MOODY'S ANALYTICS

May 25, 2011

SPECIAL REPORT

To Shore Up the Recovery, Help Housing

Prepared by
Mark Zandi
Chief Economist
+610.235.5000

To Shore Up the Recovery, Help Housing

BY MARK ZANDI

The five-year-old housing crash continues to threaten the U.S. economic expansion. Home sales and housing construction remain weak, while house prices are falling again in many parts of the country as foreclosure and short sales are ramping up.

It is hard to be enthusiastic about the economy's prospects as long as house prices are declining. A house is usually a household's most important asset; many small-business owners use their homes as collateral for business credit, and local governments rely on property tax revenues tied to housing values.

Most worrisome is the risk that housing will resume the vicious cycle seen at the depths of the last recession, when falling prices pushed more homeowners under water—their loans exceeded their homes' market values—causing more defaults, more distress sales, and even lower prices. That cycle was broken only by unprecedented monetary and fiscal policy support.

The gloom in the housing and mortgage markets notwithstanding, there are reasons to be optimistic that housing's long slide will come to an end soon. While a mountain of distressed property remains to be sold, investor demand appears strong. Prices have fallen enough to allow investors to profitably rent out these homes until the market recovers. Rental vacancy rates have fallen meaningfully over the past year, suggesting that new construction is slow enough to let builders work down the still-considerable number of excess vacant homes.

Nonetheless, the risks remain uncomfortably high. Policymakers may thus want to consider taking additional steps to support housing temporarily. These might include facilitating more mortgage refinancing, delaying a reduction in conforming loan limits, and supporting more mortgage loan modifications—with principal reductions—more aggressively.

Although none of these steps are particularly satisfying or likely to be popular, the outcome will be worse if policymakers stand by while a weakening housing market undermines the economic expansion.

Five lean years

The housing crash is more than five years old. Sales of existing homes—a measure of housing demand—languish near an annual rate of 5 million units, of which about a third are foreclosures and short sales. Sales of new homes are even bleaker, running at a record low rate close to 300,000 units per year. In a well-functioning housing market, about a million more new and existing homes would change hands per year, and less than a tenth would be distress sales.[1]

Housing construction—the marker for housing supply—is even more depressed. Single- and multifamily housing starts are running at close to 550,000 units annualized, and manufactured home placements barely reach 50,000 per year (see Chart 1). This is the weakest pace of residential construction since World War II. A well-functioning housing market would be producing closer to 1.75 million units annually.[2]

1 A housing market is considered to be functioning well when the broader economy is at full employment and growing at its long-run potential rate over the course of the business and housing cycles.

2 This housing supply is supported by an average annual 1.25 million household formations, the obsolescence of 300,000 housing units, and the construction of 200,000 vacation homes.

Nationwide house prices are falling again. The Fiserv Case-Shiller national house price index has dropped by a third since peaking in the first quarter of 2006. The fragile stability in prices that prevailed for most of the past two years was broken in recent months as more distressed properties were sold. In a well-functioning housing market, prices should rise nearly 3% per year.[3]

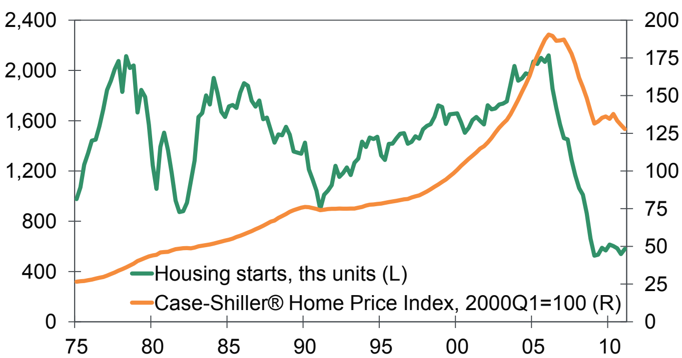
Economic fallout

Although housing is not the drag that it was during the worst part of the recession, it remains a significant weight on growth. This is particularly disappointing since housing is often a major source of growth early in an economic recovery.

