The national foreclosure crisis is intensifying, exacerbating the financial panic and adding to the severity of the recession. Since large numbers of homeowners began to miss mortgage payments three years ago, nearly 5 million have received notices of default—the first step in the foreclosure process—and 3 million have lost homes in foreclosure sales, short sales or deeds-in-lieu.1 With rapidly falling house prices and rising unemployment in much of the country, foreclosures are sure to accelerate in the coming year, devastating homeowners, communities, the financial system, and the wider economy.

Policymakers are working to stem the surge in foreclosures. In late 2007, FHA Secure was established to help put distressed homeowners into FHA-insured loans. Hope Now, a consortium of mortgage servicers and lenders, was created soon thereafter to streamline foreclosure mitigation efforts. Hope for Homeowners was established this past summer to encourage mortgage owners to reduce principal owed by distressed homeowners and to refinance them into FHA loans. The FDIC has also been aggressively modifying mortgage loans of those institutions that it has placed into receivership, and Fannie Mae and Freddie Mac have recently announced plans to modify loans they own and insure, where the borrowers are seriously delinquent.

These efforts have been helpful, but have been overwhelmed by the magnitude of the problem. Particularly worrisome is evidence that modification efforts to date have not been very successful. The Office of the Comptroller of the Currency recently reported that more than half of the loans modified in early 2008 were back in delinquency within six months. The problem appears to be that most modifications have been limited to lowering interest rates and extending terms. These measures can lower monthly mortgage payments, but are ineffective when homeowners owe significantly more than their homes are worth in the current housing market. Such people are likely to lose hope of ever building equity, and thus have little incentive to keep paying on their loans.

A much larger foreclosure mitigation plan is needed, including mortgage principal write-downs funded by taxpayers. The Homeownership Vesting Plan would modify unaffordable mortgage loans, making them affordable and creating strong incentives for borrowers to remain current by offering a clear opportunity to get above water again. While this would be costly to taxpayers, not responding aggressively to the foreclosure crisis will cost even more. Moreover, the plan addresses concerns common to all foreclosure mitigation plans, including moral hazard, adverse selection, and fairness.

Foreclosure Crisis. The foreclosure crisis has already taken on historic proportions, and is getting worse. Defaults on first mortgages surged from around 800,000 in 2005 to 2.65 million in 2008 (see Chart 1). Foreclosures have been most severe in Arizona, California, Florida, Michigan and Nevada—which together account for approximately half of all defaults—but are rising quickly in nearly every part of the country. Mortgage delinquencies are rising sharply in every category, from 30 days through 120 days, signaling that defaults will rise substantially in 2009.

Three waves of foreclosures have marked the current crisis. The first, in 2006, was characterized by a rapid rise in early payment defaults. Home speculators who were borrowing aggressively to finance “flipping” realized prices had

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1 A short sale occurs when a home is sold for less than the mortgage debt owed. Mortgage owners have been slow to agree to short sales, concerned they are not receiving fair market prices. A deed-in-lieu occurs when a homeowner returns a deed to a mortgage owner to discharge remaining debt on a property. All data on mortgage delinquencies and defaults used here are based on random monthly samples of credit files maintained by credit bureau Equifax.
peaked, and that the easy money was gone. Many handed lenders their keys, sometimes failing to make a single mortgage payment before defaulting.

A second foreclosure wave in 2007 began when payments rose sharply for many subprime borrowers. Most subprime mortgages are so-called “2-28” loans—payments are fixed for two years, and adjust based on six-month Libor rates thereafter. Subprime loans originated during 2005 hit their first payment reset in 2007, when interest rates were still high. The average subprime borrower’s monthly mortgage payment rose from $1,200 to $1,550, becoming impossible for many to meet.

The third wave of foreclosures hit in 2008 as a weakening job market combined with falling house prices to deepen and broaden the crisis. By September 2008, an estimated 11.8 million homeowners held mortgages that were underwater (see Chart 2).2 Falling underwater puts a mortgage at risk of default, but historically that risk does not become critical until a borrower’s income is disrupted or household expenses rise sharply and unexpectedly. Rising joblessness in 2008 hit millions of at-risk homeowners; at 6.7%, the November 2008 unemployment rate represented more than 10 million workers. More than 10 million more are underemployed, or discouraged and not looking for work.

