

## ***Impact***

*A regulatory impact analysis must accompany every economically significant federal rule or regulation. The Office of Policy Development and Research performs this analysis for all U.S. Department of Housing and Urban Development rules. An impact analysis is a forecast of the annual benefits and costs accruing to all parties, including the taxpayers, from a given regulation. Modeling these benefits and costs involves use of past research findings, application of economic principles, empirical investigation, and professional judgment.*

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# **Regulatory Impact Analysis: Emergency Homeowners' Loan Program**

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## **Program Summary**

The Emergency Homeowners' Loan Program (EHLP), as enacted in the Dodd-Frank Wall Street Reform and Consumer Protection Act, allows the U.S. Department of Housing and Urban Development (HUD) to provide a maximum of \$50,000 to homeowners who are 90 or more days delinquent on their mortgages due to a 15-percent or greater reduction in household income and face the threat of foreclosure. Reasons for the reduction of income are limited to involuntary unemployment, involuntary underemployment, and medical conditions. EHLP participants must come from households that earned no more than 120 percent of Area Median Income (AMI) before the decrease in income. EHLP provides assistance through a 5-year, no-interest loan, with loan repayment beginning after program assistance ends. Payments cease after 24 months or \$50,000, whichever comes first, which allows up to 7 years from loan disbursement to full repayment. Finally, EHLP assistance is limited to homeowners in Puerto Rico and in the 32 states that are not assisted by the Department of the Treasury's Innovation Fund for Hardest Hit Housing Markets program.

## **Cost-Benefit Analysis**

EHLP is intended to assist a segment of delinquent homeowners who face a high probability of foreclosure and have become delinquent because of a temporary loss of income. Assisted households are expected to recover financially within 24 months. The benefits of this program's rules include the avoidance of costs associated for (1) owners of foreclosed properties, (2) lenders holding mortgages

on foreclosed properties, (3) homeowners living near the foreclosed properties, and (4) local governments. Overall, the benefits of this rule are estimated to be between \$928 million and \$1.9 billion, offset by administration costs, namely participant selection (\$87.3 million) and servicing the EHLPL loans (\$7.4 to \$11.3 million), and up to \$29.5 million of incremental costs of foreclosure to lenders caused by borrowers assisted by EHLPL who subsequently default anyway. In addition, participants in this program receive a transfer ranging from \$28.32 to \$43.3 million, which is equal to the government's cost of borrowing the funds. Lenders also receive a transfer totaling \$105 to \$213 million, which includes costs related to the mortgage, such as interest payments, from the homeowner.

## **Demand for EHLPL Loans**

The amount of EHLPL assistance for which a homeowner qualifies depends on the monthly mortgage payment and current income. Under program rules, homeowners are required to pay their monthly mortgage payments equaling up to 31 percent of their current monthly income. EHLPL assistance can cover the remaining mortgage amount, for a period of up to 24 months. EHLPL assistance can also be used to pay delinquent mortgage payments (principal and interest), taxes, insurance, and certain other related fees.

Data from canceled Home Affordable Modification Program (HAMP) loans<sup>1</sup> are used to estimate the number of homeowners who may need assistance from EHLPL. The HAMP data<sup>2</sup> represent the most complete source of mortgage and income data for eligible households. The data used in this analysis are further limited to households that experienced the requisite fall in income and had incomes less than or equal to 120 percent of AMI before the fall. This filtered search yielded a total of 22,546 homeowners. After modification in HAMP, these homeowners had average monthly incomes of \$3,329, 31 percent of which is \$1,032. The average monthly housing expense for these households, including principal, interest, taxes, and insurance, was \$1,519. HAMP, however, does not contain data on second mortgages. Assuming second liens are 20 percent of the first lien, the total monthly housing expense is \$1,756, which qualifies a household for \$724 in EHLPL assistance. This amount represents the monthly need for homeowners seeking EHLPL assistance and totals \$17,370 for 24 months. To participate in EHLPL, households must be at least 3 months delinquent in their mortgage payments. Assuming that participating homeowners are on average 5 months delinquent, \$8,778 would be added to the total EHLPL loan amount, for an overall total of \$26,148. With a program limit of approximately \$901 million available for loans to homeowners, after subtracting administrative costs, an average loan of \$26,148 would assist up to 34,474 homeowners. This assessment calculates the value of benefits, costs, and transfers based on the assumption that between 22,546 and 34,474 homeowners will receive EHLPL loans.

