



C H A P T E R 4

STABILIZING AND HEALING THE HOUSING MARKET

The recession that began at the end of 2007 is inextricably linked with the bursting of the housing bubble that had built up over the previous decade. The ensuing shock to financial markets, and the more than \$7 trillion in lost housing wealth, prolonged and deepened the downturn and has been a headwind for the economic recovery. Although the housing market is showing signs of stabilization, the healing process is not complete in many parts of the country.

The bursting of the bubble was a culmination of a multiyear process of rapid growth in house prices fueled by excess capital flows into the United States. These flows were converted into home mortgages by various financial intermediaries using lax underwriting standards and channeled through the financial system with an increasingly complex web of mortgage securitizations. These trends, in turn, created unmoored expectations of continuous price growth that caused a spike in residential construction. The overheated housing market ultimately proved to be unsustainable, and the return to more realistic levels has been very painful for the economy. As this process continues to unfold, responsible policies are needed to assist the market in its transition to a new, sustainable equilibrium supported by a prudent and robust financial framework. In this context, healing the housing market requires laying the foundation for balanced and sustainable growth, while repairing and improving the housing finance system that helped inflate the housing bubble.

The effects of the drop in housing prices have been amplified by the uniqueness of housing as a financial asset class. Indeed, housing is the single most important asset for a majority of American households. Houses generate a steady stream of consumption services for their owners, as well as enabling them to send their children to local schools and use neighborhood amenities ranging from parks to retail stores to hospitals. They also create demand and jobs as homeowners furnish their homes and invest in their

maintenance. By virtue of their tangibility, houses also serve as an important form of collateral for other borrowing purposes, notably startup financing for small businesses. Housing collateral attracts lender financing, making housing the most levered asset in household portfolios and closely linking the health of the housing market to that of the broader financial sector. Consequently, declines in housing wealth can have a far greater effect on the economy than equivalent losses in other financial assets, such as equities.

Setting the housing market back on track is a key step on the road to recovery. Yet housing presents several particular challenges, many of which derive from an array of institutional frictions in housing finance markets that have been exposed by the enormous scale and scope of home price declines and from very long lags in the adjustment in the stock of housing. This chapter highlights some of these challenges. They include a poorly functioning system for loss mitigation of nonperforming mortgages and effective disposition of mortgaged properties; inadequate origination of mortgage credit; and obstacles to refinancing, including the widespread phenomenon of negative equity. These deficiencies form a mutually reinforcing adverse feedback system in which negative equity raises the likelihood of delinquencies that often result in a drawn-out foreclosure process, eventually concluding with distressed sales that exert further downward pressure on home prices and thereby deepen the amount of negative equity. The large overhang of unresolved properties in distress, along with mortgage debt in excess of home value, further feeds this negative dynamic by depressing price expectations of potential homebuyers and lenders. Left unchecked, this dynamic creates a dangerous possibility for housing prices to overshoot and fall below their fundamental values, posing a difficult hurdle for sustained economic recovery.

Some have argued that the best course of action is to rely on the market alone to work out the problems of struggling homeowners, negative equity, and foreclosed properties through liquidation. This approach disregards the risk of overshooting the bottom, and it fails to recognize the many complex incentive conflicts that exist between purely private parties, such as homeowners, investors, and mortgage servicers. These conflicts and the need to recognize and allocate housing losses to various economic actors, present a serious collective action problem, the resolution of which by the market has been sluggish, at best, over the past several years. Perhaps most important, a *laissez-faire* approach also disregards the spillover effects of large numbers of delinquencies and foreclosures on local housing markets, the financial system, and the toll they exact on American families and the economy in general.

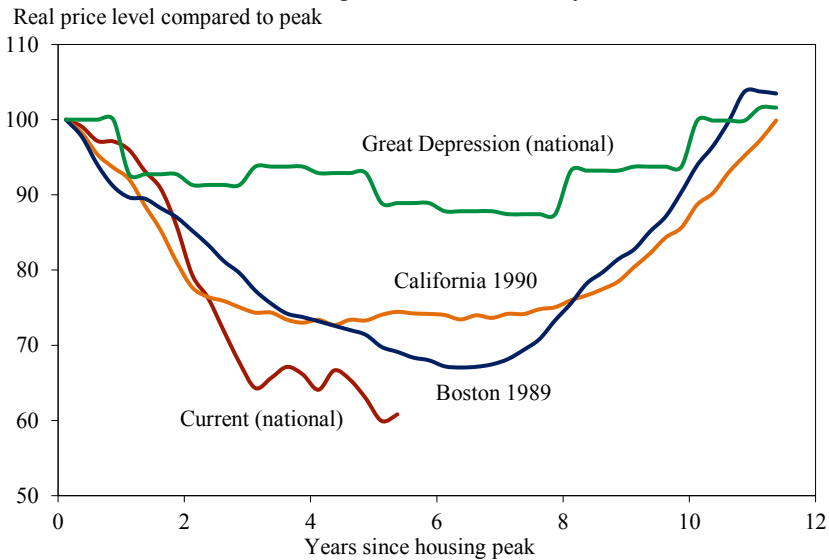
The alternative to sitting back and waiting for these enormous challenges to work themselves out slowly and painfully is for the Government to engage in a series of coordinated, measured, and multifaceted policy actions. This approach involves working in conjunction with market participants and housing regulators to address the lingering effects of the bursting of the housing bubble, as suggested, for instance, in a recent Federal Reserve Board white paper (2012). This chapter describes a set of existing and proposed policy initiatives that target many of the interlinked housing market problems. Some of these policies are pursued through Government agencies, such as the Federal Housing Administration (FHA), the Department of Housing and Urban Development (HUD), and the Department of the Treasury. Others are undertaken in conjunction with private investors, and still others are carried out together with the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, under the supervision of their regulator, the Federal Housing Finance Agency (FHFA).

THE HOUSING CRISIS AND THE INITIAL POLICY RESPONSES

After growing at a rapid pace through the early years of the new century, home price appreciation ground to a halt in the summer of 2006. This change in the path of housing prices triggered an initial wave of subprime mortgage defaults, and the resulting losses quickly propagated through the global financial system, bringing it to the brink of collapse and ushering in a deep recession. By the beginning of 2009, nationwide measures of home prices had declined for 30 straight months, falling by a total of nearly 28 percent. This drop in the national average masks significant regional variation. In some states, like Florida and Nevada, where prices had gone up the fastest, housing prices plummeted by 35 to 50 percent from their peak. Price drops in some other states were much milder.

Overall, as shown in Figure 4-1, the decline in inflation-adjusted home prices was unprecedented in the post-World War I U.S. economic experience in both its severity and its geographic scope. Some of the regional housing recessions—notably in California and New England in the early 1990s—generated sharp and long-lasting price declines, but neither was as steep and prolonged as the current episode. And during the Great Depression, the only other instance of nationwide price declines since WWI, much of the comparably-sized decline in nominal home prices was offset by a concurrent drop in general price levels, so the decline in *real* housing values was only about one-quarter as large as the one we recently experienced.

