THE JOURNAL OF STRUCTURED FINANCE
VOL. XIII, NO. 2, SUMMER 2007

Subprime Mortgage Meltdown: How did it Happen and How will it End?

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BACKGROUND

In recent months, there have been almost daily reports on the looming economic crisis that may result from widespread delinquencies in subprime mortgage loans – loans with higher interest rates and fees that are made to borrowers with impaired or limited credit histories, or to first time borrowers. After all the sound and fury, two questions remain: "How did this happen?" and "How will this end?"

The fascination with the subprime mortgage meltdown is partly due to the sheer size of the market and partly to the speed with which the market has grown. Prior to 2005, subprime mortgage loans accounted for approximately 10% of outstanding mortgage loans.[i] By 2006, subprime mortgages represented 13% of all outstanding mortgage loans, with originations of subprime mortgage loans by year-end 2006 totaling approximately $650 billion and representing 20% of new residential mortgage loans (compared to the historical average of approximately 8% of new residential mortgage loans).[ii]

This article examines the rapid growth of the subprime mortgage loan market, the recent sharp increases in subprime mortgage loan delinquencies and foreclosure actions, the potential impact of these delinquencies for the subprime lending industry and the secondary market for such loans, and possible regulatory and governmental responses to the situation.

WHY THE SUBPRIME MARKET PROSPERED

The growth of the subprime mortgage market can be attributed to a number of factors. Borrower-friendly underwriting criteria (discussed in greater detail, below) certainly played a major part, as did the generally favorable conditions for the residential housing market that prevailed from 2002 to 2005. Interest rates were low by historical standards, home prices were rising in most markets,[iii] and delinquency rates on subprime loans were at historically low levels throughout almost all of 2004 and 2005. During this period, home price appreciation gave borrowers an equity cushion, so that subprime borrowers who experienced financial hardship could refinance their loans or pull equity out of their properties. As a result, there were only moderate or low losses on defaulted subprime loans, which may have masked potential problems in the subprime market by convincing lenders and investors that very few subprime loans would experience defaults or foreclosures.

Another factor was the increase in securitizations of subprime loans, typically as asset-backed securities (ABS) in which senior and subordinate classes of securities are paid in order of seniority and the remaining cash flow goes to a residual class. Many of the subordinate classes of subprime ABS were purchased by asset managers and put into new issues of collateralized debt obligations (CDOs). According to Standard & Poor's, in 2006 subprime ABS constituted slightly more than 70% of the collateral in rated mezzanine structured finance CDOs.[iv] The tremendous demand for these high yielding subprime ABS and CDOs consisting of subprime ABS generated vast amounts of liquidity and dramatically increased the volume of credit available to subprime borrowers. Finally, recent technological advances in mortgage lending, such as automated underwriting systems, have allowed originators to make rapid underwriting decisions based upon the credit scores and other available credit information of prospective borrowers.

It should be noted that although these developments fostered greater access to mortgage credit, contributing to near record levels of home ownership, they weakened the traditional long-term relationship between the borrower and the company that originated and serviced his mortgage loan. This relationship has now been divided among various parties, each of which benefits from its specialized role in the mortgage lending business, but each of which has different business interests and objectives. Even if the interests of these parties are not directly in conflict, this segmentation has complicated efforts to determine responsibility and to structure solutions when problems have arisen.

WHY THE SUBPRIME MARKET FELL

Overview

The weakening performance of subprime loans is attributed to many factors, including a steady increase in the risk characteristics of subprime loans during the past two years. During the refinancing boom from 2001 to 2003, interest rates fell, borrowing demand increased, mortgage lenders expanded their businesses, and new lenders entered the market. Incentive structures that tied lender revenue to the number of subprime loans closed made increasing origination volume the primary objective of some lenders. Subprime loans were originated and sold into the secondary market as long as lenders could record profits from the sale of such loans through whole loan sales or funding through securitizations. This growth in subprime mortgage lending may have resulted in tremendous overcapacity.