## **Benefits**

The benefits of this program include the avoided costs associated with foreclosure. Foreclosures impose costs on four groups: (1) owners of foreclosed properties, (2) lenders holding mortgages on the foreclosed properties, (3) homeowners living near the foreclosed properties, and (4) local governments.

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<sup>1</sup> For more information on HAMP, see <http://www.makinghomeaffordable.gov/programs/lower-payments/Pages/hamp.aspx>.

<sup>2</sup> HAMP data as of September 2010. The reported income and payment information used in this analysis is premodification because mortgage terms revert to premodification terms after the HAMP loan was canceled.

## **Owners of Foreclosed Properties**

Foreclosure imposes a number of costs on owners, including moving costs, legal fees, and administrative charges. Using data collected through the Mortgage Foreclosure Prevention Program (MFPP) in Minneapolis and Saint Paul, Minnesota, Moreno (1995) estimated the total cost to homeowners related to foreclosure at \$7,200 per household. This study was based on more than 800 low- and moderate-income distressed homeowners who were assisted by the MFPP. When adjusting for inflation, from 1995 to 2010, this estimate increases from \$7,200 to \$10,339 (43.6 percent).<sup>3</sup> In addition, families bear immeasurable costs of emotional stress and possibly higher costs for housing in the future because of poor credit ratings. Evidence of the high private cost of foreclosure is the level of negative equity that households are willing to bear before defaulting on a loan.

## **Lenders Holding Mortgages on the Foreclosed Properties**

Foreclosure also imposes significant costs on mortgage lenders related to losses on loans, neglected property maintenance, appraisal fees, legal fees, lost revenue, insurance, marketing, and cleanup. Recent studies of lender loss rates present a range of estimates from 23 to 92 percent (UBS, 2008). This range reflects that loan loss severity depends on several factors, primarily loan amount and property value. The current analysis relies on Standard & Poor's (2008) estimate of 45 percent, which is derived using an average subprime loan size of \$210,000. Using Standard & Poor's estimate of 45 percent and the average unpaid principal of the relevant households discussed previously (\$152,052), the costs of foreclosure that lenders can avoid from EHLP is expected to be \$68,423 per home.

The total prevented loss to the lender, however, cannot be counted as a social benefit. Much of this benefit is a transfer from the homeowner. If there had not been a foreclosure, the loss in equity would have been borne by the borrower and not the lender. The foreclosure affects the determination of whether the lender or the homeowner bears the burden of a specific cost but does not affect the aggregate cost.

Foreclosure-related transaction costs, which are borne by the lender and should be considered deadweight losses include legal fees, court fees, and broker fees. Commissions paid to agents and court and legal fees would not have been paid if the property had not been foreclosed upon and sold, and these payments do represent transaction costs that decrease social welfare. The deadweight loss from these transaction costs is approximated as the sum of 2 percent of the loan balance for legal fees and 6 percent of the housing price for brokers' fees. The total of deadweight loss avoided per loan is \$10,063, or approximately 7 percent of the unpaid balance. The estimates from Cutts and Merrill (2008) imply that 49.1 percent of costs to the lender, excluding unpaid balance, represents a deadweight loss, which is similar to the 41.3-percent share developed in this analysis, using estimates from Standard & Poor's (2008).

The reduction in property value that results from being forced to sell a home because it is foreclosed upon (stress discount) could also be a source of deadweight loss. The stress discount should be counted, however, as a transfer rather than a cost. Although the seller will lose from a reduction

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<sup>3</sup> Based on the Consumer Price Index from the first half of 1995 (151.5) to the first half of 2010 (217.535).

of value, another investor may gain from the opportunity to purchase at a lower price. Aside from the stress-discount loss of value, evidence indicates that properties lose value that they would not have lost if they had been traded in another circumstance. Frequently, before owners sell a home, they invest a great deal in the structure, at least in cosmetic aspects of the property. An owner who knows that he or she will default ceases to maintain and upgrade the property and may even actively disinvest. Cutts and Merrill (2008) explained that homeowners often destroy property before losing a home through foreclosure, including damage to walls and windows and flooding induced by clogging drains. The depreciation to the property is structural and real: the new owner must invest resources to restore the property to its preforeclosure state. Harding, Thomas, and Sirmans (2000) found evidence of this externality: borrowers with high loan-to-value (LTV) ratios spend, on average, 19 percent less on maintenance than those with lower LTV ratios. Knowledge of impending default would increase the overuse of housing. With an EHLP loan, the program could eliminate some of the loss associated with the depreciation of the structural value. We estimate this structural damage is equal to one-half of the stress discount on the property, which yields \$14,445 ( $0.5 \times 19 \text{ percent} \times \$152,052$ ).