Figure 4-1
Housing Busts in U.S. History

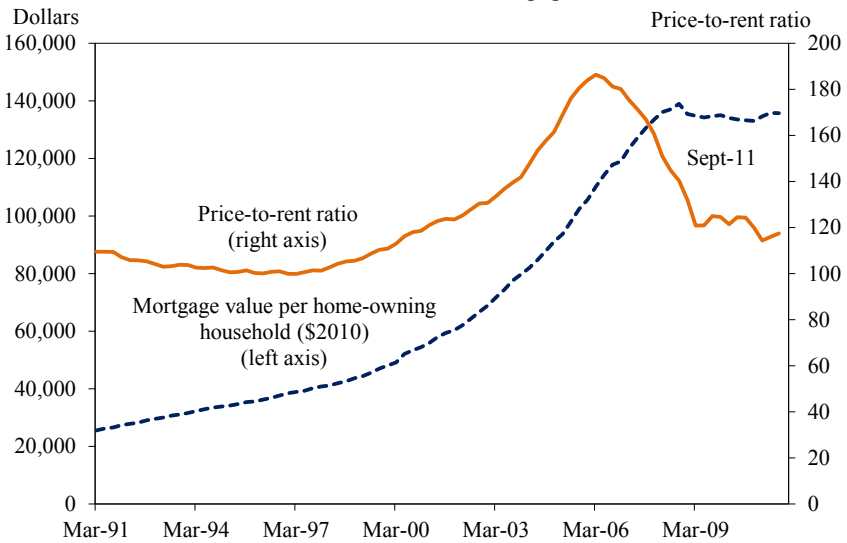


Source: S&P/Case-Shiller Home Price Index; the Great Depression time series from Shiller (2005).

The unprecedented and ultimately unsustainable nature of housing market trends before 2007 is further highlighted in Figure 4-2. The dashed line depicts annualized growth in real levels of mortgage debt per homeowner household between 1991 and the third quarter of 2011. Mortgage debt balances grew at a rapid pace from 2001 to 2007, one that far exceeded growth in real income during this period. There were many factors behind the escalating household debt. In part, it reflected rising home prices and growing household leverage driven by extraction of home equity and shrinking down payment requirements. As households continued to accumulate mortgage debt in the expectation of ongoing housing appreciation, housing was becoming less and less affordable, as evidenced by the price-to-rent ratio series (the sold line) in the same figure. After remaining in a narrow range between 100 and 120 percent for nearly two decades, the price-to-rent ratio accelerated rapidly to peak at 186 percent in the first quarter of 2006.

Once the bubble burst, falling prices and poor economic conditions resulted in steep increases in delinquencies and foreclosures across a broad spectrum of American homeowners. By the first quarter of 2009, non-performance rates among prime borrowers rose nearly threefold relative to their level in the first quarter of 2005 (from 2.2 to 6.1 percent), while those for subprime loans spiked to nearly 25 percent, from 10.6 percent four years earlier. About 1.7 million homes were at some stage of the foreclosure

Figure 4-2
Price-to-Rent Ratio and Mortgage Debt



Source: CoreLogic; Department of Labor; Bureau of Labor Statistics, Consumer Price Index.

process, and nearly 7 percent of total mortgage debt was seriously delinquent (more than 90 days past due). Market participants were deeply pessimistic about the future path for housing prices—the Case-Shiller index futures contracts traded in January of 2009 suggested that house prices were expected to fall an additional 10 percent by September 2010 (the dashed line in Figure 4-3). Other housing futures contracts traded in over-the-counter markets (not shown) were even more downbeat.

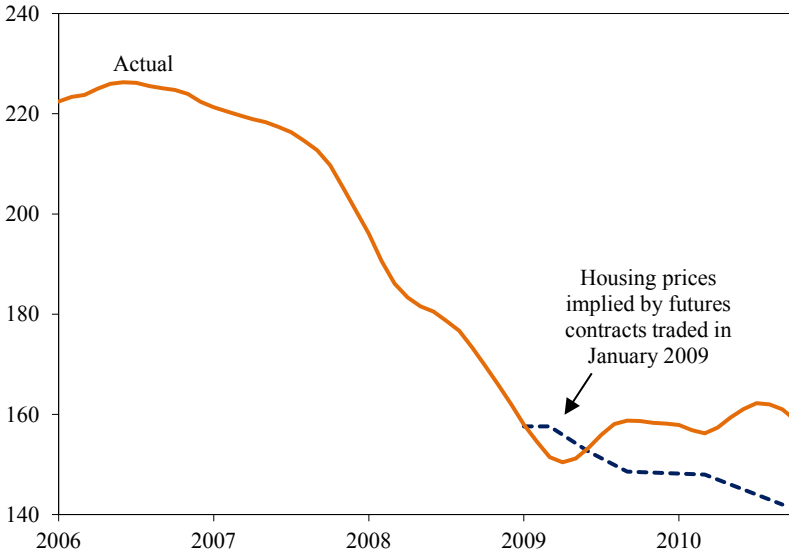
Initial Policy Responses to the Crisis

The broad meltdown in the financial sector called for a series of emergency responses by the Executive Branch, the Legislative Branch, and the Federal Reserve. The Federal Reserve undertook a series of aggressive monetary policy actions and launched a number of programs to support liquidity and lending activity in key financial markets. Congress passed the Housing and Economic Recovery Act (HERA) in July of 2008, which established the Federal Housing Finance Agency, the new regulator of the GSEs with greatly expanded powers. The HERA was followed by the Emergency Economic Stabilization Act in October of 2008, which established the Troubled Asset Relief Program.

In one of its first major policy actions, the Obama Administration implemented the Financial Stability Plan in February 2009. A key part of

Figure 4-3

S&P/Case-Shiller: January 2009 Expectations of Future House Prices and Actual Price Index



Source: Case Shiller.

the plan focused on maintaining the flow of housing credit and helping responsible homeowners stay in their homes through the Making Home Affordable (MHA) program. In particular, the Treasury Department made an increased funding commitment to Fannie Mae and Freddie Mac, which had been placed in conservatorship six months earlier. The Federal Reserve, which had previously announced a program to purchase up to \$600 billion of GSE debt and mortgage-backed securities, expanded the planned size of the program to \$1.75 trillion in March 2009. These actions have resulted in economically meaningful and long-lasting reductions in mortgage interest rates (Gagnon et al. 2010) and credit availability (Fuster and Willen 2010).

To help responsible households take advantage of these lower rates, the MHA included the Home Affordable Refinance Program (HARP), which was intended to enhance refinancing opportunities for borrowers who had insufficient equity in their homes. While HARP helped homeowners to hold onto their homes through more sustainable mortgages, other components of the MHA focused on restructuring mortgages of borrowers struggling to stay current on their loans. In particular, the Home Affordable Modification Program (HAMP) provided a streamlined approach to modification of delinquent loans and offered monetary incentives and procedural safe harbors to industry participants. To help communities manage the destruction caused when the housing market collapsed, the American Recovery and

Reinvestment Act of 2009 (the Recovery Act) provided additional support to the housing market by extending HUD's Neighborhood Stabilization Program, which began under HERA. This program allocated funds to state and local governments and nonprofit organizations to mitigate foreclosures and to pursue innovative local approaches to deal with the economic effects of abandoned properties. The Recovery Act extended the first-time home-buyer credit established under HERA and increased it to \$8,000. This program was extended further by the Workers, Homeownership, and Business Assistance Act of 2009.

To date, these initial responses to the housing crisis have assisted several million households. The most recent housing scorecard released by the Department of the Treasury and HUD indicated that, as of December 2011, more than 930,000 homeowners had received permanent modifications under HAMP, putting the program on pace to reach the 1 million threshold early in 2012. Of equal importance, HAMP provided a template for major servicers to follow in conducting their own modifications outside of the program. To date, servicers have undertaken nearly 2.7 million so-called "proprietary" modifications, many of which would not have occurred without the standards established by HAMP. The scorecard also highlights 998,000 loans refinanced through HARP, as well as nearly 1.2 million borrowers helped through various FHA loss mitigation interventions. These programs have faced challenges from a number of structural problems in housing markets. These problems include incentive conflicts that arose when loan servicing was separated from loan ownership in mortgage securitizations, as well as uncertainty about legal liability in loan origination and loss mitigation practices. These problems have been greatly exacerbated by erosion in collateral values, which have increasingly fallen below the value of associated loans and put more than one in five mortgage borrowers "under water." These dramatic declines in collateral necessitate eventual recognition of economic losses and allocation of such losses to various economic actors. As policymakers have increasingly focused on addressing these deficiencies, each of these original MHA programs has undergone substantial modification, described more fully in the following sections.

