



Modifying Mortgages Involving Fannie Mae and Freddie Mac: Options for Principal Forgiveness

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Summary

At the end of 2012, housing prices were 30 percent below their peak in 2006, and about one-fifth of borrowers with residential mortgages were “underwater,” owing more than the value of their homes. Default rates are particularly high among such borrowers. One of the primary ways that the federal government has assisted underwater borrowers is through the Home Affordable Modification Program (HAMP). That program, administered by the Department of the Treasury, has facilitated lower payments on some mortgages by providing incentives for mortgage holders and servicers to help borrowers avoid foreclosure.

In 2010, the Treasury Department expanded the program to include the possibility of principal forgiveness, a reduction in the amount the borrower owes. Before then, the program had been limited to other ways of reducing payments. (This report refers to HAMP without principal reduction as “standard HAMP.”) For the borrower, principal forgiveness provides not only a lower monthly payment, but also, unlike standard HAMP, an improved equity position as a result of the lower loan balance. Having equity (the difference between the value of the home and what the borrower owes) allows a borrower to more easily refinance or sell the home to avoid default and strengthens his or her incentive to continue to pay off the mortgage. Since the introduction of that alternative, one in four borrowers participating in HAMP has received a principal reduction, the Congressional Budget Office (CBO) estimates. However, that program is small—fewer than 120,000 borrowers had obtained a principal reduction through HAMP as of the end of 2012.

The approach of using principal forgiveness has not been adopted by Fannie Mae and Freddie Mac. Those two government-sponsored enterprises (GSEs) own or guarantee

more than half of the outstanding residential mortgages in the United States (see [Figure 1](#)). CBO estimates that nearly 13 percent of underwater borrowers with mortgages owned or guaranteed by the GSEs have missed three or more mortgage payments (in other words, are “seriously delinquent”), which is more than six times the rate for borrowers who owe less than the value of their homes. But Fannie Mae and Freddie Mac have not been allowed to implement principal forgiveness out of concerns about fairness, implementation costs, and the incentive that the approach could provide for people to become delinquent in order to obtain principal forgiveness.

Fannie Mae and Freddie Mac incurred large losses from the surge in mortgage defaults that began in 2007, as did other investors in mortgages, which resulted in the GSEs’ being taken into conservatorship in September 2008 by their regulator, the Federal Housing Finance Agency (FHFA). Because the federal government is now the effective owner of the enterprises, any gain or loss arising from a change in the way the distressed mortgages are handled by the GSEs would ultimately accrue to taxpayers.

This report examines three options for the GSEs to use principal forgiveness for borrowers who are eligible or could become eligible for assistance through HAMP.¹ CBO finds that implementing those options would probably do the following:

- Result in small savings to the government,
- Slightly reduce mortgage foreclosure and delinquency rates, and
- Slightly boost overall economic growth.

Designing a program that affected more borrowers and had a greater impact on the housing market and the economy would require a significant departure from HAMP’s current eligibility rules.

How Have the GSEs Assisted Borrowers Who Are Behind on Their Mortgages?

The housing and financial crisis that took hold during the recession of 2008 and 2009 left millions of people in default or at significant risk of default on their monthly mortgage payments. For some people, a loss of income, an increase in nonmortgage expenses, or other factors diminished their ability to make that payment. Underwater borrowers are particularly vulnerable to falling behind on their mortgage obligations because they tend to have high monthly payments relative to their income and they have conflicting incentives to continue to pay on loans that exceed the value of their

1. For additional discussion of and details on the analysis summarized in this report, see Mitchell Remy and Damien Moore, *Options for Principal Forgiveness in Mortgages Involving Fannie Mae and Freddie Mac*, Working Paper 2013-02 (Congressional Budget Office, May 2013), www.cbo.gov/publication/44114.

homes. Even though some borrowers have sufficient income to make their mortgage payments or enough assets to pay off their mortgages, and they may wish to stay in their homes, they may choose to “strategically default” to avoid paying off a mortgage balance that exceeds the current value of the home.