Falling house prices and the resulting hit to household wealth remain a serious problem. Some $6.5 trillion in homeown-

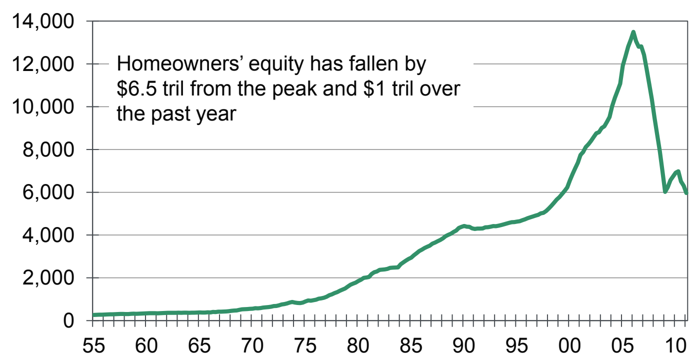
3 House prices should grow somewhere between the rate of household income (4% per annum) and overall price inflation (2% per annum). Prices are ultimately determined by their replacement cost, which is equal to the sum of the cost of land and the cost of construction. The cost of land is determined by the opportunity cost of that land or GDP per developable acre. The growth in GDP per acre is equal to the growth in household income (assuming that the profit share of GDP remains constant). Construction costs will grow at the rate of overall inflation (in the long run, as material and labor costs can vary substantially in the short run). Since the proportion of house prices that are accounted for by land costs varies considerably from place to place (a very high percentage in San Francisco and a low percentage in Des Moines), the growth in house prices will also vary considerably. For the past quarter-century or so (the recent boom-bust aside), house prices have been growing at a rate closer to household income. As the incentives for homeownership steadily increased (pecuniary and non-pecuniary), households spent as much of their income on housing as possible. As these incentives have likely peaked and may very well decline, households will devote less of their income to housing, and prices are likely to grow more closely to the inflation rate.

Chart 1: The Housing Crash Continues



Sources: Fiserv, BEA, Moody's Analytics

Chart 2: Homeowners' Equity Is Halved



Sources: Federal Reserve Flow of Funds, BEA, Moody's Analytics

ers' equity has been lost in the housing crash, approximately $1 trillion of it just in the past year (see Chart 2). Given our estimate of the impact on consumer spending from lost housing wealth, this will shave almost a half percentage point from real GDP growth this year.[4] The loss is particularly hard on middle-income households, which have benefited less from rising stock prices than their higher-income neighbors have.

Shaky house prices have also made it difficult for small-business owners to use their homes as collateral for loans. Bank lending to small businesses has picked up over the past year, but it is hard to see how credit will flow freely until house prices rise again. Since small businesses are a key part of job creation, this is a significant impediment to a stronger job market.

Strapped local governments are also struggling with the impact of falling house prices on property tax revenues. Despite rising millage rates in many parts of the country, tax revenue is growing near its slowest pace on record. Given the lag between market price changes and tax assessments, revenues are likely to slow even more in the coming year. Local governments will thus have little choice but to continue cutting budgets and laying off workers. Local government payrolls are down more than 400,000 below their peak and are shrinking by about 10,000 jobs per month.

4 See "The Wealth Effect," Mustafa Akcay. Regional Financial Review, November 26, 2008.

There are other serious but harder to quantify effects from falling house prices such as a reduction in labor mobility—an important way for the economy to adjust to shocks—and the erosion of retirement savings for low- and middle-income homeowners.

Vicious cycle

Falling house prices could threaten the economic expansion if they become self- reinforcing, pushing more homeowners under water, prompting more mortgage defaults and more distress sales and thus more price declines.

With an estimated 14 million homeowners underwater, half by more than 30%, this is a real possibility (see Chart 3).[5] Adding to the concern, the average underwater homeowner's debt exceeds market value by nearly $50,000. It does not take much to induce many in that situation to turn their keys over to their lenders; a leaky roof or broken air conditioner might be sufficient, particularly if rental housing is available nearby for less than the cost of the mortgage. Studies based on credit file data suggest that the share of strategic defaults—involving homeowners who are current on other debt obligations—has risen and now accounts for approximately one-fourth of all defaults.

