Written Testimony of Mark Zandi Chief Economist and Co-Founder Moody's Analytics

Before the Senate Committee on Banking, Housing, & Urban Affairs

"New Ideas for Refinancing and Restructuring Mortgage Loans"

September 14, 2011

The nearly six-year-old housing crash continues to threaten the U.S. economic expansion. Home sales and construction remain weak, while prices are falling again in many parts of the country because of the unprecedented volume of foreclosures and short sales.

It is hard to be enthusiastic about the struggling 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 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 and supporting mortgage loan modifications more aggressively. Although none of the potential 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.

Six lean years

The housing crash is nearly six 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 of close to 300,000 units per year. In a well-functioning market, about a million more new and existing homes would change hands per year and less than a tenth would be distress sales.ⁱⁱ

Housing construction—the marker for housing supply—is even more depressed. Single-and multifamily 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. iii



Chart 1: The Housing Crash Continues

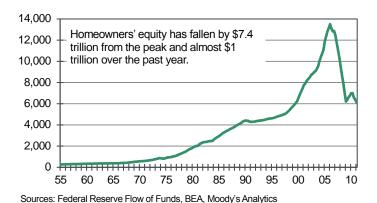
Nationwide, house prices remain very fragile. The Fiserv Case-Shiller national house price index has dropped by a third since peaking in the first quarter of 2006. Prices remain under pressure as more distressed properties are sold. In a well-functioning housing market, prices should rise nearly 3% per year. iv

Economic fallout

Although housing is not the drag 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 serious problems. Some \$7.4 trillion in homeowners' equity has been lost in the housing crash, with almost \$1 trillion of it just in the past year (see Chart 2). Given the estimated impact on consumer spending from lost housing wealth, this will shave about half a percentage point from real GDP growth this year. The loss is particularly hard on middle-income households, who have benefited less from rising stock prices than have their higher-income neighbors.

Chart 2: Homeowners' Equity Is More Than Halved



Shaky house prices have also made it difficult for small-business owners to use their homes as collateral 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 at 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.

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

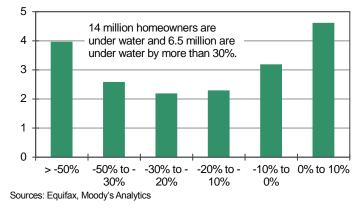
Falling house prices could threaten the economic expansion if they become self-reinforcing, pushing more homeowners under water, prompting more mortgage defaults and more distress sales and thus more price declines.

With an estimated 14 million homeowners under water, half by more than 30%, this is a real possibility (see Chart 3). 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.

Chart 3: Millions of Homeowners Sink Under Water

Homeowners' equity distribution, mil of homeowners



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 that cycle. The federal government put Fannie Mae and Freddie Mac into conservatorship and the FHA aggressively expanded its lending. Today 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 mortgage rates down 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 began to stabilize 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 government intervention in the economy, particularly given Washington's precarious fiscal situation.

Righting the wrongs

Perhaps the 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 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—3.5 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 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.

First mortgage loans, ths 4.500 4,000 ■ 120 days delinquent 3,500 ■ In foreclosure 3.000 2,500 2,000 1,500 1.000 Sources: Equifax. Moody's Analytics

Chart 4: A Mountain of Distressed Homes

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 in early 2012. 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 out. Many of these markets actually appear undervalued when house prices are compared 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 individuals and institutions and appear to have investment horizons of more than a few years.

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.

First mortgage loans 30-90 days delinquent, ths, SA 2,800 ■ 90 days 2,600 2,400 ■ 60 days 2,200 ■ 30 days 2.000 1.800 1,600 1,400 1,200 1,000 800 600 08

Chart 5: Early-Stage Mortgage Delinquencies Falling Fast

Sources: Equifax, Moody's Analytics

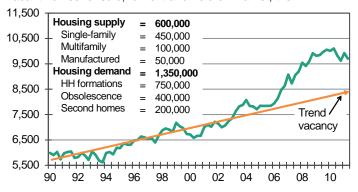
Excess inventory

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 that close to 1.25 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 9.7 million actual vacant homes; almost 8.5 million vacancies would be consistent with a well-functioning housing market. At the current level of demand and supply, it will take two full years to work off this excess inventory.