The GSEs, through the direction they provide to mortgage servicers, can use a number of techniques to help borrowers while minimizing costs to the government. Some of those approaches—such as refinancing or working with a borrower to make up missed payments and to change the terms of the loan, in what is known as a loan modification—focus on keeping borrowers in their homes. Other approaches—such as a short sale, whereby the borrower arranges for an arms-length sale of the home at a price lower than the outstanding balance on the mortgage—focus on transitioning borrowers out of their homes.

In recent years, borrowers with mortgages backed by the GSEs have received loan modifications that lower their monthly payments either through HAMP or other programs. Those modifications have made some borrowers’ mortgages much more affordable. But despite those efforts, many homeowners remain delinquent on their mortgages and at risk of losing their homes to foreclosure. To date, FHFA has not allowed the GSEs to implement loan modifications using principal forgiveness, citing a combination of factors:

- Concerns about the incentive that the approach could provide for people to become delinquent in order to obtain principal forgiveness, which could result in large costs to the government (this is a type of “moral hazard,” a tendency for people to be more willing to take risks for which the potential costs or burdens will be borne in whole or in part by others);
- The fairness of assisting some distressed borrowers at the risk of raising mortgage interest rates or reducing the availability of credit for future borrowers; and
- The direct and indirect costs associated with implementing and managing such a program.

How Does HAMP Work?

Under HAMP, the Treasury or the GSEs provide financial incentives to holders of mortgages, mortgage servicers, and the borrowers themselves to facilitate modifications in the mortgage agreements. Standard (or Tier 1) HAMP modifications lower payments on mortgages for eligible borrowers, who include owner-occupants with payments that fall within a certain range as a share of their income.² Payments are decreased to 31 percent of a borrower’s gross monthly income by reducing their interest rate (to a floor of 2 percent), extending the term of their loan (to a maximum of

2. For a description of HAMP’s Tier 1 criteria, see Department of the Treasury, *Making Home Affordable Program Handbook*, version 4.1 (December 13, 2012), www.hmpadmin.com/portal/programs/docs/hamp_servicer/mhahandbook_41.pdf.

40 years), or delaying repayment of part of their loan without requiring added interest payments (known as principal forbearance). HAMP modifications for loans that are not owned or guaranteed by the GSEs can also include principal forgiveness. As of December 2012, mortgage servicers had made more than 1.3 million permanent HAMP modifications; approximately 50 percent of those represent loans held by Fannie Mae and Freddie Mac.³

What Options Did CBO Analyze?

CBO compared the GSEs' current approach (standard HAMP) with three options involving principal forgiveness for HAMP-eligible borrowers. (Such options could be adopted through legislation or by an administrative change.) Under each option, the GSEs would select for each eligible borrower a standard HAMP modification or a modification that includes principal forgiveness, depending on which one lowered the government's expected costs more. The options that CBO analyzed were the following:

- *Option 1.* GSEs choose between standard HAMP and the HAMP Principal Reduction Alternative; the latter reduces the monthly mortgage payment to 31 percent of the borrower's gross monthly income, primarily by decreasing the outstanding loan balance to as low as 115 percent of a home's current assessed value;⁴
- *Option 2.* GSEs choose between standard HAMP and principal forgiveness that would reduce the outstanding loan balance to 100 percent of a home's current assessed value; and
- *Option 3.* GSEs choose between standard HAMP and principal forgiveness that would reduce the outstanding loan balance to 90 percent of a home's current assessed value.

How Many Borrowers Might Qualify for Assistance?

On the basis of detailed data about outstanding mortgages and FHFA's review of the potential effects of implementing principal forgiveness at the GSEs, CBO estimates that 610,000 borrowers with mortgages owned or guaranteed by the GSEs already are or, over the assumed two-year period of the program, would become delinquent and

3. For the total number of HAMP modifications, see Department of the Treasury, *Making Home Affordable Program Performance Report* (December 2012). For the number of modifications of GSE-backed mortgage loans, see Federal Housing Finance Agency, *Foreclosure Prevention Report* (November 2012).