With house prices still falling, moreover, evidence is mounting that even small financial problems now produce defaults. Many homeowners realize their mortgage payments are little more than rent, at rates far higher than the actual rents prevailing in their neighborhoods. Anecdotes suggest that where house prices have fallen particularly sharply such as the Central Valley of California or South Florida, some homeowners are walking away even if they can still pay the mortgage. Indeed, as of September, some 6.4 million homeowners had mortgage balances more than 10% greater than their homes’ market prices, and an astounding 3.5 million were underwater more than 20% (see Chart 3).

With house prices expected to slide and unemployment to rise substantially further, this third foreclosure wave will grow larger. If house prices fall another 10% over the coming year, as Moody’s Economy.com currently forecasts, an estimated 18.6 million homeowners could be underwater.3 At the same time, the unemployment rate is expected to surge near 9%, representing 14 million workers, by spring 2010. Even more disconcerting is the breadth of the phenomenon; house prices are falling and unemployment is rising in nearly all parts of the country.

Even if the economy stabilizes in 2010 as expected, defaults will remain elevated long afterward. More large payment resets are due to hit so-called “option ARMs.” Most of these mortgages were designed on the 5-25 plan: five years of fixed payments and rates pegged to Libor after that. All the option ARMs issued at the peak of the housing bubble in 2005 and 2006 will thus reset for the first time in 2010 and 2011 (see Chart 4). Moreover, any subprime loans that survive the current foreclosure wave will struggle when interest rates eventually rise, pushing up payments on these loans.

If the government’s foreclosure mitigation efforts go no further than those programs already in place, an estimated 8.5 million additional homeowners will default during the next three years. Some five million households will ultimately lose homes.

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2 The estimate is based on mortgage data derived from Equifax credit file information and house price data from Fiserv Case-Shiller.

3 This overstates the actual number likely to fall into this category, since many will default and some loans will be modified.

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in foreclosure sales, short sales, or deeds in lieu (see Chart 5). The financial and economic impact will be substantial.

**Existing Mitigation Efforts.**

Policymakers have been ramping up efforts to address the foreclosure crisis for more than a year. In summer 2007, President Bush unveiled FHA Secure, designed to help homeowners who fell delinquent after a payment reset. To qualify, a homeowner had to be current prior to the reset, make at least a 2.5% down payment, and have sufficient income and a stable job. While well-intentioned, FHA Secure was not particularly helpful since the hardest-pressed homeowners were underwater and thus could not make the down payment.

The administration followed this in October 2007 with Hope Now, a consortium of mortgage lenders, services, and investors brought together to find ways to streamline foreclosure mitigation. No one had ever contemplated the need to address many millions of troubled mortgage loans at once, and the system was not up to the task on its own. Hope Now has been successful in bringing together the diverse players involved; the effort has also succeeded in opening lines of communications between stretched homeowners and mortgage servicers.

Still, Hope Now is not keeping enough distressed homeowners out of foreclosure. Most of its efforts involve putting troubled homeowners on repayment plans (see Chart 6). These provide little relief; the plans simply let delinquent homeowners resume paying their mortgages with no change in terms. Borrowers also must make up any missed payments and pay associated penalties. Monthly payments actually rise under most repayment plans. Loan modifications by Hope Now participants have increased recently, but these largely involve reducing mortgage rates and extending loan lengths to lower monthly payments. Most modifications do not reduce principal.

Various agencies have initiated their own loan modification efforts. The FDIC has worked with homeowners who borrowed from institutions that were placed in federal receivership. Fannie Mae and Freddie Mac have their own programs, as do mortgage lenders and servicers such as Bank of America, Citigroup, and JP Morgan Chase. But while laudable, these efforts are not reaching the most troubled homeowners, and the modifications that do occur do not involve principal write-downs.

