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"Turning the Tide: Preventing More Foreclosures and Holding Wrong-Doers Accountable"

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Good afternoon Co-Chairman Grijalva, Co-Chairman Ellison, and members of the caucus. I am John Griffith, an Economic Policy Analyst at the Center for American Progress Action Fund, where my work focuses on housing policy.

It is an honor to be here today to discuss ways to soften the blow of the ongoing foreclosure crisis. It's clear that lenders, investors, and policymakers—particularly the government-controlled mortgage giants Fannie Mae and Freddie Mac—must do all they can to avoid another wave of costly and economy-crushing foreclosures. Today I will discuss why principal reduction—lowering the amount the borrower actually owes on a loan in exchange for a higher likelihood of repayment—is a critical tool in that effort.

Specifically, I will discuss the following:

- **First, the high cost of foreclosure**. Foreclosure is typically the worst outcome for every party involved, since it results in extraordinarily high costs to borrowers, lenders, and investors, not to mention the carry-on effects for the surrounding community.
- **Second, the economic case for principal reduction**. Research shows that equity is an important predictor of default. Since principal reduction is the only way to permanently improve a struggling borrower's equity position, it is often the most effective way to help a deeply underwater borrower avoid foreclosure.
- **Third, the business case for Fannie and Freddie to embrace principal reduction**. By refusing to offer write-downs on the loans they own or guarantee, Fannie, Freddie, and their regulator, the Federal Housing Finance Agency, or FHFA, are significantly lagging behind the private sector. And FHFA's own analysis shows that it can be a money-saver: Principal reductions would save the enterprises about $10 billion compared to doing nothing, and $1.7 billion compared to alternative foreclosure mitigation tools, according to data released earlier this month.
- **Fourth, a possible path forward**. In a recent report my former colleague Jordan Eizenga and I propose a principal-reduction pilot at Fannie and Freddie that focuses on deeply underwater borrowers facing long-term economic hardships. The pilot would include special rules to maximize returns to Fannie, Freddie, and the taxpayers supporting them without creating skewed incentives for borrowers.
- **Fifth, a bit of perspective**. To adequately meet the challenge before us, any principal-reduction initiative must be part of a multipronged solution that includes support for refinancing, alternative loan modifications, housing counseling, pre-foreclosure mediation, reforms to the bankruptcy code, and several other foreclosure prevention tools.

But before I go further into the possible solutions, I'd like to take a moment to lay out the negative equity crisis facing millions of American families today, many of whom have loans backed by Fannie Mae or Freddie Mac.

America underwater

More than five years into what is arguably the worst foreclosure crisis in American history, millions of families are still at serious risk of losing their homes. In fact, some analysts predict we're only halfway through the crisis.[1]

Here's where we stand today. Banks and Wall Street firms have foreclosed on about 11 million homes since 2007,[2] and according to analysts from Bank of America Merrill Lynch, there are more than 7 million homes still in the foreclosure pipeline.[3] The historic decline in home prices has left nearly one in four homeowners "underwater," meaning they owe more on their mortgage than their home is worth, adding up to more than $700 billion in total negative equity.[4]

Fannie Mae and Freddie Mac, both under government conservatorship since 2008, own or guarantee about 3 million of those underwater loans, accounting for nearly $100 billion in negative equity.[5]

Of course the housing crisis did not impact every community equally. In hard-hit cities like Las Vegas, Miami, and Phoenix, home prices have dropped more than 50 percent.[6] Just four states—California, Florida, Arizona, and Massachusetts—account for half of the nation's total negative equity.[7] Still, the remaining states face serious hardships. Approximately one-third of properties with a mortgage outstanding in Michigan and Georgia are underwater, while more than 20 percent of mortgages in Ohio, Maryland, Virginia, Colorado, New Hampshire, and Illinois are underwater.

Why is negative equity such a big problem? Research shows that underwater borrowers are at higher risk of foreclosure than borrowers with more equity in their home.[8] Certainly the amount of money a borrower actually pays on their mortgage each month relative to their income, other expenses, and other debt is a critical component of their ability to avoid default. But payment size is not the only consideration: A borrower's equity position also matters quite a bit.

Families that are hopelessly underwater often cannot see the long-term upside from making expensive monthly payments into a bad investment—especially when their income or other expenses come under stress—and these borrowers often have trouble refinancing or selling their home down the line. On the other hand, borrowers with more equity are naturally more likely to stick it out in tough economic times by making deep cuts to other areas of spending.