Negative Equity: An Unprecedented and Pervasive Problem

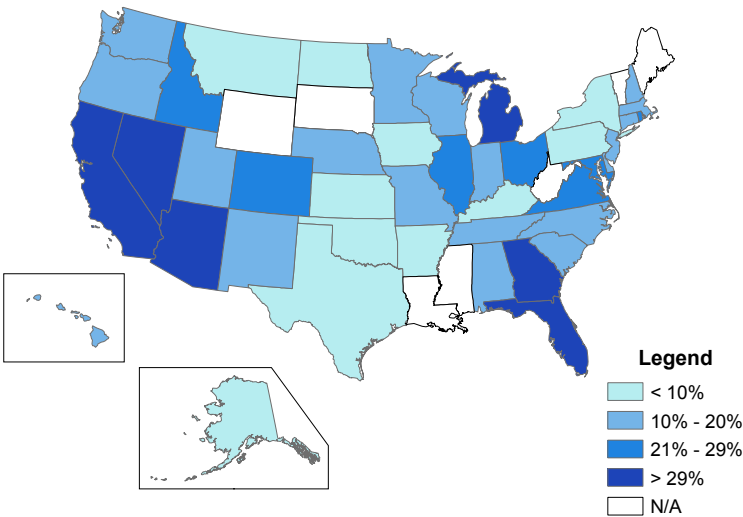
As noted, widespread declines in housing prices resulted in more than a \$7 trillion fall in aggregate housing wealth. These losses were borne to at least some extent by most homeowners. For some homeowners, however, falling prices not only wiped out their housing wealth in its entirety but also pushed the value of their homes below the value of outstanding mortgages. The resulting "negative" equity, which is estimated to total \$700 billion, has

become one of the legacy hallmarks of the housing price bubble. This negative equity resulted from large home price declines combined with a number of other factors. According to recent estimates, as many as 10.7 million (or 22 percent of) borrowers are under water. The aggregate negative equity is unequally distributed across the nation. Six states with the highest incidence of negative equity—Arizona, California, Florida, Georgia, Michigan, and Nevada—account for more than half of all underwater borrowers and of the aggregate amount of negative equity (Figure 4-4). All of these states have experienced steep declines in house prices.

Negative equity has been associated with a number of problems over and above those caused by the more widespread loss in housing wealth. Underwater borrowers find it difficult, if not impossible, to take advantage of record low interest rates through refinancing, because lenders and investors are unwilling to take on uncollateralized credit risk. The inability to refinance prevents households from lowering their monthly mortgage payments. It also undermines the effectiveness of monetary policy that aims to lower borrowing costs to businesses and households and thus encourage greater economic activity. (For more on the decision to refinance, see Economics Application Box 4-1).

Underwater households have weakened incentives to invest in their property, since the expected gains from their investment are likely going to be absorbed by the lender. As a result, underwater households underinvest

Figure 4-4
The Distribution of Underwater Mortgages By State, 2011



Source: CoreLogic.

in home improvements and maintenance, which leads to the overall decline in the quality of the nation's housing stock (Melzer 2010).

Negative equity has also been associated with heightened realized default rates. Several recent academic and industry studies have found that the higher their negative equity, the more likely households are to become delinquent (Bajari, Chu, and Park 2010; Elul et al. 2010). Recent work by Federal Reserve Board economists (Bhutta, Dokko, and Shan 2010) shows that a household's equity position amplifies the effect of unemployment shocks on default and that this interaction grows in strength with the degree of negative equity. (For more on data challenges in evaluating the financial situation of homeowners, see Data Watch 4-1). Household delinquency and the ensuing foreclosures are very costly, as they disrupt the social fabric of neighborhoods and cause lenders to engage in an expensive and drawn-out process of liquidation. Moreover, foreclosures not only lower the value of the foreclosed property itself; they also have a sizable spillover effect on valuations of neighboring homes. According to a recent academic study (Campbell, Giglio, and Pathak 2011), each foreclosure within a 0.1 mile radius of a given house lowers its predicted sale price by 7.2 percent.

Negative equity also poses a roadblock for efficient reallocation of housing resources. Families naturally buy and sell houses over their life cycle and in response to shocks such as illness or divorce. The necessity to write a sizable check to the lender upon sale makes it effectively impossible for liquidity-constrained households to trade their houses without credit-impairing actions such as delinquency; deed-in-lieu, in which a borrower returns the property to the lender; or short sale, in which a house is sold for less than the balance of debts secured by the property. Negative equity also has the potential to limit underwater borrowers' ability to pursue employment opportunities in other geographic areas. The empirical evidence to date, however, has largely suggested that the adverse effect of negative equity on labor mobility—the so-called “house lock effect”—is fairly limited.

MACROECONOMIC EFFECTS OF HOUSING MARKET WEAKNESS

The housing sector plays an important role in determining the health of the broader economy. Two aspects of this relationship are particularly important—the effect of housing wealth on household consumption and the direct contribution of residential construction to gross domestic product (GDP).

Economics Application Box 4-1: Making a Decision about Refinancing a Mortgage

Mortgage rates in the United States reached historic lows in 2011, presenting an opportunity for many homeowners to save money by refinancing their fixed-rate mortgages. However, refinancing typically involves a number of costs that push the effective interest rate above the rates reported in news media. These costs include those associated with obtaining a new loan, such as title insurance and various administrative fees; risk-management charges related to loan origination (for example “points”); underwriting charges for appraisal of the house; and the more mundane costs of gathering documentation.

How does a homeowner decide whether it is worth paying the additional costs to reap the benefit of the lower rate? The first step in evaluating refinancing is to get a clear and comprehensive summary of costs associated with a new loan; these should be provided by your loan officer or mortgage broker on a HUD-1 form. While many of these costs can be rolled into the loan, some have to be paid in cash up front.

The second step is to lay out the stream of all payments required under the original loan and the new loan used for refinancing. Although this process may seem involved, it will allow you to take into account refinancing costs as well as the fact that you will be making payments on a refinanced mortgage over a longer period than you will have remaining on the existing mortgage.

Third, those payment streams need to be converted into one number—the amount of spending today that this stream of payments is worth. This is known as the net present value or NPV. The net present value discounts costs paid in the future to reflect the time value of money and the uncertainty associated with future returns. In the simplest possible form, it is better to have a dollar today than a dollar tomorrow, as this dollar can be invested and grow in value by the time tomorrow arrives. Hence, all future payments are discounted relative to today’s outlays. The choice of the discount rate merits a separate discussion that is beyond the scope of this example. However, some common choices include discounting at the risk-free rate (commonly approximated by the 10-year Treasury rate) or the expected rate of return for the stock market (approximated, say, by the long-term average return on the S&P 500 index). The NPV calculation can be carried out with a spreadsheet program such as Microsoft Excel or on a number of websites. Once NPV values are computed for both payment streams, the one with the lower value is the better choice.

The computation and comparison of net present values is the main idea behind a broad range of online calculators designed to answer the question of whether refinancing makes sense. An example can be found on Jack Guttentag's Mortgage Professor's Website at <http://www.mtgprofessor.com/calculators/Calculator3a.html>. Some mortgage brokers are fond of making use of simple rules of thumb as a shortcut for using the NPV approach. For example, they may suggest that "the new mortgage rate has to be 1 percentage point lower to justify refinancing with typical closing costs." Recent estimates of such rule-of-thumb threshold differences in interest rates have varied between 1 and 1.5 percentage points.