Chart 6: Housing Inventories Have Peaked

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



Sources: Census Bureau, Moody's Analytics

The situation is not as bleak as this suggests, however, because the Housing Vacancy Survey likely overstates the problem. Recent data from the 2010 census suggest there are fewer rental vacancies than the survey implies. Vii 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 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 fewer job opportunities, young people have been staying in school; labor force participation has plunged among those from 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 of 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 loans from banks that still are 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 one of the most serious on the current horizon. It may thus be worthwhile for policymakers to consider steps to ensure housing remains on track.

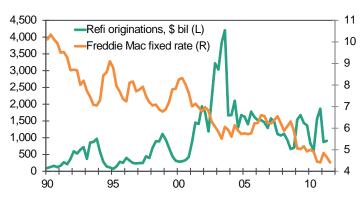
Restringing HARP

With 30-year fixed mortgage rates recently falling to a record low of slightly more than 4%, a policy step we proposed a year ago appears attractive again. This is requiring Fannie Mae and Freddie Mac to facilitate more refinancings via the Home Affordable Refinancing Program (HARP).

Congress has been considering legislation to do just that, and President Obama provided new vigor to the effort in his September speech to Congress introducing his jobs plan, the American Jobs Act. Dobama said the administration would work with housing agencies to reduce impediments to refinancing. The FHFA—Fannie and Freddie's regulator—subsequently affirmed that it is working on improving HARP.

Refinancing has been disappointing given record-low borrowing costs. In 2003, when fixed mortgage rates were between 5.5% and 6%, home loans were being refinanced at an annualized rate above \$4 trillion. The current level of activity is less than half that (see Chart 7). The 2003 boom was fueled by the large number of mortgages that had been originated when rates were much higher, making a sub-6% rate very attractive. Yet even today, about half of all outstanding mortgages carry coupons above 5.5%. Millions more U.S. homeowners should be refinancing, significantly reducing their monthly payments and boosting their financial fortunes and the ailing economic recovery.

Chart 7: Rates Plunge, Refis Putter



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

Impediments to refinancing

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, only about 850,000 homeowners have refinanced using HARP, and a very small number of underwater homeowners have refinanced.

This is surprising, since HARP provides significant incentives for borrowers to refinance at up to 125% of a property's value, specifically in order to help those who are under water. To qualify, a homeowner's recent payments must have been on time. And borrowers must be able to show they have sufficient income to meet the new payment schedule. HARP refinancings are even available for vacation homes and investment properties.

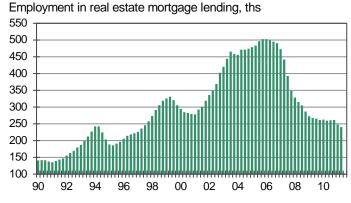
But none of this has helped raise the level of participation much, because Fannie Mae and Freddie Mac (the GSEs) have at the same time imposed additional interest rate charges—called loan level price adjustments—for refinancers with higher loan-to-value (LTV) ratios or lower credit scores. Specifically, borrowers' credit scores must be above 720 to qualify for the current market rate. This is a high bar, according to the credit bureau Equifax; just over half of the nation's households score below 720. For context, in the past, a subprime borrower was defined as one with score below 620. A HARP applicant with a sub-720 credit score or a high LTV ratio would be offered interest rates several percentage points above the current market level. For example, a borrower with a 90% to 95% LTV and a 640 to 659 score would pay nearly a half percentage point more. At these levels, the incentive to refinance is much lower.

This is an especially large problem in parts of the country where the housing market crash and economic downturn have been most severe—ironically, the areas that HARP was supposed to help. In Florida, for example, 52% of households have credit scores below 720. In the Central Valley of California, 54% of households fall below the bar. In Nevada, an astonishing 56% do.

