

Market Crisis Update

JOSEPH R. MASON†

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Since the subprime mortgage sector began deteriorating almost two years ago, many market analysts have been striving to understand the context of the market and the dynamics of the crisis. Specializing in financial crises and having tracked the structured finance industry for over a decade, the dynamics are not hard to ascertain, nor are they unique. Nonetheless, there remains considerable confusion and uncertainty about the dynamics among investors and decision makers. The present piece is therefore meant to update investors and decision makers with regard to recent market disruptions and provide a compass to the most likely future scenarios.

WHERE LOSSES HAVE SHOWN UP SO FAR

The present market conditions arise from a simple application of asymmetric information. Financial crises, present company included, generally arise from overextending new, albeit poorly understood, financial products. In that way, financial crises are part and parcel of financial innovation. But understanding financial crises therefore involves an epistemological problem: crises happen in opaque financial sectors that are not being monitored, so there is little data available to study the contribution of the sector to the crisis. If investors and regulators had the benefit of transparency, there often would have been no crisis.

† Associate Professor of Finance and LeBow Research Fellow, Drexel University LeBow College of Business, Senior Fellow at the Wharton School, and Visiting Scholar, Federal Deposit Insurance Corporation.

The Loan Funding Pipeline

While investors and decision makers still do not know the value of the securities involved or where un- or mis-valued securities are held, they can still make inferences about market dynamics by understanding the relationships among what has happened so far. Figure 1 outlines the basic line of financing for consumer mortgages. While Figure 1 specifically outlines the process for US non-agency (private subprime, alt-A, and jumbo mortgages), it generalizes to agency funding dynamics and international applications.

Figure 1: Loan Funding in a World of Securitization and Re-securitization

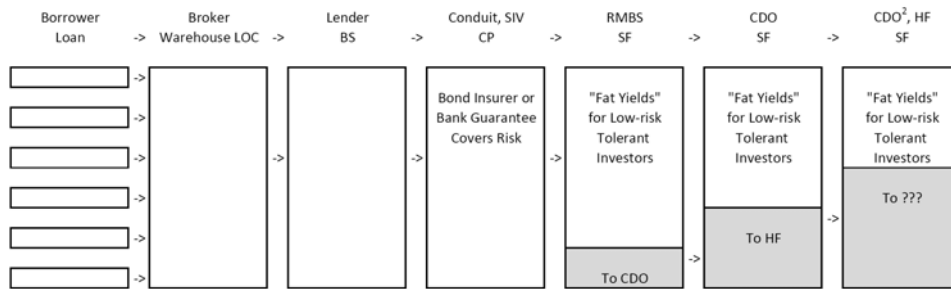


Figure 1 shows that mortgage loans are initially funded by warehouse lines of credit at the brokers for about 90 days, then held (briefly) on the lenders' balance sheets before they are funded via asset-backed commercial paper conduits or structured investment vehicles (SIVs) during a seasoning period that may range from another 90 to 180 days.

After the loans are seasoned and show some degree of statistical predictability of performance, they can be sold to an unrelated entity (a brain-dead bankruptcy remote trust) and securitized, wherein they are funded by a structure of equity and risky and less risky debt with an average 5 year maturity. The less-risky securitization debt is typically rated investment grade and therefore relatively easy to sell. The risky debt and equity of the initial securitization, however, is much more difficult to sell. The solution to the problem of selling the risky debt and equity in recent markets has been to re-securitize them. That has been accomplished in recent years using CDOs that, again, are funded by a structure of equity and risky and less risky debt with an average 10-20 year maturity, albeit with more risky debt and equity in the mix to reflect the increased overall risk of the underlying pool. Of course, that solution only perpetuates the problem, as the risky debt and equity of the CDO needs to be placed, subsequently. Hence, CDOs-squared and Hedge Funds have evolved to fill the market niche, funding the higher-risk portions of securitizations for 30-40 years or more.

The recent crisis arose out of loosened underwriting standards in an opaque market and was transmitted through the array of financial instruments used to fund the loans through securitization and re-securitization. Hence, we initially saw problems at the brokers and the erosion of warehouse lines of credit. Then, problems began to manifest in securitizations, hitting CDOs and hedge funds as investors there realized they held first-loss exposure to the difficulties in the

securitizations. Once securitizations slowed, lenders had little choice but to accumulate loan production in the commercial paper conduits and on-balance sheet, sources that already held high-risk late-2006 and 2007 vintage production. Hence, we now see rates rising as commercial paper conduits and SIVs become squeezed between funding capacity and the realization of the risk of the loans already funded by similar means.

Lenders cannot Delay the Inevitable

Now we are witnessing lenders struggling to fund loan production by any means necessary. Non-bank lenders like New Century already went by the wayside. Narrow bank lenders like Countrywide and WaMu do not have the money center capacity to further diversify their funding and are therefore currently under stress. Commercial banks like B of A are using any means necessary to draw funds, including bailing out their broker-dealers to keep the paper in investor hands.¹ There will undoubtedly be more market histrionics to come as lenders continue to try to cover up their weaknesses. The problem, however, is the continued cover-up itself.

