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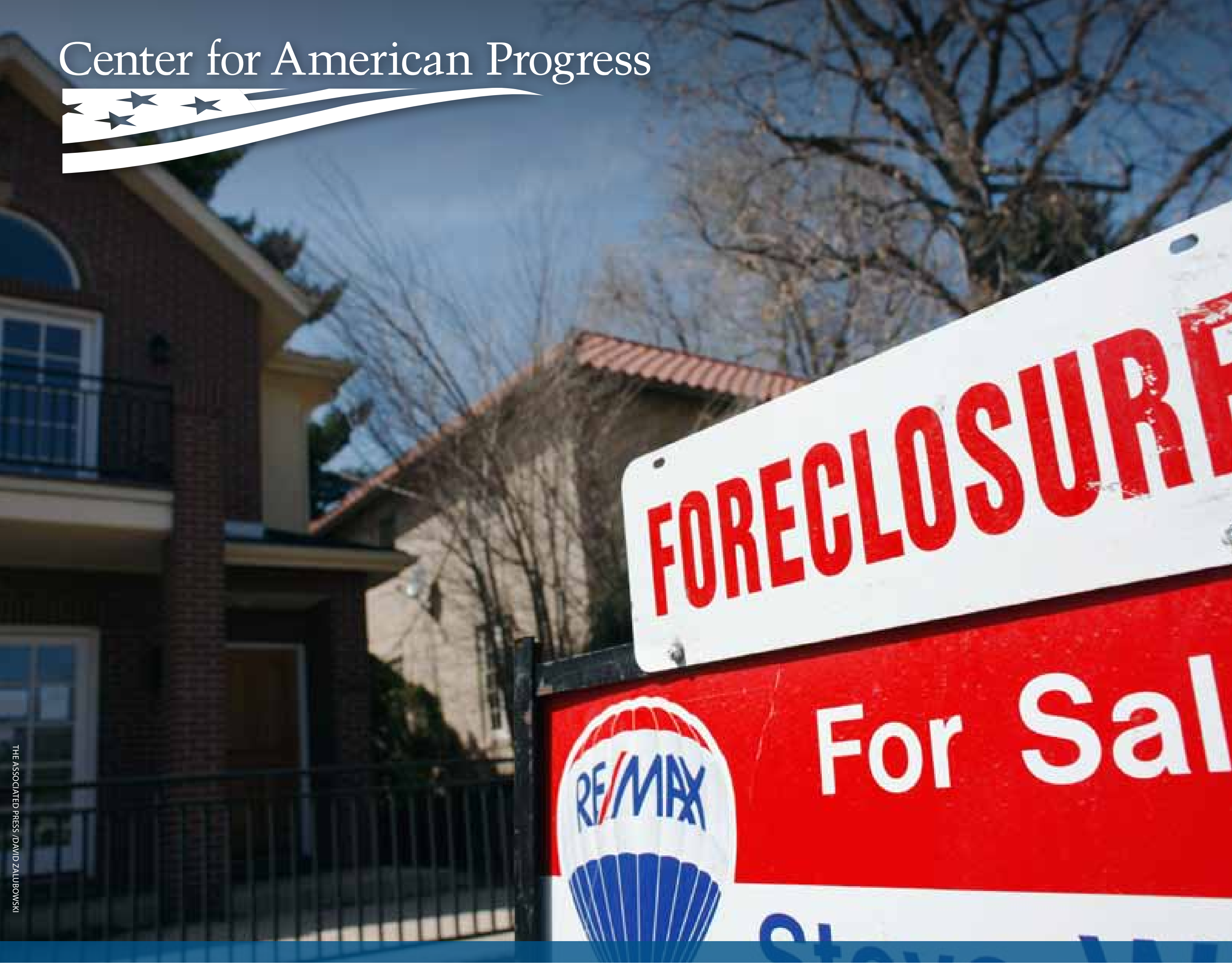

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Sharing the Pain and Gain in the Housing Market

How Fannie Mae and Freddie Mac Can Prevent Foreclosures and Protect Taxpayers by Combining Principal Reductions with "Shared Appreciation"

John Griffith and Jordan Eizenga March 2012

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Introduction and summary

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. Nearly one in four homeowners is "underwater," meaning they owe more on their mortgage than their home is worth,[1] and more than 7 million homes are still in the foreclosure pipeline, according to analysis from Morgan Stanley.[2] In fact, some analysts predict we're only halfway through the crisis.[3]

The big question before lenders, investors, and policymakers today is how to avoid another wave of costly and economy-crushing foreclosures. There are several ways to lower an at-risk borrower's monthly payments and increase the chance of repayment: refinancing to today's historically low interest rates, extending the loan's terms, modifying the interest rate, deferring payments, or lowering the amount the borrower actually owes on the loan—so-called "principal reduction." In most cases the lender or mortgage investor responsible for the loan considers all of these options when deciding which intervention is best for the specific borrower.

That is, unless the loan is owned or guaranteed by Fannie Mae or Freddie Mac, the country's two biggest mortgage finance companies. Fannie and Freddie have yet to embrace one option—principal reduction—as a viable foreclosure mitigation tool.

