# Working Paper Series

WP 09-13 NOVEMBER 2009

# Mortgage Loan Modifications: Program Incentives and Restructuring Design

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#### **Abstract**

Mortgage defaults and home foreclosures remain a growing problem that undermines the nascent US economic recovery. Delinquencies continue to skyrocket, up 300 percent since the beginning of the crisis, and the contagion has spread to prime loans where delinquencies have risen to over 11 percent of outstanding loans. The resulting foreclosures have broad consequences: Individuals lose their homes, banks take losses on the loans, neighbors suffer as area prices go down, and localities lose on property taxes. The economics of modifying loans to avoid defaults appear strong: Lenders lose an average of \$145,000 during a foreclosure compared with less than \$24,000 on a modified loan. Yet the track record of modification programs has been surprisingly poor. Potential lawsuits over modifying loans in securitization trusts may be a less important obstacle than many claim. More significant are misaligned incentives that put mortgage servicers in opposition to both investors and borrowers, conflicts between investors holding different tranches of mortgage-backed securities (MBS), operational impediments, and problems in loan modification design that contribute to redefaults. Policymakers should improve reporting metrics to highlight servicers' conflicts of interest, shift the emphasis of loan modifications from short-term fixes to making the new loans more sustainable, and use government resources to drive operational/capacity improvements in the industry.

JEL Codes: E60, G01, G18, G21

Keywords: Mortgage Loan Modifications, Restructuring, Credit Crisis, HAMP

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Author's Note: I would like to thank Morris Goldstein for his ongoing support and encouragement, Jacob Kirkegaard, Gary Hufbauer, Steve Weisman, and Philip Henderson for feedback on earlier drafts, and Allyson Reynolds at Loan Performance for data updates. The views expressed are mine and do not represent the official position of Lone Star Funds or the Peterson Institute.

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#### **INTRODUCTION**

Mortgage defaults and home foreclosures, the sparks that ignited the broader credit crisis, remain a growing problem that undermines the nascent US economic recovery. While "avoiding preventable foreclosures" has been the watchword for policy leaders from former Treasury Secretary Henry Paulson to President Barack Obama, Treasury Secretary Timothy Geithner, and even bank CEOs, focus on the problem has moderated as the banking sector appears increasingly stabilized. And yet delinquencies continue to skyrocket, up 300 percent since the beginning of the crisis. Worse yet, the contagion has spread to prime loans, where the delinquencies reached 11 percent in August, more than nine times the rate in mid-2007. The resulting foreclosures have broad consequences—individuals lose their homes, banks take losses on the loans, neighbors suffer as area prices go down, and localities lose on property taxes. The economics of modifying or restructuring loans to avoid defaults appear strong: Lenders lose an average of \$145,000 during a foreclosure compared with less than \$24,000 on a modified loan. Unfortunately, despite all the programs aimed at helping homeowners, the track record of modifications has been surprisingly poor.

For policymakers, mortgage restructuring has an additional dimension. Restructuring efforts must minimize the moral hazard issues that arise when borrowers and banks are encouraged to take or make risky loans, knowing that if their losses are large enough, the government will bail them out. An effective restructuring plan must address this issue while also being able to be implemented on a sufficiently wide scale to impact the broader economy.

Several commonly cited impediments to wide-scale modifications appear to be overstated while other issues receiving less attention still need to be addressed. Potential lawsuits over modifying loans in securitization trusts may be a less important obstacle than many claim. More significant are misaligned incentives that put servicers in opposition to both investors and borrowers, incentive mismatches between the investors holding different tranches of mortgage-backed securities (MBS), operational impediments to offering modifications, and problems in loan modification design that contribute to a high rate of redefaults. Finally, the difficulty that servicers and borrowers have in reaching each other continues to be a stumbling block to effective loan restructuring.

This paper outlines the current state of the mortgage market and reviews leading loan programs, evaluating them against a set of common sense criteria balancing costs and benefits among all stakeholders. Based on this analysis, I recommend improving servicer reporting metrics to highlight conflicts of interest, shifting the emphasis in loan modifications from short-term fixes to those that make the new loans more sustainable, and using government resources to improve communication between borrowers and servicers as well as to drive operational/capacity improvements at servicers who are responsible for conducting loan modifications.

#### **CURRENT MARKET ENVIRONMENT**

At the end of September 2009 an estimated 52.6 million mortgages were outstanding in the United States, of which 46.8 million, or 89 percent, were prime and 5.8 million, or 11.1 percent, were subprime (table 1).<sup>1</sup>

The overall rate of completed foreclosures rose dramatically from 42,000/month in July 2007, hitting a peak of 92,000 in July 2008 and falling temporarily before settling around 75,000 to 90,000 per month between May and September 2009 (figure 1). Alarmingly, the spike was worse for prime loans, where the rate of foreclosures rose to 55,000 in September 2009—over 2.5 times the rate at the start of the crisis. Subprime foreclosures peaked in May 2008 at 49,000 per month but fell to 34,000 in September 2009—still nearly 50 percent higher than the rate in July 2007. Data on foreclosure starts, which track properties initiating the foreclosure process, have continued to increase after a period of slowdown in late Q3/early Q4 2008, hovering near 240,000 per month since March 2009—for a total of 2.8 million in the 12 months ending September 2009.<sup>2</sup> These data suggest that the pipeline is filled to keep completed foreclosures going strong.

According to LoanPerformance, an industry data consortium, since the beginning of the mortgage crisis, 60+ day delinquency rates have jumped 275 percent to over 12 percent of all loans. The 60+ day delinquency rate for subprime loans had reached 31 percent by June 2008 and rose to 46 percent in August 2009 (figure 2). Prime loans went from a 60+ day delinquency rate of 1.3 percent in June 2007 to 8.3 percent just over two years later<sup>3</sup> (figure 3). If we account for the number loans that have moved out of the 60+ day category and on to foreclosure, delinquency rates in August reached a total of 11.1 percent for prime and an astounding 61 percent for subprime loans.

Delinquency rates are even more astonishing when broken down by vintage (year of initiation of the loan). Until 2004, prime 60+ day delinquencies at 24 months were less than 1.1 percent, and they increased to only 2.2 percent in 2005 (figure 4). By 2006 the rate was 8.4 percent and peaked just below 14 percent in 2007. The 2008 vintage jumped to over 6.5 percent delinquencies after only 15 months.

<sup>1.</sup> Hope Now Alliance, "National Data July07 to September09," available at www.hopenow.com. The data are based on the Mortgage Bankers' Association's delinquency surveys, along with data compiled from the Hope Now Alliance of 27 major mortgage lenders accounting for a majority of the market. Nearly 1.5 million mortgages have disappeared from the peak of 54.1 million in 2007Q4, which is the result of a net reduction of 400,000 prime loans and 1.1 million subprime loans.

<sup>2.</sup> Similar data from First American CoreLogic's LoanPerformance pegged foreclosure filings at an even higher 3.4 million for 2008, up 76 percent from 1.9 million in 2007 and an over 300 percent increase from 1.1 million in 2006 (First American CoreLogic Media Alert, January 26, 2009). Hope Now Alliance's total for 2008 was 2.2 million foreclosure starts, a 33 percent increase over its count of 1.7 million in 2007. The difference between the two sources appears due to some double counting—filings may include foreclosures that are reported twice in cases where the loan was sold from its original holder or a foreclosure process that was stopped and restarted (conversation with Hope Now Alliance data analyst, May 15, 2009).

<sup>3.</sup> First American CoreLogic, LoanPerformance data, November 2009.

Subprime loans are showing similar deterioration at a more significant rate. Until 2004, 24-month delinquencies hovered around 10 to 14 percent, but they hit 23 percent in 2005, 39 percent in 2006, and nearly 50 percent in 2007 (figure 5). The 2008 vintage seems to be performing in line with 2007.

At a more fundamental level, at the end of 2009Q2 an estimated 15.2 million mortgages, or 32.5 percent, of all home loans in the United States, were "under water"—where the borrower has negative equity since they owe more on their mortgage than their house is worth.<sup>5</sup> If we include homes with "near negative equity," which is defined as being within 5 percent of a negative equity position, the total rises to 38 percent. Given geographical differences in the housing bubble, the share of negative equity reached nearly 66 percent in Nevada, 51 percent in Arizona, 49 percent in Florida, 48 percent in Michigan, and 42 percent in California.<sup>6</sup> These trends are driven by the decline in home prices that dropped 33 percent from their peak in July 2006 through April 2009, though have rebounded somewhat since, such that they are down only 29 percent in August.<sup>7</sup>

The good news is that not all borrowers with negative equity will necessarily default. Borrowers who can make their payments have an incentive to do so, since they cannot sell their homes and buy another without injecting new equity into the transaction. Many of them will continue to pay their loans, stay in their homes, keep their kids in the local schools etc., hoping the market comes back as they pay down some of their principal, so that they return to a positive equity position in a few years.

To estimate the value of "at risk" mortgages, we can make the simplifying assumption that prime and subprime loans have the same outstanding value on average. The amount of outstanding home mortgage debt as of 2009Q2 was \$10.4 billion.<sup>8</sup> Applying the different delinquency rates from the two sources cited above, the amount of "at risk" loans ranges from approximately \$687 billion to \$1,292 billion.<sup>9</sup> Of course, not all the 60+ day delinquent loans will default, in part because of existing restructuring efforts. But significant losses are still to come.

#### **High Cost of Defaults: Incentives for Restructuring**

The key rationale for restructuring mortgages is that the average economic benefits outweigh the costs—providing an apparently clear financial incentive for investors to offer modifications. The Mortgage Bankers Association suggests that the cost of foreclosures ranges from 30 to 60 percent of the loan

<sup>4.</sup> First American CoreLogic, LoanPerformance data, November 2009.

<sup>5.</sup> First American CoreLogic, "Summary of Second Quarter 2009 Negative Equity Data," August 13, 2009.

<sup>6.</sup> Ibid.

<sup>7.</sup> S&P/Case-Shiller Home Price Index, Composite 20 through August 2009, published October 27, 2009.

<sup>8.</sup> Federal Reserve Flow of Funds Accounts, Table D3: Debt Outstanding by Sector, September 17, 2009.

<sup>9.</sup> Since prime borrowers are more likely to be eligible for larger loans including jumbos, the initial assumption overstates the estimate of at-risk loans. However, even if we assume prime loans account for 95 percent of the outstanding loan volume instead of the 89 percent of total loans, the total at-risk loans is over \$1,050 billion.

amount and that the lender's loss typically amounts to \$50,000 or more. Ocsts include the general decline in housing prices, foregone payments, court costs and related fees, and a loss on sale that can range from 5 to 30 percent. A study of mortgages modified in November 2008 found the average cost of foreclosures was \$145,000 for the lender, 55 percent of the average amount outstanding. By contrast, the November loan study found that the average cost of principal and interest reductions in modifications was \$23,600.

Wide-scale restructuring is complicated by the need to sort through more than 40 million borrowers to identify those who are likely to default without a loan modification but could afford a new, lower-cost loan. Individual modification decisions are more complicated than the averages suggest, since they must account for local housing prices and resale trends, state regulations governing foreclosures and the expected time in that jurisdiction, likelihood of self-cure, etc. Servicers may also be concerned with the moral hazard involved in modifying loans that provides an incentive to default for borrowers who would otherwise self cure. However, even taking these factors into account, the wide difference in average costs appears to provide ample room for lenders and borrowers to reach mutually beneficial agreements that are better for both parties than foreclosures—at least in more cases than are currently happening.

# Impediments to Modifying Loans Misaligned Incentives

Given the seemingly straightforward financial benefits to all parties from restructuring mortgages, why aren't more loans getting modified? The process is complicated by the large number of players involved and misaligned incentives between them.

Initially, analysts worried that servicers would hesitate to modify loans because their agreements with investors do not allow servicers to reduce the value of the securities owned by investors. They were also concerned that modifying too many loans might be considered active management, which could jeopardize the issuer's ability to receive off–balance sheet treatment for the securitization trust under FASB140 accounting rules. A final concern is that in order to modify a first mortgage, servicers have to get agreement from the owners/investors in any second lien, e.g., home-equity loans, to resubordinate their claims. In many cases, particularly where the value of the home has fallen below the value of the mortgages, modifying the first loan would make it clear that the second lien was worthless. Holders of

<sup>10.</sup> Mortgage Bankers' Association, "Lenders' Cost of Foreclosure," May 28, 2008.

<sup>11.</sup> See also Ben Bernanke, speech at the Federal Reserve System Conference on Housing and Mortgage Markets, December 4, 2008; and "A Promising New Solution for Homeowners Facing Foreclosure," *International Business Times*, December 31, 2008.

<sup>12.</sup> Alan M. White, "Deleveraging the American Homeowner: The Failure of 2008 Voluntary Mortgage Contract Modifications" (January 9, 2009), *Connecticut Law Review* 41 (2009): 1107.13. Ibid.

the second lien therefore would not agree to modifications unless they were able to extract value from the owner of the first mortgage.

The empirical data suggest that concerns over servicing agreements are overstated, and policymakers have rather clearly addressed the accounting issue. The issue of second liens is more complicated and ties to a more complex set of conflicts of interest that servicers face in modifying loans.

With regard to securitization agreements, most have provisions that allow servicers to undertake actions that maximize value to investors, providing justification for modifications. A study of 31 servicing agreements found that only two did not allow modifications when a default was reasonably likely, and that 12 had some sort of restrictions (percent of loans that could be modified, minimum interest rate, etc.). Another study by the Federal Reserve reviewed a servicer that operates under 500 different contracts and reported that 48 percent have no restrictions on the servicer's ability to maximize value to investors, 26 percent allowed modifications with prior approval of the trustee, 18 percent allow modifications except for those that extend the maturity of the loans beyond that of the mortgage pool, and only 4.5 percent prohibited any workouts, with an additional 3 percent prohibiting modifications other than those establishing a balloon payment. The authors further wrote: "servicers admitted that investors have rarely questioned a workout, or asked to see NPV spreadsheets, or threatened a lawsuit in the past." 15

Beyond that, the Obama administration passed a measure to provide safe harbor to servicers that undertake loan modifications. The provision was included in the broader Helping Families Save Their Homes Act, which passed in May 2009. <sup>16</sup> Critics argued that the provision is too broad, limiting all legal recourse investors may have against servicer misbehavior. Other analysts pointed out that the provision could lead servicers to benefit themselves at the expense of investors. <sup>17</sup> Moreover, a recent lawsuit against Bank of America has directly challenged the ability of servicers to invoke the legislation in order to avoid investor claims. <sup>18</sup>

<sup>14.</sup> Credit Suisse, "The Day After Tomorrow: Payment Shock and Loan Modifications," April 5, 2007.