When a deeply underwater borrower starts falling behind on their mortgage payments, lenders and investors have two basic options: Move forward on lengthy and expensive foreclosure procedures or work out a new deal the borrower can afford. In many cases foreclosure is not the best outcome for any party.

The administrative costs, legal fees, foregone interest, and losses on the property cost the lender about $50,000 on the typical foreclosure, according to the Federal Reserve Bank of Chicago. By comparison, preventing foreclosure costs lenders about $3,300 on average.[9] Meanwhile, the borrower will lose any initial equity in the home, face high administrative costs associated with foreclosure proceedings,[10] and have a serious blemish on their credit history, making it much harder to obtain a loan in the future. And the borrower's neighbors would likely see the value of their home suddenly decrease just because there was a foreclosure in the neighborhood.[11]

A loan modification—lowering the monthly payment by either changing the interest rate, extending terms, deferring payments, reducing principal, or some combination of these steps—is often the only way to prevent costly foreclosure proceedings and keep a delinquent borrower in their home.

Each borrower has unique financial constraints, so each loan modification must be tailored to those needs. If a borrower has significant equity in their home but just saw their income reduced indefinitely, a term extension or interest-rate modification might be the best option. But if a borrower is facing a temporary spike in expenses or drop in income, then a short-term payment deferral might be preferable.

In cases where the borrower is deeply underwater and facing a long-term reduction in income or increase in mandatory spending, the most effective way to avoid foreclosure is to both reduce monthly payments and rebuild equity in the home. That's where principal reduction—lowering the amount the borrower actually owes on their mortgage—can help.

The economic case for principal reduction

For deeply underwater loans, simply lowering the monthly payment may not be enough—borrowers also need a fighting chance at reaching positive equity over a reasonable timeframe. This is precisely why principal reductions, which help restore equity by writing down some of what is actually owed, have proven to be an effective way to stave off unnecessary foreclosures.

Reams of economic evidence back this up. A recent New York Federal Reserve Bank study concluded that re-default rates were lower for private subprime mortgage modifications involving principal forgiveness than those involving interest-rate reductions.[12] Another from the University of North Carolina's Center for Community Capital found that modifications combining principal write-downs and interest-rate reductions resulted in the highest repayment rates compared to other modifications.[13]

Given these findings, it should be no surprise that many private mortgage lenders, servicers, and investors have embraced principal reductions. In the fourth quarter of 2011, banks used principal reduction for about one in four modifications on loans held in their own portfolios, according to the Office of the Comptroller of the Currency. And when banks modified their loans through the Treasury's Home Affordable Modification Program, or HAMP, which provides funds to help defray the cost of write-downs and other modifications, about 43 percent included some principal reduction.[14]

Banks are doing this because it's good business practice, not to promote broader social or economic goals. When private firms decide whether or not to reduce principal on delinquent loans through HAMP, they run what's called a "Net Present Value" test, modeling expected costs and cash flows in the event of foreclosure compared to several modification alternatives. Lenders, investors, and servicers are under no programmatic obligation to reduce principal, even when the Net Present Value test identifies it as the best option. But as mentioned above, many do.

That said, it's important to note that principal reductions have a positive impact the broader housing market, which remains one of the biggest drags on our economic recovery. When a lender or servicer avoids an unnecessary foreclosure, the market price for that home stays high, helping to stabilize home prices and local housing markets. And since home prices are often derived from comparable homes in the neighborhood, that single foreclosure would also reduce home values for everyone else in the neighborhood.[15]

Principal reductions also cause ripples throughout the economy. Homeowners with little equity, as well as anyone uncertain of the value of their property, are often reluctant to invest in renovations and upgrades.[16] So principal reductions that bring a borrower to (or close to) positive equity should help drive up demand for home-related industries from window curtains to washing machines, while improving the overall quality of the housing stock.

At the same time, families digging their way out of mortgage debt are not spending as much on clothes, food, and other consumer goods, discouraging businesses from investing and bringing on new employees. By reducing the borrower's debt overhang—not to mention monthly mortgage payments—principal reductions free up much-needed funds for other purchases, boosting aggregate demand.