In fact the two mortgage giants, which are now operating under government conservatorship, are forbidden from lowering principal on any mortgages they own or guarantee by their regulator, the Federal Housing Finance Agency, or FHFA. That's the case despite a growing consensus among economists, investors, academics, and consumer advocates that principal reduction is often the most cost-effective way to avoid unnecessary foreclosure for certain groups of borrowers.

Principal reductions are particularly effective for deeply underwater borrowers that are facing long-term economic hardships, such as a permanent reduction in wages or long-term increases in unavoidable spending. These families are at high risk of default and often cannot see the long-term upside from making expensive monthly payments into a bad investment. With more equity in their home, these borrowers would be more likely to stick it out in tough economic times by making deep cuts to savings or other areas of spending.

These are homeowners worth helping. Foreclosure is often the worst-case scenario for everyone involved, but especially for underwater borrowers who boast close ties to their communities and prefer to stay in their homes. These kinds of homeowners consider the administrative fees, consequences for their future credit, and other costs of foreclosure. So, too, do the lenders or investors, who often have to shell out tens of thousands of dollars in legal fees, foregone interest, and losses on the property. And each foreclosure in the neighborhood decreases the value of everyone else's home, which is a drag on the local housing market.

Reducing principal is the only way to rebuild an underwater borrower's equity while permanently lowering monthly mortgage payments. That's one reason why almost one in five modifications of private loans held in bank portfolios involves some principal reduction, according to one survey.[4] But FHFA is not convinced principal reduction is ever the best option for Fannie or Freddie.

To be fair that position may make sense if the goal of the agency is to protect the short-term interests of Fannie and Freddie. Principal reductions require the lender to take a hit on their books today in order to save more money tomorrow by reducing defaults and foreclosures. In the case of Fannie and Freddie, that may mean billions of more dollars in temporary support from taxpayers, who have already invested $150 billion in the companies since 2008.[5]

But it's important to realize that over the long run, the goverment-sponsored enterprises are projected to lose even more money if they don't act today. And more than three years into the conservatorship, with no clear path for the federal government to wind down its control of Fannie and Freddie anytime soon, we need to start thinking long term. It's time for Fannie, Freddie, and FHFA to give their stance on principal reduction another thought. This report explains why Fannie, Freddie, and FHFA should embrace a targeted principal-reduction program for certain deeply underwater loans it owns or guarantees. This is not a matter of charity, though more struggling homeowners would likely be able to stay in their home as a result. At its core, principal reduction is good business.

Indeed, we already know that principal reductions are beneficial to Fannie and Freddie in the long term. FHFA's own analysis shows that reducing principal on all deeply underwater borrowers would save the government-sponsored enterprises and the taxpayers supporting them approximately $20 billion over the life of those loans relative to not doing anything.[6] A carefully designed principal-reduction program—one that limits the long-term risks borne by Fannie and Freddie and focuses on borrowers that actually need a reduction—makes the business case even stronger.

To maximize returns to Fannie and Freddie, we propose a pilot program that reduces principal—often by as little as 5 percent or 10 percent—without creating skewed incentives for borrowers. Through so-called "shared appreciation" modifications, Fannie or Freddie agrees to write down a portion of the principal on deeply underwater loans in exchange for a portion of the future appreciation on the home. The borrower has a reason to keep paying, while the lender benefits when home prices eventually stabilize and rebound.

To maximize returns to Fannie and Freddie, we propose a pilot program that reduces principal—often by as little as 5 percent or 10 percent—without creating skewed incentives for borrowers.

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. And by phasing in the principal reduction—say, over the course of three years contingent on meeting every monthly payment—the borrower has additional incentive to stay current on their mortgage. Both of these program rules deter borrowers from defaulting on their loan just to get a reduction in principal, what some critics call the "moral hazard" problem.

That said, we fully understand that principal reductions should not be available to everyone. As is the case with any loan modification, the principal reduction 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.

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:

- Have a mortgage that's worth at least 115 percent of the home's current value
- Are either delinquent on their mortgage payments or at imminent risk of default
- Face a long-term economic hardship, such as a nontemporary decrease in income or a permanent increase in unavoidable spending

- Do not have private mortgage insurance or a second lien, such as a home equity loan

To be sure, we believe that principal reduction could be the best modification option for Fannie- or Freddie-backed borrowers that do not meet all of these criteria. But we propose that the pilot focus on this core group to test the model.

We also recommend that the shared appreciation pilot operate through the Home Affordable Modification Program, or HAMP. The Obama administration recently announced new incentives for Fannie and Freddie to write down principal through HAMP, which should help the companies keep more underwater borrowers in their homes, according to our analysis.

But before we go further into the details of our proposal, let's take a closer look at the negative equity crisis facing millions of American families today, many of which have loans backed by Fannie Mae or Freddie Mac.