No Stable Investor Base for Distilled Risk

According to Figure 1, the root cause of the present market problems has been the lack of a stable investment base for the risky debt and equity created in securitizations. The revelation is nothing new in the development of securitization. In fact, over the past 30 years of market development, placing the risky debt and equity created in the process of securitization has been the biggest challenge to the industry and has created many market difficulties. Securitization and re-securitization of the equity and risky debt worked as long as markets continued rising into 2007. Once markets fell and losses began to accrue, the strategy lost its allure.

Similar dynamics are playing out on a smaller scale in the alt-A and jumbo mortgage, commercial mortgage, and leveraged loan sectors, though none of those sectors share the economic scale and social importance of subprime mortgage funding, which lends to disadvantaged consumers. Nonetheless, those sectors are experiencing sharp reductions in market funding, which is hurting home sales across the industry and paralyzing many leveraged buy-out transactions on Wall Street.

¹ On August 20th the Fed granted a waiver to B of A by exempting it from The Fed's Regulation W. That waiver will allow the B of A to extend up to \$25 billion of additional credit to its broker-dealer affiliate. The restrictions of Reg. W were and are designed to protect a bank from losses that may occur in a broker affiliate. The Fed imposed collateral restrictions and policing mechanisms on B of A. It also required that the B of A holding company subordinate its interest to the bank itself. This rule applies whether or not the Fed actually extends any Discount Window loan to B of A. The Fed gave a similar waiver request approval to Citibank and Chase. Even a bankruptcy cannot supersede the Fed's claim. Obviously the Fed has taken every administrative step it can to protect the bank's capital from loss. (David Kotok, "Bernanke's Fed has changed the rules and the tools," September 8, 2007.)

None of the dynamics presented here are new, however. The manufactured housing and aircraft lease, and mutual fund 403-b fee sectors all attempted to approach the problem in a similar fashion in the late 1990s. All experienced a dramatic reduction in funding once problems manifested themselves in the early 2000s. None of the sectors are prominent today.

Note, however, that some subprime sectors outside mortgages are not currently sharing the difficulties. In particular, credit cards and automobiles have long lent to subprime consumers, but learned long ago to structure their securitizations in such a manner that does not create the funding risks now facing the mortgage industry. First, both sectors securitize with far simpler structures than mortgages, using only a few tranches and virtually no sophisticated strips, PACs, and PIK-able instruments. Second, both are very conservative in setting tranche cutoffs, although it has long been recognized that different quality issuers may have AAA tranche compositions that vary by as much as 10% or more. Last, credit cards in particular fundamentally restructured their securitization vehicles to an issuance trust paradigm following the lessons learned in the 1998 Russian crisis. In doing so, they de-linked the risky and less-risky debt so that they could better assure continued market liquidity in the event of a temporary market disruption. The lesson here is that subprime loans need simple transparent structures so that the idiosyncrasies arising from the riskier loans can be accounted for by investors. The sectors are still sensitive to fundamental decline, but transparent funding mechanisms have, so far, insulated the sectors from funding deficiencies that can cause disintermediation and the concomitant feedback that perpetuates cyclical economic declines.

HOW MIGHT U.S. AUTHORITIES REACT?

Authorities rarely respond to crises in any meaningfully constructive way. I anticipate this crisis will be no different. One of the biggest risks, however, is that authorities impose significant restrictions on the markets and that those restrictions take generations to erode. Such a move would place a significant tax on the financial system and the economy for years to come.

Authorities have Overlooked the Developing Structured Finance Market for Decades

U.S. authorities already have a track record of generally ignoring the structured finance sector. While technically violating FAS140, During the early- and mid-1990s, regulators routinely looked the other way while lenders provided recourse to their securitizations.² In some cases, regulators did so explicitly for the purpose of providing forbearance, reasoning that the bank would be rendered critically undercapitalized if recourse was disallowed. Nonetheless, such actions provided little incentive for issuers to be more conservative about the legal and financial structures that defined risk in the arrangements.

Similarly, authorities consistently ignored repeated crises that arose from inadequate legal or financial structures. Funding crises arising in credit cards

² For examples from credit cards, see Eric Higgins and Joseph Mason. "What is the Value of Recourse to Asset Backed Securities? A Study of Credit Card Bank ABS Rescues." *Journal of Banking and Finance*, April 2004 (28:4), pp. 857-874.

(1998), home equity lending (1999), and other receivables like aircraft leases and 403-b mutual fund fees (2001) were deemed too small to be of concern. The US Securities and Exchange Commission examined RMBS markets four times between 1998 and 2007, each time claiming no significant concerns with transparency. Authorities have therefore been consistently reluctant to examine market dynamics at incipient stages of development to infer larger-scale risks, which has turned out to have been a fatal oversight.