But not all mortgage investors are convinced of the power of principal reduction. The most prominent holdouts are the country's two biggest mortgage finance companies, Fannie Mae and Freddie Mac.

Fannie, Freddie, and FHFA's current position on principal reduction

Fannie Mae and Freddie Mac, both under government conservatorship since 2008, are banned from offering principal write-downs as part of their modifications by their regulator, the Federal Housing Finance Agency, or FHFA. That's the case despite FHFA's own analysis showing that principal reduction would actually *help* the books of Fannie and Freddie in the long run compared to other foreclosure prevention approaches.

Earlier this month FHFA released an analysis focusing on Fannie- or Freddie-backed borrowers that are expected to be eligible for the Home Affordable Modification Program, which was created in 2009 to help struggling homeowners avoid foreclosure. The agency projected about 700,000 borrowers would be eligible for HAMP, being both delinquent and deeply underwater, meaning their mortgage is for an amount 115 percent or more of the current value of the home.[17]

Here are the basic findings. If Fannie and Freddie did nothing to avoid unnecessary foreclosures, then together they would expect to lose about $63.7 billion on these loans. If the companies defer a portion of principal and interest on those loans to avoid some foreclosures, known as principal forbearance, they expect to lose significantly less: $55.5 billion. But they can stave off even more foreclosures and losses through principal reduction, resulting in just $53.7 billion in losses.[18]

In other words, a federally supported principal reduction program will save Fannie Mae and Freddie Mac about $10 billion compared to doing nothing, and $1.7 billion compared to alternative foreclosure mitigation tools, according to the FHFA's own analysis.

Given the overwhelming case for doing more principal reductions, why is FHFA reluctant to take this direction? Based on comments from FHFA Acting Director Edward DeMarco, the agency appears to have three primary concerns:

- The financial benefits of principal reduction rely heavily on taxpayer subsidies
- The sudden availability of principal reductions could inspire some underwater borrowers to stop making payments just to qualify for assistance—what DeMarco calls "strategic modifiers"[19]
- Principal reductions could impose a significant administrative burden on Fannie, Freddie, and FHFA, which could further reduce the bottom-line benefit

While these are important considerations in weighing the costs and benefits of any principal-reduction initiative, none of these concerns should be deal breakers for FHFA. Let's examine each in turn.

Taxpayer subsidies

FHFA estimates that offering principal reductions to 700,000 Fannie- or Freddie-backed borrowers would require about $3.7 billion in payments from the U.S. Treasury through HAMP. The Obama administration recently made these funds available to Fannie and Freddie for the first time.

But it's important to understand a key distinction here. Congress in 2009 instructed the Treasury to set aside a portion of funds through the Troubled Asset Relief Program—enacted to protect our economy from complete meltdown at the height of the financial crises—for foreclosure prevention, resulting in $29.9 billion going to HAMP. Under the new rules, Fannie, Freddie, and their servicers can now use those funds to keep more troubled borrowers in their homes through principal reduction, which is fully consistent with Congress' initial intent.

FHFA has a very different goal in mind: to protect taxpayers by preserving the assets of Fannie Mae and Freddie Mac. It's not FHFA's role to weigh the social benefits of the foreclosure prevention programs created by Congress.

That said, we mustn't ignore FHFA's second congressional mandate: to foster "liquid, efficient, competitive, and resilient national housing finance markets."[20] The agency's true responsibility as conservator goes beyond the simple calculus of net costs and benefits to the enterprises. On top of the financial gains, a targeted principal-reduction program would lead to fewer foreclosures, which in turn means more stable neighborhoods and stronger local housing markets.[21]

So-called "strategic modifiers"

About three-fourths of underwater borrowers with Fannie- or Freddie-backed loans are current on their mortgage, and the last thing the Federal Housing Finance Agency wants to do is push those borrowers to miss payments unnecessarily. Indeed, the agency's analysis shows that any financial gains from principal reduction could be wiped out if the program were to cause 90,000 borrowers to become "strategic modifiers." [22]

But this problem should not be overstated. First, this is not a new concern. Any modification program that reduces monthly mortgage payments, whether through interest-rate reductions, term extensions, or payment deferrals, could create skewed incentives for borrowers. There's very little evidence that the sudden availability of principal reductions will meaningfully change borrower behavior.[23]

Second, there are simple ways Fannie and Freddie can structure a principal-reduction program without creating skewed incentives for borrowers. One solution would be to make this a one-time program open to borrowers that are already delinquent when the program begins. Such a rule limits the borrower's ability to default intentionally just to be eligible.