5 CoreLogic estimates there are closer to 11 million underwater homeowners. The Moody's Analytics data are based on actual mortgage debt outstanding from Equifax credit files, while CoreLogic's estimate is based on debt outstanding at time of origination. The Moody's estimate of negative equity is nearly the same as CoreLogic's California, much lower in Florida, and higher most everywhere else. CoreLogic may have some difficulty measuring debt outstanding in rural or exurban areas where homeowners generally have little equity even in good times (since house prices never rise much) and go into small negative-equity positions in difficult times. The Moody's estimate is much higher in Texas, for example. CoreLogic data are also unavailable for a half-dozen states.

Decisions to default depend critically on expectations about future house prices. If homeowners think prices will rise, they are more likely to hold on; if they believe more price declines are coming, they are likely to give up. This can quickly become a vicious cycle, as occurred during the depths of the recession. Only a massive policy effort broke it. The federal government put Fannie Mae and Freddie Mac into conservatorship and the FHA aggressively expanded its lending. Even now, the federal government originates more than 90% of new mortgages.

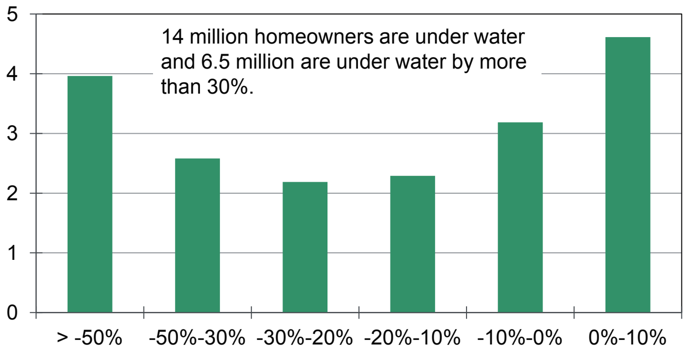
In addition, conforming loan limits were increased and three rounds of housing tax credits were enacted as part of the federal fiscal stimulus. The Federal Reserve purchased $1.25 trillion in mortgage securities to bring down mortgage rates as part of its first round of quantitative easing. The government also took part in the mortgage-loan modification effort via the HAMP plan and encouraged refinancing via the HARP plan.

Although it is easy to criticize individual elements of this policy response, it is important to remember that it was devised and implemented quickly, under extreme circumstances. Moreover, in its totality, the policy response worked; the housing market stabilized beginning in 2009.

Yet if housing were to begin another dark cycle, the policy response, if any, would not be nearly as aggressive. There is little political appetite for another big

Chart 3: Millions of Homeowners Underwater

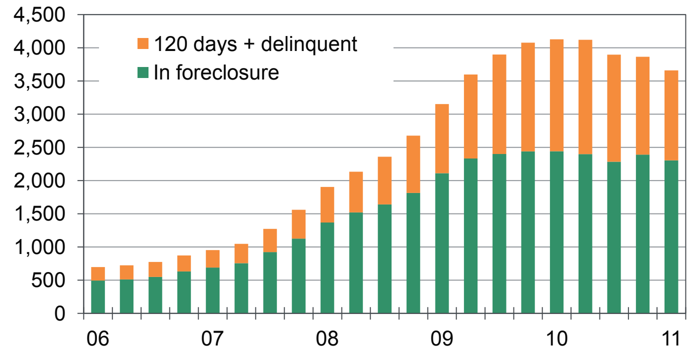
Homeowners' equity distribution, mil of homeowners



Sources: Equifax, Moody's Analytics

Chart 4: A Mountain of Distressed Homes

First mortgage loans, ths



Sources: Equifax, Moody's Analytics

government intervention in the economy, particularly given Washington's precarious fiscal situation.

Righting the wrongs

Perhaps government will not need to come to housing's rescue again. There are hopeful signs that the problems in the housing market are being worked out. While the process will not be clean, housing should find its footing by this time next year.