One often overlooked cost of refinancing has not yet been mentioned. By refinancing today, one generally forgoes the opportunity to refinance in the future if interest rates were to drop a bit further. Suppose you determine that refinancing a 5.75 percent loan into a 4.5 percent loan is advantageous from an NPV standpoint. Then refinancing the original loan into a 4.25 percent loan would be even more beneficial, but refinancing from a 4.5 percent loan would not. This difference between payments at 4.5 percent and 4.25 percent is essentially the value of the forgone option to delay refinancing. The value of preserving this option has fluctuated over time, because it clearly depends on the volatility of interest rates, the economic outlook, and the ability to maintain access to credit markets—a nontrivial concern for today's borrowers.

In recent work, Sumit Agarwal, John Driscoll and David Laibson (2007) calculated the optimal interest rate differential at which to refinance that explicitly takes into account the aforementioned option value (these calculations can be found at <http://zwicke.nber.org/refinance/>). Take, for example, a family that plans to stay in their house for 10 years, has a \$250,000 mortgage at 6 percent interest rate and has a marginal tax rate of 28 percent. For this family, assuming an upfront fee of 1 percentage point of mortgage value (1 point) and cash closing costs of \$2,000, refinancing is optimal if the interest rate on the new mortgage is 4.6 percent or less. Unlike the simple rule of thumb, this calculation takes into account family expectations of the future inflation rate, interest rate volatility, and how long they plan to stay in the house—the option value determinants—which affect the ultimate recommendation.

Consumption Effects

The standard approach in economics has been to assume that households consume about the same fraction of the increase in their wealth each year, regardless of its source. Numerous econometric studies have come up with a range of estimates that relate changes in household consumption to changes in wealth (Poterba 2000). Although there is no single agreed-upon value, the consensus range is fairly narrow—the fraction of each additional dollar in wealth consumed in a given year (what economists call the marginal propensity to consume out of wealth, or MPC) is estimated to be roughly between three and five cents. Applying the lower of these estimates to the \$7.25 trillion in housing wealth losses to date implies consumption losses of \$218 billion a year, or 1.5 percent of GDP. Under standard Okun’s law assumptions, this GDP impact, in turn, translates into a 0.75 percentage point increase in the unemployment rate. The severity of losses experienced during the recession that began in December of 2007 in both national output and in labor markets makes these estimates appear too small.

One of the possible explanations for this puzzle may be that declines in housing wealth have a more profound effect on consumption than equivalent declines in other forms of wealth. Case, Quigley, and Shiller (2005, 2011) find strong empirical evidence in support of this hypothesis by exploiting substantial variation across states in house price paths and holdings of equity assets. In particular, they relate quarterly growth rates in house prices and equity holdings to quarterly growth rates in state-level retail sales and find that the consumption response is more sensitive to changes in housing wealth than to changes in stock market wealth. It is noteworthy that both the level of the response and the difference between sensitivities to financial and housing wealth shocks increase substantially once the recent experience is incorporated in the data (the 2011 study includes data from 2000 through 2010.)

Why would households respond more to housing wealth shocks? Part of the likely answer has to do with the very different distributions of ownership of various financial asset classes. Most financial assets other than liquidity-restricted retirement plans are heavily concentrated at the top of the wealth distribution. In contrast, holdings of housing assets are much more uniformly spread across different wealth, income, and demographic strata. At the peak of the housing market in the third quarter of 2006, home ownership stood near a record high at 69 percent. Although home ownership rates among African American and Hispanic households were noticeably lower (49 percent and 50 percent, respectively), they vastly exceed ownership rates of all other financial assets other than bank accounts for these two groups. Perhaps more important, housing assets make up a much

Data Watch 4-1: Need for a Comprehensive Source of Data on Mortgage Debt and Performance

There are currently four basic sources of loan-level data on mortgage debt: the Home Mortgage Disclosure Act (HMDA) database, data reported by mortgage servicers, credit bureau data, and public records data. Each of these sources provides insight about mortgage holdings, but the existing system is inadequate for measuring the extent and ownership of financial obligations backed by residential real estate.

The HMDA database contains data required to be publicly reported for all mortgages. It is useful for measuring long-term trends in mortgage application volumes and originations, but contains little information on loan terms or performance following origination. Further, HMDA data are released only annually with a significant lag. In contrast, proprietary data sets from loan servicers, such as Lender Processing Services (LPS) and CoreLogic, have useful information on loan characteristics and performance but underrepresent certain loan and investor types. They also have little detail on borrower income or credit scores following origination and lack information on other debt obligations, including those collateralized by the same real estate.

The credit bureau data track borrower credit scores and performance on multiple debt obligations over time, but tell us little about loan terms and mortgage contract type and nothing about the employment status and current income of homeowners. Public records contain legal notices of property-related transactions, such as mortgage origination and foreclosure, but they contain little information beyond the reason for creating the record, loan amount, and an associated property identifier.

Linking these data sources to produce a more comprehensive database is a challenging undertaking, but a pilot version developed by a team of researchers at Freddie Mac and the Federal Reserve Board has laid a strong foundation for this effort. A combined database could make available critical statistics on the health of the housing market. For example, it could establish a link between first- and second-lien mortgages on the same property, providing key information on the overall extent of borrowers' leverage in different housing markets. This, in turn, would enable better risk management by first-lien lenders and private investors, as well as better design and implementation of government and private-sector loss mitigation programs. In addition, by utilizing statistical sampling techniques, such a database could correct for known biases across different data sources. Reliance on sampling also could reduce operational burden, allowing for more timely reporting.

larger fraction of wealth among lower income households. Whereas housing accounted for nearly two-thirds of the overall assets of households in the bottom half of the wealth distribution in 2007, it constituted only 25 percent of assets for those in the top decile, and only 10 percent for those in the top percentile. Shocks to housing wealth not only affect more households than other wealth shocks; they also apply disproportionately to those at the lower end of the wealth distribution.

A Pew Research Center report issued in July 2011 provides a stark illustration of these trends, concentrating on the disparate effects of the burst housing bubble on the wealth of minority and white households. Because home equity accounts for a much greater share of household wealth among minorities—59 percent for African Americans and 65 percent for Hispanics in 2005, compared with 44 percent for whites—minority households experienced much greater losses from the housing downturn. These losses were further compounded by the uneven geographic distribution of house price declines. As underscored by the Pew report, more than 40 percent of the nation's Hispanic households resided in the five states with the steepest price drops—Arizona, California, Florida, Michigan and Nevada—while only about one in five of all white and African American households resided in those states. For Hispanics in those five states, declining home prices have nearly wiped out household net worth, with median values collapsing from about \$51,000 in 2005 to just \$6,000 in 2009.

These trends matter to consumption because empirical research has pointed out systematic differences in marginal propensities to consume across income groups. For example, studies that analyzed the consumption effects of the 2001 and 2008 tax rebates using actual household expenditure data found that low-income households and those with low liquid wealth spent considerably higher fractions of these rebates. These effects were identified in credit card data (Agarwal, Liu, and Souleles 2007), the multiple-category Consumer Expenditure Survey (Johnson, Parker, and Souleles 2006), and automobile purchases (Parker et al. 2011). The fact that housing wealth losses were concentrated among the subset of households most responsive to such shocks may account in part for the magnitude of the observed declines in consumption. Indeed, a recent study by Mian, Rao, and Sufi (2011) shows that households with low levels of nonhousing financial assets experienced much greater declines in consumption for a given decline in home prices.

