

Ben S Bernanke: The subprime mortgage market

Remarks by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and Competition, Chicago, 17 May 2007.

* * *

The recent sharp increases in subprime mortgage loan delinquencies and in the number of homes entering foreclosure raise important economic, social, and regulatory issues. Today I will address a series of questions related to these developments. Why have delinquencies and initiations of foreclosure proceedings risen so sharply? How have subprime mortgage markets adjusted? How have Federal Reserve and other policymakers responded, and what additional actions might be considered? How might the problems in the market for subprime mortgages affect housing markets and the economy more broadly?

The development of the subprime mortgage market

Let me begin with some background. Subprime mortgages are loans made to borrowers who are perceived to have high credit risk, often because they lack a strong credit history or have other characteristics that are associated with high probabilities of default. Having emerged more than two decades ago, subprime mortgage lending began to expand in earnest in the mid-1990s, the expansion spurred in large part by innovations that reduced the costs for lenders of assessing and pricing risks. In particular, technological advances facilitated credit scoring by making it easier for lenders to collect and disseminate information on the creditworthiness of prospective borrowers. In addition, lenders developed new techniques for using this information to determine underwriting standards, set interest rates, and manage their risks.

The ongoing growth and development of the secondary mortgage market has reinforced the effect of these innovations. Whereas once most lenders held mortgages on their books until the loans were repaid, regulatory changes and other developments have permitted lenders to more easily sell mortgages to financial intermediaries, who in turn pool mortgages and sell the cash flows as structured securities. These securities typically offer various risk profiles and durations to meet the investment strategies of a wide range of investors. The growth of the secondary market has thus given mortgage lenders greater access to the capital markets, lowered transaction costs, and spread risk more broadly, thereby increasing the supply of mortgage credit to all types of households.

These factors laid the groundwork for an expansion of higher-risk mortgage lending over the past fifteen years or so. Growth in the market has not proceeded at a uniform pace, but on net it has been dramatic. About 7-1/2 million first-lien subprime mortgages are now outstanding, accounting for about 14 percent of all first-lien mortgages.¹ So-called near-prime loans – loans to borrowers who typically have higher credit scores than subprime borrowers but whose applications may have other higher-risk aspects – account for an additional 8 to 10 percent of mortgages.²

The expansion of subprime mortgage lending has made homeownership possible for households that in the past might not have qualified for a mortgage and has thereby contributed to the rise in the homeownership rate since the mid-1990s. In 2006, 69 percent of households owned their homes; in 1995, 65 percent did. The increase in homeownership has been broadly based, but minority households and households in lower-income census tracts have recorded some of the largest gains in percentage terms. Not only the new homeowners but also their communities have benefited from these trends. Studies point to various ways in which homeownership helps strengthen neighborhoods. For example, homeowners are more likely than renters to maintain their properties and to participate in civic organizations. Homeownership has also helped many families build wealth, and accumulated

¹ This estimate is based on data from the Mortgage Bankers Association, adjusted to reflect the limited coverage of the association's sample.

² Near-prime loans include those securitized in "alt-A" pools and similar loans that are held on lenders' books.

home equity may serve as a financial reserve that can be tapped as needed at a lower cost than most other forms of credit.

Broader access to mortgage credit is not without its downside, however. Not surprisingly, in light of their weaker credit histories and financial conditions, subprime borrowers face higher costs of borrowing than prime borrowers do and are more likely to default than prime borrowers are. For borrowers, the consequences of defaulting can be severe – possibly including foreclosure, the loss of accumulated home equity, and reduced access to credit. Their neighbors may suffer as well, as geographically concentrated foreclosures tend to reduce property values in the surrounding area.