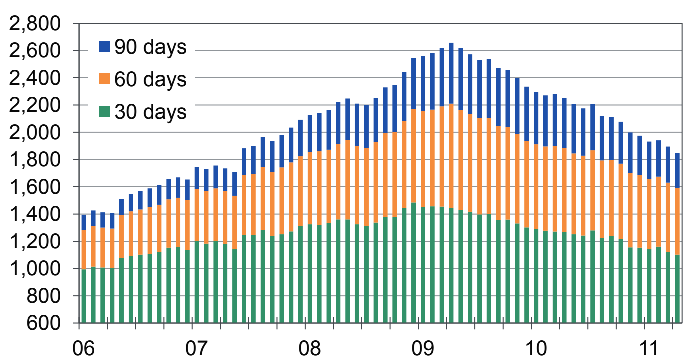
It is encouraging that the flow of first mortgage loans into foreclosure, or more than 120 days delinquent (and thus likely to go into foreclosure), has peaked. An enormous number of mortgages remain in this situation—3.6 million out of 50.6 million loans outstanding—and most will end as distress sales over the next 12 to 24 months, but the key for house prices is the share of home sales that are of distressed properties (see Chart 4). Prices fall when the share rises, but prices stop falling once the distress share peaks, even if it remains elevated.

It is difficult to forecast when the distress share will peak, as this depends on negotiations between mortgage servicers and state attorneys general related to the robo-signing scandals. Yet the peak seems most likely to occur late this year. The share of distress sales will remain high in 2012—probably above a third of all home sales—but prices should stabilize.

Investor demand for distressed properties appears strong, particularly in the hardest-hit markets. Prices have fallen so sharply in Atlanta, much of Florida, Nevada, and Arizona that investors can purchase distressed properties and cover their costs by renting them. Many of these markets actually appear undervalued when comparing house prices with household incomes and effective rents. Unlike the house flippers who tried to make quick profits during the bubble, today's distressed-property investors seem willing to hold on longer. They include both individual and institutional investors and appear to have investment horizons of more than a few years.

Chart 5: Early-Stage Delinquency Is Falling Fast

First mortgage loans 30-90 days delinquent, ths, SA



Sources: Equifax, Moody's Analytics

Meanwhile, prices for nondistressed homes are holding up better than they did earlier in the foreclosure crisis, according to data from CoreLogic and FNC. Many distressed properties may be in less desirable areas and no longer in direct competition with nondistressed properties. This suggests that damage to homeowners' wealth will be less severe, with less economic fallout.

The flow of mortgage loans entering foreclosure should also begin to slow soon, since fewer troubled loans are in the early stage of delinquency. The number of first mortgage loans between 30 and 90 days delinquent is declining rapidly (see Chart 5). This reflects a better job market and improvements in underwriting standards since the recession. Mortgage loans originated during the past three years are of excellent quality.

Excess inventory

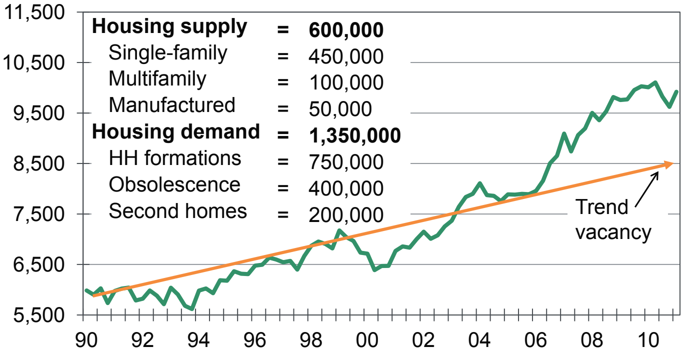
At the same time, builders are slowly working down the number of new vacant homes for sale. Yet the rampant overbuilding during the housing bubble remains a significant impediment to any pickup in new construction.

We estimate nearly 1.5 million excess vacant homes are either for sale, for rent, or being held off the market (see Chart 6). The Census Bureau's Housing Vacancy Survey counts 10 million actual vacant homes; about 8.5 million vacancies would be consistent with a well-functioning housing market. At the current level of housing demand and supply, it will take two full years to work off this excess inventory.

The situation is not as bleak as this suggests, however, because the HVS likely over-

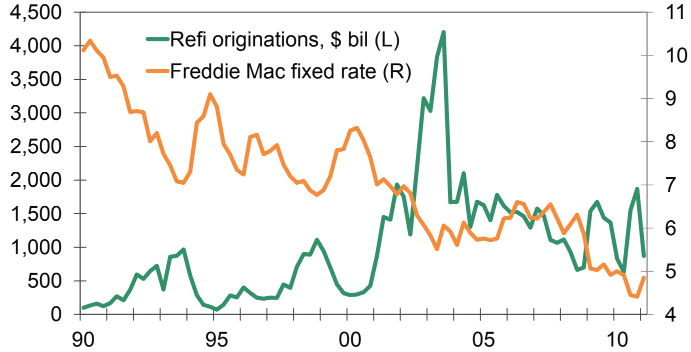
Chart 6: Housing Inventories Have Peaked