The problem

America underwater

Home prices have declined more than 30 percent nationwide from their peak in 2006,[7] leaving nearly one in four homeowners "underwater," owing more on their mortgage than their home is worth. That's roughly 11 million underwater families, adding to more than $700 billion in total negative equity.[8]

Of course, the housing crisis did not impact every community equally. In hard-hit cities like Las Vegas, Miami, and Phoenix, prices have dropped more than 50 percent.[9] Just four states—California, Florida, Arizona, and Massachusetts—account for half of the nation's total negative equity.[10] But the remaining states are still facing 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.[11]

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. 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.

Underwater loans default at a much higher rate than loans with more equity, even after accounting for types of mortgages and borrower characteristics like credit scores, according to a recent study by Laurie Goodman, Roger Ashworth, Brian Landy, and Lidan Yang of Amherst Securities.[12] The report tracked default activity for different types of loans with different "loan-to-value ratios," the percentage of a home's worth covered by a mortgage loan.

The study finds, for example, that 2.5 percent of prime loans with equity at least 20 percent (a loan-to-value ratio of 80 percent or less) "transition to default" each year, missing two consecutive monthly payments for the first time. For prime loans with 40 percent negative equity (a loan-to-value ratio of greater than 140 percent), that rate is more than six times higher: 16 percent.[13]

This "transition" is usually a tipping point toward a borrower losing their home. Once an underwater borrower transitions to default by missing two consecutive monthly payments, there is more than a 90 percent chance they will miss at least the next four payments as well, according to the Amherst study.[14]

These facts shouldn't come as a surprise. Families that are hopelessly underwater often cannot see the long-term upside from making expensive monthly payments into a bad investment. 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 savings or other areas of spending.

The conundrum of "strategic" default

One important consideration here is the extent to which underwater homeowners simply "walk away" from their homes, defaulting even though they can afford to keep making their monthly payments. Despite anecdotal evidence to the contrary, the data show that these so-called "strategic" defaults are not very common.

A recent Federal Reserve study of foreclosures on underwater mortgages in Arizona, California, Florida, and Nevada found that about 80 percent of defaults occurred as a result of "income shocks combined with negative equity."[15] This suggests that being underwater is rarely the only reason for default. Default usually arises because the problem of negative equity is combined with an additional economic hardship such as reduced or lost income, new health care costs, or other unexpected expenses.

To put it differently, income or expense shocks can quickly tip an underwater borrower who has kept up with his or her mortgage payments into default. Over the long run, especially in weak economic periods when these kinds of shocks are more common, greater numbers of underwater borrowers will eventually find themselves unable to maintain their mortgage payments.

But the situation is a bit different for extremely underwater borrowers, in this case defined as mortgages that exceed the value of the home by more than 50 percent. About half of those defaults are driven by negative equity alone, according to a Fed study.[16] So while "strategic" defaults do indeed occur, it's limited to a small portion of all underwater borrowers that are extremely underwater.[17] And that makes some sense because these borrowers often have no hope of regaining lost equity over a reasonable time period.

Avoiding costly foreclosures

When a deeply underwater borrower—say, a homeowner in Miami or Phoenix who just saw their home lose half its value—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.[18]

In many cases foreclosure is not the best outcome for any party. The administrative costs, legal fees, foregone interest, and losses on the property will likely cost the lender tens of thousands of dollars. A Joint Economic Committee report noted that the average foreclosure costs $78,000[19] and a paper by the Federal Reserve Bank of Chicago reported that a foreclosure can cost lenders as much as $50,000.[20] In contrast preventing foreclosure costs about $3,300 on average, the paper noted.[21]

Meanwhile, the borrower will lose any initial equity in the home, face high administrative costs associated with foreclosure proceedings,[22] 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.[23]

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 struggling borrower in their home. Each borrower has unique financial constraints, so loan modifications 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 economic hardship, 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.

As we discuss later in the paper, private institutions are already offering principal reductions in specific instances. But not all mortgage investors are convinced—namely the country's two biggest mortgage finance companies, Fannie Mae or Freddie Mac, who own or guarantee more than 3 million underwater mortgages.[24]

The "boulder in the path" to 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 makes FHFA the "big boulder in the path to principal reduction," according to former Obama administration economic advisor Jared Bernstein.[25]

But FHFA's own analysis shows that principal reduction would actually help the books of Fannie and Freddie in the long run. According to an FHFA report released in January, write-downs for all deeply underwater borrowers—those that owe at least 15 percent more on their mortgage than their home is worth—would save Fannie Mae, Freddie Mac, and the taxpayers supporting them approximately $20 billion over the life of those loans relative to not doing anything.[26]

FHFA's own analysis shows that principal reduction would actually help the books of Fannie and Freddie in the long run.

The report went on to explain FHFA's preference toward principal forbearance, where the lender temporarily defers certain principal and interest payments but does not change the total amount owned. Indeed, a principal forbearance plan on the same underwater loans was projected to save Fannie and Freddie slightly more, but FHFA admits that this difference is "negligible given the model risk."[27] We'll elaborate on the differences between principal reduction and principal forbearance later in this report.