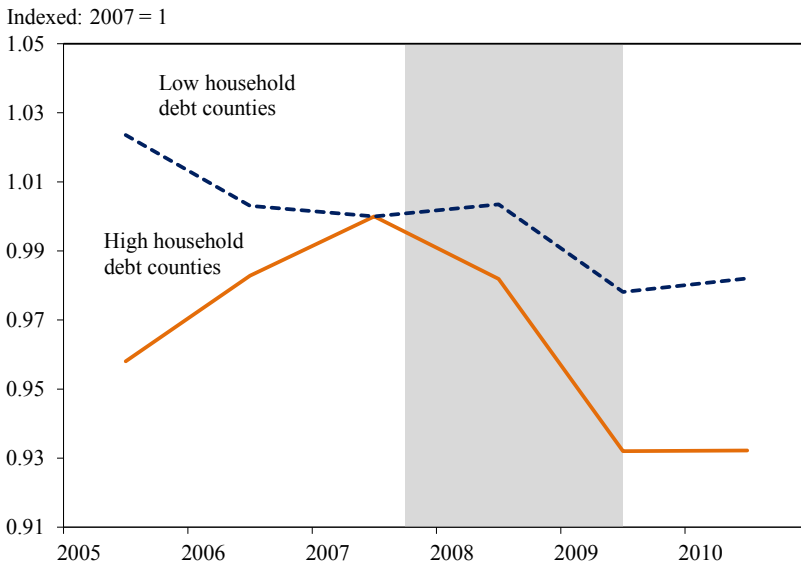
A growing economics literature highlights the importance of household debt balances in influencing the severity of economic slumps. Most of the growth in household debt between 2002 and 2006 can be traced to mortgage-related borrowing, which increased by nearly \$5 trillion (or 94 percent of the total increase) over this period. As housing values collapsed,

many households found their balance sheets tilting heavily toward debt. Household efforts to bring their balance sheets closer to equilibrium leverage can potentially proceed along several avenues. Households can default on their debt obligations. They can accelerate repayment of their debts. Or they can repair their asset base through more aggressive saving. Collectively, these approaches are often referred to as deleveraging.

A series of empirical papers attempts to quantify the effect of such deleveraging on consumption (Mian and Sufi 2010; Mian, Rao, and Sufi 2011). These papers broadly suggest that the levered nature of household housing assets amplified the effect of pure wealth losses from the crash in housing prices. The studies compared the consumption response in counties with different pre-recession levels of household debt and found that counties with the highest debt levels experienced much larger and longer-lasting drops in consumption than counties with low debt levels. This finding held true for consumer durables, such as automobiles, appliances, and furniture, as well as for consumption of groceries. These counties also exhibit patterns consistent with deleveraging, as increases in the numbers of defaults, and debt paybacks by non-defaulters are much higher in high-debt counties than in low-debt ones. These trends in consumption in turn affect local employment, particularly in sectors that produce locally consumed goods and services, such as restaurants and retail establishments (Mian and Sufi 2011). Figure 4-5 illustrates the divergence in employment trends in such nontradable industry sectors for high- and low-debt counties. In contrast, the traded goods sectors (not shown) display no such divergence, suggesting that the run-up in debt and bursting of the housing bubble have caused the contraction in aggregate demand.

Aside from the consumption effects of debt reduction or increases in savings needed to deleverage, households with impaired balance sheets may also have difficulty obtaining credit, which would further affect their consumption (Hall 2010). Before the crisis, the ability to use home equity as loan collateral served as an important source of financing for household purchases of goods and services. For example, Doms, Dunn, and Vine (2008) find that the increasing ease of tapping home equity credit in the early 2000s allowed homeowners to use their housing wealth to finance various forms of consumption. Another example of the pernicious effects of over-leveraging on access to credit, discussed earlier, is the inability of homeowners with low or negative equity stakes to refinance into low-interest mortgages. Moreover, reductions in the collateral value of houses have a negative effect on the economic recovery by restricting one of the primary channels for financing startup businesses.

Figure 4-5
Employment Growth: Nontradable Industries



Source: Quarterly Census of Employment and Wages; Mian and Sufi (2011).

Residential Construction and Home Ownership Patterns

As discussed in Chapter 2, residential construction in 2011 remained at very subdued, albeit stable, levels. Starts of new housing units averaged a little over 600,000, roughly in line with the levels observed in 2009 and 2010. Housing starts of both single- and multi-family structures remain far below their peak 2006 levels of 2 million units, weighed down by the cyclical weakness in demand, the slow pace of household formation, high inventories of vacant properties for sale, and tight financing conditions for homebuilders.

In addition to cyclical headwinds, residential construction has been impeded by the need to reallocate the nation's housing stock from owner-occupied to rental units, as a growing number of households exited the ranks of homeowners through foreclosures. Recent research by Federal Reserve economists analyzes the moving decisions of homeowners who went through foreclosure between 1999 and 2010 (Molloy and Shan 2011). This study finds that post-foreclosure households do not tend to move in with others to defray their living expenses. Rather, the overwhelming majority of them (76 percent) end up renting single-family housing units.

This evidence suggests that many of the newly foreclosed households will continue to exhibit strong preference for single-family structures. However, the conversion of an owner-occupied house to a rental property takes a certain amount of time, especially if the home is repossessed at the

conclusion of the foreclosure process. Repossessed homes need to be sold, often rehabilitated, and then marketed to potential renters. This process is made all the more difficult by tight credit conditions for financing investment properties, evidenced by historically high shares of all-cash purchases and by execution problems in amassing property portfolios necessary to realize any economies of scale through multiple foreclosure auctions.

In the meantime, prices in rental markets have been trending upward, pointing to the critical importance of efficient conversion of foreclosed properties and providing some of the necessary impetus for this process. A well-functioning mechanism for disposition and conversion of distressed properties into rental units has the potential to ease the downward pressure on owner-occupied house prices by removing a part of bank-owned and shadow inventory of soon-to-be-foreclosed properties from the sales market. (See the Data Watch 4-2 for discussion of challenges in measuring home sales.)

Demand for rental housing is likely to grow at a healthy rate over the next few years, creating an ongoing need to convert existing homes to rental. First, household formation is poised to accelerate. As numerous observers have pointed out, household formation slowed dramatically during the 2007–09 recession and has only recently begun to grow. Data from the Census Bureau show formation of fewer than 400,000 new households in both 2009 and 2010, well below the 2002–07 annual average of 1.3 million. The primary part of this trend is cyclical, deriving both from high unemployment rates among the young and from a substantial drop-off in immigration. A 2010 study done for the Mortgage Bankers Association (Painter 2010) suggests that historically, as economic conditions improved, individuals who delayed forming households during recession years were more likely to turn to rental markets to fulfill their housing needs.

Second, credit conditions have tightened considerably in recent years. Successful mortgage applicants have substantially higher average credit scores and are required to put up larger down payments than was the case in the era of rapidly rising house prices. For potential homebuyers who are unable to put down 20 percent of the purchase price, loans through the FHA and the U.S. Departments of Veterans Affairs (VA) and Agriculture have become the primary and, in many cases, only avenues for mortgage financing—providing a vital counter-cyclical buffer to sustain access to credit through the crisis. Consequently, the agencies' market share has risen rapidly, with the FHA accounting for nearly 40 percent of all house purchase loans in 2010. Among minority households, in particular, the FHA and VA loans became the predominant form of financing for home purchase. Between 2005 and 2010, the share of FHA/VA loans has skyrocketed from

Data Watch 4-2: Need for a Comprehensive Source of Data on Home Sales

On December 21, 2011, the National Association of Realtors (NAR) announced substantial downward revisions going back to 2007 of previously reported data on sales of existing homes. The revisions reduced the estimated home sale projection for 2011 from nearly 5 million units to 4.25 million units, and reduced the number of reported home sales between 2007 and 2010 by nearly 3 million units. Although the implied pace of change in recent home sales was largely unaffected, lower sales levels caused a reevaluation of housing market conditions, and, by causing realtor commissions to be revised downward, are expected to lower the level of GDP.

To a certain extent, revisions to the NAR data are inevitable. The NAR sales estimates are based on reports from a subset of regional Multiple Listing Services (MLS). The data from the covered areas must be weighted to represent the areas that are not covered and adjustments must be made to this weighting over time. Further, the NAR cannot directly measure sales transactions conducted outside of Multiple Listing Services platforms. These “unlisted” transactions may include houses sold by owners without realtor assistance, sales carried out by builders, and some foreclosure sales. These sales channels vary in importance over the housing cycle and across different geographies, something that can be difficult to capture accurately on a current basis.