Vacant homes for sale, for rent, and held off market, ths



Sources: Census Bureau, Moody's Analytics

Chart 7: Rates Plunge, Refis Putter



Sources: Federal Reserve, Freddie Mac, Moody's Analytics

states the problem. Recent data from the 2010 census suggest there are fewer rental vacancies than the survey implies.[6] It is also unclear how well many of the vacant homes are being cared for, especially in heavily overbuilt markets such as Florida and California's Central Valley.

This highlights another important point, namely that the excess inventory problem is regionally concentrated. Atlanta, Florida, Nevada, Arizona, and the Central Valley are awash in vacant homes; elsewhere the inventory problem is much less pronounced and will thus be resolved sooner.

Demand and supply also will not change together; it is likely that demand for vacant homes will pick up more quickly than will new construction. The principal component of demand is household formation, which has been depressed recently because of the weak job market. With few job opportunities, young people have been hiding out in school; labor force participation has plunged among those 16 to 29 years old. While the data here are sketchy, it appears that at its low point, household formation slowed to an annualized pace close to 300,000 in early 2010. It picked up over the past year to closer to 750,000; this has fueled a surge in rental absorption but is still well below the 1.25 million households expected to be formed each year in a well-functioning economy.

As the job market comes back to life and young people go to work, household formation should accelerate. Given that many young people have lived with their parents longer than in normal times, there is a fair amount of pent-up household formation that should be unleashed in the next year or two. Formations in 2013 and 2014 could be closer to 1.5 million per year.

Housing construction, specifically single-family homebuilding, will take longer to get going. Even as demand revives for new homes, it will take time for builders to obtain new-construction and land-development funds from banks still digesting the sour loans they made during the bubble.

It will also take time for builders to ramp up the process of new-home construction, which includes everything from acquiring land and obtaining permits to assembling equipment on site. Multifamily construction will come back much sooner, likely during the second half of 2011, given strong absorption, declining vacancy rates, improving rents, and more ample multifamily mortgage credit. But single-family home construction should also be well off bottom by this time next year, when there are far fewer excess vacant homes.

There are reasons to hope the housing market can at least limp through the next year without additional government support, but the risks are still uncomfortably high. A weaker than anticipated housing market poses a serious threat to the economic expansion—probably the most serious on the current horizon. It may thus be worthwhile for policymakers to consider steps to ensure housing remains on track.

Restringing HARP

With 30-year fixed mortgage rates falling back near 4.5%, a policy step we proposed nearly a year ago appears attractive again.[7] This is requiring Fannie Mae and Freddie Mac to facilitate more refinancings via the Home Affordable Refinancing Program (HARP).[8]

For millions of homeowners, mortgage refinancing could significantly reduce monthly payments and boost their financial fortunes, aiding the economic recovery. Yet many potential refinancers cannot obtain the necessary interest rates because the tough economy has undermined their credit scores and home values.

The Obama administration has tried to facilitate more refinancing, but its efforts have fallen flat (see Chart 7). HARP was introduced in early 2009 to help refinance loans insured or owned by Fannie and Freddie; at the time, the administration said the program would allow between 4 million and 5 million homeowners to lower their interest rates to market levels. Yet to date, fewer than 700,000 homeowners have refinanced using HARP.

This is especially disappointing, since HARP provides significant incentives for borrowers to refinance up to 125% of a property's value, specifically to help underwater borrowers. To qualify, a homeowner's

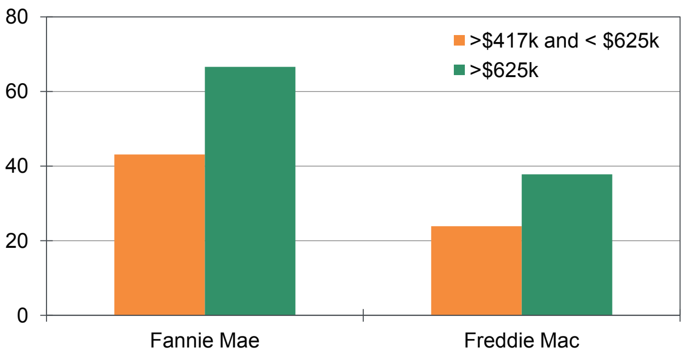
6 The Census Bureau's Housing Vacancy Survey is based on a sample that, given the Census 2010 data, appears to be significantly biased.