With the rise in interest rates and the downturn in the United States housing market during the past two years (discussed below), competition increased among mortgage lenders for the reduced pool of subprime borrowers who qualified for housing credit. At the same time, investor demand for subprime ABS with high yields remained strong. Heightened competition among lenders intent on maintaining or expanding origination volume in order to meet the continued demand for subprime ABS, may have contributed to loosened underwriting standards, which in turn resulted in the approval of borrowers who otherwise may not have qualified for mortgage loans.

The Housing Market Slowdown

The steady rise in U.S. home prices started to slow in 2006. The Office of Federal Housing Enterprise Oversight (OFHEO) reported that although home prices were 10% higher in the second quarter of 2006 than they were one year earlier, the rate of increase fell sharply in the second quarter of 2006 to only 1.2%, or an annualized rate of approximately 4.7%. Once the housing market slowed, the credit risk of the subprime mortgage market could no longer be masked by surging home prices. Subprime mortgage loans originated in 2006 are experiencing more delinquencies, defaults, and foreclosures than loans originated during the prior few years. The rate of serious delinquencies for subprime adjustable rate mortgages (ARMs) rose sharply towards the end of 2006. On March 13, 2007 the Mortgage Bankers Association reported that 13% of subprime borrowers were delinquent on their payments by 60 days or more.[v]

Relaxed Underwriting Standards

<u>*Risk Layering*</u>

The weaker performance of 2006 subprime mortgage loans may be due in large part to the increasing risk characteristics of subprime mortgages resulting from relaxed underwriting standards. In 2005 and 2006, lenders made it easier for borrowers to obtain subprime loans. For example, the typical subprime borrower with a credit score between 450 and 680 could obtain a loan with little or no downpayment, provide little or no documented proof of income or assets, obtain a loan with a low initial "teaser" interest rate that reset to a new, higher rate after two or three years, or obtain a loan with a term beyond 30 years with associated lower monthly payments. Subprime loans that were made with a combination of two or more of these characteristics, also known as "risk layering," became more common.

The increase in risk layering occurred in response to the challenge of maintaining the affordability of home purchases. Rapid home price appreciation in 2003 through 2005 made home buying less affordable for many purchasers. To address affordability issues and possibly in an effort to maintain or increase loan production, lenders developed and offered subprime mortgage loans that combined the lowest possible downpayments and monthly payments with relaxed underwriting standards. These products were generally made available by mortgage brokers and mortgage bankers who had direct contact with borrowers.

<u>*Hybrid Subprime ARMs*</u>

For the past two years, the most common subprime loans have been the 2/28 and 3/27 hybrid subprime ARMs. In general, these loans had a relatively low fixed teaser rate for the applicable two or three year initial period and then reset semiannually to an index plus a margin for the remaining term. A typical margin was between 400 and 600 basis points. In 2006, almost three-quarters of non-agency securitized subprime mortgage originations were ARMs, primarily 2/28 and 3/27 hybrid loans.[vi] Borrowers were qualified primarily at the introductory teaser rate rather than at the fully amortizing rate. These hybrid subprime ARMs offered borrowers the benefit of relatively low fixed initial teaser rates. When the fixed rate period and any applicable prepayment penalty period expired, borrowers were generally expected to be able to refinance their subprime ARMs into loans with lower payments.

<u>*Relaxed Documentation Requirements*</u>

Lender requirements on the income and asset information that borrowers were required to provide when loans were underwritten, and the method of lender verification of that information, also were relaxed in recent years. Until several years ago, the majority of borrowers, both prime and subprime, provided full documentation of their income and assets to lenders. In such full documentation or "full doc" loans, this information would be verified by lenders with the appropriate third parties. Low and no documentation loans typically were reserved for self-employed professional borrowers who did not want to, or could not, document information about their incomes. Low and no documentation loans also were designed to accommodate borrowers lacking long-term employment records because of frequent job changes. In recent years, however, low or no documentation loans were made available to persons with impaired credit histories and to first time borrowers.