Simply put, FHFA's position is not a matter of long-term costs and benefits, but short-term financial outcomes.[28] Principal reductions require the lender to recognize a significant write-down on their books today, while principal forbearance requires a much lower write-down, mostly from lost interest income. If FHFA is solely focused on near-term losses at Fannie and Freddie, then it will tend to avoid the immediate write-down whenever possible.

But there are good reasons to challenge FHFA's analysis. First, the report was released before the Obama administration announced new incentives for Fannie and Freddie to write down principal through the Home Affordable Modification Program, or HAMP. For the first time Fannie, Freddie, and private lenders could get as much as 63 cents on every dollar written off, depending on the riskiness of the loan.[29]

FHFA is still reviewing the possible consequences of the new HAMP rules on its two regulatory charges, Fannie and Freddie. But we estimate that Fannie and Freddie only need to get back about 9 cents on each dollar written off to tip the scales toward forgiveness instead of forbearance, based on the numbers in the

January report.[30] So the new HAMP incentives should more than tip the scales toward principal reduction, according to our analysis.

Recent reports hint that Fannie and Freddie are warming to the idea of principal reduction. In fact, Freddie Mac CEO Charles "Ed" Halderman recently told HousingWire that principal reductions "might be in [Freddie's] self intrest" with the new HAMP incentives.[31]

Second, the January analysis by FHFA was limited to traditional principal write-downs, as opposed to alternative approaches to principal reduction that could spread risk and save Fannie and Freddie even more money. We will examine one such approach, the "shared appreciation" modification, later in this report. To be clear, though, we believe that a targeted principal-reduction program makes economic sense for Fannie Mae and Freddie Mac without a risk-sharing angle or government subsidy. But these added incentives simply cement our case that principal reduction is good business practice for Fannie and Freddie. In this way, an upfront contribution from taxpayers tips the scale in favor of the better long-term outcome, ultimately resulting in lower losses.

Third, industry experts have identified several technical issues with FHFA's analysis. Laurie Goodman from Amherst Securities recently told Congress that she noticed "serious technical issues with the conduct of the study." Notably, the calculation was done on a portfolio level instead of a loan-by-loan basis, which ignores the fact that forbearance may be best in some circumstances while reduction might be better in others. Goodman also noted that the FHFA analysis considered attributes of the loan at origination instead of current attributes, which could further skew the impact of each modification on individual loans. Finally, she said the analysis did not differentiate between uninsured loans and those with private mortgage insurance, a topic discussed in more detail later in this report.[32]

In the final analysis we think Fannie, Freddie, and FHFA should rethink their blanket ban on principal reduction.[33] Later in this report we'll lay out a specific proposal for testing principal reduction on certain Fannie and Freddie loans. But first, let's take a closer look at the economic rationale for principal reduction.

Fast facts about underwater mortgages at Fannie and Freddie

Fannie and Freddie own or guarantee about 30 million loans.[34] Of these:

- About 11 percent—3.3 million mortgages—are underwater[35]
- Five percent—1.4 million mortgages—are "deeply" underwater, meaning the outstanding debt is at least 15 percent more than the home's current value[36]
- Twenty-six percent of these "deeply" underwater loans are delinquent[37]
- Thirty-two percent of all seriously delinquent loans owned or guaranteed by Fannie and Freddie, including those with positive or negative equity, have private mortgage insurance[38]

The economic case for principal reduction

The case for principal reduction is simple: Evidence shows that equity is an important predictor of default, and principal forgiveness is the most effective way to improve an underwater borrower's equity position. If done well and under the right circumstances, principal reduction can have a meaningful and positive impact on the broader housing market. Let's dig into each of these claims in turn.

Principal reduction can reduce the likelihood of foreclosure

As mentioned above, the amount of money a borrower actually pays on their mortgage each month relative to their income, other necessary expenditures, and other debt is a critical component of their ability to avoid default. That's why any effective modification must first aim to reduce the monthly payment to a sustainable level.

But for deeply underwater loans, a borrower's equity position meaningfully impacts their likelihood of default as well. That's why any cost-effective modification of a severely underwater loan should aim to both reduce the payment size and restore the borrower's equity.

This is precisely why analysts have found that principal reductions, which help restore equity by writing down some of what is actually owed, are generally more effective at mitigating foreclosures than other types of modifications. The Amherst Securities paper mentioned above provides some helpful data on this. In general, loans that receive principal modifications—either through reduction or forbearance—experience substantially lower re-default rates than capitalization or interest-rate modifications. The paper also finds that principal modifications save 5 out of 10 defaulted loans from foreclosure, while other types of modifications save just 3 out of 10.[39]

A separate study from the New York Federal Reserve Bank confirms this, concluding that re-default rates were lower for private subprime mortgage modifications involving principal forgiveness than those involving interest-rate reductions.[40] And another study 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.[41]

Unfortunately, we do not have sufficient data to differentiate re-default rates in principal-reduction and principal-forbearance modifications on loans backed by Fannie Mae and Freddie Mac. But it's telling that the model FHFA used in their analysis assumed that principal forgiveness avoids more re-defaults than alternative modifications.[42]