7 See "Restringing HARP: The Case For More Refinancing Now," Mark Zandi and Cris DeRitis. Moody's Analytics Special Report, October 7, 2010.

8 The HOME Act, introduced by U.S. Representative Dennis Cardoza in September, does precisely this. See. Senator Barbara Boxer has introduced similar legislation.

Chart 8: GSE Jumbo Loan Purchases

$ bil, 2010



Sources: Fannie Mae, Freddie Mac, Moody's Analytics

recent payments must have been on time, meaning no more than 30 days late within the past year, and borrowers must be able to show sufficient income to meet the new payment schedule.

But none of this has helped raise the level of participation, in part because Fannie Mae and Freddie Mac have imposed additional interest rate charges—called loan level price adjustments—for refinancers with higher loan-to-value ratios or lower credit scores.[9] This is an especially large problem in parts of the country where the housing market crash and economic downturn have been most severe—which are the same areas where HARP was supposed to help.

Fannie and Freddie are not breaking precedent in charging higher interest rates to borrowers with less equity and weaker credit. The two mortgage companies have always done so, because such borrowers are more prone to default. But this standard practice is weakening HARP. It also is not clear the traditional rules should apply in this situation, since Fannie and Freddie already insure these loans and are on the hook if they default. HARP refinancing would lower borrowers' monthly mortgage payments, increase the chance they will stay current, and thus reduce the payouts on the insurance Fannie and Freddie provide.

Jump-starting HARP could be straightforward. Congress could simply require Fannie and Freddie to suspend add-on rates, even for refinancing borrowers who have lost a lot of equity or have relatively low credit scores. Keep in mind that Fannie and Freddie already bear the credit risk on these loans; anything that makes it easier for borrowers to pay their mortgages on time and avoid default will reduce the agencies' ultimate cost.

Economic logic strongly favors action to promote refinancing. With current mortgage rates near 4.5% and the median rate on outstanding mortgages above 5.75%, the potential rate reduction could average almost 125 basis points. If all agency and government borrowers with rates above the median refinance at 4.5%, the gross saving to borrowers would be around $45 billion a year (18 million Fannie and Freddie borrowers x $200,000 average mortgage balance x 1.25%). Clearly, not all this saving would be realized, but even a fraction would be a big plus.

There are costs involved with facilitating more HARP refinancings. Fannie and Freddie would receive less in interest, as would other private investors in mortgage securities backed by Fannie and Freddie loans. But Fannie and Freddie (and thus taxpayers) would be made substantially whole because of the reduced default rate. Most global investors, meanwhile, are surprised they have not already been refinanced out of more loans.

Higher loan limits for longer

Conforming loan limits for Fannie, Freddie and the FHA are set to be reduced beginning this October. The limits were increased during the recession to help the government fill the void left by the collapsing private lending market.[10] The higher limits were never intended to be permanent, but it might be worthwhile for policymakers to extend them for another year.

Without an extension, Fannie and Freddie's loan limit will fall from $729,750 in the highest-cost areas of the country to $625,000.[11] FHA loan limits in these areas are likely to fall even more, since they are defined as the lesser of 115% of an area's median-priced home or $625,000. The high-cost areas that would be significantly affected are primarily in the Northeast and California but include some parts of Florida and the Chicago metro area. The higher loan limits affected approximately $140 billion in loans originated in 2010, or less than a tenth of the $1.5 trillion in mortgages made that year (see Chart 8).

Reducing the loan limits will test whether private lenders are willing and able to step up as the government steps back, but doing so this year may be premature. The nation's largest financial institutions appear to have the necessary capital to increase lending—assuming a 10% reserve rate, it will take $20 billion in capital to support $200 billion in new mortgage lending—but homebuyers will have to pay higher interest rates than they do now.[12] If all goes reasonably well, the added cost will be manageable, between 25 and 50 basis points.