<sup>15.</sup> Larry Cordell et al., *The Incentives of Mortgage Servicers: Myths and Realities*, Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, September 2008.

<sup>16.</sup> One more potential legal impediment had already been addressed by lawmakers. Borrowers generally face taxes on any debt forgiven, since the amount is considered income. This taxation provides a strong disincentive for borrowers to participate in mortgage restructuring that involves writing off part of their principal. However, Congress temporarily excluded taxing gains on mortgage debt forgiven through the Mortgage Debt Relief Act of 2007. Under the legislation, valid until December 2012, borrowers do not face taxes on debt that is forgiven as part of restructuring a loan on their primary residence.

<sup>17.</sup> For example, two lawyers for MBS investors point out that the top four banks, Bank of America, JP Morgan Chase, Wells Fargo, and Citigroup, hold over \$440 billion of second mortgages but very few firsts—and that the four also service nearly half of first mortgages. That puts the servicers in a position to modify first mortgages in a way that can also benefit the secondary liens, even if the modification is not optimal from the perspective of the investor in the first mortgage. See Ric Brenner and Hamish Hume, "How Big Banks Want to Game the Mortgage Mess," *Wall Street Journal*, May 4, 2009.

<sup>18.</sup> Under a December 2008 settlement made with several state attorneys general over charges of predatory lending,

A number of measures have been put into place to address other aspects of the servicers' concerns. The American Securitization Forum came out with a Streamlined Framework that provides a fast-track procedure for modifying loans on first-lien subprime residential adjustable rate mortgages (ARMs) that originated between January 1, 2005 and July 31, 2007. In addition, in July 2007, Christopher Cox, then chairman of the Securities and Exchange Commission (SEC), stated that modifications of loans facing likely default would not disqualify a pool from off–balance sheet treatment. <sup>20</sup>

The issue with second liens is more complex than it appears. One study argued, "it may be the case that senior lien holders are overestimating the risk that courts will consider them as subordinate following a modification. . . we have not found any instances in the current foreclosure episode of junior lien holders successfully promoting their claim over a senior lien holder, although many lawsuits have yet to work their way through the courts." Moreover, as will be discussed further on, at least one major servicer, Bank of America, has stated that second liens are not a major impediment for them in practice.

But what may be more of a problem is that the top four servicers, Bank of America, JPMorgan Chase, Wells Fargo, and Citigroup, who service approximately 50 percent of all first mortgages for various investors, also own the majority of second liens themselves—approximately \$400 billion in total. In modifying the first lien on any property where these servicers own the second, they severely undercut their own investment. This conflict of interest may be one of the most powerful impediments to loan modifications. In response, the Federal Financial Institutions Examination Council (FFIEC), a council made up of the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), Office of Thrift Supervision (OTS), Office of the Comptroller of the Currency (OCC), and National Credit Union Association came out with a statement instructing servicers not to allow their decision whether to modify first loans to be influenced by any potential impact on a second lien.<sup>22</sup> The statement specifically mentioned that servicers with an ownership interest in a subordinate lien must not consider that interest when evaluating a first lien modification. However, the statement does not discuss penalties or

Bank of America, which acquired Countrywide Financial, agreed to modify approximately 400,000 loans made by Countrywide. The majority of the loans were in an investor trust, the terms of which explicitly required Countrywide to buy back any loans it modified. Bank of America has argued the Helping Families Save Their Homes Act supersedes the pooling and servicing agreement. The investors disagreed and sued. In mid-August the case was referred back from federal court to the New York State supreme court. See Gretchen Morgenson, "Countrywide Loses Ruling in Loan Suit," *New York Times*, August 19, 2009.

<sup>19.</sup> American Securitization Forum, "Streamlined Foreclosure and Loss Avoidance Framework for Securitized Subprime Adjustable Rate Mortgage Loans," issued December 6, 2007 and revised July 8, 2008.

<sup>20.</sup> SEC Chairman Cox's response to a letter from House Financial Services Committee Chairman Barney Frank, available at http://financialservices.house.gov.

<sup>21.</sup> Larry Cordell et al., "The Incentives of Mortgage Servicers: Myths and Realities."

<sup>22.</sup> FDIC, "FFIEC Support for Responsible Loss Mitigation Activities, Servicers' Obligations to Lienholders on Modifying Loans," Financial Institutions Letters, August 6, 2009.

consequences of noncompliance, and enforcement will likely be difficult since the regulators will face a challenge in proving servicers have acted in bad faith.

Even in cases where servicers do not own the second lien, other incentive mismatches can limit modifications. Servicer fees are based on a percentage of outstanding loan balance—usually 0.25 to 0.50 percent. They also get to keep 100 percent of late fees they collect, which can reach 6 percent of monthly payments—providing a meaningful source of revenue and therefore a significant disincentive to quick action, especially if they assume some of the loans will self-cure in the meantime. During a foreclosure proceeding, servicers can also make significant revenue through fees for insurance, appraisals, and title searches, which they funnel to their own subsidiaries.<sup>23</sup>

Indeed, a July study by the Federal Reserve found that over 30 percent of delinquent borrowers will self-cure, scraping together a way to make up their payments and thus undermining investor incentives to offer modifications.<sup>24</sup> Interestingly, just the next month a Fitch study found that cure rates had plummeted. Cure rates for prime loans dropped from around 45 percent between 2000 through 2006 to 6.6 percent in July 2009. Alt-A cure rates fell from 30.2 to 4.3 percent, and subprime cure rates fell from 19.4 to 5.3 percent.<sup>25</sup> Some of these borrowers may not be able to afford their payments even with a modification, but the trends in cure rates reinforce the notion that we will see accelerating delinquencies.

Other incentive misalignments include the fact that servicers traditionally initiate foreclosure proceedings at the same time as evaluating a potential modification in case the latter falls through. As a result, servicers incur incremental costs of processing the modification in addition to the foreclosure—costs that they are unable to pass along to investors, despite the fact that expenses associated with a foreclosure are generally reimbursed. This is a particularly perverse incentive whereby servicers may not undertake modifications that would result in a benefit to investors that is larger than the processing expenses. Compounding this phenomenon is the fact that in the event a modification fails, the servicers have not only incurred extra costs but also delayed the eventual foreclosure at a time when housing prices are falling. A related issue is that when a borrower first falls delinquent, servicers advance the missing

<sup>23.</sup> Peter Goodman, "Lucrative Fees May Deter Efforts to Alter Loans," New York Times, July 30, 2009.

<sup>24.</sup> The authors also pointed to the high rate of redefaults as creating another group of borrowers to whom lenders would not want to offer modifications, leaving a small subset in between who would be able to continue payments with a temporary reduction in terms but not otherwise. Manuel Adelino, Kristopher Gerardi, and Paul S. Willen, Why Don't Lenders Renegotiate More Home Mortgages? Redefaults, Self-Cures, and Securitization, NBER Working Paper 15159, July 2009, Cambridge, MA: National Bureau of Economic Research.

<sup>25.</sup> James R. Hagerty, "Fewer Catching Up on Lapsed Mortgages," Wall Street Journal, August 25, 2009.

<sup>26.</sup> Another study highlighted the same issue, that servicers prefer foreclosures over modifications because they received fixed-rate compensation when they modify a loan but "unmonitored cost-plus compensation" in foreclosures. See Adam J. Levitin, "Helping Homeowners: Modification of Mortgages in Bankruptcy," *Harvard Law and Policy Review* 3 (January 2009).

<sup>27.</sup> As pointed out below, rushing foreclosures while housing prices decline may have been an aspect of the earlier part of the crisis. More recently, as investors see a perceived bottom to housing prices coupled with a backlog of foreclosed

mortgage payments to investors and tax authorities. If they later modify the loan, they face a complicated task of settling up with each of the parties. These dynamics gave servicers additional incentives to move on foreclosures without exploring modifications, particularly in the early days of the current crisis.

Servicers also face competing pressure on modifications that differentially impact investors depending on what tranche they hold in the MBS stack. Holders of AAA tranches may prefer foreclosures since they are shielded from any loss by their seniority. By contrast investors holding residual tranches are more likely to support modifications that offer them a chance to recoup some of their investment. This "tranche warfare" will at best slow servicers who need approval of investors to conduct modifications. It can also increase the threat of lawsuits if they favor the interest of one class of investors over another. At least one industry representative has indicated that several large investors with significant holdings of senior tranches of MBS are working quietly but aggressively (and effectively) behind the scenes to slow the progress of loan modifications.<sup>28</sup>

More recently, servicers may be getting encouragement from investors to keep loans that have become seriously delinquent in a kind of purgatory that is not quite foreclosure. With the buildup of foreclosure inventory, depressed home values, and a backlog in the courts that can reach 24 months, investors have no incentive for their servicers to foreclose and try to sell the home. Instead, in a strategy referred to by some as "defer and hope," investors forestall the foreclosure, hoping the homeowner will self-cure or at least that they can hold off foreclosing until the market comes back. Even if the investor is forced to take the same loss later on, by not foreclosing they can defer the accounting recognition of the loss. This strategy is helped by unclear guidelines on accounting for delinquent loans. Partially in response, the OTS wrote in a letter to bank CEOs in May 2009 stating that "charg[ing]-off losses only at foreclosure or when deemed uncollectible" is "weak and do[es] not appear to be in accordance with GAAP and/or supervisory guidance." Unfortunately, the language of the letter was not definitive and it did not specify consequences for noncompliance. As a result, it is still a significant problem months later. 30

### **Operational Impediments**

Even if the conflict of interest problems could be solved, operational issues make it difficult for servicers to implement modifications. Servicers have traditionally focused on collecting money from borrowers and paying investors and are not set up to conduct loan modifications. They have collections teams, but generally they do not have sales teams capable of signing up new (or in this case existing) borrowers for

properties on the market, a different incentive may be emerging to forestall foreclosures until the market returns.

<sup>28.</sup> Author's conversation with MBS investment professional, April 2009.

<sup>29.</sup> Department of Treasury, Office of Thrift Supervision, "ALLL—Observed Thrift Practices Including Sound Practices," Memorandum for Chief Executive Officers, May 22, 2009.

<sup>30.</sup> See, for example, "Postponing the Day of Reckoning," American Banker, August 26, 2009.

modified loans. Simply reaching homeowners to discuss loan modifications is difficult—many borrowers cannot sift through the barrage of mail and phone calls they receive from collection agencies to realize they are being offered a beneficial deal (see the case study on Bank of America's outbound efforts below). For their part, homeowners have difficulty getting through to lenders to talk about possible modifications: The day after the Obama administration announced further details about their loan program, JP Morgan Chase reported that call volume spiked 150 percent, and SunTrust saw calls increase 50 percent.<sup>31</sup>

Moreover, servicers do not typically have underwriting capability, including systems and staff needed to identify which borrowers qualify for loans and to set new terms. Underwriting loan modifications can be even more complex than underwriting traditional loans, due to the myriad of government programs and incentives, different eligibility requirements, and new tighter lending standards. In the words of one lender: "Right now, if I tried to refinance a loan that didn't have equity, our computer system wouldn't even allow it...." These operational factors are proving to be very real impediments to getting loan restructuring underway.

# **Problem of Redefaults and Modification Design**

A vexing problem with the concept of loan restructuring is the poor track record of borrowers complying with their new loan payments. And early study of loan modifications found that 58 percent of loans modified in 2008Q1 and 51 percent of loans modified in Q2 missed one payment within six months.<sup>33</sup> Other analysis showed that modifications with interest rate reductions perform slightly better—in a sample of loans modified during 2009Q1, those with rate reductions had a 23 percent chance of missing two payments.<sup>34</sup>

Other research has shown that a homeowner's equity position, along with affordability, is a key determinant of default rates—i.e., borrowers with negative equity are more likely to default.<sup>35</sup> These studies suggest that principal write-downs may be a critical element of making any loan modification program sustainable over the long term. And yet the study of modifications done in November 2008 found that the average restructuring in fact added over \$10,000 to the principal of each loan—approximately 5 percent of the total loan outstanding, by capitalizing unpaid interest and fees. Only

<sup>31. &</sup>quot;U.S. Launches Wide-Ranging Plan to Steady Housing Market," Washington Post, March 5, 2009.

<sup>32.</sup> Ibid.

<sup>33. &</sup>quot;Foreclosure Reduction Effort Yielding Mixed Results, Report Says," *Washington Post*, December 9, 2008. The study, published in December, looked at a sample of 200,000 loans.

<sup>34.</sup> Credit Suisse study cited in "Foreclosure Reduction Effort Yielding Mixed Results, Report Says," *Washington Post*, December 9, 2008.