4. The HAMP Principal Reduction Alternative incorporates principal forgiveness to a floor of 115 percent of a home's current value as the first step to achieve the target monthly mortgage payment of 31 percent of gross monthly income. If the target payment is not achieved once that amount of principal has been reduced, the mortgage servicer implements standard HAMP procedures, starting with an interest rate reduction, to complete the modification.

would meet all other eligibility criteria for HAMP under current policy.⁵ CBO expects that another 550,000 borrowers will meet all HAMP eligibility criteria except for being in financial distress (defined as being delinquent or at reasonable risk of becoming delinquent); under a change in policy to introduce principal forgiveness, some of those borrowers might become delinquent. In total, those 1.2 million borrowers constitute the population that CBO considers to be eligible or potentially eligible for a principal forgiveness program. They represent approximately 40 percent of all underwater borrowers and 4 percent of all borrowers with mortgages backed by the GSEs as of December 31, 2012.

Although HAMP is set to expire on December 31, 2013, CBO's analysis is based on modifications that would be performed over a two-year period after the GSEs had implemented a principal forgiveness modification program. For the purposes of comparison, "current policy" in this analysis reflects the assumption that the GSEs will continue to offer loan modifications that lower the monthly payments of eligible borrowers in a manner consistent with HAMP for at least one additional year beyond 2013.

How Would the Options Affect the Number of Defaults and the Federal Budget?

The key findings of CBO's analysis are the following:

- Under **current policy**, 227,000 borrowers with mortgages owned or guaranteed by the GSEs will receive a standard HAMP modification (37 percent of the eligible population of 610,000 borrowers and none of the 550,000 potentially eligible participants) over a two-year period. Approximately 600,000 of the 1.2 million borrowers, including some receiving a HAMP modification, are expected to default (see [Table 1](#)).
- Under **Option 1**, which includes the possibility of reducing the principal balance to as low as 115 percent of a home's assessed value, an additional 29,000 mortgages would be modified, leading to 18,000 fewer defaults and generating a savings to the government of \$0.2 billion. About 73 percent of the modifications under Option 1 would involve principal forgiveness.
- Under **Option 2**, which includes the possibility of principal forgiveness to 100 percent of a home's current value, the number of modifications would increase by 26,000, slightly fewer than under Option 1, but more defaults would be avoided (43,000). Savings to the government—at \$2.8 billion—would be the largest among

5. Federal Housing Finance Agency, *Appendix to FHFA Review of Options* (July 2012), www.fhfa.gov/Default.aspx?Page=403.

the three options. About 85 percent of the modifications under Option 2 would involve principal forgiveness.

- Under **Option 3**, which includes the possibility of principal forgiveness to 90 percent of a home's current value, 57,000 more mortgages would be modified than under current policy, leading to 95,000 fewer defaults (the largest reduction under any of the three options) and savings to the government of \$2.2 billion. About 78 percent of the modifications under Option 3 would involve principal forgiveness.

CBO estimated the cost to the government of the policy alternatives on a fair-value basis—that is, reflecting the estimated change in the market value of the portfolio of eligible mortgages.⁶ Although many techniques are available to determine fair values, a standard method for estimating the market value of a direct loan or loan guarantee is to discount the expected cash flows to the present using market-based discount rates. CBO estimated discount rates for mortgage cash flows from the rate of return investors would expect to earn on privately issued mortgage loans. Private investors require a higher rate of return on investments like mortgages—for which losses are correlated with the state of the economy and for which that risk cannot be avoided through portfolio diversification—than on safer investments like Treasury securities.

CBO used higher discount rates for mortgages that were expected to have higher default rates because those loans also tend to have higher levels of risk that cannot be diversified, also known as market risk. Using discount rates that vary with default rates—compared with using a constant discount rate—results in a lower estimated cost for policy options that produce lower default rates (like principal forgiveness to 90 percent of a home's value) and a higher estimated cost for policy options that result in higher default rates (like standard HAMP).

How Could a Principal Forgiveness Program Be Designed to Limit the Costs of Moral Hazard?