But if the test does not go according to plan, mortgage rates could be much higher than anticipated. This cannot be ruled out, particularly given the increased concentration of the mortgage industry since the financial crisis and the greater market power of today's large institutions.[13] There would be no meaningful cost to taxpayers of delaying a reduction in the conforming loan limits, but the cost to the housing market and economy of a misjudgment would be high.

Principal reduction modifications

A more dramatic and costly policy step, but one with the best odds of ending the

9 See "Selling Home Affordable Refinance—New Refinance Options for Existing Fannie Mae Loans." Fannie Mae Announcement 09-04, March 4, 2009.

10 The Economic Stimulus Act of February 2008 temporarily raised the conforming loan limit from $417,000 to as high as $729,750 for "high-cost areas," defined as those where the median home price exceeds the national average by a substantial margin. Five months later in the Housing and Economic Recovery Act, Congress agreed to set a permanent conforming limit of $625,500; the higher rate is set to fall back to that level in September.

11 Nearly 100 metro areas, mostly in the Northeast and California, are considered high-cost.

12 There is no reason to expect that additional private mortgage lending can be financed through the private securitization market. That market is dormant and likely to remain so until housing stabilizes and a range of regulatory, legal and accounting issues are resolved.

13 The nation's five largest mortgage lenders account for nearly two-thirds of mortgage originations.

housing crash quickly and definitively, would have the government facilitate loan modifications with substantial principal write-downs. The current Home Affordable Modification Program (HAMP) was reworked late last year to promote this, but the change has accomplished little so far.[14]

A broader principal reduction program has economic positives and negatives but would be a positive on net if it were well-designed. The main concerns are moral hazard and fairness. To deal with these, the program must be well-targeted, with clearly articulated eligibility requirements, a long vesting period—as much as five years—and some type of clawback provision for future capital gains to guard against potential fraud.

To get a sense of scale, suppose the program were to require that, to qualify:

» Homes had to be owner-occupied.
» Homes had to have been bought before December 31, 2008.
» The owners could take no cash out in the refinancing.
» First mortgages had to be less than conforming loan limits.
» A loan's principal could be reduced by no more than $50,000.

Moreover, refinancing deals would have to result in the following conditions:

» The loan could be no more than 10% above the home's market value (to limit the probability of redefault).
» The "front-end" debt-to-income ratio (counting only housing costs) could not exceed 31%, and the "back-end" DTI ratio (counting all obligations) could not exceed 50%.

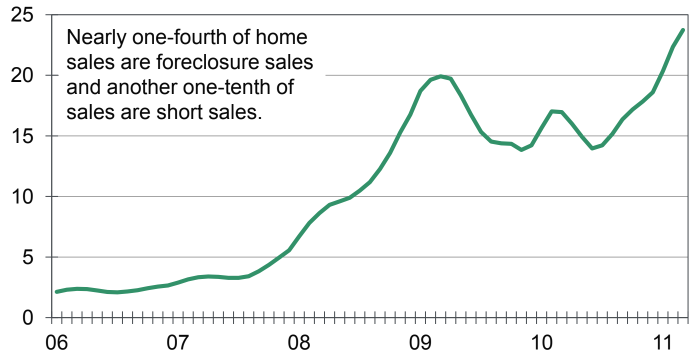
Approximately 600,000 current homeowners meet these criteria. Assuming a redefault rate of 25%, this would result in approximately 450,000 sustainable modifications.[15]

14 To date, there have been fewer than 700,000 permanent HAMP modifications. When the HAMP program was unveiled in early 2009, President Obama predicted between 2 million and 3 million HAMP modifications.

15 The redefault rate could be even lower given that this is comparable to the redefault rate on HAMP modifications.

Chart 9: Distress Sales Are High and Rising

Foreclosure sale share of home sales



Source: Zillow

This is just about the number of modifications, in addition to those that would take place regardless, needed to forestall the anticipated house price declines.[16] Without such a plan, the distress share of home sales is expected to rise from approximately one-third to a peak of 40% late this year (see Chart 9). House prices will decline as the distress share of sales rises. But with a well-designed modification a program implemented in the fall, the distress share of sales will end the year close to its current one-third level.

Such an effort would not be cheap. A principal reduction program of this size would cost an estimated $18 billion. While the HAMP and HARP plans will fall well short of using the funds originally allocated for them in the Troubled Asset Relief Plan, there appears to be little political appetite at this time for putting additional government funds into loan modifications.