<sup>35.</sup> Kristopher Gerardi, Adam Hale Shapiro, and Paul S. Willen, "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosures," Federal Reserve Bank of Boston, May 2008; Shane M. Sherlund, "The Past, Present, and Future of Subprime Mortgages," Federal Reserve Board, November 2008.

about 35 percent involved reducing the borrower's monthly payment, 18 percent left it unchanged, and 47 percent of monthly payments actually increased.<sup>36</sup> These trends contribute to the high rate of redefaults and suggest that modifications must focus on bringing down payments to an affordable level so that they are sustainable in the long term.<sup>37</sup> The picture improved for modifications done in 2009Q1, where 54 percent reduced payments, though unfortunately 18 percent still increased payments. Data for modifications completed in 2009Q2 show that 78 percent reduced the borrowers' monthly payments, while 17 percent increased them.<sup>38</sup> The data also clearly show that modifications that reduced borrower payments perform significantly better than those that increased payments or left them unchanged (figure 6). Loans where the payment was reduced 20 percent or more show nearly half the redefault rate of those where the payment was unchanged, and loans where the payment was reduced by an even smaller amount still show significantly lower redefault rates.<sup>39</sup>

#### Behavioral Economics and Loan Modification: Loss Avoidance and Collective Action

Reducing overall housing prices is an important element of any mortgage restructuring program because of the behavioral characteristics of homebuyers. Housing prices are highly sticky on the downside. Most sellers base their asking price on the nominal price they paid for their home and are unlikely to accept less than that amount, even when housing markets have fallen. This loss aversion keeps their asking prices high and increases the days on market of their properties, contributing to an overall increase in housing inventory. Moreover, a study of the Boston real estate market during the 1980s and 1990s showed that individual homeowners exhibit twice as much loss aversion as real estate investors. Furthermore, as Amos Tversky and Daniel Kahneman showed in their pioneering work on behavioral economics, people are much more sensitive to financial losses than to equivalent-sized gains. Therefore, at a time when a

<sup>36.</sup> White, "Deleveraging the American Homeowner." Professor White looked at a sample of 3.5 million subprime and Alt-A mortgages, comprising 20 percent of all loans modified in November of 2008.

<sup>37.</sup> Interestingly, the FDIC has modeled a 40 percent redefault rate into their own projections, though they claim that even so loan modifications are worthwhile given the high cost of foreclosures. "Just a Band-Aid on the Foreclosure Problem?" *Washington Post*, February 3, 2009.

<sup>38.</sup> Office of the Comptroller of the Currency and Office of Thrift Supervision, "Mortgage Metrics Report for Second Quarter 2009," September 2009.

<sup>39.</sup> According to the OCC/OTS report (ibid.) regarding the surprising finding that loans where the payment was unchanged evidenced worse performance than those that increased payment: ". . .one reason for this anomaly is that modifications in which payments are unchanged often result from freezing the interest rate on adjustable rate mortgages before the loans resetting to higher payments. While servicers determined that these borrowers were at risk of imminent default on the increased payment, the rate and payment were often frozen as part of a systemic program that did not involve a full assessment of the borrowers' capacity to continue making their payments."

<sup>40.</sup> David Genesove and Christopher Mayer, "Loss Aversion and Seller Behavior: Evidence from the Housing Market," *Quarterly Journal of Economics* 116, no. 4 (2001): 1233–60.

<sup>41.</sup> Ibid.

<sup>42.</sup> Amos Tversky and Daniel Kahneman, "Loss Aversion in Riskless Choice: A Reference-Dependent Model," *Quarterly Journal of Economics* 106, no. 4 (November 1991): 1039–61.

large portion of US mortgages are underwater, policies aimed at reducing the selling price of homes could have a greater "bang for the buck" than policies that provide the same dollar value of incentives to buyers.

A final impediment to mortgage restructuring is the result of collective action problems on the lender front. While foreclosures are more costly than successful loan modifications, in an environment of falling prices lenders who foreclose sooner can benefit incrementally as they minimize their loss on sale relative to lenders who wait and sell into a market with more inventory and further depressed prices. Each lender benefits from restructuring and all lenders benefit collectively from fewer foreclosures, but lenders who rush foreclosures through quickly can benefit. Thus in order for all lenders to participate effectively, programs that provide incentives for all lenders to act in concert, like standard modification guidelines and a moratorium on foreclosures, are important to solving this collective action problem and getting lenders focused on restructurings.

#### PRINCIPLES FOR AN EFFECTIVE RESTRUCTURING PLAN

A common sense list of principles for designing an effective mortgage restructuring plan might include the following:

Principle	Rationale
Does the plan reduce defaults and foreclosures? Does it protect against redefaults?	This is the key to keeping people in their homes, reducing bank losses, and restoring investor confidence in the securities made of these mortgages.
How much does it cost and who pays? How are the costs allocated between borrowers, lenders, and investors?  How are the benefits allocated?	All things equal, a lower-cost plan would be better—more easily approved by both parties in Congress, more acceptable to taxpayers, and more likely to gain the interest of private-sector players involved.
	If borrowers, lenders, and investors are given support, particularly if that support comes from taxpayers, then taxpayers should also share in any potential upside. This will help minimize future moral hazard issues and also reward taxpayers for the risk they are taking.
How scalable is it? How quickly can it be implemented on a broad scale? And not just for subprime loans but for all mortgages?	Since the number of affected mortgages is large, an effective program must address a significant number of both prime and subprime loans quickly.
Does it support downward movement in housing prices?  And does it help avoid a possibly disastrous overshoot on the downside?	Given wide-scale agreement that in the run-up to the crisis there was a housing asset bubble, programs should not artificially prop up the housing market, but minimize disruptions as prices settle down to a more sustainable level.
Does it discriminate between truly needy borrowers and those trying to game the system?	An effective program would help those who truly need help, not those who want to benefit from the program at taxpayers' expense.
To what extent is it consistent with existing laws, regulations, and other legal constraints—i.e., rights of secondary lien holders and securitization agreements?	To be easily and broadly implemented, the restructuring program must avoid running into legal roadblocks from other players involved.

#### **EVALUATION OF EXISTING MORTGAGE RESTRUCTURING PROPOSALS**

#### **FHASecure**

FHASecure was launched in August 2007 and then expanded in April 2008 by the Federal Housing Administration (FHA), a division of the US Department of Housing and Urban Development (HUD). The program was initially intended to provide FHA-insured refinancing and long-term fixed-rate mortgages to non-FHA ARM holders facing a rise in payments due to interest rate resets. To be eligible, borrowers needed at least 3 percent equity in the home, a history of on-time payments, and a solid employment history so as to be able to afford the new mortgage.<sup>43</sup>

The expanded program broadened eligibility to subprime ARM borrowers who had missed up to three monthly mortgage payments. For borrowers with two missed payments in 12 months, the lender was required to write down the loan to 97 percent of the current appraised value. Borrowers with three missed payments were eligible if their loans were at or written down to 90 percent or less of the current appraised value.<sup>44</sup>

#### Results

Between September 2007 and December 2008, 475,000 loans were modified through FHASecure. One hundred thousand loans were modified in the first six months of the program, another 100,000 in the next three months, and nearly 300,000 in the last seven months following the implementation of the program changes. However, the program reportedly refinanced only about 4,000 subprime borrowers. The program expired December 31, 2008, as the FHA shifted its focus to the Hope for Homeowners program.

# **Evaluation of FHASecure**

**Reducing Defaults:** The program design initially targeted borrowers who had made consistent payments but were facing interest rate resets. This criterion selected people who were a good insurance risk and would likely continue making payments on their new loans. The expanded program gave it broader reach but opened it to a population that would have a higher risk of redefaulting.

<sup>43.</sup> US Department of Housing and Urban Development, "Bush Administration to Help Nearly One-Quarter of a Million Homeowners Refinance, Keep Their Homes: FHA to Implement New "FHASecure" Refinancing Product," HUD press release 07-123, August 31, 2007, www.hud.gov.

<sup>44.</sup> US Department of Housing and Urban Development, "Bush Administration to Expand Mortgage Help for Struggling Families: Expanded FHASecure Able to Help Half a Million Homeowners Stay in Their Homes by Cutting Mortgage Payments," HUD press release 08-050, www.hud.gov.

<sup>45.</sup> US Department of Housing and Urban Development, "Bush Administration's FHASecure Refinances 200,000th Mortgage for American Families," HUD press release 08-069, May 15, 2008, www.hud.gov and "Charting Your Course," *Washington Post*, December 27, 2008.

<sup>46. &</sup>quot;More Homeowners Getting Aid, but Demand Keeps Rising," Washington Post, May 14, 2009.

Allocation of Costs and Benefits: In the original program the borrower benefited by getting refinanced into a loan with a fixed rate at a payment level they could afford, and the servicer benefited from having an FHA-insured loan. The FHA used risk-based pricing to set premiums, so that any payouts would be covered by the insurance and not by taxpayers. The story became more complicated when the program required servicers to write off a portion of the loans, providing more benefit to borrowers. Servicers still would not have participated if the program were not a financially attractive alternative to likely defaults. It is unclear whether the insurance payments were increased enough to cover the higher projected risks of redefaults—which is likely why the Hope for Homeowners program (described below) that followed FHASecure requires homeowners to share any future price appreciation with the FHA. Also, writing off a portion of the loans based on the current appraised value increases the cost for the servicer/lender, and it is unclear how many of the modified loans were processed after the expanded criteria went into effect.

**Scalability**: FHASecure had a fairly extensive reach in modifying loans. The rate of 30,000 to 50,000 loans modified per month is a sizable portion of the number of loans going into default during the same period.

**Supporting Downward Housing Prices**: The original program did not support any reduction in housing prices. By including principal forgiveness, the expanded program added an element to help realign home values.

**Borrower Eligibility/Screening**: The program's original eligibility requirements targeted homeowners with a lower risk of redefault. While the expanded program targeted more needy borrowers—those who have defaulted on their loans already—those borrowers are also more likely to default in the future.

**Legal Consistency**: FHASecure did not explicitly address the second lien or servicer-agreement issues. The initial program refinanced up to 97 percent of the value of the home, enabling the borrower to pay off most secondary liens. With the expanded program, servicers could write down the amount owed to make the loan eligible, suggesting that they would have to accommodate the second-lien holder about any possible loss. Because the program helped servicers improve the value of loans with a high probability of default, it gave them a basis for meeting the requirements of their servicing agreements.

Overall Assessment: FHASecure was successful in reaching a sizeable number of mortgages and restructuring them. The next step in evaluating the program's effectiveness will be to see how the new loans perform over time. Overall, the performance of FHA-insured loans has eroded, with defaults rising from 3 percent in 2006 to 4.31 percent in December 2008—though it is important to note that over the same time the agency's share of new mortgages increased dramatically from 2 percent to 25 to

30 percent.<sup>47</sup> However, loans modified under the original criteria will likely perform better than the later ones, since they were limited to more solidly performing borrowers, suggesting the default rates will continue to rise. The new program was more generous to borrowers, which appears to be why Hope for Homeowners added value sharing so that borrowers do not benefit exclusively from future housing price appreciation. Value sharing also helps the FHA/taxpayers to be made whole for additional losses that are not covered by the insurance premiums. This is important as the FHA reserves available to cover losses, including those from this program, fell significantly year over year from 6 percent of the loans it guaranteed in September 2007 to 3 percent in September 2008.<sup>48</sup>

### **FDIC Mortgage Restructuring Proposals**

Perhaps one of the most vocal advocates of the government role in mortgage restructuring is Sheila Bair, chairman of the FDIC. In August of 2008 Bair offered a new loan modification program through IndyMac Federal Bank, the mortgage company taken over by the FDIC in July 2008 when its capital levels became unsustainable. IndyMac would modify loans so that payments are capped at 38 percent of a borrower's income by extending the repayment period (up to 40 years), lowering the interest rate (as low as 3 percent), or forbearing or forgiving some of the principal.<sup>49</sup> Modifications were made after verifying the borrower's income and ability to afford the new monthly payments and subject to the cost of the modification being lower than a net present value (NPV) calculation of estimated foreclosure costs.

The program offered a low initial interest rate to provide the borrower with immediate assistance in making their payments. Beginning in the sixth year of the new loan, the interest rate increased by 1 percent each year, capped at the current Freddie Mac Primary Mortgage Market Survey rate (initially 6.5 percent when the program was set up in August 2008, it had fallen to 5 percent by year end and hovered +/– 20 basis points through the beginning of October 2009).

In November, Bair encouraged other lenders to use the same guidelines and offered to pay servicers \$1,000 for each modification. The FDIC would also insure the new loans for up to 50 percent of the loss lenders incurred in the event of a redefault.<sup>50</sup> On New Year's Eve 2008, a consortium agreed to

<sup>47. &</sup>quot;Rate of Defaults Is Rising Among FHA-Backed Loans," Washington Post, January 24, 2009.

<sup>48.</sup> FHA reserves are expected to fall below 2 percent at the end of September 2009, see "Housing Agency's Cash Reserves Will Drop Below Requirement," *Washington Post*, September 18, 2009. If the FHA's reserves drop below 2 percent, the agency will be required to ask Congress for a bailout or increase its fees to borrowers. However, Commissioner David Stevens has said the agency will increase the capital holding requirements for lenders who seek FHA insurance to \$1 million, to cover the increased incidence of fraud. The FHA will also hold lenders responsible for any fraud committed by their network of mortgage brokers.

<sup>49.</sup> FDIC, "Loan Modification Program for Distressed Indymac Mortgage Loans," www.fdic.gov (accessed on December 15, 2008). See also "FDIC to Restructure IndyMac Loans," TheStreet.com, August 8, 2008.

<sup>50.</sup> NPR, "FDIC's Bair Offers Plan for Reworking Mortgages," November 14, 2008 and "FDIC Details Plan To Alter Mortgages," *Washington Post*, November 14, 2008. Also see the FDIC Loan Modification Program brochure, available at

buy IndyMac from the FDIC for \$13.9 billion in a deal that closed on March 19, 2009. The newly recapitalized bank operates under the name OneWest Bank, and according to the deal press release it will "continue to modify mortgages in accordance with the program created by the FDIC." However, while it was listed as one of the servicers approved under the Home Affordable Modification Program in the September report, OneWest had not yet gotten up and running so there was no data on its recent modification activity.

#### Results

From September to December 2008, the FDIC/IndyMac program had modified 8,500 loans and at the end of the year had 9,500 more loans in the pipeline.<sup>53</sup>

# **Evaluation of the FDIC Proposals**

Reducing Defaults: The 38 percent debt-to-income (DTI) target provided a clear target for making the new mortgages affordable. However, several commentators, including Federal Reserve Chairman Ben Bernanke, have suggested that DTI targets must be even lower, perhaps capped at 31 percent, for people to be able to afford their mortgages. <sup>54</sup> Principal forbearance and temporary rate reductions alleviate short-term payment pressure but may simply push off defaults to a later date.