NAR revisions also reflect the fragmented nature of local MLS systems and their evolution over time. Historically, many metropolitan regions were represented by several MLS databases. The NAR obtained actual sales data from a subset of these databases and adjusted the numbers to account for sales recorded in the remainder. MLS systems have undergone considerable recent consolidation. As NAR adjustments lagged consolidation of MLS systems, reported sales were being grossed up by outdated factors and thus were systematically overstated.

Since all property sales are publicly documented by local deed registration systems, it theoretically should be feasible to use these records to estimate sales volumes across all jurisdictions and all channels, and with minimal time delay. The main hurdle to constructing a comprehensive national data source for real estate transactions will be to integrate data across disjointed and dissimilar county-level recording systems. Such data, however, would represent a reliable and timely source of information on sales activity—useful information for macroeconomic forecasters and an important gauge of health in the nation’s housing markets.

15 percent to 80 percent of all purchase mortgages originated to African-American households and from 8 percent to 75 percent of all purchase mortgages originated to Hispanic households. During the past three years, at least 60 percent of all first-time home buyers financed their purchases with FHA or VA loans. Young households surveyed by Fannie Mae repeatedly cite an insufficiently strong “credit history” and “not having enough for a down payment” as two of the biggest obstacles to homeownership.

Third, younger households that just experienced a historic decline in housing prices may be less optimistic about homeownership. Recent research (Malmendier and Nagel 2011) showed that households coming of age during periods of sizable declines in the equity market stayed away from equity ownership in the future. For such households, a longer lifetime perspective could not offset the dramatic price declines experienced early in life, which thus tended to have a strong and long-lasting influence on subsequent economic behavior. It is premature to say whether a similar “Depression babies” effect is applicable to today’s young renters. The scant survey evidence available on this question is mixed. On one hand, the Fannie Mae surveys indicate that the majority of young households continue to regard housing as a good financial investment and homeownership as a desirable goal. On the other hand, a series of special supplements to the Michigan Survey of Consumer Sentiment suggest that younger households hold more pessimistic views of homeownership, although this result is limited to a subset of responders with personal knowledge of someone who experienced foreclosure or substantial home price declines (Bracha and Jamison 2011).

In sum, the weakness in the housing sector continues to weigh heavily on macroeconomic performance. The enormity of losses in housing wealth and the uneven distribution of those losses in the population, along with the substantial weakening of household balance sheets burdened by debt overhang, have an outsized effect on consumption. High unresolved inventories of distressed properties, along with a concurrent need for large-scale rebalancing of the housing stock, contribute to ongoing difficulties in the residential construction sector.

These challenges are compounded by several structural problems in housing markets that have been exposed by the crisis. Understanding and addressing these institutional frictions represents a necessary step in formulating appropriate policy actions.

STRUCTURAL PROBLEMS IN HOUSING MARKET

The shock to the housing market laid bare serious deficiencies in the existing infrastructure for servicing delinquent mortgage loans, liquidating

foreclosed properties, and adjudicating legal disputes between various parties. These deficiencies have impaired the effectiveness of loss mitigation efforts and may also be affecting borrowers' ability to access mortgage credit.

Adjudicating Legal Disputes

Rapid growth in the volume and complexity of securitized mortgage credit during the bubble years outpaced developments in case law adjudicating legal liability for representations and warranties associated with loan underwriting. The resulting legal uncertainty has the potential to impede origination of new mortgage credit if it unnecessarily adds to lender liability vis-à-vis mortgage investors.

During the standard loan origination process an underwriter provides legally binding representations and warranties (R&W) backing the veracity of collected information. Representations and warranties encompass such crucial elements of the loan application as borrower income, available assets, and the appraised value of the house. Within a specified period of time following securitization, an agent of the investors (the Trustee) conducts a postsale audit of loan documentation. If the Trustee finds R&W violations on a particular loan, the originator is obligated to buy back that loan from the securitized pool. A similar audit may be conducted in the event of mortgage default, when the discovery of R&W violations on defaulted loans would also result in the investor "putting back" the loan to the originator. These put-back rights create a liability for originators that is designed to serve an important quality control function: the originator must bear the risk of loss on defaulted loans with R&W violations.

As the number of intermediaries between the underwriter and loan investor grew, the transmission of this liability by each party along the chain became less well understood, and quality control standards became more difficult to enforce. For example, many financial institutions increasingly relied on independent mortgage brokers to carry out customer prospecting and loan underwriting, especially in urban and minority-dominated neighborhoods that have been historically underserved by traditional lenders. Because mortgage brokers did not have sufficient capital to originate and hold a substantial number of loans, they quickly sold their mortgages to a larger financial institution, which, in turn, would securitize the resulting loan portfolio in broader capital markets. In effect, mortgage brokers functioned as independent contractors for banks that would eventually securitize these loans. In a twist on a common description of mortgage securitization, "originate-to-distribute," this business model was labeled as "outsource-to-originate-to-distribute."

In theory, established financial institutions that securitized loans had ample incentives to exercise due diligence. They retained liability for representations and warranties, and carried reputational risk, as well as the risk that they might not be able to pass faulty loans back to the originating mortgage brokers. Yet, there is empirical evidence that at least some banks actively securitized loans originated by mortgage brokers with little or no documentation—the so-called “liar” loans that can be easily falsified (Jiang, Nelson, and Vytlačil 2011). The lengthening of the chain of financial intermediaries made the evaluation and assignment of liability for faulty underwriting processes considerably more complicated.

The complexity of the claims, and the sheer number of lawsuits that are being litigated on a loan-by-loan basis, suggest that court resolution will take considerable time, which poses a challenge to stabilizing the housing market and accelerating a recovery.

Incentive Conflicts

Before securitization became prevalent, the majority of mortgages was funded directly by banks and other deposit-taking financial institutions. These loans were held on lenders’ own balance sheets and were typically serviced by them as well. Securitization of mortgage credit either through GSEs or private label issuers allowed the expansion of funding to broader capital markets. As a result, bank-funded (or portfolio) mortgages became less prevalent, ceding ground to GSE and private-label securitizations (PLS). By 2007, the share of aggregate residential mortgage debt held on portfolio had fallen to 37 percent from 48 percent in 1992, while that held by the PLS investors nearly quadrupled to 19 percent over the same time period. Investors in mortgage-backed securities relied on third-party servicers to collect monthly payments, transmit those payments to various investor classes, and mitigate losses on nonperforming mortgages.

The separation of mortgage ownership and servicing gave rise to a number of incentive conflicts between loan investors and their servicers, which made problem mortgages more difficult to address. These relationships are generally governed by “pooling and servicing agreements” (PSAs) that specify permissible actions servicers may take in dealing with delinquent loans. Although the overriding PSA principle is maximization of the value of the loan pool, some litigation was necessary to clarify this principle. Even now that the principle has been established, it can be interpreted in several different ways, particularly for mortgage pools with multiple investor classes or tranches. In particular, junior investors that are second in line (or lower) to receive flows generated by mortgage pools have an incentive to legally challenge modification actions that curtail overall cash flows. The resulting

internecine “tranche warfare” discourages servicer actions. Indeed, some observers have argued that servicers tailor their loss mitigation practices to minimize the risk of litigation by their investors. Because loan modification is an expensive and uncertain undertaking, servicers may have an incentive to pursue foreclosures as the least legally contentious option. Indeed, recent research found evidence of considerably lower likelihood of modifications for privately securitized mortgages than for portfolio-held loans where no conflicts of interest are present (Piskorski, Seru, and Vig 2010; Agarwal et al. 2011).