Experience is showing that rate reductions and term extensions without principal write-downs do not prevent many foreclosures. Comptroller of the Currency John Dugan recently reported that more than half the loans modified in the first quarter of 2008 fell delinquent within six months. 4 After three months, nearly 36% of the borrowers were more than 30 days past due. After six months, the rate was nearly 53%, and after eight months, 58%.

One program that does attempt to use principal write-downs to modify mortgages is the Hope for Homeowners program, begun in October 2008. The program converts troubled mortgages into 30-year, fixed-rate FHA loans, on condition that the mortgage owner is willing to shrink the loan’s principal and pay an insurance premium to the FHA. Homeowners in the program end up with a smaller mortgage, but they do have to pay an annual insurance premium as well and share the benefits of any future price appreciation.

Hope for Homeowners has drawn just several hundred applicants over the past three months. Hampering take-up of the plan is a lack of cooperation by second-lien holders, who must subordinate their interests before a refinancing can proceed; the FHA’s high insurance costs; and most importantly, the reluctance of mortgage owners to reduce principal amounts. 5

All foreclosure mitigation efforts to date have been voluntary; mortgage owners have not been compelled to participate. An effort to change the bankruptcy code in ways that would compel greater participation, by allowing a first mortgage to be reduced in a Chapter 13 bankruptcy, has been blocked in Congress. 6 Currently, bankruptcy judges may reduce the amount owed by bankrupt borrowers on all debts, except first mortgages.

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4 The current debate over additional foreclosure mitigation plans may also impede adoption of Hope for Homeowners, as mortgage owners wait to see if a new plan will offer them more favorable terms.

5 Chapter 13 bankruptcy can impose a repayment plan on households that includes strict budget and debt repayment terms. I have testified in support of allowing judges to impose write-downs on mortgage owners as well. See http://www.economy.com/mark-zandi/documents/House_Subcomt_01_29_08.pdf

6 The press release announcing these results can be found at: http://www.occ.treas.gov/ftp/release/2008-142.htm
Opponents of this change—led by the banking industry—argue that such a change would result in higher mortgage rates. This is unlikely under current versions of the proposal, however, as the proposed change would only apply to mortgages already originated, and not loans made in the future. There is a reasonable concern that the change would result in greater losses for all lenders, particularly unsecured credit card lenders, since there would be more bankruptcies. But these costs seem modest compared with the additional benefit of inducing more mortgage loan modifications with principal write-downs. Despite President-elect Obama’s support for bankruptcy reform during the campaign, there has been little discussion of the issue by the transition team since the election.

The transition team is putting together another, more comprehensive foreclosure mitigation plan, which is likely to meet a receptive Congress. The Democratic leadership has already suggested that some of the remaining TARP money be used for such a plan. One plan, put forth by FDIC Chairwoman Sheila Bair, would pay mortgage servicers $1,000 for every homeowner put into a new mortgage with no more than a 31% debt-to-income ratio; a ratio that the FDIC believes to be consistent with an affordable mortgage payment. A second component of the plan is that the government and the mortgage owner would split any losses on the modified mortgage loan if it re-defaults. The FDIC estimates that the plan would save 1.5 million foreclosures in 2009, at an estimated cost near $25 billion. Take-up on the FDIC plan should be strong given the payment to mortgage servicers and the cost-sharing arrangement with mortgage owners. The plan does not create an incentive for principal write-downs, however. Most modifications would likely only include rate reductions and term extensions, resulting in an undesirably high re-default rate; this suggests the plan will cost taxpayers more than estimated.

**Homeownership Vesting Plan.**

A much larger foreclosure mitigation plan that includes mortgage write-downs is necessary to significantly slow the foreclosure wave. Under the Homeownership Vesting Plan, qualifying homeowners would have their mortgages split into two pieces: One would be a 30-year, fixed-rate FHA-insured loan with a balance equal to 97.5% of the home’s current appraised value; the other would be a non-amortizing, no-interest loan from the Treasury, with a balance equal to the difference between the homeowner’s original loan amount and the new FHA loan. Every year that the homeowner remains current on the new FHA loan, a fifth of the balance owed to the Treasury would be forgiven, so after five years of consistent payments, the Treasury loan would be paid off. The original mortgage owner would then own a new FHA loan, and would also receive a payment from the Treasury equal to the difference between the original loan amount and the FHA loan.