Allocation of Costs and Benefits: The primary cost to the lender comes through any principal forgiveness, which benefits the borrower directly and could benefit the lender through reduced defaults. For illustrative purposes, table 2 shows a hypothetical \$250,000 mortgage with a 6 percent interest rate and 30-year term and size of loan forgiveness needed to hit a 38 percent DTI at various income levels. Achieving the target DTI may be significantly less costly to the lender than the cost of foreclosure, which as noted above can reach 20 to 60 percent of a loan. The FDIC guidelines encouraged servicers to search for borrowers for whom modifications would be profitable, and the incentive payments may have enabled them to make modifications that were otherwise on the margin.

Extending the repayment period could benefit both borrowers (lower monthly payments) and lenders (longer holding period for interest payments and reduced defaults). The program does not impose any costs on the borrower, such a value sharing, in exchange for the large subsidy they receive. Lower interest rates and caps on increases are also costs to lenders, particularly as rates rise in the future. When

www.fdic.gov.

<sup>51. &</sup>quot;Investor Group Completes Acquisition of IndyMac Assets," IndyMac/OneWest Bank press release, March 19, 2007, www.indymacbank.com.

<sup>52.</sup> The Obama administration's Home Affordable Modification Program is detailed in a later section.

<sup>53. &</sup>quot;Charting Your Course," Washington Post, December 27, 2008.

<sup>54.</sup> Traditional conforming mortgages have MTIs of 28 percent and DTIs of 36 percent.

the securitization markets eventually reopen, that interest rate risk would pass along to investors, who would presumably price in the additional cost of the longer amortization period to their own valuation considerations. Finally, lower interest rates clearly help the borrower in the short term but after rates begin to increase, could make the loan unsustainable.

**Scalability**: Fewer than 10,000 loans modified in three months compared with over 80,000 foreclosures/ month suggest that the program was not scalable on its own. Bair's proposal to encourage other lenders to use the same guidelines in their own efforts indicates that she was aware of the limited reach of IndyMac and the need to dramatically expand the number of mortgage servicers putting efforts into the programs.

**Supporting Downward Housing Prices**: Loan forgiveness helps lower housing prices, while both lower interest rates and longer amortization periods are ways to help lower monthly payments while keeping the overall house price unchanged.

**Borrower Eligibility/Screening**: The guidelines suggest borrower eligibility should be focused on those who are 60+ days delinquent or where a default is "reasonably foreseeable." The home must also be a primary residence, so that speculators and investors in rental properties are excluded.

The 60+ day delinquency criterion provides some incentive to borrowers to miss payments to improve their eligibility. However, judging when a default is "reasonably foreseeable" is much more subjective and thus open to abuse by lenders. Thus the 60-day rule provides a simplified way of identifying homeowners who are likely to default, and coupled with a review of the homeowners' finances, should help avoid people who might otherwise afford their payments.

**Legal Consistency**: The FDIC guidelines specify that the lender/servicer undertake a transparent analysis to ensure that the cost of a specific loan modification is lower than the estimated cost of foreclosure. By showing that a modification provides a higher NPV to the investor, the servicer should fulfill the terms of most servicing agreements that enable servicers to maximize the value of their portfolios.

Overall Assessment: The general approach of the FDIC program seems on target. It focuses on making payments affordable in the near term and attempts to balance the costs and benefits among the parties involved. However, the longer-term rise in payments, though made explicit at the time of modification, sounds almost like an ARM, whose interest rate resets were one of the drivers of the current rash of defaults. Unless the other elements of loan modification (principal forgiveness, principal forbearance, and longer amortization) materially lower the payment for homeowners over the longer term, this design feature may end up simply pushing off defaults five or so years down the road. Furthermore, during that time, it is unlikely the borrower will build up a sizeable equity position to guard against future defaults—since over the first five years the majority of a loan payment is directed to interest payments, and it is unclear how much housing prices will rise if at all.

### **Hope for Homeowners (H4H)**

Hope for Homeowners began as the Frank-Dodd legislation in 2007 and was ultimately authorized in the Housing and Economic Recovery Act in June 2008. H4H aims to refinance existing loans into FHA-insured 30- or 40-year fixed-rate loans. To qualify, the lender/servicer must write down the balance of the loan outstanding to 96.5 percent of the current appraised value to create some equity for the borrower and pay an up-front insurance premium of 3 percent. Furthermore, servicers must modify the loan so that payments do not exceed 31 percent mortgage-to-income and 43 percent debt-to-income. In exchange, the borrower is required to share with the government any appreciation of the home value. The government owns a sliding share of the initial homeowner equity, which decreases to 50 percent after five years, as well as sharing in 50 percent of any future price appreciation. To address subordinate liens, the program offers lien-holders either an up-front payment or an interest in the FHA's share of the future appreciation of the property. Borrowers are eligible if they have paid at least six monthly payments in full, do not own any other real estate, and have not intentionally defaulted on any other debts.<sup>55</sup>

As part of its revised foreclosure prevention plan, on April 28 the Obama administration announced changes to the H4H program that would incorporate incentive payments to servicers and lenders. Those changes are discussed more below under the evaluation of the Obama plan.

#### Results

Initial participation was low, however, as lenders shied away from making large write-downs of principal.<sup>56</sup> As of late March 2009, the program had attracted only 752 applications, and only one loan had been approved.<sup>57</sup> The most recent public data appear to be from April, showing the number of restructured loans had risen to 51.<sup>58</sup>

# **Evaluation of the Hope for Homeowners and the Proposed Program Reforms**

Reducing Defaults: The 31 percent mortgage-to-income (MTI) target is similar to the FDIC proposal. By beginning with loan write-downs that provide borrowers with some equity, H4H addresses a key factor in reducing future defaults. However, the program is clearly ineffective; the low application rate points to overly stringent eligibility requirements, and the even lower number of completed modifications demonstrated little impact.

<sup>55.</sup> Hope for Homeowners, available on the HUD website, http://portal.hud.gov (accessed on December 26, 2008). See also "H4H Press Fact Sheet 2," available on the same site.

<sup>56.</sup> The original H4H program required the servicer to forgive the loan to 90 percent of the appraised value. The program was modified by the Emergency Economic Stability Act, which authorized the Troubled Asset Relief Program (TARP) and was passed in October 2008.

<sup>57. &</sup>quot;HOPE Prevents 1 Foreclosure," CNNMoney, March 25, 2009.

<sup>58. &</sup>quot;Loan-Modification Plan Revised to Address Second Mortgages," Wall Street Journal, April 29, 2009.

Allocation of Costs and Benefits: H4H was designed to share costs and benefits among all parties. The FHA would insure the new loans against redefault, and in exchange both the lender and borrower must pay insurance premiums. Borrowers benefit from principal forgiveness and lowering their MTI but share any future appreciation with the government. Servicers trade principal forgiveness and other modified loan terms along with an insurance fee in exchange for an insured loan. Value sharing is an appealing conceptual design to limit the program to needy borrowers, reduce moral hazard, and provide an opportunity for the taxpayer to share in potential upside. However, it is unclear to what extent this value sharing has scared away potential applicants.

Scalability: The program's track record demonstrates very little reach.

**Supporting Downward Housing Prices**: Loan forgiveness using the newly appraised home value helps bring prices down to the prevailing market levels. But without broader participation, the program is not having much impact.

Borrower Eligibility/Screening: Limiting participation to homeowners who have made a string of successful payments selects those who are likely to succeed with their new loans but screens out borrowers who are most at risk for foreclosure. Avoiding those who own other homes helps avoid speculators looking for an easy government bailout.

**Legal Consistency**: The H4H program explicitly addresses the second-lien holder issue by providing either up-front payments or share in the FHA's portion of the house price appreciation.

Overall Assessment: H4H's slow take-up rate suggests some fundamental design flaws. The program has been criticized for having fees that are too high, overly stringent restrictions on who qualifies, and inadequate incentives for lenders. <sup>59</sup> Some have argued that it was limited in its effectiveness by an administration and Congress that were unwilling to allocate money necessary to provide incentives to make the program work. <sup>60</sup>

# **Glenn Hubbard and Christopher Mayer Proposal**

In late 2008, Glenn Hubbard, former chairman of the Council of Economic Advisers (CEA) under President George W. Bush and now dean of Columbia Business School, and Christopher Mayer, a finance and economics professor at Columbia Business School, proposed that the government offer fixed 4.5 percent mortgages to all new homebuyers in the United States. Their goal was to provide incentives

<sup>59.</sup> NPR, "Investors Support Overhauling Homeowner Program," April 16, 2009.

<sup>60.</sup> While the Congressional Budget Office (CBO) initially estimated the Frank-Dodd approach would help approximately 400,000 homeowners, Treasury officials looking at the requirement for lenders to write down principal without receiving government incentives apparently predicted the program would be a failure. See Phillip Swagel, The Financial Crisis: An Inside View, *Brookings Papers on Economic Activity* (Spring 2009).

for new buyers to enter the market by reducing the cost of monthly mortgage payments. They proposed that existing homeowners be given access to the lower-priced loans and estimated that over 40 million homeowners would qualify for the lower rate, which would reduce their average monthly mortgage payment by \$424.

#### Results

The program received media attention since it was innovative and different than most other proposals but did not gain significant traction among policymakers.

# **Evaluation of the Hubbard-Mayer Proposal**

Reducing Defaults: The Hubbard-Mayer proposal did not address the default/foreclosure problem directly. Presumably, Hubbard and Mayer believed the new loans would be less likely to default because they are more affordable. By lowering mortgage costs and increasing the demand for housing, their plan would support housing prices, mitigating further increases in negative equity. They calculated that refinancing would pay off \$600 billion in jumbo loans and \$260 billion in second liens that underlie MBS,<sup>61</sup> which could make significant headway into cleaning up bank balance sheets and restoring confidence in the banking system.

Allocation of Costs and Benefits: Hubbard and Mayer estimated taxpayers could make a profit given the spread between the 10-year T-bond yield (which averaged 2.4 percent in December 2008 when they made the proposal and had risen to 3.4 percent in September 2009) and the rate of the new mortgages. They pointed to the fact that the average historical default premium is 0.25 percent, so that even if it needs to be 0.75 percent in the current market, there is still room for profit. Furthermore, at a 4.5 percent interest rate, they argue that the risk of prepayments would be dramatically reduced to nearly zero.

**Scalability**: In theory, the proposal could be extended to the 40 million or so households suggested by Hubbard and Mayer, since each loan would be profitable on its own. However, a limiting factor for implementation would be the Treasury's capability in underwriting and approving the new loans, an effort that would require the government to develop a massive new in-house capability or to outsource to a private-sector partner. In either case, refinancing even a portion of the 40 million mortgages would be a tremendous effort requiring significant manpower.

<sup>61.</sup> See R. Glenn Hubbard and Christopher Mayer, "Low Mortgage Rates: Fixing the Market," February 2009, available at www4.gsb.columbia.edu.

<sup>62.</sup> Hubbard and Mayer consider that instead of offering a fixed 4.5 percent rate, the government could instead peg the rate to the 10-year Treasury yield to maintain the spread. However, they suggest that the benefits of having a program that is easy to describe may be more important than maintaining the spread.

Supporting Downward Housing Prices: When they initially made their proposal in 2008, Hubbard and Mayer argued that housing values had generally bottomed out, with the exception of some particularly overvalued locations like Miami, Phoenix, and Las Vegas. They were more concerned with preventing an overcorrection than in easing prices downwards, and therefore their proposal is designed to stimulate demand and support housing prices. However, since they made that argument, the Case-Shiller Index dropped an additional 7.5 percent before making up about half of that loss.<sup>63</sup>

Borrower Eligibility/Screening: Any borrower who could afford a loan at the 4.5 percent interest rate would be eligible. However, since the proposal did not address the issue of negative equity, some of the neediest and most at-risk borrowers would likely be unable to get a new loan under the program.

**Legal Consistency**: The proposal would provide new mortgages that enable borrowers to refinance their existing ones, eliminating the problem of modifying securitized loans. The plan did not directly address the second lien issue for borrowers who cannot refinance both loans together.

Overall Assessment: The proposal has the benefit of simplicity and avoids entanglements with servicing contracts by refinancing around them. However, by opening the program to the entire US homeowner population, the program would be so flooded with applications that the government would be overwhelmed—and indeed as would any private-sector company that is contracted to assist it. Based on the experience of Bank of America in its restructuring program (see below), and even accounting for a much higher response rate to outbound solicitations that tripled the productivity of loan officers, it could take 50,000 officers to process 10 million loans each year.

The proposal makes no attempt to identify and prioritize borrowers who are most at risk for default. Instead, it focused on supporting housing prices and providing a consumer-spending stimulus to the overall economy. As such, the proposal does not seem to be a strong recipe for preventing defaults, though by supporting home values it would mitigate the trend towards negative equity.

# Federal Reserve's Proposals—January 2009

In January the Federal Reserve announced plans to restructure the mortgages that it holds as a result of the rescue of Bear Stearns and AIG. The Fed planned to work with third-party servicers to renegotiate loans that are in foreclosure or in danger of entering foreclosure, with a focus on those that are severely under water—i.e., where the loan value is more than 125 percent of the current value of the property. The plan will reduce borrowers' MTI payments to a 38 percent target by reducing the loan's interest rate, extending the amortization period, and postponing or forgiving principal.<sup>64</sup>

<sup>63.</sup> Case-Shiller Housing Price Index, Composite 20, published October 27, 2009.

<sup>64.</sup> See Federal Reserve, "Homeownership Preservation Policy for Residential Mortgage Assets," attachment to Federal

Also beginning in January, the Fed began purchasing billions of dollars of Fannie Mae and Freddie Mac MBS on the open market with a goal of buying a total \$1.25 trillion by year-end.<sup>65</sup> The program is aimed at driving down mortgage rates to make it easier for individuals to refinance their loans.

#### Results

By the end of December 2008 the Fed claimed it had modified more than 11 percent of the delinquent loans in the asset pool from Bear Stearns.<sup>66</sup> There does not appear to be any updated information about the initiative.