Fannie and Freddie are not breaking precedent in charging higher interest rates to borrowers with less equity and weaker credit. The agencies have always done so, to account for the fact that such borrowers are more prone to default. But this standard practice is undermining HARP. It also is not clear what use the traditional rules have 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, increasing the chance they will stay current and reducing the number of payouts on the insurance Fannie and Freddie provide.

Another impediment to refinancing is the wide interest rate spread between rates offered by mortgage lenders and the rates Fannie and Freddie are charging. The wide spreads are due in large part to the lack of competition in mortgage lending. The industry went through significant rationalization and consolidation during the financial crisis and recession, with the top three lenders now accounting for well over half of all mortgage originations. There is little indication that existing lenders are interested in expanding their origination capacity. The number of those employed in the mortgage lending industry has been cut by more than half since the peak during the housing boom, and employment continues to decline (see Chart 8). Moreover, given the severe stress and substantial uncertainty in the housing and mortgage markets, it is unlikely that any new major lenders will enter the market any time soon.

Chart 8: Mortgage Lending Capacity Declines



Source: Bureau of Labor Statistics

Lenders may also be holding rates higher to compensate for Fannie's and Freddie's recently more aggressive efforts to put back problem loans. If lenders violate the agencies' guidelines and their loans go into default, Fannie and Freddie can require the loan originators to shoulder the financial burden themselves. Expecting more such put-backs, lenders may be building that into their current rates. The FHFA also recently filed suit charging that major banks sold Fannie and Freddie mortgage securities backed by negligently underwritten mortgage loans.

Any refinancing includes closing costs—fees to process applications or obtain appraisals and other taxes or costs. With so many households facing uncertainty about employment and the time before they may need to relocate, borrowers may prefer to conserve cash rather than pay such fees up front. Under the HARP, these fees can be capitalized into the borrower's mortgage balance, but such a "no-cost" refinancing increases the borrower's interest rate. For underwater borrowers, it also delays the day when they will again be able to accumulate equity in their homes, thus reducing the incentive to refinance.

Another potential impediment are holders of second liens (such as home equity lines and closed-end second loans), who also need to agree to put their claims on a refinanced home after those of the first mortgage holder.

Private mortgage insurers who provide insurance on Fannie and Freddie loans with LTVs above 80% must also agree to continue coverage on refinanced loans (although they do not need to increase their risk exposure if a borrower's LTV ratio has increased since origination).

Although mortgage insurers and second lien holders should have little incentive to block a refinancing that will leave the borrower less likely to default, the incentives for cooperation may not be strong, given the time and paperwork involved. Some second-lien holders may even see the refinancing as an opportunity to pressure first lien holders to buy them out. First-lien holders in turn may be unwilling to do this, believing that the second lien holder should in many cases be wiped out.

Jump-starting HARP

Jump-starting HARP requires that Fannie and Freddie not charge add-on rates, even for refinancing borrowers who have lost a lot of equity in their homes 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.

Even borrowers in an early stage of delinquency may benefit from a HARP refinancing, although many of these borrowers likely have other financial problems that make loan modification or some other foreclosure mitigation the more prudent choice. But

refinancing may help. Under current rules, borrowers who refinance under HARP are then ineligible for loan modification through the government program HAMP. This restriction should be eliminated.

To accelerate the refinancing process, Fannie and Freddie could also provide more streamlined refinancing that forgoes income verification and a full-blown appraisal to keep costs down. To further reduce paperwork and costs, it may even be possible to devise a simple form to substitute for required TILA, RESPA and HMDA filings. Unlike new borrowers, HARP candidates have already proven their ability to pay by making timely payments throughout the tough economy. Streamlining the process will not materially change the risk the GSEs are exposed to.

Fannie and Freddie could also help identify which homeowners are the best prospects for refinancing—those with the highest coupons, best credit scores, and lowest LTVs. The agencies could provide this information to their networks of mortgage lenders and brokers, who could then contact homeowners and originate the refinancings.

Refinance costs cannot be eliminated completely as process checks and controls must be in place to avoid fraud and keep loans eligible for securitization. Thus, a bolder step—as it would cost taxpayers money and may be deemed unfair—would be to subsidize refinance closing costs directly or through a tax rebate. With so much uncertainty in the job market, many borrowers fear they will be unable to recoup the upfront costs of refinancing if they have to move in a year or two. Many borrowers are still operating with a survival mentality and a preference for conserving cash rather than paying for a refinance with long-run benefits.