<u>Stated Income Loans</u>

Stated income loans – loans that do not require borrowers to have their incomes verified – also became more widely available during this period. A stated income loan is underwritten based on the income level that the borrower gives in his or her loan application. Stated income borrowers often are permitted to provide limited documentation to support their income, or even no documentation at all. To compensate for the added lending risk, lenders typically charge stated income borrowers a slightly higher interest rate depending on the level of documentation. Stated income subprime loans have been referred to as "liar loans." These loans were often a misrepresentation of the subprime borrower's income. In some cases, the loans went beyond misrepresentation and were actually fraudulent. In the past two years, approximately 50% of all subprime borrowers are estimated to have provided limited documentation regarding their incomes.

<u>Low Downpayments</u>

Until recently, most borrowers were expected to make at least a 20% downpayment on the purchase price of their home and to finance the remaining amount of the purchase price. For borrowers that didn't have the financial means to make a 20% downpayment, lenders required private mortgage insurance. However, for the past two years, subprime borrowers were allowed to take out two mortgages on their homes. In addition to a first mortgage for 80% of the total purchase price, a simultaneous second mortgage or "piggyback" loan for the remaining 20% would be made to the borrower in the form of a home equity loan or a home equity line of credit. One popular loan option was the so-called "80/20" product in which a borrower financed 80% of the home price with a regular mortgage and the remaining 20% with a piggyback loan so that the borrower made no downpayment. The second mortgage would have a higher interest rate than the first mortgage. In many cases the first mortgage and the piggyback loan were made by different lenders. Piggyback loans allowed subprime borrowers to obtain 100% financing of their homes. In recent years, the percentage of purchase mortgage subprime first mortgage loans made with piggyback loans has been estimated to be as high as 50% in states that have had the greatest home price increases.

Early Payment Defaults

<u>Increase in Early Payment Defaults</u>

Prior to 2006, many loan sale agreements between subprime lenders (who originated the loans) and loan purchasers (who intended to package the loans into subprime ABS) permitted the lenders to sell the loans and the associated servicing rights with little or no recourse to the lenders, other than limited recourse in the form of standard representations and warranties about the loans. The credit risks associated with the subprime loans were largely passed along to the purchasers of the loans. However, in the midst of the weakening housing markets in 2006, many investment banks and other investors in subprime loans came to recognize the increasing risk characteristics of those loans and required lenders to assume the risk of default occurring within a few months of origination, referred to as an "early payment default." Although the criteria vary for what constitutes an early payment default, the criteria are generally understood as loans that become past due by two or more payments within the first three or four months after origination.

Until 2006, early payment defaults on mortgage loans, including subprime loans, were relatively uncommon. However, a pronounced rise in early payment defaults on recently originated subprime mortgages occurred in the final quarter of 2006 and the first quarter of 2007. The large increase in early payment defaults reflects the inadequacy of the underwriting standards for these products, especially those originated in 2006. Research by the rating agencies suggested that such defaults often involved a stated income or limited documentation loan for a first-time borrower, together with a piggyback loan.[vii]

These early payment defaults have generally not been triggered by payment increases associated with rate resets on subprime ARMs. In the case of subprime ARMs originated in 2005 and 2006, defaults triggered by payment increases associated with rate resets are not expected to occur until later in 2007 and 2008. According to a study by First American CoreLogic, the interest rates for an estimated 1.1 million subprime ARMs will reset in 2007 and an additional 882,000 subprime ARMs will reset in 2008.[viii] As a result, notwithstanding the problems with, and the attention focused on, the subprime mortgage market towards the end of 2006 and in the first half of 2007, a second major wave of subprime delinquencies and defaults caused by interest-rate resets may follow in the next two years.