The recent problems in the subprime mortgage sector

With this background in mind, I turn now to the recent problems in the subprime mortgage sector. In general, mortgage credit quality has been very solid in recent years. However, that statement is no longer true of subprime mortgages with adjustable interest rates, which currently account for about two-thirds of subprime first-lien mortgages or about 9 percent of all first-lien mortgages outstanding. For these mortgages, the rate of serious delinquencies – corresponding to mortgages in foreclosure or with payments ninety days or more overdue – rose sharply during 2006 and recently stood at about 11 percent, about double the recent low seen in mid-2005.³ The rate of serious delinquencies has also risen somewhat among some types of near-prime mortgages, although the rate in that category remains much lower than the rate in the subprime market. The rise in delinquencies has begun to show through to foreclosures. In the fourth quarter of 2006, about 310,000 foreclosure proceedings were initiated, whereas for the preceding two years the quarterly average was roughly 230,000.⁴ Subprime mortgages accounted for more than half of the foreclosures started in the fourth quarter.

The sharp rise in serious delinquencies among subprime adjustable-rate mortgages (ARMs) has multiple causes. "Seasoned" mortgages – mortgages that borrowers have paid on for several years – tend to have higher delinquency rates. That fact, together with the moderation in economic growth, would have been expected to produce some deterioration in credit quality from the exceptionally strong levels seen a few years ago. But other factors, too, have been at work. After rising at an annual rate of nearly 9 percent from 2000 through 2005, house prices have decelerated, even falling in some markets. At the same time, interest rates on both fixed- and adjustable-rate mortgage loans moved upward, reaching multi-year highs in mid-2006. Some subprime borrowers with ARMs, who may have counted on refinancing before their payments rose, may not have had enough home equity to qualify for a new loan given the sluggishness in house prices. In addition, some owners with little equity may have walked away from their properties, especially owner-investors who do not occupy the home and thus have little attachment to it beyond purely financial considerations. Regional economic problems have played a role as well; for example, some of the states with the highest delinquency and foreclosure rates are among those most hard-hit by job cuts in the auto industry.

The practices of some mortgage originators have also contributed to the problems in the subprime sector. As the underlying pace of mortgage originations began to slow, but with investor demand for securities with high yields still strong, some lenders evidently loosened underwriting standards. So-called risk-layering – combining weak borrower credit histories with other risk factors, such as incomplete income documentation or very high cumulative loan-to-value ratios – became more common. These looser standards were likely an important source of the pronounced rise in "early payment defaults" – defaults occurring within a few months of origination – among subprime ARMs, especially those originated in 2006.

Although the development of the secondary market has had great benefits for mortgage-market participants, as I noted earlier, in this episode the practice of selling mortgages to investors may have contributed to the weakening of underwriting standards. Depending on the terms of the sale, when an originator sells a loan and its servicing rights, the risks (including, of course, any risks associated with poor underwriting) are largely passed on to the investors rather than being borne primarily by the company that originated the loan. In addition, incentive structures that tied originator revenue to the

³ Estimates of delinquencies are based on data from First American LoanPerformance. The rate of serious delinquencies for variable-rate subprime mortgages also reached about 11 percent in late 2001 and early 2002.

⁴ Foreclosure starts are based on data from the Mortgage Bankers Association, adjusted to reflect the limited coverage of their sample.

number of loans closed made increasing loan volume, rather than ensuring quality, the objective of some lenders. Investors normally have the right to put early-payment-default loans back to the originator, and one might expect such provisions to exert some discipline on the underwriting process. However, in the most recent episode, some originators had little capital at stake and did not meet their buy-back obligations after the sharp rise in delinquencies.⁵ Intense competition for subprime mortgage business – in part the result of the excess capacity in the lending industry left over from the refinancing boom earlier in the decade – may also have led to a weakening of standards. In sum, some misalignment of incentives, together with a highly competitive lending environment and, perhaps, the fact that industry experience with subprime mortgage lending is relatively short, likely compromised the quality of underwriting.

The accuracy of much of the information on which the underwriting was based is also open to question. Mortgage applications with little documentation were vulnerable to misrepresentation or overestimation of repayment capacity by both lenders and borrowers, perhaps with the expectation that rising house prices would come to the rescue of otherwise unsound loans. Some borrowers may have been misled about the feasibility of paying back their mortgages, and others may simply have not understood the sometimes complex terms of the contracts they signed.