It would be helpful if Fannie and Freddie were to wave existing mortgage lenders' liability for past "rep and warranty" violations as long as a given mortgage is current and at least a year old. This will alleviate lenders' concerns that refinancing existing loans could uncover past errors and leave them vulnerable to put-backs by the GSEs.

To ensure that mortgage lenders do not charge extraordinary rates given their increased market power, they could be required to originate and service newly issued mortgages at a fixed spread to be determined by the GSEs. The spread needs to be large enough to entice existing lenders to temporarily expand their origination capacity. Historically, the spread has been near 25 basis points, suggesting that a spread between 25 and 50 basis points should be adequate. Given the other steps taken to lower origination costs and the scale economies involved, originating and servicing these mortgages should be highly profitable at these spreads. Perhaps an even better alternative is that if lenders do not voluntarily keep spreads close to historical norms, the GSEs could reduce the amount of business they do with these lenders in the future.

Economic logic

Economic logic strongly favors action to promote refinancing. With current mortgage rates near 4% and the median rate on outstanding mortgages above 5.5%, the potential rate reduction could average almost 150 basis points. If all Fannie, Freddie and FHA borrowers with rates above the median refinance at 4%, the gross saving to borrowers would be almost \$50 billion a year (18 million borrowers x \$150,000 average mortgage balance x 1.5%).

Clearly, not all those savings would be realized. Some borrowers would be unable or unwilling to refinance: they are too deeply under water or unemployed or have such small loan balances that it is not worth the closing costs to refinance. Borrowers who expect to sell soon will also not want to incur the cost. Given these considerations, closer to 4 million borrowers are in a good position to refinance at current market rates, saving them more than \$10 billion per year in interest payments. xii xiii

The savings would provide a quick boost for middle-income homeowners. Some of the cash would be used to repay other debt, but the bulk would likely be spent on home improvements or other needs. Assuming three-fourths of the extra cash, or some \$7.5 billion, is spent within 12 months, real GDP growth will see a small but meaningful 10-basis point boost in 2012. The fragile U.S. economy can clearly use all the help it can get.

More refinancing would also further the immediate goals of the Federal Reserve. Monetary policymakers are considering a new round of quantitative easing—a process in which the Fed purchases Treasury securities in an effort to bring down long-term interest rates, including fixed mortgage rates. Indeed, the recent decline in mortgage rates is due in part to expectations that the Fed will soon resume quantitative easing again. If that happens, it arguably would help the economy most significantly by increasing the amount of home loan refinancing. Anything fiscal policymakers can do to support the Fed's effort would be a plus.

A revamped HARP should not add significantly to Fannie and Freddie's costs and therefore should not be a burden to taxpayers. The two mortgage finance agencies would lose some interest income as refinancing lowers their return on more than \$1.2 trillion in mortgage securities and whole mortgage loans that they own directly. But under reasonable assumptions, this cost would be offset by lower default rates on the loans that are refinanced. Borrowers are more likely to stay current if their monthly payments drop by \$100 or \$200. Fannie and Freddie would break even if the probability of default on the loans and securities they own and insure falls by about 25 basis points. Even if the default does not decline by this much, it is clear that the cost to Fannie and Freddie, and by extension to taxpayers, will be small.

Downsides

While homeowners would clearly benefit from a restrung HARP, and taxpayers would be largely unaffected, global investors in agency mortgage-backed securities (MBS) would be hurt financially. As more loans are refinanced, higher-yielding MBS would be retired and replaced with lower-yielding MBS. To be precise, if a more effective HARP resulted in 4 million more refinancings, investors would receive approximately \$6.5 billion less in annual interest income. xvi

These investors include a wide array of institutions. Through its credit easing efforts last year, the Fed quickly became the largest owner of agency MBS, amassing \$1.25 trillion, or about a fourth of the total outstanding. The nation's central bank can easily digest the lost interest income from the increased prepayments, but this may put pressure on the Fed to be more aggressive in its quantitative easing efforts to forestall a counterproductive rise in mortgage rates. The interest rate spread between MBS and Treasury yields will increase regardless, but MBS yields need not rise if the Fed buys a sufficient amount of Treasury bonds.