Principal reduction is good business practice

Given all of the economic evidence, it should be no surprise that some private mortgage lenders and servicers have implemented principal reduction as a cost saver. More than 15 percent of private modifications involved some principal reduction in the third quarter of 2011, according to a self-reported survey from the Office of the Comptroller of the Currency.[43] And perhaps more tellingly, banks used some principal reduction for 18 percent of modifications on their own portfolio of loans.[44] This includes some of the nation's largest financial institutions, such as JPMorgan Chase & Co. and Wells Fargo.[45]

A growing number of industry experts support principal reduction as prudent business practice. Santa Clara University's Sanjiv R. Das last year found that modifications using loan write-downs are "value-maximizing for the lender" compared to alternative approaches.[46] A representative from the global bond investment giant PIMCO told Bloomberg in November that reductions are often "in the best interest of both the lender and the borrower."[47] And Ron Faris, president of the mortgage servicer Ocwen Financial Corp., recently told ShelterForce that principal reduction is "a win for the investor in the loan" as well as the loan's servicer, according to his firm's modeling.[48] In a separate publication, Ocwen's Faris said:

> *Taking into account homeowner income, home valuation, degree of delinquency, borrower acceptance, prepayment and re-default probabilities, resolution timelines and other relevant data, our optimization models and behavioral science research increasingly demonstrate that principal-reduction modifications of underwater mortgages are indeed [net present value] positive for investors.*[49]

And it's worth noting more private firms are likely to embrace principal reduction in the coming months after a recent settlement over faulty foreclosure practices by the five biggest mortgage servicers required a $17 billion fund for principal reductions and other forms of relief to struggling homeowners.[50] Indeed, Bank of America announced last month its intention to reduce principal for approximately 200,000 of its underwater borrowers.[51]

Principal reduction helps neighborhoods, local housing markets, and the broader economy

It's clear that principal reduction, in particular instances, can be the most effective way to modify a mortgage to avoid unnecessary foreclosure. But principal reduction also has a positive impact on the housing market as a whole, which remains one of the biggest drags on our economic recovery.

First, when a lender or servicer avoids unnecessary foreclosures, it helps stabilize home prices and local housing markets. According to a recent study from the Massachusetts Institute of Technology, foreclosure reduces a home's value by an average of 27 percent.[52] And since home prices are often derived from comparable homes in the neighborhood, that single foreclosure also reduces home values for everyone else in that neighborhood, according to the report.[53]

Second, like other loan modifications, principal reductions can meaningfully and permanently reduce monthly mortgage payments, which increase the disposable income of households who need it most.[54] Today 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. A focused principal-reduction initiative for loans guaranteed by Fannie Mae and Freddie Mac should help stimulate the economy by putting more money in the hands of those who are likely to spend it.

Third, homeowners with little equity (as well as anyone uncertain of the value of their property) are often reluctant to invest in renovations and upgrades. Specifically, underwater borrowers tend to cut back substantially on home improvements and maintenance spending, according to a 2010 study from Northwestern University's Brian T. Melzer.[55] So principal reductions that bring a borrower to (or close to) positive equity should help drive up demand for home-

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related industries from window curtains to washing machines, while improving the overall quality of the housing stock.

For these reasons, principal reductions offer "the best odds of ending the housing crash more quickly and definitively," according to Mark Zandi, chief economist at Moody's Analytics, and could give a much-needed boost to the broader economy.[56]

Any principal-reduction initiative must be done carefully

The first goal of any principal-reduction initiative at Fannie Mae and Freddie Mac should be to prevent unnecessary foreclosures and save taxpayer dollars. For the program to have significant uptake, it must present a good deal for both the investor and the borrower.

This means two things. First, a responsible program must bring a benefit to Fannie and Freddie tomorrow for the loss they're realizing today. There are undeniable risks associated with principal write-downs so the program must maximize the potential upside to Fannie, Freddie, and taxpayers.

Second, it must only apply to the borrowers that need it most: underwater homeowners who are facing foreclosure or are in imminent danger of default but have a fighting chance of meeting their mortgage payments going forward if offered a principal reduction. In order to maximize impact of the program and prevent the most foreclosures, thus saving more money in the long run, the program has to be available to some borrowers that have started falling behind on their payments. After all, these borrowers are the most likely to experience a foreclosure.

But this poses a potential problem. If principal reduction is only eligible to delinquent borrowers, it could incentivize otherwise-current borrowers to purposely default in order to qualify, commonly referred to as the "moral hazard" problem. Indeed, about three out of four underwater Fannie and Freddie borrowers are still making their monthly payments, according to FHFA.[57] The last thing Fannie and Freddie want to do is to push those current borrowers into unnecessary default.