Mandatory Repurchases of Subprime Loans

Under the terms of many recent loan sale agreements, investors have had the right to require loan sellers to repurchase early payment default loans. Forced repurchases of subprime loans following early payment defaults have increased significantly since the final quarter of 2006. Because the repurchases typically are at a discounted value due to the default status of the subprime loans, they generally have resulted in large losses for the loan sellers. Consequently, the lenders' have had to reverse their previous gains on the sale of the defaulted loans. In addition, the increase in early payment defaults also allowed warehouse lenders who provided financing to subprime loan originators to cut back or terminate their warehouse lines of credit. Many subprime loan originators were forced to sharply curtail their originations or negotiate warehouse credit lines on much less favorable terms.

Many specialty finance lenders have lacked the funding liquidity, capital, or earnings to meet their repurchase obligations. Loan sellers that have been unable to meet their loan repurchase obligations or have been unable to acquire alternative sources of warehousing financing have had limited options: forced loan sales, filing for bankruptcy, or liquidating their businesses. Since the end of 2006, over 30 subprime originators have filed for bankruptcy or gone out of business. In almost every case, the subprime originators that went out of business were specialty finance lenders and were not institutions with federally insured deposits.

IMPACT OF THE SUBPRIME MELTDOWN

The Market Reaction

The market reaction to the turmoil in subprime mortgages has taken many forms. Consolidation has accelerated in the U.S. subprime mortgage market as large financial institutions and investment banks have acquired subprime mortgage originators and servicers. Many subprime originators that were purchased by large financial institutions remain in operation, although some originators that survived the recent liquidity crunch have completely exited the business of lending to subprime borrowers.

The remaining subprime originators have significantly tightened their underwriting standards in the form of greater income, employment and asset verification, higher minimum credit scores, and the elimination of 100% financing. Lenders also are requiring more stringent appraisals and greater borrower equity in the properties. Purchasers of subprime loans are scrutinizing the loans more carefully. Freddie Mac has indicated it will cease buying subprime mortgages that do not qualify borrowers at the fully indexed, fully amortized rate. Subprime originations have dropped by 30% or more in the first quarter of 2007 compared to the same period last year. The number of new issues of subprime ABS has fallen in concert with the drop in originations. A surge of ratings downgrades is expected to occur for subprime ABS issued in 2005 and 2006. Although the supply of credit to the subprime mortgage market has been reduced, credit has not entirely disappeared. While the demand for subprime ABS by CDO asset managers has declined, purchases by investment banks and hedge funds have increased, although at greatly reduced prices.

Impact on Individual Borrowers

Subprime mortgage problems are expected to result in financial hardship for a growing number of individuals and families. Resets on subprime ARMs are resulting in higher monthly payments that strain or exceed the budgets of many subprime borrowers. Tighter lending standards, reduced credit availability, and the slumping U.S. housing market have hurt the ability of subprime borrowers with little home equity to refinance their loans. Only borrowers with excellent credit scores, employment histories, and substantial equity have been able to avoid the full impact of these developments. When defaults occur on subprime loans, the sale or foreclosure of the properties is more likely to result in losses because of the flattening or drop in home prices. In the case of owner-investors who had assumed that continued home price appreciation would allow them to purchase homes and resell them in the immediate future for significantly higher prices, once their loans have become delinquent, the slowdown and fall in home prices have left them with little or no equity, and many have had no option other than walking away from their properties.

Modifications of Defaulted Loans

For subprime mortgage loans that are either in default or in imminent default, loan modifications have been and will be an important tool to minimize losses to investors in subprime ABS and help subprime borrowers avoid foreclosure. Loan modifications may include changing the interest rate, forgiving principal, capitalizing arrearages, and extending the loan maturity date. Successful loan modifications allow borrowers facing temporary economic setbacks to work through their financial problems, and allow loan servicers to avoid the costs of foreclosure and the losses associated with selling foreclosed properties. Loan modifications are normally considered on a loan-by-loan basis, taking into account the unique circumstances of the loan and borrower. The primary challenge of modifying securitized subprime loans is striking the appropriate balance between the legitimate needs of the borrower and the best interests of the investors who purchased portions of the affected subprime ABS. Contractual provisions in subprime ABS pooling and servicing agreements typically do not limit modifications of defaulted loans so long as the modifications would result in the maximum recovery on a present-value basis.