#### **Evaluation of the Fed Plan**

Reducing Defaults: The Fed plan offers a mix of techniques to reduce monthly payments. Fed Chairman Bernanke has been one of the strongest advocates of forgiving principal to make new loans sustainable and in cautioning that negative equity causes homeowners to be at risk for default. Consistent with these positions, the Fed plan prioritizes principal reductions in cases where the loan balance is more than 125 percent of the home's current appraised value. Surprisingly, the Fed plan aims for a 38 percent MTI target rather than the more borrower-friendly 31 percent that the FDIC and H4H programs target, even though the Fed might be expected to move more aggressively than private lenders who do not share the Fed's public policy goals. This higher MTI target could make the Fed modifications less sustainable, though the long-term viability of these new loans will depend more on the mix of approaches used to lower the monthly payments and the Fed's ability to identify borrowers who can reasonably be expected to stay with the program.

**Scalability**: The Fed program is aimed at adjusting mortgages among the approximately \$70 billion of mortgage-related assets it owns through its AIG and Bear Stearns bailouts. If the Fed were to extend its loan modification efforts to all the mortgage assets it controls, the program could be quite far-reaching.

Allocation of Costs and Benefits: It is not clear from the Fed's policy outline how borrowers would share in the cost of loan modification. The Fed may only modify loans where the expected value of the restructured loan exceeds the existing one, regardless of any value sharing with the government. While doing so would help taxpayers recoup as much of the Fed's outlays as possible, there does not appear to be any measure to address the moral hazard issues involved.

**Supporting Downward Housing Prices**: To the extent that the program reduces outstanding principal, it will support downward movement in housing prices. Moreover, by focusing on those borrowers who

Reserve press release, January 30, 2009, www.federalreserve.gov.

<sup>65.</sup> See Federal Reserve Bank of New York, "FAQs: MBS Purchase Program," www.newyorkfed.org.

<sup>66.</sup> Written response of Fed Governor Betsy Duke to Senate Banking Committee Chairman Christopher Dodd, as reported in "Fed's Duke: Fed Close to Foreclosure Relief Plan," Reuters, January 15, 2009.

are severely under water, the program more explicitly tries to address the problem of falling house values that do not support the loans written on them.

Borrower Eligibility/Screening: The Fed plan focuses on identifying at-risk borrowers before they enter foreclosure, starting with those that are 60 days delinquent, those that are facing a "known trigger event" such as an interest rate reset, or those that are facing a reduction in their income, for example, due to having lost their jobs. Priority goes to owner-occupied residential properties and those where the loan outstanding exceeds 125 percent of the current appraised home value. However, the Fed reserved the right to modify any loan where the expected value exceeded that of the original mortgage. The Fed's proposal is therefore more proactive than many of the others, in that it attempts to identify loans that are at risk for delinquency and not just those that are already seriously behind on their payments.

**Legal Consistency:** In a situation where the loan the Fed wishes to modify is a subordinate lien, the Fed intends to work with the senior mortgage holder to make modifications. When the Fed's loan is senior, it will modify the mortgage in ways that maximize value. As owner of the loans, the Fed eliminated any potential liability the servicer it chooses would face in modifying them.

Overall Assessment: The plan is a step forward in its borrower eligibility/proactive approach to identifying at-risk borrowers. The 38 percent MTI target seems less aggressive than plans that will go down as far as 31 percent, but the real measure of how sustainable the new loans are will be determined by the mix of methods used to reach that target—i.e., how much of it is done with long-term fixes and principal reductions in particular. Sustainability of the new loans along with the resources given to conduct outreach and actively modify loans will be key determinants of the program's overall effectiveness. The plan envisions working with an outside advisor/mortgage servicer to modify the loans it controls, but its ultimate reach will depend on the resources the Fed chooses to put behind the program and the capabilities of the advisor/servicer it selects.

### Obama Administration Plan: Homeowner Affordability and Stability Plan

The administration's homeowner relief plan, first announced on February 18, 2009 by President Obama, aims to help 7 million to 9 million families avoid foreclosure. The plan has three main elements. The first aims to make it easier for homeowners to refinance mortgages to the lower rates in today's marketplace by increasing the conforming loan amounts eligible for Freddie Mac/Fannie Mae guarantees. The plan, called the Home Affordable Refinance Program (HARP), increased eligible loan-to value (LTV) first to 105 percent and more recently 125 percent to enable borrowers who are under water but current on their loans to participate in the program.

The second element provides \$75 billion for the Home Affordable Modification Program (HAMP) to work with servicers to modify loans. The initiative offers a \$1,000 incentive to servicers to modify

loans and provides them with another \$1,000/year for three years as long as the borrower stays current. Borrowers who remain current receive up to \$1,000/year for five years towards principal reductions. The plan also provides a \$500 incentive for lenders to identify at-risk borrowers before they default as well as \$1,500 to borrowers who participate in the program prior to becoming delinquent. Any rate reduction must be kept for at least five years before it can be gradually increased to the conforming rate at the time of the loan modification. Further, once the lender hits a 38 percent MTI target (by any combination of lowering the interest rate, lengthening the term, etc.), the government matches further reductions dollar-for-dollar to hit the 31 percent target.

The third element of the plan was increasing support for Fannie Mae and Freddie Mac by providing an additional \$100 billion in funding to each one, allowing the two to increase their mortgage portfolios by an additional \$50 billion (to \$900 billion) and continuing to buy agency MBS to promote market liquidity. Finally, the original administration plan called for allowing judges to modify the terms of mortgages during bankruptcy and provided \$1.5 billion in assistance to renters affected by mortgages.<sup>67</sup>

In March the administration established a website, www.makinghomeaffordable.gov, that provides details on the president's plan and tools to help homeowners learn if they qualify. Subsequently, the administration kicked off a series of workshops in cities with high foreclosure rates, beginning with Miami, to raise awareness, prepare borrowers to negotiate with their servicers for modifications, and generally help borrowers and servicers connect more effectively to prevent avoidable foreclosures.<sup>68</sup> In conjunction with the Hope Now Alliance, workshops have also been held in Fresno and Bakersfield, CA; Las Vegas, NV; Phoenix, AZ; Orlando, FL; St. Paul, MN; and Washington, DC.<sup>69</sup>

On April 28, Treasury announced further changes to the program to address second liens. The program requires the automatic modifications of a second lien when a first mortgage is modified. Specifically, for amortizing seconds, the government shares the cost of reducing the interest rate to 1 percent and requires servicers to extend the term of the second mortgage to match the first, including forbearing principal. The interest rate reduction is set for five years, at which point it rises in step with the rate on the first mortgage, capped at the Freddie Mac Primary Mortgage Market Survey rate. Investors receive an incentive payment equal to half the difference between the interest rate on the first mortgage (as modified) and 1 percent.<sup>70</sup> Servicers receive a \$500 up-front incentive payment for modifying the

<sup>67.</sup> US Treasury, "Homeowner Affordability and Stability Plan, Executive Summary," February 18, 2009, www.treas.gov.

<sup>68.</sup> Making Home Affordable, "Obama Administration to Launch National Outreach Campaign in Support of Making Home Affordable Program," press release, July 26, 2009, www.makinghomeaffordable.gov.

<sup>69.</sup> Hope Now Alliance press releases, www.hopenow.com.

<sup>70.</sup> US Treasury, "Making Home Affordable: Program Update/Second Lien Program Fact Sheet" April 28, 2009, www. treas.gov. For interest-only loans, the rate would be reduced to 2 percent and the incentive payment to investors would be the difference between 2 percent and the rate on the modified first mortgage.

secondary lien and \$250 a year for three years as long as the borrower stays current on the loan. Borrowers will receive \$250 a year for five years as long as they remain current, which will be applied to paying down principal on their first mortgage. Finally, the program offers lenders the option of extinguishing the second lien when it is severely under water, at anywhere from 3 to 12 cents on the dollar, depending on how delinquent the loan is, on the LTV, and on the borrower's MTI.

The administration's April update also aimed to move more aggressively in addressing underwater mortgages by reforming the H4H program. H4H requires lenders to forgive a portion of the outstanding mortgage in order to bring borrowers back into a positive equity position. However, as noted above, overly stringent eligibility requirements and the lack of incentive payments to lenders have hamstrung the program's effectiveness. The new reforms require that servicers evaluating borrowers for a Making Home Affordable modification also evaluate their eligibility for H4H refinancing and offer it to borrowers if they qualify. In exchange, the servicer would receive a \$2,500 incentive payment for a successful modification, and lenders would receive \$1,000 a year for three years as long as the loan was current.

In May the administration announced two further program refinements, a Foreclosure Alternatives Program and Home Price Decline Protection Incentives. The first provides financial incentives of \$1,000 to servicers and \$1,500 to borrowers to pursue short sales and deeds-in-lieu rather than foreclosures. By doing so, borrowers avoid the stigma of foreclosure and lenders avoid the long foreclosure process and thus potentially recoup more of their investment. The second initiative allocated \$10 billion to compensate lenders—based on declines in local home prices—for modified loans that stay current for up to 24 months but then redefault. However, by the end of October, the short sale/deed-in-lieu incentives had still not been finalized as policymakers decide how to treat second-lien holders, whose loans would be made worthless in most such cases. In late October the administration also announced a new program to help state and local housing finance authorities (HFAs), which provide mortgages to low- and moderate-income families. Treasury will buy bonds issued by the HFAs, reportedly up to \$35 billion worth, to support the local authorities in their mission to continue offering mortgages.

Finally, the American Recovery and Reinvestment Act of 2009 (the February stimulus bill) offered a one-time tax credit of \$8,000 to first time homebuyers. In May the FHA decided to allow homebuyers to immediately apply the credit as part of their down payment.<sup>74</sup> The credit was set to expire December 1,

<sup>71.</sup> US Treasury, "Making Home Affordable, Update: Foreclosure Alternatives and Home Price Decline Protection Incentives," press release, May 14, 2009.

<sup>72. &</sup>quot;Treasury to Encourage Short Sales," American Banker, September 9, 2009.

<sup>73.</sup> Deborah Solomon, "\$35 Billion Slated for Local Housing," *Wall Street Journal*, September 28, 2009. See also David Cho, "Small Firms, Home Buyers to Get a Boost," *Washington Post*, October 20, 2009.

<sup>74. &</sup>quot;Donovan Announces Recovery Act's Homebuyer Tax Credit Can Immediately Help Thousands of First-time Homebuyers to Buy a Home," HUD press release, May, 29, 2009.

2009 but in early November Congress passed a bill and President Obama signed it extending the credit through April 30, 2010, and adding a \$6,500 credit for buyers "trading up" to a more expensive home.<sup>75</sup>

#### Results

In the first two months of the program, only 55,000 homeowners received HAMP loan modification offers and 20,000 began making lower payments. By mid-July, 325,000 offers had been made and 160,000 trial modifications initiated, hough the numbers jumped to over 900,000 offers and 650,000 trial modifications by the end of October. A more significant problem that is emerging as the initial trial periods have begun to expire is that servicers appear to be having significant difficulties converting trial modifications to permanent ones. The conversion problem appears to be primarily due to problems with borrowers failing to provide required documentation of their financial condition. The October HAMP report did not provide data on conversion rates, but Morgan Stanley Saxon has reportedly completed modifications for only 500 of its 39,000 trial modifications or 1.3 percent, and Citi has apparently completed 1,600 of its 68,000 trial modifications or 2.4 percent. As a result, Treasury has extended the trial period for an additional two months to give borrowers more time to qualify for a permanent modification—but it remains to be seen if the extension will be sufficient to address the conversion roadblocks. Separately, by the end of July only 60,000 borrowers had refinanced their loans under the HARP program.

# **Evaluation of the Homeowner Affordability and Stability Plan**

Reducing Defaults: Giving borrowers access to lower interest rate mortgages should reduce defaults by making payments more affordable. Interestingly, that part of the program is directed at people who are current on their loans, so it will reduce defaults only to the extent that the behavior of those borrowers would otherwise be likely to change in the future—i.e., if they lose their jobs or otherwise face a reduction in income so that their initial loan is no longer affordable. The administration's plan also puts a unique emphasis on trying to restructure loans for at-risk homeowners before they default. In this way it

<sup>75.</sup> Jim Abrams, "Obama Signs Bill Assisting Homebuyers, Jobless," Washington Post, November 6, 2009.

<sup>76. &</sup>quot;Slow Start to U.S. Plan for Modifying Mortgages," New York Times, May 14, 2009.

<sup>77.</sup> Treasury Assistant Secretary for Financial Stability Herbert M. Allison, testimony before the Senate Banking Committee, July 16, 2009.

<sup>78.</sup> Servicer Performance Report through October 2009," Making Home Affordable press release, November 10, 2009, www.treas.gov.

<sup>79.</sup> Ruth Simon, "Mortgage Program Gathers Steam After Slow Start," *Wall Street Journal*, November 11, 2009. While the article mentions Citi as having 68,000 loans in its program, the HAMP report lists it with 110,000 trial modifications—in which case the 1,600 it has reportedly converted would only amount to 1.4 percent of the total.

<sup>80.</sup> Nick Timiraos, "Confusion Roils HARP Program for Refinancing," Wall Street Journal, September 2, 2009.

addresses critics who are unhappy that people who took on too high of a mortgage are getting bailed out while those who play by the rules and are current do not. But while providing incentives to lenders to identify these borrowers should help modify loans that are not yet in default, it may take resources away from those who are already in default and in danger of losing their homes.

The program has not put significant emphasis on lowering outstanding principal, and mortgages modified by HAMP will see their new lower interest rates begin to reset after five years. These interest rate resets could result in substantial monthly payment increases for borrowers and may shift defaults into the future. If housing prices do not recover down the road, these borrowers may find themselves not being able to sell their homes or refinance their loans, leading to a spike in defaults around 2014. The update to reform H4H could encourage principal write-downs if the incentive payments to servicers are sufficient to turn that program around.

Finally, the focus on a 31 percent MTI payment does not take into account any other sources of debt the borrower may have (e.g., credit card or auto loans). Focusing on an all-in DTI target would be a better way to ensure the borrower's entire financial picture is taken into account to make the modified payments more sustainable and lead to reduced redefaults.