Augmenting standard HAMP with principal forgiveness would have mixed effects on the costs to the government of modifications to loans owned or guaranteed by the GSEs. On the one hand, such a program would probably induce some additional participation by borrowers for whom principal forgiveness would reduce the government's costs relative to such costs under standard HAMP or with no modification. On the other hand, it might draw in some borrowers for whom it would

6. CBO has used a fair-value approach in its budget projections for the GSEs and in cost estimates for legislation affecting the GSEs. That approach produces estimates of the value of assets and liabilities that either correspond to or approximate market prices. See the testimony of Deborah Lucas, Assistant Director for Financial Analysis, Congressional Budget Office, before the House Committee on the Budget, *The Budgetary Cost of Fannie Mae and Freddie Mac and Options for the Future Federal Role in the Secondary Mortgage Market* (June 2, 2011), www.cbo.gov/publication/41487.

represent a more costly alternative to not modifying their mortgage under current policy. Some of those borrowers might become delinquent in order to obtain principal forgiveness but would not have done so in the absence of the program (a form of moral hazard). On balance, CBO estimates, additional participants would reduce the government's net costs overall, although by less than costs would fall if borrowers whose modifications were costly could be excluded. CBO's estimates of the cost of moral hazard are relatively low in part because the agency assumed that borrowers would be required to show sufficient evidence of financial hardship, as required under HAMP rules.

Several approaches to designing a principal forgiveness program would further address concerns about the costs stemming from moral hazard. The most effective approach would be to offer principal forgiveness only to borrowers who were delinquent at the time the program was announced, thereby excluding borrowers who become delinquent in order to receive principal forgiveness. Another approach would be to forgive a portion of the borrower's loan in exchange for granting the lender a claim on future equity or home appreciation—that approach is known as a “shared appreciation” modification. For example, a borrower who owes \$120,000 on a home with a current value of \$100,000 may have the loan “written down” (reduced in value) to \$95,000 in exchange for granting the lender the right to receive 25 percent of any future increase in the home's value.

How Would CBO's Analysis Change Under Alternative Assumptions?

CBO's findings are based on the agency's best estimates of values for key parameters of relevant economic behavior, but there are many uncertainties. For example, actual outcomes could differ from CBO's estimates in the following ways:

- Borrowers might be more or less likely to default to become eligible for principal forgiveness;
- The probability of default might be more or less sensitive to changes in borrowers' monthly payments;
- Defaults might be more or less sensitive to the ratio of the mortgage balance to the home's current value; and
- The market risk premium, the estimate of market risk of the mortgages (as reflected in the discount rate used to estimate their fair value), might be higher or lower.

To address those uncertainties, CBO analyzed the three options using high and low values for the key parameters. The agency found that combining standard HAMP with principal forgiveness under all three options would reduce defaults across the entire range of estimates. The budgetary savings are less certain, however. Nevertheless, Options 2 and 3 would reduce the federal budget deficit under nearly all alternative

scenarios that CBO analyzed (see [Table 2](#)).

How Would the Options Affect the Economy?

Implementing one of the options could spur economic activity by boosting the amounts that households spend because of increases in their disposable income, net wealth, and creditworthiness (which would facilitate borrowing for purchases of automobiles and other durable goods).⁷ However, the estimated aggregate financial benefit to households would be small. Augmenting the GSEs' existing loan modification policy with principal forgiveness under current eligibility rules for HAMP would probably generate fewer than 60,000 additional modifications and avert fewer than 100,000 defaults, in CBO's estimation. When compared with the approximately 3 million borrowers who are at least three months delinquent on their mortgages, the options' expected positive effects on the housing market nationally and on the economy as a whole would be small. Policies with broader eligibility than those CBO analyzed could have larger effects.

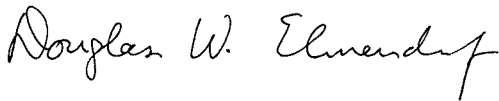
7. Another potential effect of the options is a reduction in "house lock," a circumstance in which borrowers who owe more than the value of their home are constrained in their ability to move to take advantage of employment outside of their local area. Research has found mixed evidence on the effects of such situations on migration or labor mobility.