REGULATORY AND LEGISLATIVE RESPONSES

Problems in the subprime mortgage market and the related hardship experienced by subprime mortgage borrowers have led to a complex mix of proposed solutions. In general, specific legislative and regulatory proposals have been preceded by numerous reports and hearings attempting to analyze and explain the reasons for the negative developments in the subprime mortgage market. Although market-based solutions may not be the complete solution to the current problems confronting the subprime mortgage market, regulatory and legislative responses also need to be carefully crafted to ensure that they do not overly restrict consumer access to mortgage credit on fair and appropriate terms.

Statement on Subprime Mortgage Lending

On March 2, 2007, the Federal Reserve Board and other federal bank and thrift regulators issued a proposed Statement on Subprime Mortgage Lending intended to address certain risks and emerging issues relating to subprime mortgage lending practices, including concerns that subprime borrowers do not fully understand the interest rate risks of subprime ARMs. The proposed guidance places special focus on loans involving repayment terms that exceed the borrower's ability to service the debt without refinancing or selling the property. The statement specifies that appropriate underwriting of a subprime ARM includes an evaluation of the borrower's ability to repay the loan by its final maturity at the fully indexed rate. The statement also underscores that communications with consumers should provide clear and balanced information about the relative benefits and risks of the products. The federal banking agencies are now reviewing the comments to the proposed statement, including supportive industry comments. On the other hand, industry comment also cautions against prohibiting certain loan product types, terms, or underwriting practices that would stifle innovation in the mortgage market, discourage lenders from offering credit to deserving borrowers, or decrease the availability of subprime mortgage loans.

Restructuring Loans

Federal banking regulators have also actively encouraged banks and thrift institutions to identify and contact subprime borrowers having trouble meeting their mortgage obligations before their loans become delinquent or enter foreclosure. To some extent, legal, accounting, and tax rules make successful workouts of these loans more difficult. The terms of pooling and servicing agreements for subprime ABS often restrict the percentage of loans that can be modified if the loans aren't defaulted or reasonably likely to default. Accounting rules in some cases may require substantially modified loans to be brought back on the originator's balance sheet. Rating agencies have expressed their view that extensive modifications that reallocate expected cash flows on subprime ABS could trigger reviews and downgrades of those securities.

Taking this approach one step further, federal and state legislation has also been proposed for across-the-board approaches to loan modifications that would require uniform modifications for all defaulted subprime loans. In at least one state, the governor has directed the commissioner of banks to seek delays from mortgage lenders, on a case-by-case basis, for any state homeowner who has filed a complaint with the division of banks.

Predatory and Abusive Practices

While federal and state regulators have expressed the need to avoid curtailing responsible lending or eliminating refinancing options for subprime borrowers, they also have made it clear that preventing fraudulent and abusive lending is an equally important goal.

Federal banking regulators are expected to require additional measures to combat improper lending practices determined to be predatory or abusive. For example, under the Home Ownership Equity Protection Act (HOEPA), the Federal Reserve Board (FRB) has broad rule making authority to prohibit mortgage lending practices that it finds to be unfair and deceptive. Violations of HOEPA subject loan originators not only to regulatory enforcement actions, but also to private lawsuits. The FRB is considering whether certain lending practices currently not covered by HOEPA are unfair or deceptive and should thus be prohibited. HOEPA as currently in effect serves as a minimum federal predatory lending standard. It sets a threshold for a certain class of high cost loans based on either an interest rate or a points and fees trigger. Additional disclosures and substantive protections are required for covered high cost loans. However, many states have enacted their own predatory lending laws because HOEPA is perceived by them to be inadequate at levels below or beyond its regulated threshold. The mortgage lending industry, on the other hand, has always found efforts to define predatory lending to be unreasonably subjective and problematic; consequently, mortgage lenders generally believe that any expansion of laws and regulations at both the federal and state levels that does not set objective standards for curbing predatory lending may inadvertently limit credit to subprime and other borrowers, and worsen the current housing market downturn.