**Scalability**: By working through lenders/servicers and providing incentives beyond what other government plans are offering, the program aims to have a broad impact on the stock of outstanding mortgages. By November, the administration claimed that 71 servicers, including the five largest ones, are making modifications under the HAMP program and that together with Freddie Mac and Fannie Mae these servicers cover more than 85 percent of all loans in the country.<sup>81</sup>

Earlier on the administration had expressed frustration with servicers who had not made sufficient strides in effecting modifications. In late July Treasury Secretary Geithner and Housing and Urban Development Secretary Shaun Donovan summoned the major servicers to a meeting in Washington where they admonished the servicers for lack of progress and gained a commitment that the program would achieve 500,000 modifications by November 1, 2009—a target ultimately hit in early October. The administration announced their intention to release monthly statistics on servicer performance (which began in August) and that they had hired Freddie Mac to oversee servicers' compliance with HAMP guidelines by auditing declined applications.<sup>82</sup>

The administration has also struggled with HARP refis, with only 60,000 loans refinanced through July 2009. The Fed's purchase of MBS appears to have helped drive down mortgage rates that facilitated refinancing, but the beneficiaries were likely a small group of relatively higher credit quality

<sup>81. &</sup>quot;Servicer Performance Report through October 2009," November 10, 2009.

<sup>82.</sup> Treasury Assistant Secretary for Financial Stability Herbert M. Allison, testimony before the Senate Banking Committee, July 16, 2009.

borrowers who were able to refinance to the lower rates in the market. As for HAMP, the October numbers suggest that only 29 percent of eligible borrowers have been offered trial modifications and 20 percent have actually been given trial modifications. These are small percentages of what is already a subset of borrowers, i.e., those who are considered eligible by the HAMP program. Furthermore, while the administration's target has been achieved in terms of trial modifications, the number of permanent modifications is dramatically lower, reportedly around 2 percent of the total. More broadly, the administration has begun emphasizing that the modification program aims to help 3 million to 4 million borrowers of the 7 million to 9 million the full Homeowner Stability Plan is intended to reach by 2012.<sup>83</sup> The program has therefore helped reach a significant number of people at least on a preliminary basis, more so than any other program. Unfortunately even if HAMP solves the issue of converting trial modifications to permanent ones it still will help only a relatively small portion of the total number of people seeking help. And it may struggle to hit even this more modest goal if the problem with converting to permanent loans is not sorted out.

Allocation of Costs and Benefits: Servicers will benefit by receiving incentive payments to restructure loans they could have restructured already. However, the payments could address the problem of servicers' expenses for modifications not being reimbursed by investors. Borrowers will benefit from lower interest rates and incentive payments. Program costs will mostly be borne by taxpayers, and this plan does not include any method of recovering those costs. However, taxpayers will benefit too—directly in cases where they can refinance their own mortgages, indirectly since the reduction in defaults will support housing prices throughout their neighborhoods. The Obama administration believes its plan will help homeowners avoid \$6,000 in price declines relative to what they would be without the broader program in place.<sup>84</sup>

Supporting Downward Housing Prices: The part of Homeowner Affordability and Stability Plan focused on lowering market interest rates will increase the purchasing power of buyers and thus serves to support housing prices. Similarly the \$8,000 homebuyer credit simply helps buyers pay more for new homes. Adding a \$6,500 "trade-up" incentive tax credit seems even less economically defensible, since it not only maintains overinflated housing prices, but benefits relatively affluent people who already live in their own home and simply want to purchase a more expensive one (at taxpayers' expense).

HAMP does not prioritize principal reductions/write-offs in a manner that could help lower homeowner debt. Indeed, the HAMP guidelines require a servicer to lower a borrower's interest rate all the way to 2 percent before lengthening amortization or offering any principal deferments, though

<sup>83.</sup> See, for example ,Treasury Assistant Secretary for Financial Institutions Michael S. Barr's testimony before the House Financial Services Committee Subcommittee on Housing and Community Opportunity, September 9, 2009.

<sup>84.</sup> US Treasury, "Homeowner Affordability and Stability Plan, Executive Summary," www.treas.gov.

principal write-offs can be made at any time. However, the administration has recognized the benefit of tackling underwater mortgages to help stabilize the housing market and is therefore trying to reform the H4H program, which does focus on lowering principal. As such it could also cushion falling housing prices, though its impact will depend on how effective the reforms are in attracting homeowners and lenders to the program.

Borrower Eligibility/Screening: The plan will be limited to owner-occupied residences to avoid benefiting housing speculators. Modifications will be directed at borrowers with sufficient income to afford their new payments.

Legal Consistency: The original plan did not make any special new arrangements to address the second lien or securitization issues. However, allowing mortgages to be modified in bankruptcy was a way to restructure loans without running into either of those two concerns. Even before the bankruptcy modification legislation failed, the administration was also advancing the Safe Harbor provision to help shield servicers from investor lawsuits and encourage modifications. As for second liens, the program's April update tackles the issue by requiring servicers to offer similar modification terms on a second lien as on the first. This latter reform should both help address servicers' concerns over potential lawsuits and facilitate the modification process.

Overall Assessment: The administration's plan came fast out the gate and has required several subsequent upgrades/refinements along the way—almost like a Microsoft operating system. But that may be appropriate for a crisis that needed an immediate response but also a nuanced one, calling for quick action that is expanded upon and refined over time. Overall, the plan adds some new elements to the existing proposals, notably long-term incentives to encourage borrowers to stay current and servicers to modify loans, but also modification guidelines and insurance against price declines. However, while ongoing incentive payments that reduce principal seem to be an important way to encourage borrowers to stay current, the size of the payments may be too small to have an impact. The same funds could perhaps be more effectively used to lower monthly payment costs—for example, the \$1,000 reduction in principal on a \$200,000 mortgage each year for five years might not be as much of an incentive to a borrower as reducing their monthly payment by \$80. The \$1,000 credit does help lower the overall amount of consumer debt in the economy (trading it for public debt), but it will not necessarily reduce homeowners' selling expectations. Moreover, the focus on borrowers who are not yet delinquent may sacrifice the thousands of homeowners who are currently delinquent and may not affect the large backlog of pending foreclosures.

The administration's plan seems to have missed the opportunity to encourage lenders to write off a meaningful amount of mortgage principal in a manner that would still be consistent with maximizing

the value of those loans. The servicer incentives and modification guidelines are important and helpful steps; the lack of emphasis on principal write-off and the interest rate resets that begin in five years make the program feel like an improved version of the other plans, which focus more on short-term relief rather than addressing the underlying problems of too much debt tied to overly inflated home prices. While the updated program tries to address this concern somewhat by making the H4H program more attractive to lenders, servicers, and borrowers, the principal reductions could have been encouraged more forcefully in the original Making Home Affordable program. Moreover, the bankruptcy provision may have provided the strongest incentive for lenders to modify loans, but it did not have support in the Congress. Without the bankruptcy modification option, lenders may take the government's incentive payments primarily to adjust loans they would have restructured in any event. Still, the incentive payments should impact servicers' NPV calculations at the margin, and along with the Safe Harbor legislation and more broadly the attention the program is bringing to servicer performance, the plan should drive more modifications that would happen in its absence.

The secondary-lien program is a well-intended attempt to tackle one of the impediments to more widespread modifications. The incentives to lenders to write off the secondary lien are being offered at such a discounted rate (4 to 12 cents on the dollar) that lenders will choose this option only if the loan is so underwater that they have no other hope of recouping their investment. In such cases, it is not clear that the secondary-lien holder needs to be given any incentive payment, even though doing so could help speed the restructuring process. Perhaps more importantly, if the real reasons servicers are not moving more aggressively on restructuring loans are that they have conflicting incentives, face pressure from senior bondholders, and lack operational capabilities, the program update may not prove as effective as hoped.

# EARLY RESTRUCTURING EFFORTS AT BANK OF AMERICA: A VIEW FROM THE GROUND

When Bank of America bought Countrywide Financial in January 2008, the combined entity became the country's largest mortgage servicer and originator with a \$2 trillion portfolio and 15 million loans. As a result of its significant exposure, the bank was already taking a lead on loan workouts over the course of 2008. Then in October 2008, as part of a settlement with 11 state attorneys general over allegations of deceptive lending practices, Bank of America agreed to move even more aggressively on modifications.

According to a top Bank of America official, by mid-November 2008 the bank had 5,600 people trained as home retention specialists working on modifications. One of their biggest challenges was simply starting a dialogue with borrowers, many of whom were wary of the letters and phone calls they receive about any new mortgage program. And the borrowers should be wary—in April Treasury Secretary

<sup>85.</sup> However, the Federal Reserve study in late 2008 found that pools of delinquent subprime second liens were being traded at 1 to 3 cents on the dollar, suggesting that the government's offer may be generous enough to attract lenders. See Cordell et al., *The Incentives of Mortgage Servicers: Myths and Realities.* 

Geithner announced a crack-down on "bad-actor" loan modification companies that charge unnecessary and possibly illegal fees.<sup>86</sup> Even worse are the reports of companies charging distressed homeowners for counseling or promised loan modifications and leaving them with nothing in return.<sup>87</sup>

To illustrate the magnitude of Bank of America's outreach effort to overcome such obstacles, in October 2008 the bank averaged 15 outreach attempts per month per borrower, which added to 13 million outgoing calls and 800,000 personalized letters that month. These efforts resulted in 1 million conversations with delinquent borrowers and produced 214,000 home retention workouts in the first 10 months of 2008.<sup>88</sup> The modifications are done on a loan-by-loan basis, highlighting the magnitude of the effort required to modify loans on a broad scale.<sup>89</sup>

Bank of America's loan modification program targets a 34 percent DTI for borrowers, with the potential to go up to 42 percent DTI if necessary. The bank generally leads with rate reductions but also forbears or forgives principal if necessary to make the loans work. It waives prepayment penalties. According to the bank official, they had not been hindered by second liens. Similarly, he claimed that trust agreements were not an impediment to restructuring the loans, since Bank of America had found it has an implicit authority to do so if it can show investors that they are not made worse off in the transaction. In the cases where Bank of America did not have the implicit authority to modify the loans, he suggested the bank had gone to investors to ask their permission—a task made easier since Fannie Mae was the main investor in legacy Countrywide securitizations. However, as the subsequent lawsuit by investors in Countrywide's securities shows, the securitization issue is not so clear cut. However,

More broadly, even if we assume that Bank of America's nearly 6,000 loan specialists were able to

<sup>86.</sup> Federal Trade Commission, "Federal and State Agencies Crack Down on Mortgage Modification and Foreclosure Rescue Scams," April 6, 2009, www.ftc.gov.

<sup>87.</sup> See, for example, "Swindlers Find Growing Market in Foreclosures," *New York Times*, January 14, 2009 and "Mortgage Predators Take Money and Run," TheBostonChannel.com, March 12, 2009.

<sup>88.</sup> The Hope Now Alliance reported a much higher 17 percent response rate to its much smaller outreach effort with 1.9 million pieces of mail sent so far in 2008. See "Hope Now Joins with Government to Create Streamlined Mortgage Modification Plan," press release, November 11, 2008.

<sup>89.</sup> Talk by Gregory Baer, deputy counsel for regulation and public policy at Bank of America, New American Foundation, November 22, 2008. In another illustration of the difficulty of reaching borrowers, one lender was reported to have hired a psychologist to fine-tune the script its call center staff were using in conversations with homeowners. See "Mortgage Services Try the Softer Touch—Some Hire Psychologists to Help Get the Right Staff to Address Borrowers; 'Saving' the Homes," *Wall Street Journal*, April 8, 2009. By the end of October 2009, Bank of America had extended over 212,000 trial modification offers and begun nearly 137,000 trial modifications under HAMP, the second highest numbers in absolute terms of any servicer. However, with only 14 percent of their total eligible borrower base in trial modifications, Bank of America significantly lagged the other top three servicers, with CitiMortgage hitting 40 percent, JPMorgan Chase at 32 percent, and Wells Fargo at 29 percent (see "Servicer Performance Report through October 2009," Making Home Affordable press release, November 10, 2009, www.treas.gov). And even so, the key metric is permanent modifications, and so far none of the servicers have achieved significant conversion of their trial modifications to permanent ones.

<sup>90.</sup> Talk by Gregory Baer, deputy counsel for regulation and public policy at Bank of America.

<sup>91.</sup> See, for example, "Countrywide Loses Ruling in Loan Suit," New York Times, August 19, 2009.

complete 100,000 of their workouts during the last quarter, there would need to be as many as 40,000 specialists industry-wide to complete loan workouts on the nearly 750,000 foreclosures initiated each quarter. Even at this rate, it would take approximately 12 months to address the over 2.5 million loans that are currently delinquent. Addressing any new loans that fall delinquent in the meantime would require even more time, more manpower, or both.

## **ANALYSIS AND POLICY IMPLICATIONS**

Phillip Swagel, former assistant secretary for economic policy in the Paulson Treasury, offered a detailed post-mortem of the process of designing loan modification programs in a conference paper entitled "The Financial Crisis: An Inside View." The paper offers an engaging and nuanced chronicle of the politics and economic considerations that went into the programs and how they changed over the course of the Bush administration up until the transition to the Obama administration. Swagel argues that with the exception of the proposals by the FDIC, the ineffectiveness of loan modification programs supported by the Bush administration and even the Democratic-controlled Congress in many cases was a foregone conclusion. Six pages into his analysis of housing policy and foreclosure avoidance he writes:

Among the White House staff in particular, but also within Treasury, there was no desire to put public money on the line to prevent additional foreclosures. . . . The policy rationale to spend public money is clear in that there is a negative externality from foreclosures to home inventories and thus prices. But the public opposition to such bailouts appeared to be intense. . . Congress appeared to heed this opposition as well: there were constant calls for Treasury and the administration to do more on foreclosure prevention, but this was just rhetoric. Until the FDIC came out with a proposal late in 2008 there was not legislative support to spend public money to actually prevent foreclosures.... [M]embers of Congress...understood the poor optics of having the government write checks when some would find their way into the hands of "irresponsible homeowners."