As the problems in the subprime mortgage market have become manifest, we have seen some signs of self-correction in the market. Investors are scrutinizing subprime loans more carefully and, in turn, lenders have tightened underwriting standards. Credit spreads on new subprime securitizations have risen, and the volume of mortgage-backed securities issued indicates that subprime originations have slowed. But although the supply of credit to this market has been reduced – and probably appropriately so – credit has by no means evaporated. For example, even as purchases of securitized subprime mortgages for collateralized debt obligations – an important source of demand – have declined, increased purchases by investment banks, hedge funds, and other private pools of capital are beginning to fill the void. Some subprime originators have gone out of business as their lenders have cancelled credit lines, but others have been purchased by large financial institutions and remain in operation. Importantly, we see no serious broader spillover to banks or thrift institutions from the problems in the subprime market; the troubled lenders, for the most part, have not been institutions with federally insured deposits.

What about borrowers already in distress? The Board and other federal supervisory agencies have [taken actions](#) to encourage the banks and thrift institutions we supervise to work with borrowers who may be having trouble meeting their mortgage obligations. Often, loan workouts are in the interest of both parties. With effective loan restructuring, borrowers facing temporary economic setbacks may be able to work through their problems while staying in their homes, and lenders may be able to avoid the costs of foreclosure and the losses usually associated with selling a repossessed home.

Servicers of loans aim to minimize losses, and they appear to be actively working with thousands of individual borrowers to modify their mortgages. To some extent, the dispersed ownership of mortgages may combine with legal and accounting rules to make successful workouts more difficult to achieve. For example, the "pooling and servicing agreement" associated with a given securitized mortgage pool may restrict the share of accounts that can be modified. Accounting rules that, in some cases, require substantially modified pools to be brought back on the originator's balance sheet may dissuade lenders from undertaking workouts. And extensive modifications that reallocate expected cash flows across different securities associated with the pool could trigger a review of those securities by the ratings agencies. At the same time, if workouts are economically viable, then an incentive exists for third parties to purchase distressed pools at a discount and to undertake the workout process. We see these purchases taking place in the marketplace, a development that should help to increase the number of successful workouts.

Also, local community organizations that work to promote homeownership and prevent foreclosures have stepped up their efforts. For example, NeighborWorks America advises borrowers about restructuring their mortgages. A survey conducted by this group found that many homeowners do not understand that lenders also want to avoid foreclosure. Thus, the simple step of encouraging borrowers in trouble to contact their lenders can be very productive. The Federal Reserve and the other supervisory agencies have encouraged financial institutions to identify and contact borrowers

⁵ Many mortgage brokers are subject to minimum licensing standards and bonding or net worth criteria, but these standards and criteria vary across states.

who, with counseling and financial assistance, may be able to avoid entering delinquency or foreclosure. Indeed, some lenders are being proactive in this regard – for example, by contacting borrowers to discuss possible options well before a scheduled interest-rate reset.

Possible regulatory responses

Looking forward, the Federal Reserve, other regulators, and the Congress must evaluate what we have learned from the recent episode and decide what additional regulation or oversight may be needed to prevent a recurrence. In deciding what actions to take, regulators must walk a fine line; we must do what we can to prevent abuses or bad practices, but at the same time we do not want to curtail responsible subprime lending or close off refinancing options that would be beneficial to borrowers.

Broadly speaking, financial regulators have four types of tools to protect consumers and to promote safe and sound underwriting practices. First, they can require disclosures by lenders that help consumers make informed choices. Second, they can prohibit clearly abusive practices through appropriate rules. Third, they can offer principles-based guidance combined with supervisory oversight. Finally, regulators can take less formal steps, such as working with industry participants to establish and encourage best practices or supporting counseling and financial education for potential borrowers.