Secondary Market Liability

Although HOEPA currently includes certain provisions covering "assignee liability" for purchasers and holders of mortgage backed securities on account of violations or misrepresentations that occurred at the time of origination of the underlying loans, proposed federal legislation would expand such liability. Over the years, certain states have attempted to enact their own versions of assignee liability for loans originated within their borders. The mortgage industry believes that expanded assignee liability for secondary market participants would likely have major consequences for the mortgage market, including a general contraction of available mortgage credit for subprime and other borrowers. To the extent that assignee liability legislation does progress and secondary market participants are subjected to increased assignee liability, a uniform national standard that replaces all current federal, state, and local laws would be preferable to the existing patchwork of state and local laws. The mortgage industry has lobbied for the inclusion in any new legislation of safe harbors, limited damages, and limits on class action lawsuits.

Regulatory Patchwork

In addition to all of the other causes of the subprime mortgage meltdown, the patchwork nature of enforcement authority regarding subprime mortgage lending poses a special challenge for regulators. Many of the rules issued by the federal banking regulators have no effect on non-bank lenders. These lenders have underwritten many of the subprime loans with the most problems. Proposals have been discussed to put non-bank, specialty finance lenders under direct supervision of the FRB or some other federal banking regulator in order to have a level playing field. Separately, rules issued by the FRB under HOEPA apply to all lenders but are enforced, depending on the lender, by one of five federal regulators of depository institutions or by state regulators.

Many mortgage bankers, both regulated and unregulated, have placed the blame for poorly underwritten subprime loans on mortgage brokers who originate most home mortgages and yet generally are not held to federal requirements with respect to their originations. Proposals have been made for the mandatory federal regulation of mortgage brokers who currently are unregulated.

CONCLUSION

Although a consensus has developed that underwriting standards for subprime mortgage loans need to be strengthened and that troubled borrowers facing foreclosure need assistance, there is no uniform view whether the best approach is to allow the mortgage industry to deal with these matters itself or to issue new federal laws and regulations to solve these problems. At a minimum, there is government and mortgage industry agreement that the current problems in the subprime mortgage market have resulted in a return to more prudent and proper underwriting standards for such loans. While this debate continues, the larger question may be whether the problems in the subprime mortgage market are now behind us or whether they will worsen in the next two years.

i. The Mortgage Bankers Association.

ii. Testimony of Sheila C. Bair, Chairman, Federal Deposit Insurance Corporation, on *"Possible Responses to Rising Mortgage Foreclosures"* delivered to the Committee on Financial Services, U.S. House of Representatives on April 17, 2007.

iii. The Office of Federal Housing Enterprise Oversight (OFHEO), which provides analysis of housing price appreciation trends by state and region, reported that home price appreciation was approximately 8% in 2003, 12% in 2004 and 13% in 2005.

iv. S&P Weighs In On The U.S. Subprime Mortgage Market, April 5, 2007, page 15.

v. Regional economic problems also are believed to have played a role in the recent rise in default and foreclosure rates of subprime loans. Some of the states with the highest default and foreclosure rates are among those most affected by job cuts in the auto industry.

vi. Testimony of Sheila C. Bair, Chairman, Federal Deposit Insurance Corporation, on *"Possible Responses to Rising Mortgage Foreclosures"* delivered to the Committee on Financial Services, U.S. House of Representatives on April 17, 2007.

vii. "S&P Weighs In On The U.S. Subprime Mortgage Market," April 5, 2007, page 12.

viii. Christopher L. Cagan, "Mortgage Payment Reset: The Issue and the Impact," *First American CoreLogic*, March 19, 2007.

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