This Congressional Budget Office (CBO) report was prepared in response to a request by the Ranking Member of the House Committee on Oversight and Government Reform. In keeping with CBO's mandate to provide objective, impartial analysis, this report makes no recommendations.

Mitchell Remy prepared the report under the supervision of Damien Moore. Gabriel Ehrlich and Jeffrey Perry of CBO and Francesca Castelli (formerly of CBO) assisted with parts of the analysis. Chad Chirico, Andrew Stocking, Aurora Swanson, and David Torregrosa of CBO provided helpful comments.

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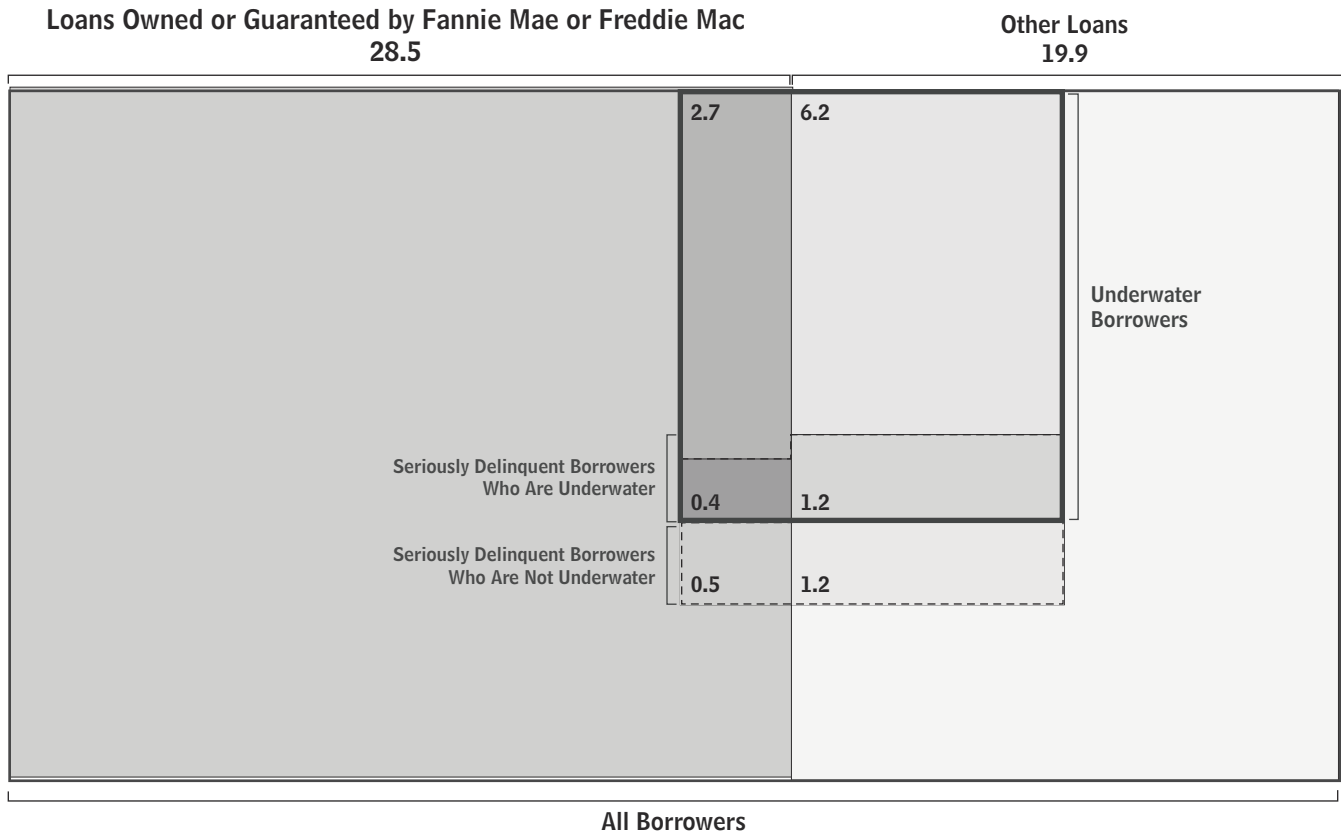


Figure 1.