In the area of disclosure, the Federal Reserve is responsible for writing the regulation that implements the Truth in Lending Act (TILA), known as Regulation Z. The purpose of Regulation Z is to ensure that lenders provide borrowers or potential borrowers with clear, accurate, and timely information about the terms and conditions of loans. The Federal Reserve is also authorized to write rules; notably, the Home Ownership Equity Protection Act (HOEPA) gives the Board the power to prohibit acts and practices in mortgage lending deemed "unfair" or "deceptive."⁶ Both the disclosures required by TILA and the rules developed under HOEPA (which is part of TILA) apply to all lenders, not just banks. In cooperation with the other federal banking regulators, the Board can also draft supervisory guidance and back it up with regular examinations. Supervisory guidance applies only to banks and thrift institutions, although state regulators of nonbank lenders can and sometimes do adopt guidance written by the federal regulators.

In my judgment, effective disclosures should be the first line of defense against improper lending. If consumers are well informed, they are in a much better position to make decisions in their own best interest. However, combating bad lending practices, including deliberate fraud or abuse, may require additional measures. Rules are useful if they can be drawn sharply, with bright lines, and address practices that are never, or almost never, legitimate. Sometimes, however, specific lending practices that may be viewed as inappropriate in some circumstances are appropriate in others, and the conditions under which those practices are appropriate cannot be sharply delineated in advance. In such cases, supervisory guidance that establishes principles or guidelines is, when applicable, probably the better approach. Guidance can be modified as needed to apply to different situations, and thus can be a more flexible tool than rules for accomplishing regulators' goals.

As I noted, markets are adjusting to the problems in the subprime market, but the regulatory agencies must consider what additional steps might be needed. The Federal Reserve is currently undertaking a thorough review of all its options under the law. Under its TILA authority, the Board last summer began a top-to-bottom evaluation of mortgage-related disclosures with a series of [four open hearings](#) around the country, in which we heard public concerns about various mortgage-related issues, including predatory lending and the effectiveness of the currently required disclosures. Using consumer testing, we will be working to improve the disclosures associated with mortgage lending and to fight deceptive marketing practices. This effort will draw heavily on our nearly-completed review of disclosures relating to open-end credit, including credit cards, for which we made extensive use of consumer testing to determine which disclosure formats are most effective and informative.⁷

⁶ For home refinance loans, the Board can prohibit practices that it finds to be associated with abusive practices or not in the best interest of the borrower.

⁷ The results of the review of disclosures for open-end credit and the associated notice of proposed rule-making will be discussed at an open meeting of the Board of Governors on May 23, 2007.

Of course, the information provided by even the best-designed disclosures can be useful only when it is well understood. Accordingly, the Federal Reserve produces and regularly updates a range of materials, including a [booklet](#) that lenders are required to provide to potential ARM borrowers, to help consumers understand ARMs and other alternative mortgages; and we will continue to promote financial education through a variety of partnerships with outside organizations. Federal Reserve Banks around the country will also continue their cooperation with educational and community organizations that provide counseling about mortgage products and the responsibilities of homeownership.

We are also actively reviewing the possible use of our rule-making authority to prohibit certain specific practices. In 2001, the Board acted under its HOEPA authority to ban several practices for high-cost loans that were determined to be unfair or deceptive, such as loan flipping – frequent and repeated refinancing to generate fees for lenders. The Board will consider whether other lending practices meet the legal definition of unfair and deceptive and thus should be prohibited under HOEPA. Any new rules that we issue should be sharply drawn, however. As lenders are subject not only to regulatory enforcement action but possibly also to private lawsuits for redress of HOEPA violations, insufficiently clear rules could create legal and regulatory uncertainty and have the unintended effect of substantially reducing legitimate subprime lending. Next month, we will conduct a [public hearing](#) to consider how we might further use our HOEPA authority to curb abuses while preserving access to credit. We have invited people representing all sides of the debate to present their views.