While other private MBS investors will not be happy to get their money back when interest rates are low, they were aware of this prepayment risk when they purchased their securities. Indeed, they are likely surprised that their investments have not been retired, as they would have been in a more normal, well-functioning mortgage securities market. Restringing HARP can thus be seen as a way to correct a serious market failure. It is also important to note that MBS investors have been significant beneficiaries of the monetary and fiscal policy response to the financial panic and Great Recession. The Fed's massive purchases of agency MBS during a previous round of quantitative easing was a windfall. The myriad federal housing and foreclosure policies aiming to stem foreclosures have also significantly benefited investors through reduced prepayments.

Policymakers may be nervous that overseas investors, who are a sizable and growing source of capital for the U.S. Treasury, will be annoyed by faster prepayments. They may also worry about implications for the financial health of the nation's shaky depository institutions and pension funds, who also are big investors in agency MBS. While not unreasonable concerns, these seem marginal given the magnitude of the losses that will be widely distributed among investors.

Another potentially unwelcome side effect of boosting refinancing today could be less labor mobility in the future. Borrowers who lock in record-low mortgage rates will be less willing to move when rates start to climb. Given that homeowners tend to be more skilled than renters, this impediment to labor mobility could aggravate the U.S. economy's current skills mismatch. However, it is difficult to know the scale of this consideration; it seems small against the sizable near-term benefits of a refinancing program. It is also worth noting that those homeowners who refinance out of adjustable-rate mortgages to fixed-rate loans will be insulated from the increase in interest rates that is ultimately coming.

Further government intervention in the mortgage market could also send the wrong message to current and potential homeowners, encouraging them to delay decisions in hopes of receiving more federal assistance in the future. The three housing tax credits implemented over the past several years were instrumental in breaking the housing market's deflationary psychology, but the sharp decline in home sales after the most recent credit expired likely stems in part from potential buyers waiting for yet another credit.

Principal reduction modifications

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

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%.

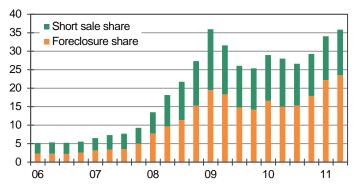
Approximately 600,000 current homeowners meet these criteria. Assuming a redefault rate of 25%, this would result in approximately 450,000 sustainable modifications. xviii

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. Without such a plan, the distress share of home sales is expected to rise from more than a third to a peak of 40% early in 2012 (see Chart 9). House prices will decline as the distress sales share rises.

But with a well-designed modification program implemented early next year, the share of distress sales will not increase appreciably.

Chart 9: Share of Distress Sales Is High and Rising

Share of home sales



Sources: Zillow, Realtors, Moody's Analytics

Such an effort would be costly. A principal reduction program of the magnitude considered here would be an estimated \$18 billion. While there is little political appetite to have taxpayers foot this bill, this could be a good use of any funds that come out of the current settlement agreement between state attorneys general and the nation's largest mortgage services over their robo-signing missteps.

Conclusions

The housing crash and foreclosure crisis are not over. Home sales and construction are stable but depressed, and prices remain weak. 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 recovery will have difficulty gaining traction. 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 will 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 HARP would provide a substantial boost with no meaningful cost to taxpayers. The economic benefit is clear. If more mortgages were refinanced, fewer borrowers would default, homeowners would have more money in their checkbooks, and the fragile economic recovery would receive a quick, sizable cash infusion. HARP will not fix all the ills that plague the housing and mortgage markets, but it has the potential to meaningfully assist homeowners at little additional 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 carefully considering given that an ongoing housing downturn remains among the most serious threats to the economic recovery.

in r

iv House prices should grow somewhere between the annual rate of growth in household income (4%) and overall annual price inflation (2%). House 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, for example, and a much lower one in Des Moines), the growth in house prices will vary considerably. For the past quarter-century or so (the recent boom and bust aside), house prices have grown at a rate closer to household income. As financial and other incentives for homeownership increased, households spent as much on housing as their incomes would allow. These incentives have likely peaked and may well decline; therefore, households will devote less of their income to housing, and prices are likely to grow more closely to the inflation rate.