The preceding analysis of the existing mortgage modification programs, along with Bank of America's experience in the field and Swagel's overview of the Bush administration goals, motivate a number of policy recommendations aimed at refining the programs to more effectively avoid preventable foreclosures. The recommendations are grouped into four categories: first, measuring conflict of interest impacts; second, renewing the push to enable loan modification in bankruptcy; third, redesigning the structure of modified loans; and fourth, using the government to bring borrowers and lenders together more effectively and to encourage loan servicers to invest in operational capabilities to conduct restructuring on a broad scale.

<sup>92.</sup> See Phillip Swagel, The Financial Crisis: An Inside View, *Brookings Papers on Economic Activity* (Spring 2009), Washington: Brookings Institution.

# 1. Improve Servicer Reporting Metrics: Identify Conflicts of Interest

The 50 percent of second liens held by the top four servicers who service half of existing first loans appears to be a serious impediment to broader restructuring. Those servicers, Bank of America, JP Morgan Chase, Citigroup, and Wells Fargo, own approximately \$400 billion of second liens, many of which would be made worthless by any modification or short sale. At the extreme, writing off all of those loans would make the four banks insolvent, so the conflict of interest goes beyond the question of those institutions' profitability to become a systemic issue. Policymakers are therefore unlikely to desire the banks to modify all such loans even if the banks' ability to do so were not hobbled by operational limitations as well as the fact that not all of the borrowers involved could handle the payments of even a newly modified loan. However, in order to assess the extent of this conflict of interest more carefully and to design specific interventions to address it, the Making Home Affordable Program servicer metrics should be expanded to include data tracking the servicers' strides in modifying loans in which they hold an interest through a second lien as compared to those in which they do not. In a similar vein, the metrics should report on the various tools that servicers use to make modifications to highlight how many are using principal reductions versus other methods like interest rate reductions or term extensions to gauge the likely sustainability of the efforts.

# 2. Renew Push to Allow Mortgage Modification in Bankruptcy

In his analysis of the Bush administration's approach to the mortgage crisis, Swagel claims that one of their key principles was the belief that allowing modifications through bankruptcy was inappropriate. While bankruptcy modifications would help distressed borrowers in the short term, the administration believed that over the long term it would cause lenders to raise interest rates for other borrowers.

However, while the Bush administration's philosophy on bankruptcy is echoed by much of the financial industry, it is not a clear-cut conclusion. Bankruptcy judges currently modify the terms of debts on credit cards, appliances, investment properties, and other loans. Congress explicitly carved home mortgages out of the bankruptcy law in 1978 so that lenders would pass along the savings to consumers as lower interest rates. And yet, when bankruptcy reform in 2005 made it harder for individuals to file, a change strongly supported by the nation's leading credit card companies, credit card rates did not fall noticeably. While the counterfactual has not been proven for mortgages, it cannot simply be assumed that rates would necessarily rise if bankruptcy modifications were allowed. Moreover, another analysis

<sup>93.</sup> For an excellent analysis of the likely costs and benefits of mortgages modified in bankruptcy, see Rod Dubitsky, "Bankruptcy Law Reform—A New Tool for Foreclosure Avoidance," Credit Suisse, January 26, 2009. Another well-crafted argument in support of enabling modifications through the bankruptcy process is provided by Adam J. Levitin, "Helping Homeowners: Modification of Mortgages in Bankruptcy," *Harvard Law and Policy Review* 3 (January 2009).

found no evidence that bankruptcy risk is reflected in mortgage pricing: Since the loss a lender takes in foreclosure swamps the loss in bankruptcy, lenders used foreclosure in their risk/pricing models.<sup>94</sup>

As noted above, the Obama administration advocated allowing judges to modify mortgages, but the reform required a legislative change to the bankruptcy code. The House passed HR 1106 "Helping Families Save Their Homes Act of 2009" on March 5, 2009, but the Senate's companion bill S 61 was rejected on April 30, 2009 despite attempts at last minute compromise with major banks. <sup>95</sup> In August and then again in September, House Financial Services Committee Chairman Barney Frank vowed to reintroduce legislation on the issue unless mortgage servicers' performance improves. Still, Treasury's assistant secretary for financial institutions was at best lukewarm to the idea, stating that "Bankruptcy reform is an additional tool, but it's not the focus of our efforts to keep people in their homes."

Bankruptcy modification could be an important tool in addressing the mortgage crisis, providing a way to modify loans that avoids problems with second liens or securitization trust agreements. There is no clear evidence to support opposition to the measure on grounds that it would increase the cost of mortgages. Moreover, given the onerous conditions attached to personal bankruptcy, e.g., the complexity of filing and having to live on a court-imposed budget for five years, etc., this approach is unlikely to increase moral hazard with borrowers. Therefore, allowing mortgage modification through bankruptcy could be a clean and effective method of restructuring loans. Perhaps more importantly, the possibility of loan modifications in bankruptcy could provide servicers with a stronger incentive to do their own modification before the borrower needs to file for protection. The Obama administration should therefore make a renewed effort to win over those senators who have bought into the unsupported arguments against the provision.

# 3. Improve Loan Modification Design: Focus on Underwater Loans

In his overview of the guiding principles of the Paulson Treasury, Swagel argues they did not focus on fixing underwater loans in the belief that doing so might lead to modifications for people who could afford their payments and thus reward speculators. However, Fed Chairman Bernanke and the Fed economists saw a strong correlation to foreclosures, a difference between Treasury and the Fed throughout the 2007–08 period. Consistent with this thinking, the Fed's modification plan expanded eligibility to borrowers who need an LTV of 125 percent.

The Obama administration plan has partially heeded the Fed's advice. It allows borrowers who are under water with an LTV of 125 percent to be eligible for refinancing—but not for loan modifications.

<sup>94.</sup> Adam J. Levitin, "Resolving the Foreclosure Crisis: Modification of Mortgages in Bankruptcy," *Wisconsin Legal Review* (forthcoming 2009).

<sup>95. &</sup>quot;Senate Refuses to Let Judges Fix Mortgages in Bankruptcy," New York Times, May 1, 2009.

<sup>96. &</sup>quot;Despite Frank's Threats, Cramdowns Still Long Shot," Wall Street Journal, September 10, 2009.

Swagel's concern can be addressed by screening out borrowers with sufficient income to afford the payments on their underwater loan before receiving a modification. Moreover, addressing underwater loans should not be undertaken for homes that are significantly under water, where the cost of writing off part of the loan swamps the cost of foreclosure. However, for loans at the margin, reducing principal can be a way to spread the pain—the lender writes off part of the loan, and the new terms should require the borrower to stretch their ability to pay to a level that is meaningful but still sustainable.

# 4. Improve Loan Modification Design: Focus on Principal Reductions

Another point raised by Swagel as a guiding principle for the Bush administration was that the programs should focus first on extending the loan's term, then reducing its interest rate, then potentially deferring a portion of principal, and only then considering principal write-downs. Swagel argues that this priority follows simple bond math. But his argument is somewhat misleading. Any of the factors (term, rate, principal) can be modified to achieve the same monthly rate (table 3). A more likely reason the Bush administration prioritized the approaches in this manner was to make them more acceptable to the lending industry. In particular, servicers who are compensated based on a percentage of the outstanding principal should be indifferent to reducing a borrower's interest rate or extending their term, since in either case the servicers' fees would remain constant—while reducing principal reduces servicers' income and thus incentive to act.

One advantage of extending the term is that it may be the simplest way to lower monthly payments, most easily explained to the borrower and most acceptable to lenders/investors. Changing interest rates requires the lender group to take a haircut on lower monthly payments, but in the case of securitized loans this pain should be borne by junior bondholders. Moreover, interest rate reductions avoid the immediate pain required in writing off principal. Forgiving principal requires a write-down in loan value so lenders incur an immediate loss but not necessarily more so than in an interest rate reduction if the latter is properly accounted for. Compared with forgiving principal, deferring principal is a somewhat less effective tool for making the new loan sustainable since the deferment is also generally short-term.

As with all modifications, principal reductions should be undertaken only in cases where the borrower can genuinely afford the new payment, in order to minimize redefaults. Still, between the \$145,000 average loss on foreclosures and the average cost of a loan modification at \$24,000, there appears to be significant room for lenders to forgive part of the mortgage and still come out ahead. Reducing principal by even \$24,000 could save a borrower \$150 each month on a typical loan. This would provide a significant savings for many families, equivalent to 4.5 percent of DTI for a family with an income of \$40,000.97 Lenders have room to make larger concessions given the costs of the foreclosure

<sup>97.</sup> Slightly above the average family income of \$39,400 for the second quintile of the population, as reported by the

alternative. Moreover, since loan holders underwrote or purchased the mortgages and misjudged the ability of borrowers to pay them back, it would help address the moral hazard involved if they shoulder a portion of the loss for failing to do their homework effectively. Perhaps more importantly, lenders should consider losses on existing loans as a sunk cost and they should encourage their servicers to pursue modifications that maximize the value of their portfolios. Principal reductions can therefore be well within the economic interest of the lender and provide a clear win-win for both sides.

# 5. Improve Loan Modification Design: No New ARMs

A corollary to the focus on principal reductions is that the government should not pay lenders to effectively create new adjustable-rate mortgages by giving borrowers temporary interest rate relief. Swagel points out that interest rate reductions traditionally have been offered for only a few months and that by extending the relief to a few years it allows time for the borrower's income and the housing markets to recover. The extra time helps so that the borrower can either afford the higher payments when the interest rate resets or refinance at that point.

Short-term rate reductions may be effective in cases where the borrower's income has been reduced temporarily, and they have a high likelihood of returning to a similar compensation level relatively soon. However, in cases where the modification is needed because of an interest rate reset on a loan that was already an ARM, temporary interest rate reductions simply defer the problem and could lead to another wave of defaults in three to five years when the new resets kick in. Absent other measures to make the overall mortgage payments affordable over the long term, the assumption that temporary relief gives borrowers breathing room to refinance sounds suspiciously like the same type of thinking that led us to the current mortgage crisis. The government should not be providing incentive payments for these types of loans, unless they are part of a broader package of modifications that make the loan more sustainable over the long term.

# 6. Improve Loan Modification Design: Insuring Modifications

Despite what appears to be a clear financial incentive to prefer modifications over foreclosures, lenders appear to need additional encouragement. When the FDIC opened its modification guidelines to the rest of the industry, it also offered to insure the new loans and share in 50 percent of any losses in the redefaults. According to Swagel, Treasury resisted the move believing the insurance could give lenders a 50 percent windfall on a loan that was likely to default in any event. Swagel argues that if the loan was modified and the borrower stayed in the home, the lender got nothing, but if the loan was modified and "went bad" the lender's government covered the loss. Even when Treasury convinced the FDIC to

CBO; see "Historical Effective Tax Rates, 1979 to 2006," April 2009, www.cbo.gov.

include a six-month waiting period before the insurance kicked in, Swagel argues that lenders would have an incentive to foreclose immediately after. He further points out that the FDIC plan insured the original loan value rather than incorporating declines in local home prices, which he describes as "providing fire insurance on an entire house when several of the rooms were already engulfed in flames."

However, the Paulson Treasury's opposition to the program seems based on a fundamental misread of the program. Swagel claims that in the event a borrower continues to make payments on their modified loan a lender receives nothing. But the lender would be receiving principal and interest payments on the new loan, which are likely higher than what it would have received in foreclosure. To avoid the perverse incentive in which lenders provide unaffordable modifications just to get the government to later share in 50 percent of the default, insurance could be offered only on modifications that meet strict underwriting criteria. And insurance would not be offered if the lender foreclosed while the borrower was still current. While it is unclear precisely how the Obama plan's insurance will work, if it addresses a lender's loss while keeping the borrower in their home, it could encourage lenders to do modifications. Swagel's critique regarding insuring the original home price is valid but can be addressed by adjusting the insurance to reflect local housing price declines—a measure adopted in the Obama administration's initial mortgage modification proposal. Insurance may also be an effective tool for convincing holders of the senior tranches of MBS on board for loan modifications, since the biggest investors are likely to have securities across the stack and insurance would improve the likelihood they collect on the lower tranches.

# 7. Refine HAMP to Allow Flexibility and Focus on Debt-to-Income

HAMP currently requires servicers to follow its protocol in a step-by-step manner to hit a 31 percent MTI: first reduce the interest rate all the way to 2 percent, then increase the term to 40 years, then defer principal. Servicers are not given flexibility to hit the target in other ways, e.g., reducing the rate to 5 percent and then deferring a portion of principal. HAMP should therefore give servicers the flexibility to choose whatever way they want to hit the payment target.

In addition, HAMP's 31 percent MTI target does not account for any other types of debt the borrower might have, e.g., credit card or auto loans, which could add a significant burden on their ability to make monthly payments. By contrast, focusing on an all-in DTI target could ensure the new payments are truly sustainable for the borrowers. Even if the DTI target was set somewhat higher than 31 percent, it could be more affordable than an MTI one, thus leading to lower redefault rates for the program.

#### 8. Redirect the \$8,000 Homeowner Credit to Sellers, not Buyers

The goal of the \$8,000 credit was to bridge the bid-ask spread between buyers and sellers. However, there appears to be very little economic support for the \$8,000 credit, since it primarily props up housing prices

<sup>98.</sup> Swagel, "The Financial Crisis: An Inside View."

using taxpayer subsidies. However, the credit enjoys broad political support and has been reauthorized by Congress. If the credit must be kept in order to prime the pump of the housing market, behavioral theory suggests that redirecting it to sellers rather than buyers could have an even greater impact on restarting the market if it could reduce sellers' price expectations. One way to achieve this goal might be offering an \$8,000 credit towards principal reduction to any first-time homebuyer who purchased a home recently, say from 2003 to 2008. Homeowners would receive the credit only if they sell their home before December 1, 2009 (i.e., the same timeframe as the current program). As a result, a homeowner who bought a house for \$310,000 could have \$302,000 as their mental anchor. If the program were properly publicized, buyers could incorporate it into their bid strategies and adjust downwards. Furthermore, directing the credit to writing down the price of homes could help lower the amount of debt outstanding in the economy and take a small step to ending Americans' overreliance on loans to finance their lifestyles.