We have also used, and will continue to use, supervisory guidance to help mitigate problems in the subprime sector. Earlier this year, the Board and other federal bank and thrift regulators issued draft supervisory guidance to address concerns about underwriting and disclosure practices, particularly of subprime ARMs. Many industry and consumer groups have responded to our proposal, and we are now reviewing the comments. Regulators in 1999 issued guidance on subprime lending and in 2001 expanded that guidance. Last year, we issued guidance concerning so-called nontraditional mortgages, such as interest-only mortgages and option ARMs. For both subprime and nontraditional mortgages, our guidance has reminded lenders of the importance of maintaining sound underwriting standards and of providing consumers with clear, balanced, and timely disclosures about the risks and benefits of these mortgages.

The patchwork nature of enforcement authority in subprime lending – in particular, the fact that the authority to make rules and the responsibility to enforce those rules are often held by different agencies – poses additional challenges. For example, rules issued by the Board under TILA or HOEPA apply to all mortgage lenders but are enforced – depending on the lender – by one of five federal regulators of depository institutions, the Federal Trade Commission (FTC), or state regulators. To ensure consistent and effective enforcement, close cooperation and coordination among the regulators are essential. The Board remains committed to working closely with other regulators to achieve uniform and effective enforcement. We can continue to improve the sharing of information and the coordination of some activities, such as examiner training, through the Federal Financial Institution Examination Council, which the Conference of State Banking Supervisors (CSBS) recently joined, as well as through other channels, such as the CSBS's State/Federal Working Group. We will also draw on the expertise of other regulators as we consider changes in required disclosures and rules.

Macroeconomic implications

The problems in the subprime mortgage market have occurred in the context of a slowdown in overall economic growth. Real gross domestic product has expanded a little more than 2 percent over the past year, compared with an average annual growth rate of 3-3/4 percent over the preceding three years. The cooling of the housing market is an important source of this slowdown. Sales of both new and existing homes have dropped sharply from their peak in the summer of 2005, the inventory of unsold homes has risen substantially, and single-family housing starts have fallen by roughly one-third since the beginning of 2006. Although a leveling-off of sales late last year suggested some stabilization of housing demand, the latest readings indicate a further stepdown in the first quarter. Sales of new homes moved down to an appreciably lower level in February and March, and sales of existing homes have also come down on net since the beginning of this year.

How will developments in the subprime market affect the evolution of the housing market? We know from data gathered under the Home Mortgage Disclosure Act that a significant share of new loans used to purchase homes in 2005 (the most recent year for which these data are available) were nonprime (subprime or near-prime). In addition, the share of securitized mortgages that are subprime

climbed in 2005 and in the first half of 2006. The rise in subprime mortgage lending likely boosted home sales somewhat, and curbs on this lending are expected to be a source of some restraint on home purchases and residential investment in coming quarters. Moreover, we are likely to see further increases in delinquencies and foreclosures this year and next as many adjustable-rate loans face interest-rate resets. All that said, given the fundamental factors in place that should support the demand for housing, we believe the effect of the troubles in the subprime sector on the broader housing market will likely be limited, and we do not expect significant spillovers from the subprime market to the rest of the economy or to the financial system. The vast majority of mortgages, including even subprime mortgages, continue to perform well. Past gains in house prices have left most homeowners with significant amounts of home equity, and growth in jobs and incomes should help keep the financial obligations of most households manageable.

Conclusion

Credit market innovations have expanded opportunities for many households. Markets can overshoot, but, ultimately, market forces also work to rein in excesses. For some, the self-correcting pullback may seem too late and too severe. But I believe that, in the long run, markets are better than regulators at allocating credit.

We at the Federal Reserve will do all that we can to prevent fraud and abusive lending and to ensure that lenders employ sound underwriting practices and make effective disclosures to consumers. At the same time, we must be careful not to inadvertently suppress responsible lending or eliminate refinancing opportunities for subprime borrowers. Together with other regulators and the Congress, our success in balancing these objectives will have significant implications for the financial well-being, access to credit, and opportunities for homeownership of many of our fellow citizens.