Conclusions

The housing crash and foreclosure crisis are not over. Home sales and housing construction are stable but depressed, and house prices are falling again. With millions of foreclosures and short sales set to hit the housing market over the next 12 to 18 months, prices are set to fall further.

While house prices are declining, the economy will not flourish. For most Americans, the home is still the most important asset, and consumers will be reluctant to spend while their wealth erodes. Many small-business owners use their homes as collateral to grow, and local governments rely on property taxes tied to house prices.

There are some reasons to be optimistic that the crash is winding down. House prices have fallen far enough that single-family housing is affordable and increasingly attractive compared with renting. Investors are putting up cash to purchase distressed properties. Overbuilding remains a problem, but a steadily smaller one, given the record-low construction and improvement in household formations.

But this optimism could be easily overwhelmed if house price declines reignite a vicious cycle, putting more homeowners under water, accelerating foreclosures and distress sales, and driving prices even lower. Only an unprecedented monetary and fiscal policy response short-circuited that cycle during the recession.

Given the balance of risks, policymakers should consider providing additional temporary help to the housing and mortgage markets. Reinvigorating the HARP program and delaying planned reductions in conforming loan limits would provide a substantial boost with no meaningful cost to taxpayers. A well-structured and timely national principal reduction program would be a much larger and costlier step but would bring the housing downturn to a quick and definite end.

None of these policy steps are particularly satisfying, but they are worth considering given that an ongoing housing downturn remains the most serious threat to the economic expansion.

16 Hope Now reports that mortgage loan modification efforts are running close to 1.5 million per year. This includes HAMP and increasingly, more importantly, private modifications by mortgage servicers and banks.

About the Author

Mark Zandi

Mark Zandi is chief economist of Moody's Analytics, where he directs research and consulting. Moody's Analytics, a subsidiary of Moody's Corporation, is a leading provider of economic research, data and analytical tools. Mark is the author of Financial Shock, an exposé of the financial crisis. His forthcoming book, Paying the Price, provides a roadmap for meeting the nation's daunting fiscal challenges. He is on the board of directors of The Reinvestment Fund, a Philadelphia non-profit that marries public with private capital to make investments in inner cities, and MGIC, a publicly traded firm that is the nation's largest private mortgage insurer. Dr. Zandi received his PhD at the University of Pennsylvania, where he did his research with Gerard Adams and Nobel laureate Lawrence Klein, and received his B.S. from the Wharton School at the University of Pennsylvania.

About Moody's Analytics
Economic & Consumer Credit Analytics

Moody's Analytics helps capital markets and credit risk management professionals worldwide respond to an evolving marketplace with confidence. Through its team of economists, Moody's Analytics is a leading independent provider of data, analysis, modeling and forecasts on national and regional economies, financial markets, and credit risk.

Moody's Analytics tracks and analyzes trends in consumer credit and spending, output and income, mortgage activity, population, central bank behavior, and prices. Our customized models, concise and timely reports, and one of the largest assembled financial, economic and demographic databases support firms and policymakers in strategic planning, product and sales forecasting, credit risk and sensitivity management, and investment research. Our customers include multinational corporations, governments at all levels, central banks and financial regulators, retailers, mutual funds, financial institutions, utilities, residential and commercial real estate firms, insurance companies, and professional investors.

Our web and print periodicals and special publications cover every U.S. state and metropolitan area; countries throughout Europe, Asia and the Americas; and the world's major cities, plus the U.S. housing market and other industries. From our offices in the U.S., the United Kingdom, and Australia, we provide up-to-the-minute reporting and analysis on the world's major economies.

Moody's Analytics added Economy.com to its portfolio in 2005. Its economics and consumer credit analytics arm is based in West Chester PA, a suburb of Philadelphia, with offices in London and Sydney. More information is available at www.economy.com.

CONTACT US
For further information contact us at a location below:

U.S./CANADA
+1.866.275.3266

EMEA
+44.20.7772.5454

ASIA/PACIFIC
+852.3551.3077

OTHER LOCATIONS
+1.610.235.5299

Email us: help@economy.com
Or visit us: www.economy.com

Moody's
ANALYTICS