Fannie and Freddie can take steps to minimize the moral hazard problem, even if the program is restricted mostly to delinquent borrowers. The simplest 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.[58]

A second option is to make the program eligible to current borrowers on the verge of falling behind in their mortgage payments. But this might raise legal concerns for certain types of Fannie- and Freddie-backed loans. The ability of Fannie or Freddie to offer principal reductions to current borrowers may be restricted by their respective mortgage-servicing guidelines governing mortgage-loan modifications. Fannie Mae's guidelines, for example, only permit loan modifications on loans that are 60 days delinquent or are current but at imminent risk of default.[59] Considering these complexities, it's clear that eligibility must be determined on a loan-by-loan basis.

A third option is to impose some cost on the borrower in exchange for program participation, making principal reduction unattractive to those who don't truly need it. We'll discuss one way to do this later in this report.

Any targeted principal-reduction program also raises certain fairness concerns. The Federal Reserve noted in a recent white paper that such efforts could "discriminate against those who were more conservative in their borrowing for home purchases."[60]

It's important to note who this program actually benefits. As mentioned above, a successful principal reduction porgram helps the borrower avoid foreclosure, which also benefits the broader housing market. After all, each foreclosure in a neighborhood reduces the value of neighboring homes located within 250 feet by about 1 percent.[61] But is also helps the books of Fannie and Freddie, which in turn benefits every taxpayer on the hook for the mortgage giants' losses.

That said, let's take a look at one way Fannie and Freddie can simultaneously target the program to the right borrowers, minimize moral hazard, and maximize long-term savings: a so-called "shared appreciation" modification.

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

A targeted "shared-appreciation" modification program implemented at Fannie Mae and Freddie Mac could overcome the moral hazard problem and benefit borrowers, the two mortgage giants, and taxpayers. Through this program, mortgage lenders agree to write off some of the outstanding principal on a mortgage, contingent on timely monthly payments, in exchange for a share of any future appreciation in the home's value.[62]

This approach essentially imposes a cost on borrowers for any debt forgiveness by requiring borrowers to give up a portion of any future increases in the home's value.[63] This should help discourage the small number of current borrowers who would choose to strategically default, ensuring that borrowers who receive principal reduction are those who need it most. The lender can also phase in the principal reduction over a certain time period, under the condition that the borrower keeps making their monthly payments. Thus the borrower "earns" a permanent principal reduction over time, further limiting moral hazard.

Shared-appreciation mortgages have already been implemented successfully in the private sector. Ocwen Financial, the country's largest subprime mortgage servicer, reduces principal for certain underwater mortgages with a restructured loan-to-value target of 95 percent, meaning the borrower restores 5 percent equity in the home. To encourage the borrower to continue meeting his or her mortgage obligations, Ocwen phases in the reduction in three increments over three years. In exchange, if the borrower chooses to sell the home or refinance the mortgage, the investor receives 25 percent of the appreciated value of the home.[64] The investor can claim up to the amount of principal they initially wrote down.

"To adequately deal with the underwater mortgage problem … we realize that you've got to include principal reduction for long-term sustainability," Ocwen CEO Ron Faris told *Shelterforce* last month. "We also needed to address the issue of investors not always being happy that principal's being forgiven," Faris said. The shared-appreciation model accomplishes both of these goals, he added.[65]

Ocwen only offers a principal reduction to a borrower when it's in their financial interest, based on an estimate of overall costs and revenues over the life of the loan, known in mortgage parlance as a "net-present-value" assessment. So each modification depends on the loan and the borrower's specific circumstances.

Ocwen's shared-appreciation pilot appears to be working. Last year the firm reported re-default rates of less than 3 percent for program participants, far below what's seen in typical loan modifications.[66] By comparison, approximately 29 percent of all private modifications in 2010 re-defaulted within 12 months, according to data from the Office of the Comptroller of the Currency.[67]

The difference between principal forbearance and shared-appreciation principal forgiveness

As mentioned above, the Federal Housing Finance Agency, the regulator in charge of Fannie Mae and Freddie Mac, refuses to allow principal reduction on Fannie and Freddie loans, instead opting for principal forbearance. We believe that principal reductions with so-called "shared appreciation," where Fannie and Freddie get a share of any future increase in home values, strengthens the business case for targeted principal reductions.

FHFA Acting Director Edward DeMarco recently defended principal forbearance, stating that it "works very much in accord with the spirit" of principal reduction with shared appreciation but poses less risk to Fannie and Freddie and thus to taxpayers.[68] We disagree.

In reality, principal forbearance and shared-appreciation forgiveness are quite different, as principal forbearance does less to help severely underwater borrowers. Notably, forbearance allows the lender or investor to temporarily reduce monthly payments and postpone losses, while forgiveness makes that change permanent and improves the borrower's equity position, likely lowering the chance of foreclosure even further.

Here's how forbearance works. Through principal forbearance, the lender temporarily sets aside the underwater portion of a borrower's principal and foregoes any interest on the deferred principal. The borrower's monthly mortgage payments go down temporarily, but their equity position does not—they are still responsible for the full loan amount. The lender records a relatively minor loss on its book today and only writes the property down to its current value in the event of a short sale or foreclosure. [69]

With a principal reduction the lender recognizes a larger write-down on its books today in hopes of saving more money tomorrow by avoiding foreclosure. Like forbearance the borrower's monthly payments go down, but the change during principal reduction is permanent. The reduction also improves the borrower's equity position, which likely decreases the chance of default, as we demonstrated above.