# 9. Use the Bully Pulpit to Connect Borrowers to Lenders

Lenders and servicers are using millions of outbound calls and sending thousands of pieces of mail to reach borrowers about loan modifications. On their side, borrowers find it difficult to find trustworthy information, especially as predatory services add to the cacophony of competing offers. One way to help connect borrowers and lenders on a wide scale is to create an impeccably reliable national information clearinghouse. The government already has created a website, makinghomeafforable.gov, but it is unclear how many Americans know about it. President Obama mentioned the site several times in his briefing after the housing refinance roundtable in April<sup>100</sup> and the Federal Reserve undertook an even more creative effort to run 30-second commercials for two days in movie theaters across nine states with the highest rates of foreclosures.<sup>101</sup> But it is hard for borrowers to sort through the noise and get to good information.

The government is on the right track by turning to mass media but needs to go further. The administration should screen commercials across the country for a longer period, with higher frequency in high-foreclosure geographies. Doing so would provide broad exposure for the government-sponsored website. Moreover, the administration should select a completely trustworthy nationally recognized figure to be the outreach spokesperson. One option would be Vice President Joe Biden—a role that might fit with his responsibilities as head of the Middle Class Working Families Task Force. An alternative would be the former presidents, along the lines of the Hurricane Katrina appeal featuring Presidents Bush and Clinton. Using mass media and spokespeople with the highest possible credibility would send a clear message to Americans about where they can turn for trusted, safe information.

<sup>99.</sup> It is unclear the credit will expire then, as Congress is already discussing extending it for military personnel and foreign service officers. See "New Life for the First Time Credit?" *Washington Post*, September 26, 2009.

<sup>100. &</sup>quot;Obama Welcomes Washington Homeowners to White House," Washington Post, April 9, 2009.

<sup>101. &</sup>quot;Fed Features: Ads at Movies Warn Against Scams," Wall Street Journal, March 26, 2009.

### 10. Provide Incentives for Servicers to Invest in Staffing and Systems

Several sophisticated commercial software platforms are already available to automate the underwriting process. A government review and certification process of qualified vendors could spur servicers to adopt these technologies. The government should also adopt more sophisticated self-service tools for borrowers to research potential loan modification options and incorporate them into the makinghomeaffordable. gov website. Doing so would not only help borrowers get step-by-step information on whether they are eligible and if so for what kind of new mortgage but also it would ease the burden on lenders' call centers by prequalifying borrowers. Other incentives could be directed to companies that hire and train call center workers in targeted geographies with high unemployment—which could provide the benefit of immediate job opportunities as well as needed resources to help work through the backlog of preventable foreclosures.

The Obama administration should emphasize technological efficiency along with modification track record as some of the key criteria in prioritizing service providers it uses to modify government-owned loans and securities. The Federal Reserve has been buying approximately \$20 billion of Freddie Mac and Fannie Mae MBS each week since the beginning of January and working to restructure loans it acquired in the bailouts of Bear Stearns and AIG. Moreover, Freddie and Fannie serve as master servicers on all the pools of mortgages the government-sponsored enterprises insure and therefore have significant influence over their servicers. These loans provide an enormous pool across which specialized servicers can amortize their investments in highly efficient systems that improve their ability to restructure loans on a wide-scale basis. Moreover, many of the larger servicers manage pools not only for the government but also for private-issue MBS. Providing them an incentive to invest in staffing and systems to service the former will allow them to have those same resources to help conduct modifications more broadly.

# **CONCLUSION**

Mortgage payments for many homeowners are too high, leading them to default. Default levels and foreclosures are at record levels and will only get worse as unemployment continues to hover at peak levels. The overall rate and severity of defaults is imposing a tremendous cost on American society as a whole.

Identifying the conflicts of interest that servicers have in modifying loans is a critical step in designing programs that provide effective incentives for modifications. Allowing bankruptcy judges to modify mortgages is an important part of a broader approach to restructuring loans, and the administration should renew its efforts to win over the Senate by dispelling the myths of such a reform. Restructuring programs need to modify loans in ways that give the homeowner monthly payments that are sustainable over the long term. Reducing principal on mortgages appears to be an important

component in making modifications sustainable and giving borrowers "skin in the game" to avoid future defaults. These modifications can maximize the value of the loans to lenders/investors who hold them, providing a win-win option for borrowers and lenders alike. Proposals that defer principal and monthly payment increases for a short period—unless coupled with other measures to make the loan more affordable over the long term—may be recreating part of the problem that led to this crisis initially, giving borrowers loans that they cannot afford over the longer term. Similarly, given the lopsided weights of the loss aversion effect, redirecting the stimulus bill's \$8,000 tax credit from buyers to sellers could serve as a more effective step to kick-start the home sales market.

On the face of it, it is unclear why the government has to provide incentives to lenders to restructure mortgages at all—after all, modifying loans to maximize their value should be incentive enough. Unfortunately, rising unemployment and uncertainty about home prices complicates the question about which borrowers are a good risk for loan modifications and at what home values. Solving the decisioning question requires first and foremost addressing some operational problems, notably the lack of sophisticated underwriting systems and dearth of call center staff. The administration can help this process along by highlighting technologies available to automate processes and directing incentives to companies to invest in new systems and to hire/train new staff.

Finally, the government could play a critical role in bringing borrowers and lenders together to effect loan modifications. The administration is in a unique position to provide reliable information to borrowers, prequalify leads for lenders, and help homeowners avoid predatory services along the way. This information clearinghouse function complements the other goals of having better-designed programs and incentives aimed at modifying loans using techniques like principal forgiveness that create loans that both are sustainable in the long term and can be a win-win for both sides. Together, these five approaches—highlighting conflicts of interest, bankruptcy modifications, more effective loan modification design, improved information, and more efficient technology and human resources—are the keys to providing effective mortgage restructuring on a wide scale.

Table 1 US mortgage market summary (in thousands)

Category	July 2007	January 2008	July 2008	January 2009	September 2009	Change, July 2007–September 2009 (percent)
Total mortgages outstanding	53,432	53,205	53,499	52,917	52,613	-2
Prime	46,385	46,684	47,035	46,908	46,825	-
Subprime	7,047	6,521	6,464	6,009	5,788	-18
Completed foreclosures (monthly)	42	70	92	65	06	114
Prime	17	30	44	30	55	224
Subprime	25	41	47	35	35	39
Foreclosure starts (monthly)	126	168	197	210	238	68
Prime	51	78	105	126	168	229
Subprime	75	06	91	84	70	
60-day delinquency rates (percent)	3.3	5.4	6.7	9.5	12.4	275.1
Prime	1.3	2.4	3.5	5.9	8.3	547.9
Subprime	16.7	26.8	29.9	37.1	46.0	175.4
Total delinquencies: 60-day + foreclosures (percent)	4.0	7.1	0.6	12.3	16.6	317.7
Prime	1.2	3.1	4.6	7.6	11.1	832.8
Subprime	22.3	35.7	40.6	48.8	6.09	173.6

a. August 2009

Source: Hope Now Alliance, Monthly Data; First American CoreLogic, LoanPerformance Data.

Table 2 Principal forgiveness required to achieve 38 percent debt-to-income (DTI) payment

		Scenario A	Scenario B	Scenario C
Annual income (gross)		\$40,000	\$45,000	\$50,000
Monthly income		\$3,333	\$3,750	\$4,167
Loan	\$250,000			
Interest rate	6%			
Amortization (years)	30			
			DTI	
Monthly payment	\$1,499	45.0%	40.0%	36.0%
Monthly payment at 38 percent DTI		\$1,267	\$1,425	\$1,583
Principal forgiveness needed to achieve 38 percent DTI		\$38,675	\$12,322	n.a.
Forgiveness as percent of initial loan		15.5%	4.9%	n.a.

n.a. = not applicable

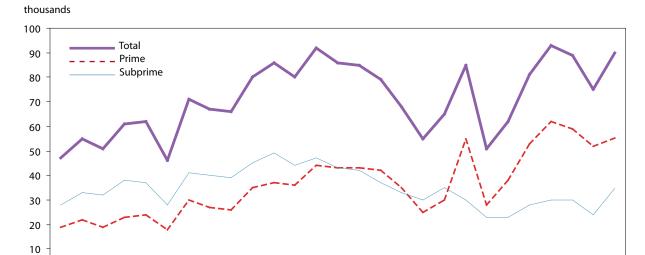
Source: Author's calculations.

Table 3 Comparison of different approaches to loan modifications

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Initial loan and payments			Scenario 1: Modify term			
Loan	\$300,000		Loan	\$300,000		
Term	30 years		Term	40 years		
Interest payment	6%		Interest payment	6%		
	Period	1		Period	1	
Monthly payment	Interest	\$1,500.00	Monthly payment	Interest	\$1,500.00	
	Principal	\$298.65		Principal	\$150.64	
	Total	\$1,798.65		Total	\$1,650.64	
			Change in monthly pa	yment	\$148.01	
Scenario 2: Modify interest rate			Scenario 3: I	Modify principal b	alance	
Loan	\$300,000		Loan	\$275,313		
Term	30 years		Term	30 years		
Interest payment	5.22%		Interest payment	6%		
	Period	1		Period	1	
Monthly payment	Interest	\$1,304.46	Monthly payment	Interest	\$1,376.57	
	Principal	\$346.18		Principal	\$274.08	
	Total	\$1,650.64		Total	\$1,650.64	
Change in monthly payment \$148.01		Change in monthly pa	yment	\$148.01		

Source: Author's calculations.

Figure 1 Completed foreclosures per month, July 2007 to September 2009



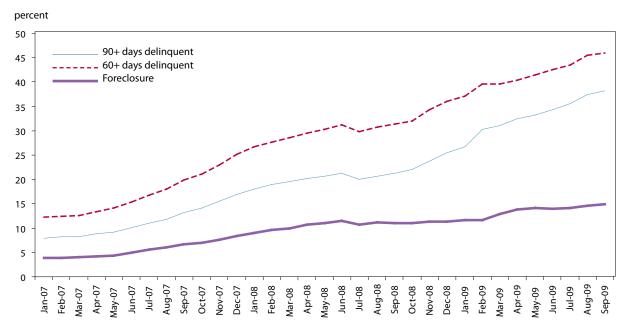
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Source: Hope Now Alliance, October 2009.

Figure 2 Subprime foreclosure and delinquency rates, January 2007 to September 2009

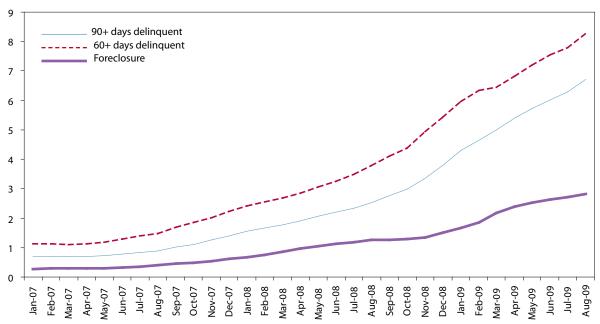
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Source: First American CoreLogic, LoanPerformance Data.

Figure 3 Prime foreclosure and delinquency rates, January 2007 to August 2009

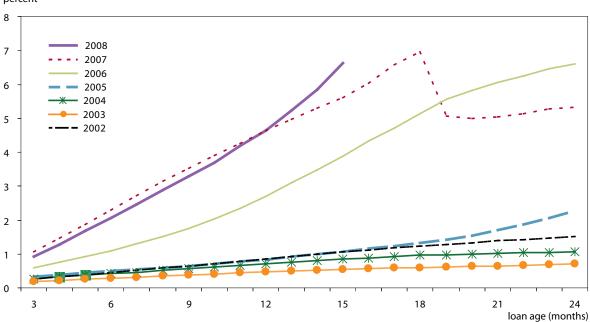




Source: First American CoreLogic, LoanPerformance Data.

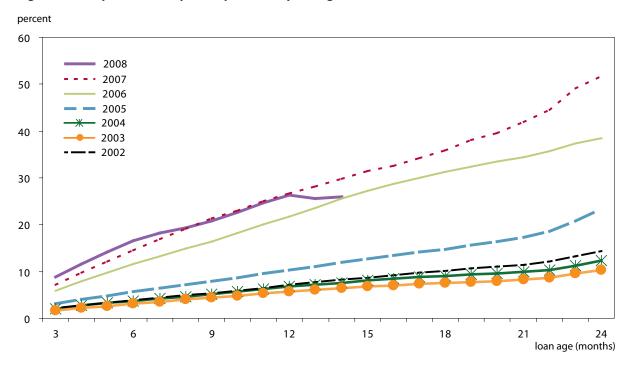
Figure 4 Prime 60+ day delinquencies, by vintage, 2002 to 2008

percent



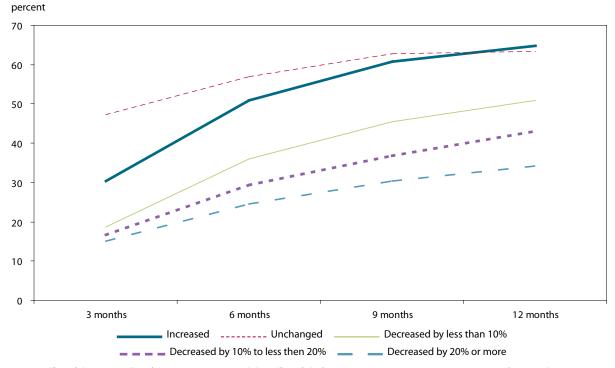
 ${\it Source:}\ {\it First American CoreLogic, Loan Performance Data}.$ 

Figure 5 Subprime 60+ day delinquencies, by vintage, 2002 to 2008



Source: First American CoreLogic, LoanPerformance Data.

Figure 6 Redefault rates of loans modified in 2008–09 by changes in payment (60+ days delinquent)



Source: Office of the Comptroller of the Currency (OCC) and the Office of Thrift Supervision (OTS), Mortgage Metrics Report for Second Quarter 2009, September 2009.