If the homeowner defaulted on the FHA loan during the five-year vesting period, the non-vested portion of the Treasury loan would be repaid first; then the mortgage owner would receive the remainder of the foreclosure proceeds.

Under this plan, mortgage servicers would receive $1,000 for each loan modified to defray their costs and give them an incentive to arrange loan modifications. Mortgage servicers do not have strong incentives to modify loans, particularly those that back private-label subprime, alt-A and jumbo mortgage securities. Servicers’ agreements with owners of these securities are in many cases not explicit about when and how a loan should be modified. Most agreements hold that a modification should only occur if it is in the best interest of the investors in these securities as determined by a net present value comparison of the loss-mitigation effort with a foreclosure. It turns out that this is much easier said than done; the NPV calculation works out differently for different groups of investors, and servicers are nervous about making too many modifications lest they be sued by investors. Servicers, who operate on thin margins, are also ill-prepared to handle large numbers of complicated and costly modifications.

Under the Homeownership Vesting Plan, second-mortgage holders with liens on properties of homeowners participating in the plan are paid five cents on the dollar to extinguish those liens. Approximately two-thirds of subprime loans originated during the housing bubble had so-called “piggyback” second mortgages. Homeowners took out these loans to avoid paying private mortgage insurance. That kept the first mortgage at a loan-to-value ratio of 80%, thus avoiding the requirement for PMI, and the second mortgage in many cases took the cumulative LTV of the first and second mortgage to 100% or more. One unintended consequence of this, now that many loans have gone sour, is to prevent modifications, since second mortgage owners can veto any modification. Their lien may be essentially worthless, since house price declines have more than wiped out their interest in the home, but they still must be paid something to obtain their consent. First mortgage owners, particularly those in pools backing mortgage securities, have not been able to agree to pay second-lien holders. Under the Homeownership Vesting Plan, second-lien holders are given five cents on the dollar to get out of the way of the modification.

The Homeownership Vesting Plan applies to mortgages for owner-occupied residences that:

- Had original loan amounts below the current FHA loan limit.
- Were unaffordable at origination, as defined by a front-end, debt-to-income ratio exceeding 30%, and a cumulative loan-to-value ratio of over 90%.
- Meet the current underwriting criteria of the FHA Secure program.
- The homeowner owns no other residences.

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2 These are known as Pooling and Servicing Agreements or PSAs.

3 Investors in the higher-rated tranches of mortgage securities, for example, are often less interested in loan modifications, since defaults are more likely to hurt investors in lower-rated tranches.
An estimated 3.75 million homeowners would qualify for this plan. If all qualifying homeowners were to actually participate, the total cost to the Treasury would be approximately $200 billion. The actual take-up on the plan would be measurably less, however—an estimated 1.7 million homeowners—considering the many difficulties involved in contacting troubled homeowners, the difficulty many homeowners will have qualifying under the FHA Secure program given rising unemployment and other disruptions to income, and various impediments common to all loan modification plans. The Homeownership Vesting Plan will thus cost taxpayers approximately $100 billion (see Table 1). Of this, close to $77 billion is the Treasury payment to mortgage owners. Seven billion goes to the FHA as a downpayment on the modified FHA Secure loans. Mortgage servicers receive $2 billion. Second-lien holders receive $1 billion; an additional billion goes for administrative costs; and the remainder is the interest cost on the Treasury borrowing used to finance the payments.\(^{10}\)

While this is a costly plan for taxpayers, the alternative of not responding aggressively to the foreclosure crisis will cost taxpayers even more. To see this, consider that for every 100,000 incidents of default among first mortgage holders, house prices drop an estimated 0.35% as measured by the national Fiserv Case-Shiller index.\(^{11}\) Forestalling 1.7 million loan defaults would reduce the peak-to-trough decline in house prices by approximately 6 percentage points. This equates to some $1.1 trillion in household wealth, which in turn implies a drop in consumer spending of some $55 billion (since the housing wealth effect is estimated at 5 cents on the dollar).\(^{11}\) The costs to the economy go well beyond this, of course, including greater credit losses for already-highly stressed financial institutions, lost property tax revenues for local governments, and much more.