Moreover, because servicer compensation is based on the unpaid principal balance of performing loans, their incentives are skewed toward modification practices that favor reductions in interest rates and adding unpaid loan balances (or arrears) to the principal, even when that is not the most effective approach to ensuring long-term performance of the loan. These incentive conflicts, coupled with the absence of established legal precedent, effectively limited early modification efforts on securitized mortgages to three alternatives: adding arrears to principal and either lowering the interest rate or freezing it on adjustable-rate mortgages (Agarwal et al. 2011).

The unveiling of the Home Affordable Modification Program in early 2009 substantially changed the playing field for loan modifications. By establishing a standardized approach to modifying mortgage contracts that explicitly maximized the return to investors as a group, the program reduced the exposure of servicers performing such modifications to investor lawsuits. The HAMP standards have served as a catalyst for spurring rapid growth in mortgage modification efforts across the industry. As servicers built up their distressed loan infrastructure to accommodate HAMP, they also switched their own modification focus to more aggressive methods that emphasize loan affordability.

POLICY ACTIONS

Both the complexity of the existing challenges in the housing market and the importance to the broader economy of resolving these challenges call for a robust and multifaceted menu of policy actions. Over the past three years, the Administration’s housing policy has continued to expand to fit the circumstances, building on the experience of the early responses to the crisis. The Administration is pursuing additional innovative approaches designed to help households refinance their mortgages and maintain access to credit, to avoid unnecessary and costly foreclosures, to stabilize housing prices, and to help communities rebuild after experiencing a wave of foreclosures and erosion in property values.

Building on the Experience of Existing Programs

A number of program modifications are focused on counteracting the corrosive effects of negative equity. These modifications also seek to overcome a set of institutional hurdles that have thus far limited the effectiveness of certain policy actions. In particular, the Administration worked with the Federal Housing Finance Agency and private market participants to improve HARP—the existing refinancing program for borrowers with insufficient or negative equity in their homes whose mortgages are guaranteed by Fannie Mae or Freddie Mac. The revised program guidelines announced in November 2011 expand the pool of eligible borrowers by removing limits on loan-to-value ratios and extending the program deadline until December 2013. The program also lowers refinancing costs by reducing unnecessary pricing overlays and negotiating favorable pricing on some of the major closing cost items, such as title insurance. The revised HARP also addresses some of the difficult institutional hurdles, such as coordination problems with second-lien holders and mortgage insurers. The changes also lower some of the representation and warranty requirements for existing loan servicers, thereby encouraging greater lender participation. In a bid to further increase use of HARP, the revised program allows servicers to solicit some potentially eligible borrowers directly. Furthermore, major lenders have committed to dedicate additional origination capacity and resources to refinancing HARP borrowers.

Whereas changes in HARP were aimed at dulling the adverse effects of negative equity on the ability of currently performing borrowers to refinance their loans, other HAMP initiatives tackled the issues posed by negative equity in modifying loans of delinquent borrowers. In particular, the Principal Reduction Alternative (PRA), announced in October 2010, augments the original HAMP focus on affordability with elimination of a portion of the mortgage balance. The PRA builds on the insight that high levels of negative equity contribute to mortgage default over and above the effects of loan affordability. Consequently, modifications of delinquent loans with high loan-to-value (LTV) ratios may be more effective if they include a principal reduction component. The PRA requires servicers of non-GSE loans to evaluate the benefit of principal reduction for loans that exceed the appraised value of the house by 15 percent or more (that is, have LTV ratios above 115 percent) in making their HAMP determinations. To encourage servicers to use the PRA, HAMP provides monetary incentives for investors to write down principal. At the same time, the PRA seeks to lessen the risk of moral hazard by implementing principal write-down in three annual installments and making it conditional on continuous performance of the

modified mortgage. Under this earned principal reduction structure, a borrower has a strong incentive to remain current, which enhances the net present value of the PRA modifications to investors. To further encourage investors to evaluate the use of principal reduction in modifying problem loans, the Treasury has recently announced a tripling of the PRA monetary incentives. The Treasury also offered to extend PRA incentives to Fannie Mae- and Freddie Mac-insured loans.

The pace of PRA modifications has picked up appreciably in the past few months, with more than one in four HAMP modifications receiving principal reductions. According to the latest Treasury report, more than 36,000 permanent modifications that include principal reduction had been implemented by the end of November 2011 (Department of the Treasury 2011). The median PRA loan had an LTV ratio of 158 percent before modification and a target ratio after modification of 115 percent. The median amount of principal forgiveness for active permanent PRA modifications was about \$66,000. Because servicers are not required to offer principal reduction and usually may do so only when permitted by the loan investor, the growing use of the program suggests increasing acceptance of principal reduction as an effective loss mitigation tool by private investors.

Similar acceptance is echoed in servicer actions on private, non-HAMP, modifications. Several servicers have shifted their focus to principal reduction for deeply underwater delinquent loans held in securitization trusts. These reductions are typically earned over time to encourage borrowers to maintain loan performance. Principal reductions are also often coupled with a shared appreciation component that exchanges forgiven principal for an equity stake in the property. If the market value of the house in a future sale or refinancing exceeds its value at the time of principal reduction, the borrower shares a part of the appreciation with the lender. Much like the earned principal reduction, shared appreciation effectively raises the borrower's costs of defaulting to qualify for principal forgiveness.

Another HAMP-related initiative recently announced by the Department of the Treasury expands the reach of the program by broadening eligibility. One of the reasons many borrowers have not been able to take advantage of the program is that eligibility was tied to first-lien mortgages. Some borrowers with high medical debts, for example, but relatively average mortgage burdens, did not previously qualify for the program. By expanding eligibility, the changes aim to extend loan modifications to such borrowers and lower the number of preventable foreclosures.

The Administration has also expanded housing assistance for unemployed or underemployed homeowners. To help out-of-work homeowners avoid foreclosure, these programs generally provide for a period of

forbearance of all or part of the monthly mortgage payment. In July of 2011, as the length of unemployment spells continued to exceed forbearance periods for many of the unemployed homeowners, the FHA and the Treasury announced the extension of forbearance to 12 months. This change applies to mortgage servicers that participate in the HAMP's unemployment initiative program (HAMP UP), as well as to the FHA Special Forbearance program. Following the Administration's lead, two major lenders and the GSEs have recently announced their commitment to provide up to 12 months of mortgage payment forbearance to unemployed borrowers.

Mortgage payment assistance for unemployed or underemployed homeowners has become a prominent feature of state level programs developed under the Hardest Hit Fund (HHF). The President announced the establishment of the Fund in February 2010 to provide targeted aid to families in states that have been hit hard by the economic and housing market downturn. HHF currently provides assistance to homeowners in 18 states and the District of Columbia. The specific programs are designed by state housing finance agencies and take into account local market conditions. In addition to helping unemployed borrowers, HHF programs commonly include efforts to fund innovative approaches to modification of delinquent mortgages and to allow homeowners to transition into more affordable places of residence.

Furthermore, in June of 2011 HUD launched the Emergency Homeowners Loan Program (EHLPP) which provided \$1 billion in interest-free loans to help keep borrowers in non-HHF states who are unemployed, or who suffer from a severe medical condition, from losing their homes. The EHLPP is available to borrowers with a long track record of staying current on their mortgages but who find their ability to continue doing so compromised by job loss or illness. EHLPP loans are secured by a junior lien note on the homeowner's principal residence, and the balance on these loans is forgiven in 20 percent increments for each year the borrower remains current on regular mortgage payments.