The inclusion of shared appreciation would allow Fannie and Freddie to gain back some of those "losses" in the future. Similar to forbearance, the final write-down reflected on their books depends on the resale price down the line—either through a traditional resale, a short sale, or a foreclosure sale. This means Fannie and Freddie can realize future gains after an immediate write-down if the future sale of the property results in a higher value than that recognized at the time of the write-down.

The bottom line is simple: If temporarily reducing monthly payments is the only thing that matters, principal forbearance is likely the best option. But if the borrower is also severely underwater and is capable of making payments on a more permanent solution, principal reduction with shared appreciation might be a better long-term alternative for the homeowner, Fannie and Freddie, and taxpayers.

How a shared-appreciation pilot can work at Fannie and Freddie

There is no conclusive evidence, including the recent analysis offered by FHFA, to suggest that principal forbearance should always be preferable to principal reduction for some homeowners struggling with mortgages that are severely underwater but capable of paying on lower mortgage payments. That's one reason why FHFA should rethink its across-the-board ban on principal reduction and adopt a pilot that allows us to better understand what works best under which circumstances.

We recommend that Fannie, Freddie, and FHFA enact a targeted principal-reduction program through a shared-appreciation modification pilot for severely underwater borrowers. We adapt a model similar to Ocwen's in our proposal, but focus on borrowers that are most likely to benefit from a reduction, based on a loan-by-loan assessment. Specifically, we expect Fannie and Freddie to target the following borrowers for their shared-appreciation pilot:

- Mortgage is worth at least 115 percent of the home's current value
- Either delinquent (but not yet in foreclosure) or at imminent risk of default
- Facing a long-term economic hardship, such as a nontemporary decrease in income or a permanent increase in unavoidable spending
- Does not have private mortgage insurance or a second lien, such as a home equity loan

We recommend that Fannie, Freddie, and FHFA operate this shared-appreciation pilot through the Home Affordable Modification Program, or HAMP. As mentioned above, the Obama administration released new incentives for lenders and investors to take a write-down on mortgage principal as part of federally supported loan modifications.[70] While we think there are particular instances in which principal reduction makes good business sense without the subsidy, these incentives should expand the number of mortgages in which it is in the best economic interests of lenders and investors to take a write-down.

Now let's take a closer look at the details of our proposed pilot program, including what borrowers will be eligible and how the agreement will be structured.

The HAMP waterfall

The Home Affordable Modification Program, or HAMP, was established in 2009 to help struggling homeowners stay in their homes through federally supported loan modifications. The primary goal of any HAMP modification is to reduce the borrower's monthly housing payments to 31 percent of monthly income. The program is eligible to both delinquent borrowers and those "determined to be in imminent default."[71] HAMP has so far supported nearly 1 million permanent-loan modifications, including more than $3.7 billion in principal reductions.[72]

The HAMP program includes a sequence of modifications that lenders must consider before they are allowed to offer a principal modification, known as the HAMP "waterfall." As the graphic below demonstrates, principal modifications, either through forbearance or reduction, are the last step taken in order to get borrowers to the target debt-to-income ratio.

Since October 2010 the Treasury Department has offered additional incentives under HAMP for servicers, lenders, and investors to reduce principal, known as the Principal Reduction Alternative. As mentioned above, the Obama administration recently tripled those incentives, and for the first time extended them to Fannie Mae and Freddie Mac.

CAPITALIZE ARREARS

Late payments, fees, and other charges are added back to the loan balance in order to determine the modified loan amount.

REDUCE THE INTEREST RATE ON THE LOAN

The interest rate on the loan is reduced until the borrower's debt-to-income ratio hits 31 percent.

EXTEND THE LOAN TERMS

If the interest rate reduction did not bring the borrower's debt-to-income ratio down to 31 percent, extend the maturity of the loan to 40 years.

MODIFY PRINCIPAL

If the 31 percent target debt-to-income ratio has not been hit, forbear or forgive principal.

Target: 31% of monthly gross income

Equity requirements

We recommend some flexibility in the amount of equity the lender is required to restore. While Ocwen's model of restoring 5 percent positive equity has proven effective, it may not be necessary to forgive that much in all cases. Indeed, 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.[73]

For FHFA's analysis mentioned above, the model considered writing down severely underwater mortgages to a loan-to-value ratio of 115 percent—which is the same equity requirement for HAMP's Principal Reduction Alternative. We recommend using the same benchmark, at least for any initial pilot.

Loan-by-loan consideration

As mentioned above, roughly three out of four underwater borrowers with Fannie-or Freddie- backed mortgages are current on their payments.[74] For the 25 percent that are behind, Fannie and Freddie should continue to evaluate loan modifications on a loan-by-loan basis using the rules and guidelines of HAMP, based on reliable "net-present value" estimates. Net-present value is a financial tool for evaluating the value of an asset such as a home mortgage over time based on estimated cash flows from the asset. But now this assessment should consider the costs and benefits of shared-appreciation modifications.