Another solution is to impose some additional cost on borrowers that receive a reduction—that is, on top of the consequences of default on the borrower's credit score. This would make principal reduction unattractive to those who don't truly need it. We adopted one such approach for our proposed pilot—a "shared appreciation" model, which I will discuss in detail later.

The administrative burden of principal reduction

In his latest remarks DeMarco warned that principal reductions could result in certain "operational costs," including technological upgrades to better track loans and guidance to and training for servicers.[24]

This is a serious concern but one that has to be put in perspective. Fannie and Freddie are responsible for more than $5 trillion in mortgage assets and remain two of the biggest and most influential financial institutions in the world. There's no excuse for their systems and internal processes to be so far behind private banks, many of which are currently doing principal reductions. And while upgrades and training may cost money today, such an investment will likely save much more money tomorrow.

It's time for Fannie, Freddie, and FHFA to rethink their position on principal reduction. If nothing else, this month's preliminary analysis makes it much more difficult for FHFA to maintain an across-the-board ban on principal reductions.

The next step is to test the model in the real world. Our recent report offers one possible way to do that.

Our solution: A "shared-appreciation" modification program at Fannie and Freddie

To maximize returns to Fannie and Freddie, we propose a pilot program that reduces principal without creating skewed incentives for borrowers: so-called "shared appreciation" modifications.

Here's how it would work. Fannie or Freddie agrees to write down the principal on deeply underwater loans to 115 percent of the home's current value.[25] In exchange, the borrower agrees to split any future appreciation on the home, payable at the point of resale or refinancing. We recommend operating this program through the Home Affordable Modification Program.[26]

The borrower has a reason to keep paying, while the lender or investor benefits if and when home prices eventually stabilize and rebound. Since the borrower has to give up a meaningful share of future home price appreciation, basically establishing a cost for program participation, the shared appreciation modification is not particularly attractive to borrowers that don't need it. This deters borrowers from defaulting on their loan just to get a reduction in principal—what some critics call the "moral hazard" problem.

That said, principal reductions should not be available to everyone. As is the case with any loan modification, a reduction in principal must be in the best interest of both the borrower and the lender, or in many cases the mortgage investor that owns the loan. This consideration must be done on a loan-by-loan basis, based on a Net Present Value test .

At this point we don't have enough data to determine when exactly principal reduction is the best option for Fannie and Freddie compared to other modifications such as interest rate modifications or principal deferral. Indeed, that's the main reason for a targeted pilot. For now we recommend Fannie and Freddie focus on borrowers that are most likely to benefit from a reduction, specifically borrowers that:

- Are eligible for a principal reduction through the Home Affordable Modification Program, meaning they are seriously delinquent and their mortgage is worth at least 115 percent of the home's current value
- Face a long-term economic hardship, such as a non-temporary decrease in income or a permanent increase in unavoidable expenses
- Do not have private mortgage insurance or a second lien such as a home equity loan, unless the insurer or lien holder agrees to share the write-down

That last requirement, however, requires a closer look.

Mortgage insurance

When a loan with mortgage insurance defaults, the insurance company usually bears most or all of the loss. Thus, on an individual loan it is the insurer—not Fannie or Freddie—who has the most to gain from avoiding foreclosure. That's why the initial pilot should focus first on deeply underwater loans without mortgage insurance.

In cases where the loan is insured, Fannie and Freddie should work with the insurance provider and the borrower to find a mutually agreeable principal reduction, with shared appreciation as one available option.[27] Another option is for the private insurer to pay a so-called "partial" or "advance" claim, providing Fannie and Freddie with a portion of the insurance claim before default, which is passed on to the borrower in the form of a principal reduction. Since the

borrower is more likely to keep making payments, everyone is better off. And if the borrower defaults anyway, the insurer pays the remainder of claim, leaving Fannie and Freddie no worse off.

About 43 percent of underwater, seriously delinquent GSE loans have private mortgage insurance, according to DeMarco's recent remarks.[28]

Second liens

In instances where an underwater borrower has both a first and second mortgage, we strongly believe that second-mortgage investors should share the burden of any principal reduction according to their contractual position. But recent history shows that is much easier said than done, especially when the second lien is held by a different investor than the first. In cases where there is a second lien, it is often very difficult to have the second-lien holder agree to a principal reduction, with the result that the process stalls or fails completely.