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

Vi 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 origination. The Moody's estimate of negative equity is nearly the same as CoreLogic's in 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. Vii The Census Bureau's Housing Vacancy Survey is based on a sample that, given the Census 2010 data, appears to be significantly biased.

viii See "Restringing HARP: The Case For More Refinancing Now," Mark Zandi and Cris DeRitis. Moody's Analytics Special Report, October 7, 2010. http://www.economy.com/mark-zandi/documents/HARP 100710.pdf

^{ix} The HOME Act, introduced by U.S. Representative Dennis Cardoza in September, does precisely this. See

ⁱ Policymakers could take a number of other steps to shore up the housing and mortgage markets such as extending the current higher conforming loan limits that are set to decline in a few weeks, but the discussion in this testimony is limited to policy steps to support mortgage loan refinancings and modifications.

ii A well-functioning housing market is defined to be one consistent with an economy operating at full employment and growing at its potential rate.

This volume of new construction is supported by the annual formation of 1.25 million households, the obsolescence of 300,000 housing units, and the purchase of 200,000 vacation homes.

http://cardoza.house.gov/index.cfm?sectionid=87§iontree=6,87&itemid=653. Senator Barbara Boxer has introduced similar legislation:

http://www.boxer.senate.gov/en/press/releases/012611.cfm.

- xi See "Selling Home Affordable Refinance—New Refinance Options for Existing Fannie Mae Loans." Fannie Mae Announcement 09-04, March 4, 2009 https://www.efanniemae.com/sf/guides/ssg/annltrs/pdf/2009/0904.pdf
- xii The calculation of 4 million potential refis begins with the 18 million Fannie, Freddie and FHA loans that have coupons of more than 5.5%. Subtract 3.25 million that are seriously delinquent or are in foreclosure; 3.5 million with mortgage balances of less than \$75,000 and thus a reduced incentive to refinance; 3 million with LTVs above 125%; and 4.25 million with short tenures and other financial reasons they are unwilling or unable to refinance.
- This result is similar to that reached by the CBO in estimating the impact of a mass refinancing program. See: http://www.cbo.gov/ftpdocs/124xx/doc12405/09-07-2011-Large-Scale Refinancing Program.pdf. The CBO estimated that were would be 2.9 million additional refis as a result of the plan, above those that would have occurred without the plan. The 4 million refis that we estimate would occur under our proposed changes to HARP include all refis, not just those resulting from the proposed changes. This assumes the proposed changes to HARP are implemented by early next year. The assumed spendout rate is consistent with that of the spendout of the 2001 tax rebates and the refinancing wave of early in the last decade. See Johnson, et. Al "Household Expenditure and the Income Tax Rebates of 2001," American Economic Review, vol. 96, no 5. pp. 1589-1610. It is likely the spendout would be greater given that homeowners will view their lower mortgage payments more as a permanent increase in their real incomes.
- ^{xv} The break-even change in the default rate equals the lost interest income divided by the product of the mortgage debt owned and insured and the loss given default, which is assumed to be 50% of the mortgage balance.
- xvi This excludes the \$3.5 billion in interest income that would be lost by Fannie and Freddie.
- xvii To date, there have been a total of about 750,000 permanent HAMP modifications. When the HAMP program was unveiled in early 2009, President Obama predicted between 2 million and 3 million HAMP modifications.
- xviii The redefault rate could be even lower given that this is comparable to the redefault rate on HAMP modifications.
- xix Hope Now reports that mortgage loan modification efforts are running close to 1.5 million per year. This includes HAMP and, increasingly and more importantly, private modifications by mortgage servicers and banks.

^x The FHFA press release can be found at http://www.fhfa.gov/webfiles/22607/HARPSTMT9911.pdf