failures to deal with. So although other market participants are collecting a huge fee for taking this risk (usually on a 10 times levered basis) it is really the central banks that will be left to guarantee the buyers of the protection. The current writers of the risk would not be solvent if markets get bad enough for there to be a claim. So the central banks might as well get paid for a risk that is theirs anyway.

It is not too late for the Fed and other central banks to correct the current securitization impasse. They need simply to bring a degree of confidence to market participants that the whole market system will not melt down. They can do this directly by bidding for the super senior tranche of structures of investment grade securities.

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