To prevent a windfall to second-lien investors that refuse to embrace the write-down, we recommend this pilot to focus first on loans that do not have second mortgages. That said, we urge Fannie and Freddie to consider ways to work with second liens when reducing principal. As the first lien holder, Fannie and Freddie do have significant negotiation power over the second-lien holder since they can always move forward with foreclosure procedures.

To assist this negotiation, the Treasury Department has set aside special funds to help permanently modify second liens through the Home Affordable Modification Program, known as 2MP.[29] All servicers participating in HAMP are required to participate in 2MP, even if they are not servicing the first mortgage. And these incentives seem to be working: Servicers last month initiated modifications on 63 percent of eligible second liens under HAMP, according to Treasury data.[30]

It's unclear exactly how many underwater Fannie- or Freddie-backed loans have second liens. A recent report from *HousingWire* estimated that less than 18 percent of GSE loans have one, but we expect that percentage to be higher for deeply underwater mortgages.[31] Indeed, DeMarco estimates that more than a quarter of HAMP-eligible GSE loans, and perhaps even half, have an associated subordinate lien.[32] Meanwhile, *CoreLogic* estimates that about 40 percent of all underwater borrowers have a home equity loan or line of credit.[33]

All told, FHFA estimates that "well over half" of Fannie's and Freddie's seriously delinquent, underwater mortgages have a "third party that share the credit risk," in the form of a second lien, a mortgage insurance, or both."[34]

Next steps

For years Fannie Mae and Freddie Mac have set the standard for several practices in mortgage finance, including loss mitigation. But in the case of principal reductions, the enterprises are significantly lagging behind their purely private counterparts.

There are certainly complexities involved in conserving the assets of the world's two largest mortgage firms. But principal reductions make clear economic sense, even when compared to alternative foreclosure prevention tools.

This is not a matter of charity, though targeted principal reductions will likely give hundreds of thousands of struggling homeowners a fighting chance at staying in their homes. At its core this is good business—a fact that is embraced by the private sector and confirmed by FHFA's own analysis.

The best way to move forward is by testing the shared appreciation model. There are currently two bills, one from Rep. Maxine Waters (D-CA) of this caucus[35] and another from Sen. Bob Menendez (D-NJ)[36] that would establish principal reduction programs with shared appreciation at Fannie and Freddie. These are helpful jumping-off points for future debate on the costs and benefits of principal reduction. And while I believe it is well within FHFA's current regulatory power to develop this pilot without congressional approval, I encourage Congress to work with Fannie, Freddie, and their regulator to develop a program that targets those who most need a principal reduction and works in the best interest of all parties involved.

Clearly, principal reduction will not be a silver bullet to solve our housing woes. To successfully meet the needs of the more than 3 million underwater families with Fannie- or Freddie-backed loans, not to mention the millions of other borrowers also struggling to stay in their homes, principal reduction must be one part of a broader solution that includes:

- Programs to help more borrowers that are current on their monthly payments refinance to today's historically low interest rates, regardless of their equity position or who owns or guarantees their mortgage;
- Incentives to encourage more lenders and servicers to pursue alternative loan modifications, such as interest rate reductions, term extensions, and principal deferrals;
- Increased funding for pre-purchase or pre-refinance housing counseling and pre-foreclosure mediation, in which the mortgage lender or servicer negotiates terms of the delinquent mortgage in the presence of a neutral third party;
- An expansion of deed-for-lease agreements for families that can no longer make their monthly mortgage payments but could afford a fair-market lease on the same property;
- A more speedy and efficient process for short sales and deed-in-lieu agreements to help more struggling families avoid costly and lengthy foreclosure proceedings; and
- Reforms to the bankruptcy code to allow courts to restructure the outstanding amount of an underwater homeowner's mortgage debt to market value, bringing mortgages in line with other assets and liabilities.

These efforts will surely help prevent unnecessary foreclosures in the future, but they will do little to deal with the millions of foreclosures that have already happened. That's why more must be done to stabilize local home prices, clear the glut of foreclosed properties from the for-sale market, revitalize communities hit hard by the crisis, and help the victims of foreclosure get back on their feet. Only then can we start mending a housing sector that remains one of the biggest drags on our economic recovery.