Some of the $350 billion remaining in the Troubled Asset Relief Program could justifiably be used to pay the $100 billion cost of the Homeownership Vesting Plan. Mortgage owners receiving Treasury payments under the plan would in many cases be the same financial institutions that have already received direct equity infusions from the Treasury. The equity infusions have been provided with few strings and no mechanism for determining how they are being used. However, under the Homeownership Vesting Plan, funds will not only support financial institutions but also help stem foreclosures, the success of which can be readily measured. Congress established TARP to shore up the financial system and support the distressed housing and mortgage markets. The Homeownership Vesting Plan meets these objectives.

The Homeownership Vesting Plan addresses a number of concerns that apply to all foreclosure mitigation plans. The plan should significantly limit mortgage re-defaults, as it provides a strong incentive for distressed homeowners to remain current on their new FHA loans, and for mortgage owners to work with homeowners to ensure that they do. The plan does not guarantee that participating homeowners will be above water in five years, but under most scenarios it comes close.

Participation in the plan by mortgage owners, including trustees of mortgage pools, should be high given the clear economic benefit on a net-present-value basis compared with foreclosure. Mortgage owners get an upfront payment from the Treasury if they participate, compared with the high probability of a costly foreclosure if they do not. Mortgage servicers also have a strong incentive to help arrange modifications, in the $1,000 payment they receive for each one.\(^{12}\)

Worries about adverse selection—that mortgage owners would put mortgages with the highest likelihood of default into the plan—should be mitigated given the significant benefit to them if the modification works. There are also significant penalties in the FHA Secure program for mortgage owners who put too many loans into the program that subsequently default.

Moral hazard concerns—that homeowners would intentionally go delinquent to qualify for help—are not significant under this plan. Under most existing modification plans,

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\(^{10}\) The administrative infrastructure used by Fannie Mae’s Homesaver Advance program, which provides a low-rate unsecured personal loan to pay mortgage principal and interest in arrears, could possibly be used by the Homeownership Vesting Plan given the similarities in the programs. More about the Homesaver Advance Program is available at: https://www.efanniemae.com/sf/servicing/homesaveradvance.jsp

\(^{11}\) The housing wealth effect measures the impact on consumer spending of a change in housing wealth. Estimates of the housing wealth effect and the impact of increased foreclosures on house prices are based on various econometric analyses that are available upon request.

\(^{12}\) Mortgage insurance companies should also be very supportive of the plan, since they would be absolved of potential losses. This would shore up their industry and ensure that they contribute to a robust mortgage credit market going forward.
homeowners must attest that they are not intentionally delinquent so as to receive the modification. This seems vulnerable to significant abuse. Under the Homeownership Vesting Plan, only homeowners who were put into unaffordable mortgage loans at origination—with debt-to-income ratios above 30% and cumulative loan-to-value ratios above 90%—would qualify. Homeowners must also prove they have the financial wherewithal to make good on their new FHA loan.

The plan also addresses fairness concerns. Only owner-occupied homes with mortgages below the current FHA loan limit qualify for the plan. These would also be loans that were unaffordable at origination; they represent cases in which lenders failed in their fiduciary responsibility to put homeowners into homes they could reasonably afford. Some of these homeowners probably knew they were rolling the dice, but most probably were relying on lenders. Some hard-working homeowners stretching to make their payments who do not qualify for the plan could justifiably be upset; but while the plan will not benefit them directly, it will lead to more stable house prices and a better job market.

Conclusions. The foreclosure crisis is intensifying rapidly. With millions more homeowners set to lose their homes, house prices threaten to fall significantly further across much of the country. This will further undermine the wealth of all homeowners, create significantly more credit losses, and deepen the already-severe recession. No foreclosure mitigation plan will forestall what will be a significant number of future foreclosures and house price declines, but the Homeownership Vesting Plan could mitigate the most serious downside threats. Forestalling 1.7 million foreclosures in the coming year would provide a meaningful source of support to the housing and mortgage markets, and, by extension, the financial system and broader economy.