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Number of Residential Mortgages, by Category of Borrower, Fourth Quarter of 2012

(Millions)



Sources: Congressional Budget Office; CoreLogic; Mortgage Bankers Association.

Notes: Underwater borrowers owe more on their mortgages than the value of their homes.

Seriously delinquent borrowers are 90 days or more past due on their mortgage payments or are in the process of foreclosure.

Table 1.**Return to Reference****CBO's Central Estimates of the Impact of the GSEs' Current Policy and Three Options Involving Principal Forgiveness**

	Current Policy: Standard HAMP	Option 1: Standard HAMP or HAMP Principal Reduction Alternative	Option 2: Standard HAMP or Principal Forgiveness to 100 Percent of a Home's Value	Option 3: Standard HAMP or Principal Forgiveness to 90 Percent of a Home's Value
Standard HAMP Modifications ^a	227,000	69,000	39,000	63,000
Principal Forgiveness Modifications ^a	n.a.	187,000	214,000	221,000
Total Number of Modifications ^a	227,000	256,000	253,000	284,000
Number of Defaults ^a	599,000	581,000	556,000	504,000
Net Increase or Decrease (-) in the Budget Deficit Relative to Current Policy (Billions of 2013 dollars)	n.a.	-0.2	-2.8	-2.2

Source: Congressional Budget Office.

Notes: The HAMP Principal Reduction Alternative involves lowering the monthly mortgage payment to 31 percent of gross monthly income, primarily by reducing the outstanding loan balance to as low as 115 percent of a home's current assessed value.

The central estimates are based on CBO's values for key parameters of relevant economic behavior (such as the sensitivity of defaults to additional incentives offered under principal forgiveness, changes in monthly payments, or changes in loan-to-value ratios) and the sensitivity of private investors to losses that cannot be avoided through diversification (known as market risk).

GSEs = government-sponsored enterprises (specifically, Fannie Mae and Freddie Mac); HAMP = Home Affordable Modification Program; n.a. = not applicable.

a. Out of 1.2 million eligible or potentially eligible borrowers.

Table 2.**Return to Reference****CBO's Estimates of the Impact of Three Options for the GSEs Involving Principal Forgiveness Under Alternative Assumptions**

(Billions of 2013 dollars)

	Option 1: Standard HAMP or HAMP Principal Reduction Alternative	Option 2: Standard HAMP or Principal Forgiveness to 100 Percent of a Home's Value	Option 3: Standard HAMP or Principal Forgiveness to 90 Percent of a Home's Value
Difference in Number of Defaults Relative to Current Policy			
Central estimate	-18,000	-43,000	-95,000
Range	-28,000 to -3,000	-63,000 to -30,000	-146,000 to -73,000
Net Increase or Decrease (-) in the Budget Deficit Relative to Current Policy			
Central estimate	-0.2	-2.8	-2.2
Range	-0.3 to 0.1	-4.2 to -1.3	-4.0 to 1.9 ^a

Source: Congressional Budget Office.

Notes: The HAMP Principal Reduction Alternative involves lowering the monthly mortgage payment to 31 percent of gross monthly income, primarily by reducing the outstanding loan balance to as low as 115 percent of a home's current assessed value.

The central estimates are based on CBO's values for key parameters of relevant economic behavior (such as the sensitivity of defaults to additional incentives offered under principal forgiveness, changes in monthly payments, or changes in loan-to-value ratios) and the sensitivity of private investors to losses that cannot be avoided through diversification (known as market risk). The ranges are based on estimated high and low values for those key parameters.

GSEs = government-sponsored enterprises (specifically, Fannie Mae and Freddie Mac); HAMP = Home Affordable Modification Program; n.a. = not applicable.

a. Option 3 would decrease the budget deficit in eight out of nine alternative scenarios that CBO analyzed.