In closing, I would like to commend the co-chairmen and the members of this caucus for holding this hearing. We're a long way from the end of the crisis, and we need to keep all options on the table moving forward.

With that, I would be happy to take any questions.

John Griffith

John Griffith is a Policy Analyst with the Economic Policy team at the Center for American Progress Action Fund. His work focuses on housing policy, foreclosure prevention, and federal credit programs. Prior to joining CAP Action, John worked as an analyst with the Social and Economic Policy Division of Abt Associates, where he researched federal homeless assistance, affordable housing, and community development programs. He holds a bachelor's degree in economics and political science from Villanova University, where he graduated magna cum laude.

ENDNOTES

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[18] Ibid.
[19] Remarks of Edward J. DeMarco, "Addressing the Weak Housing Market: Is Principal Reduction the Answer?" April 10, 2012. Available at http://www.fhfa.gov/webfiles/23876/Brookings_Institution_Principal_Forgiveness.pdf.
[20] US Code Title 12, Sec. 4513. Available at http://uscode.house.gov/download/pls/12C46.txt.
[21] It's worth noting that the model FHFA used in their initial analysis in January assumed that principal forgiveness avoids more re-defaults than alternative modifications. The report states that "the model, and hence the analysis, takes into account the sustainability of the modifications and assumes that principal forgiveness reduces the rates of re-default on the loans to a greater extent than would forbearance." See page 2 at http://www.fhfa.gov/webfiles/23056/PrincipalForgivenessltr12312.pdf.
[22] Ibid.
[23] For example, proponents of the "strategic modifier" argument often cite a Columbia study that tracked the response to a 2008 announcement that Bank of America would modify certain mortgages related to predatory

lending practices at Countrywide Financial Corp. The study found that the delinquency rate on eligible Countrywide loans increased substantially in the months immediately after the announcement. But the announcement covered several kinds of loan modifications, not principal reductions specifically. That study can be found at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1836451.

[24] Remarks of Edward J. DeMarco, "Addressing the Weak Housing Market: Is Principal Reduction the Answer?" April 10, 2012. Available at http://www.fhfa.gov/webfiles/23876/Brookings_Institution_Principal_Forgiveness.pdf.

[25] Analysis from Amherst Securities concluded that it is only necessary to write the borrower down to the 110-percent-to-120-percent loan-to-value range in order to give borrowers sufficient "skin in the game," since borrowers have reasonable hope of restoring positive equity with moderate home price appreciation. For more, see Goodman and others, "The Case for Principal Reductions."

[26] As mentioned above, FHFA estimates that 690,000 Fannie- and Freddie-backed loans would be eligible for a principal reduction through HAMP.

[27] Fannie and Freddie currently do not allow private mortgage insurers to reduce principal on the loans they own or guarantee. PMI Group, the nation's largest private mortgage insurer, has gotten around this by directly paying some underwater borrowers that for each month they stay current. For more information, see: Shaila Dewan, "Freddie and Fannie Reject Debt Relief," The New York Times, October 5, 2011, available at http://www.nytimes.com/2011/10/06/business/opposition-from-freddie-and-fannie-stalls-debt-reduction.html .

[28] According to DeMarco, only one enterprise actually tracks this information. See Remarks of Edward J. DeMarco, "Addressing the Weak Housing Market: Is Principal Reduction the Answer?" April 10, 2012. Available at http://www.fhfa.gov/webfiles/23876/Brookings_Institution_Principal_Forgiveness.pdf.

[29] Of the $29.9 billion allocated for HAMP, roughly $2.7 billion is set aside for modifying second liens through the so-called 2MP program. For more information, see http://www.housingwire.com/news/mortgage-servicers-modify-63-hamp-eligible-second-liens.

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[35] See H.R. 3841, the Principal Reduction Act of 2012.

[36] See S.2093, the Preserving American Homeownership Act of 2012. The senate bill would create a second pilot program for underwater loans insured by the Federal Housing Administration, a government-run mortgage insurer. For more information on the Menendez bill, see: Andrew Scoggin, "Senate bill gives principal write-downs through shared-appreciation plan," HousingWire, February 9, 2012, available at http://www.housingwire.com/article/senate-bill-gives-principal-write-downs-throughshared-appreciation-plan?quicktabs_connect=0.