In Theory, Existing Regulation Covers the Problems

SEC Regulation AB and Sarbanes-Oxley both specifically address transparency in non-bank loan underwriting, servicing, and securitization. Unfortunately, neither has been effectively pursued in a manner that can provide adequate transparency.

Section 404 of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley") requires the management of publicly-owned companies to assess the effectiveness of internal controls over financial reporting. Because of the increased focus on maintaining strong internal controls, Sarbanes-Oxley should have had a meaningful impact on servicing stability, both for publicly-owned servicers as well private servicers that voluntarily take similar steps.

Nonetheless, one of the key problems that led to the current difficulties has been servicers' use of loan modification and re-aging policies to mask the true condition of subprime loans as they deteriorated. Servicers used aggressive (and largely unreported) loan modifications to avoid classifying loans in default status even though the payment plan typically resulted in lower periodic loan yield and modified loans typically post a 35% - 40% re-default rate and higher re-default loss rate than non-modified loans.³ When loans went in to default, servicers again used modification to restore payments in conjunction with aggressive (and, outside banks, largely unreported) re-aging policies to restore the loans from default to current status.⁴ Nonetheless, authorities are seeking to *increase* modification, with no accompanying reporting requirements to modification or re-aging, as a policy fix for subprime borrowers.

The Securities and Exchange Commission introduced Regulation AB in 2004, which includes enhanced reporting requirements for RMBS issuers. Regulation AB was supposed to require collateral-level performance reports for RMBS, but allowed issuers to choose how to make those reports publicly available. As a result, most collateral reports are made to one company, FirstAmerican Loan Performance, who refuses to sell the data to academics or other researchers off Wall Street, even at the exorbitant price charged for the product.

Market is Now "Too-big-to-fail"

Lack of attention from the authorities led the market to fund approximately 70% of consumer credit before authorities began to learn the mechanics of

³ Fitch, "U.S. RMBS Servicer Workshop, May 18, 2007.

⁴ See Federal Register / Vol. 65, No. 113 / Monday, June 12, 2000 / Notices, pp. 36905-6, for the outcome.

structured funding. Hence, authorities have a great deal of catching-up to do before any hope of imposing meaningful constructive guidelines.

Furthermore, securitization functions most economically on a large-scale basis, providing a means of rapid growth for securitizing firms. Hence, it is very difficult, if not impossible, for lenders to curtail issuance without facing severe financial distress or, most likely, failure. If outside factors, like restrictions on securitizations (imposed from authorities or the investing public) result in a market slowdown, many issuers are not likely to survive. Given that securitizing lenders cannot shrink without severe distress or failure, industry participants who have grown primarily on the basis of securitization are promoting themselves as effectively “too-big-to-fail.”⁵

IMPLICATIONS FOR MARKETS, INVESTORS, AND BANKS

The Biggest Risk...

Probably the biggest risk facing markets today is the Federal Reserve Fed funds target rate cut on September 18. The cut to the Fed funds rate helped preserve the status quo, leading markets, investors, and banks to the conclusion that no serious structural deficiencies require changes to current practices. Josef Ackerman, CEO of Deutsche Bank, advocated that position when he called for greater transparency for investment banks and other involved in structured products.⁶ As Ackermann noted, fundamental changes are necessary to meaningfully alleviate the current crisis and lead to long-term funding stability for the consumer sector.

As pointed out previously, structured products now fund approximately 70% of consumer credit. Continuing to expand the role of structured products without addressing fundamental problems relating to reporting, structuring, and investor use of structured products will only set the stage for a much deeper crisis in the future.

Look for Market Opportunities

That said, prudent banks and nonbank lenders can insulate themselves from the crisis and its aftermath (whether a less risky or more risky environment) by taking Ackermann’s advice. After all, firms do not need regulators to tell them what transparency and adequate reporting is – firms can provide that, themselves. Consistent underwriting and quality servicing have always been the core of sound bank strategy. Going forward, a focus on improving deal structures to better weather the effects of temporary liquidity crises along with conservative structuring (like credit card and auto trusts) will help banks not only weather the current crisis, but also help them build a stable basis of issuance into the future.

To be aware of the current crisis is to see not only the risks, but also the opportunities, that have been exposed. Even Moody’s, under tremendous

⁵ See, for instance, recent pronouncements from George Miller on behalf of the American Securitization Forum, and industry group (including the ratings agencies) advocating various lender and underwriter positions on issues relating to the crisis.

⁶ “Deutsche Bank CEO urges investment banks to come clean on credit crisis losses,” *Financial Times*, September 6, 2007.

pressure as a result of the crisis, is taking advantage of the situation to expand its product offerings and improve its business enterprise with the announcement of two new initiatives next year to help investors better understand debt markets. Moody's plans to introduce tools that will help investors put a price on various forms of debt, even as American and European regulators examine the role credit ratings agencies played in the sub-prime mortgage meltdown and resulting credit crunch.⁷

⁷ Toronto Globe and Mail Streetwise Blog, September 11, 2007