The Administration's Project Rebuild, introduced as part of the American Jobs Act in September 2011, is another example of building on the experience of existing housing programs. While the revised HARP and the HAMP PRA focus on negative equity, Project Rebuild addresses the damaging effects of foreclosed or abandoned homes on neighborhood property values, economic prospects, and social fabric. Project Rebuild seeks to integrate and expand strategies proven successful under the Neighborhood Stabilization Program to deal with vacant and foreclosed properties. In particular, it explicitly allows federal funding to support for-profit development subject to HUD oversight. It also extends rehabilitation efforts to

commercial as well as residential properties. Project Rebuild further calls for expanding support for land banks that work at the local level to acquire, hold, and redevelop distressed properties. Federal funds granted under the project would provide land banks with capital infusions that can be leveraged with private-sector investments to finance long-term redevelopment strategies.

New Levers in Housing Policy

Refinancing. The Administration has called on Congress to pass legislation that will enable more homeowners to refinance their mortgages at today's historically low interest rates. First, the HARP program is available only to homeowners whose loans are owned or guaranteed by the GSEs. This restriction has left some borrowers unable to refinance their loans only because their mortgages were kept on the originating bank's books or were securitized in the private, as opposed to the GSE, market—events largely outside of a borrower's control. To remove this arbitrary distinction, the Administration proposes that the FHA be authorized to offer streamlined refinancing to non-GSE borrowers with standard mortgage contracts. To limit risks to the taxpayers, the proposal emulates HARP in requiring eligible borrowers to have remained current on their mortgages and to meet certain underwriting standards. Another risk-management component of the proposal includes capping the loan-to-value ratio of eligible loans.

Second, while enhancements to HARP announced in November of 2011 will increase the reach of the program, more can be done to reduce the barriers to refinancing of GSE-backed loans. Such steps would include harmonizing underwriting requirements for mortgages with LTV ratios below and above 80 percent; further reducing loan fees because GSEs do not acquire any new credit risk by refinancing these loans; fully aligning the treatment of representations and warranties for refinancing with the existing or new mortgage servicers; and removing remaining differences in HARP requirements that still exist between Fannie Mae and Freddie Mac. These changes are aimed at streamlining the operational requirements of the HARP program and making it more accessible to a greater number of borrowers. By leveling the playing field between existing and new servicers, the proposed changes also seek to harness competitive forces to bring more interest savings to borrowers.

Third, the Administration's proposal helps address the problem of negative equity by providing a pathway for responsible homeowners who refinance their mortgages to rebuild their equity more quickly. Under this option, home owners would refinance into a shorter-maturity (20-year, for example) mortgage and commit to deploying the savings from refinancing

to rebuilding equity in their homes. As an example, consider a borrower who has a 6.5 percent mortgage originated in 2006 with an outstanding balance of \$200,000, whose house is worth \$160,000 (a loan-to-value ratio of 125). This borrower could lower the monthly payment by \$166 by refinancing into a 20-year mortgage at 3.75 percent. Should the borrower choose to keep their mortgage payment at its original level and direct the \$166 in savings to principal reduction, the outstanding mortgage balance would decline to \$152,000 in five years. Under the proposal, underwater borrowers would have the choice of pursuing this pathway to rebuild their home equity. To assist borrowers who make this choice, the proposal directs the GSEs and the FHA to cover the closing costs of their refinanced loans.

Servicing standards. The experience of the past few years showed that the Nation is not well served by the patchwork of rules that govern the mortgage servicing system. To improve accountability and align incentives in the mortgage servicing industry, the Administration recently released a unified framework of servicing standards—the Homeowner Bill of Rights—that is designed to better serve borrowers, investors, and the overall housing market. The Administration will work closely with the Consumer Financial Protection Bureau (CFPB) and other independent regulators, Congress, and other stakeholders to create a more robust and comprehensive set of rules driven by a set of core principles outlined in the framework. These principles include full disclosure of all fees provided in understandable language upfront, with any changes disclosed before they go into effect. The framework also requires servicers to implement standards and practices that minimize conflicts of interest, such as those that exist between multiple investor classes and those that arise when the servicer simultaneously owns a secondary lien on the property. To make loss mitigation actions more timely and effective, servicers are required to contact homeowners who have demonstrated hardship or fallen delinquent, and provide them with a comprehensive set of options to avoid foreclosure. Servicers must further allow homeowners the right to appeal denials for mortgage modification to an independent third party and provide homeowners who find themselves in economic distress with access to a customer service employee with a complete record of previous communications with that homeowner. To minimize inappropriate foreclosure actions, servicers may schedule a foreclosure sale only after they have certified in writing that all loss mitigation alternatives have been considered. To ensure compliance, servicers must maintain strong controls over servicing and loss mitigation operations and subject these controls to periodic independent audits. The Homeowner Bill of Rights is meant to provide an enforceable set of rules, not just guidance, for the servicing industry.

Conversion of Repossessed Properties into Rental Units. An orderly, fair process for disposition of foreclosed properties remains a key objective of housing policy. Given the ongoing reduction in rates of homeownership, many foreclosed properties will have to be converted to rental units, a process that typically involves rehabilitation. The demand for this type of housing stock will come mainly from private investors whose activity to date has been hampered by execution problems in putting together property portfolios through a series of small-scale acquisitions. Tight credit conditions for financing investment properties have further limited the ability of private investors to fill the gap in demand.

To counteract these problems, the FHFA, with the Departments of Treasury and Housing and Urban Development, initiated a process to manage the sale of REO properties held by Fannie Mae, Freddie Mac and the FHA. The goal of this effort is to allow private investors to bid on acquiring pools of REO properties in exchange for a commitment to rehabilitate and manage the properties as rental units. Bulk purchases will make it easier for investors to achieve economies of scale as they implement their individual business strategies. Qualified bidders must demonstrate evidence of property management experience and adequate capital resources, as well as agree to abide by property usage restrictions. For instance, antiflipping provisions establish minimum time periods that an investor must hold the property before seeking to sell it, and minimum reinvestment requirements impose certain quality standards for rented properties.

In many ways, the REO-to-rental conversion program seeks to build on the best practices established by successful policy interventions during the crisis. The program focuses on leveraging the expertise and financial resources of private investors, while preserving value for the taxpayers. It looks to avoid rigid top-down solutions, allowing for customization at the local level. And it makes use of the unique position of the GSEs and FHA as owners of large nationwide inventories of distressed properties to provide a large-scale, transparent, and predictable mechanism for converting these properties to better suit local housing demands. Furthermore, the process is intended to help the industry develop a viable framework for acquiring and managing large-scale scattered-site rental portfolios. Similar to the HAMP experience, this framework may well help establish industry standards.

CONCLUSION

Developments in the housing market played a central role in the financial crisis and the ensuing recession, and they continue to present a headwind for the economic recovery. Although housing markets are stabilizing

in many regions, the healing process will inevitably take time. This is a reflection of both the magnitude of the recent housing price collapse and the many institutional obstacles on the path to a new equilibrium. Getting to the end of this path will require unwinding accumulated inventories of foreclosed homes, whether by finding new owners or by converting them to rental units. It will require enabling more homeowners to refinance their mortgages at today's low interest rates. It will require resolving multiple conflicts of interest in the modification of delinquent loans and providing meaningful assistance to unemployed homeowners as they search for new jobs that would allow them to remain in their homes. It will require restoring access to credit for responsible borrowers and repairing household balance sheets hard hit by erosion of home equity. And it will require working out legal uncertainties and fixing up mortgage finance markets.

Instead of waiting for these processes to play themselves out slowly and painfully, the Administration has embarked on a series of multifaceted and fiscally responsible actions in partnership with private market participants and housing regulators to proactively repair the housing market and ease the transition to a new and stable equilibrium. The new policy initiatives seek to enable refinancing, to unlock access to credit for responsible underwater homeowners, to reallocate foreclosed properties to the rental market, to prevent unnecessary foreclosures for borrowers struggling with temporary loss of income, to implement sustainable modifications of delinquent loans, and to repair the frayed infrastructure of mortgage servicing and mortgage finance.