As mentioned above, much of this depends on the nature of the borrower's economic hardship. Principal reduction is especially useful when a borrower faces lasting economic shocks, such as certain health care costs or an extended drop in salary or wages. Yet more temporary shocks that can be reasonably resolved in a short period of time might warrant another form of modification, such as principal forbearance.

We recommend that any shared-appreciation program adapt the guidelines laid out in the "financial hardship affidavit" currently in use for HAMP. This document helps mortgage servicers tailor specific modifications to specific hardships, including reduced income, increased expenses, overextended credit, and insufficient cash reserves.[75]

Appreciation share

Any shared-appreciation program will need to strike the right balance between borrower uptake and value to the lender or investor. If the borrower is giving up too much, they will not want to participate. If the investor is getting too little, they will likely choose alternative approaches, including foreclosure.

There are a variety of potential ways to achieve this balance. For pilot purposes we recommend Fannie and Freddie initially receive half of any future appreciated value of the home in exchange for offering a principal reduction. But Fannie, Freddie, and FHFA should be encouraged to explore other ways to share appreciation with the borrower. For example, Fannie and Freddie could receive varying shares of appreciated value of the home depending on the condition of the home, the local real estate market in which it is located, and the degree to which the borrower is underwater. Fannie and Freddie could take a greater share of the appreciation for homes that are in worse condition or in communities that are predicted to recover slower, and less of a share for less-risky modifications.

Second liens

According to CoreLogic, about 40 percent of all underwater borrowers have a home equity loan or line of credit, and mortgages with home equity loans account for more than half of all negative equity today.[76] In instances where an underwater borrower has both a first and second mortgage, we strongly believe that second mortgage investors should share the burden.

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 Fannie and Freddie focus this pilot on loans that do not have second mortgages.

To prevent a windfall to second-lien investors that refuse to embrace the write-down, we recommend Fannie and Freddie focus this pilot on loans that do not have second mortgages.

That said, we urge Fannie and Freddie to consider ways to work with (or around) 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.[77] In fact, there's a good argument for giving second lien holders the "first loss" position on any principal reduction, meaning the first mortgage should only be reduced after all other liens have been wiped out, since these investors were aware of the riskiness of relying on the collateral for their home equity loans and other second liens when they first lent the money. But again, that strategy only works if the second lien holder agrees to play along.

One possible way to work around a second lien is to strip the first lien off from the second, assuming it does not have any collateral value, leaving the note in place. The first lien holder is then free to reduce principal on the first mortgage alone, while the borrower can pursue further reductions if necessary on the note through bankruptcy court, just as they can with an auto loan or credit card debt.[78] Of course, this would require the second-lien investors to cooperate voluntarily, which could prove to be yet another roadblock. Fannie and Freddie will have to address these issues on a loan-by-loan basis.

Private mortgage insurance

About 32 percent of seriously delinquent loans that Fannie and Freddie own or guarantee have private mortgage insurance, meaning the two mortgage finance giants only take on a portion of the losses in the case of a foreclosure.[79] This insurance is a requirement for any Fannie or Freddie loan with a down payment of less than 20 percent, so we expect an even higher percentage of underwater Fannie and Freddie loans are insured.

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 of 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.[80] Another option is for the private insurer to pay a so-called "advance claim," providing Fannie and Freddie with a portion of the insurance claim before default, most of 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.

Conclusion

Despite all of the empirical evidence, private-sector experience, and promising new ways to write down mortgage debt responsibly, Fannie Mae and Freddie Mac haven't yet deployed principal reduction as a viable foreclosure-mitigation tool for severely underwater borrowers. And their regulator, the Federal Housing Finance Agency, with full authority to plot a different course, has yet to urge the two mortgage finance giants to do so.

We understand the complexities involved in conserving the assets of the world's two largest mortgage firms. But the evidence suggests that it is time for FHFA to rethink its position on principal reduction.

As a good first step, FHFA should rerun its analysis of the costs and economic benefits of principal forgiveness compared to alternative loan modifications, incorporating both the new incentives for principal reduction through HAMP and the use of shared appreciation. If this analysis proves to tip the scales toward principal reduction—recent reports indicate it will—then Fannie, Freddie, and FHFA should stand ready to lift the ban on principal reduction and pilot a targeted, shared appreciation modification program.

Sen. Bob Menendez (D-NJ) in February introduced a bill that would establish a similar shared-appreciation pilot program for underwater borrowers with Fannie- or Freddie-backed mortgages.[81] This bill is a helpful jumping-off point for future debate on the costs and benefits of principal reduction. While we believe it is well within FHFA's current regulatory power to develop this pilot without congressional approval, we 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 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 more struggling to stay in their homes, principal reduction must be one part of a broader solution that includes refinancing, foreclosure mediation, alternative loan modification, and other foreclosure-mitigation tools. We're a long way from the end of the crisis, and we need to keep all options on the table moving forward.

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