Thus, two sources of real social benefits emanate from this program: preventing transaction costs that would not have been paid without the foreclosure and preventing the real structural loss surrounding a foreclosure. The social surplus per lender for a foreclosure avoided is \$24,508 ( $\$10,063 + \$14,445$ ), or 36 percent of the total gain to the lender.

### **Homeowners Living Near the Foreclosed Properties**

Foreclosures resulting in long-term vacancies have a negative effect on the value of neighboring properties; they reduce the physical appearance of the neighborhood, attract crime, and depress the local economy. Immergluck and Smith (2006) estimated that the negative externality of a single foreclosure depresses the value of neighboring properties within one-eighth of a mile by 0.9 percent. These externalities arise when a foreclosed property is not maintained, which contributes to a lower quality neighborhood. The stigma of a foreclosed property can also cause neighborhood values to fall when other homeowners decrease their home sales prices or more homeowners choose to sell in anticipation of decreased neighborhood quality. Further, weak property appraisals based on comparables, which include the foreclosed property, affect the value of neighboring properties.

This analysis conservatively limits the negative effect of foreclosure to closeby homeowners; that is, homeowners whose properties are directly adjacent to and across from the foreclosed property. This limited group includes the two properties on each side of the foreclosed property and five properties across the street. Based on the median sales price of \$171,100,<sup>4</sup> the aggregate effect of foreclosure on neighboring properties totals \$13,859 ( $0.9 \text{ percent} \times \$171,100 \times 9$ ).

### **Local Government**

When a property forecloses, local governments face a variety of direct costs from additional administrative and legal burdens, policing services, and, in some cases, demolition of foreclosed

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<sup>4</sup> The median price of existing homes sold, as reported by the NATIONAL ASSOCIATION OF REALTORS® (NAR) for October 2010, was \$171,100.

properties. Apgar and Duda (2005) detailed the numerous costs imposed on local governments stemming from foreclosure. The Joint Tax Committee uses an estimate from Apgar and Duda of \$19,227 as the average direct cost per foreclosure to local governments. This estimate represents an extreme case in which the structure is demolished by the local government. A more typical situation would be one in which the property is sold. Assuming that a property is vacant for a period of time, modest criminal activity is present, and the property is sold at auction, foreclosure costs local governments an average of \$6,200. This amount represents only direct administrative and legal costs and specifically excludes property tax losses, unpaid property taxes not recovered, unpaid utility bills, unpaid water bills, and neglected property maintenance, which are not classified as deadweight losses.<sup>5</sup>

### Total Benefits of Avoided Foreclosure

The sum of all costs avoided by the prevention of a foreclosure is \$54,906 (exhibit 1). This benefit will not be realized, however, for every assisted household. Some households will default on their new EHL P loans and eventually lose their homes in foreclosure even with the EHL P assistance. Although the program is limited to homeowners who are expected to repay their mortgages, in some instances, foreclosure is unavoidable. Assuming a 15-percent program foreclosure rate,<sup>6</sup> the expected benefits per assisted household would be \$46,670.

### Exhibit 1

#### Expected Economic Benefits

Category of Benefit	Expected Benefits per Foreclosure Prevented (\$)	Expected Benefits per EHL P Loan at Program Foreclosure Rate of 15% (\$)	Expected Benefits per EHL P Loan at Program Foreclosure Rate of 25% (\$)
Owners of foreclosed properties	10,339	8,788	7,754
Lenders holding mortgages on the foreclosed properties	24,508	20,832	18,381
Homeowners living near the foreclosed properties	13,859	11,780	10,394
Local government*	6,200	5,270	4,650
Average economic benefits	54,906	46,670	41,180
Aggregate for 22,546 households	1,237,910,676	1,052,224,075	928,433,007
Aggregate for 34,474 households	1,892,829,444	1,608,905,027	1,419,622,083

EHL P = Emergency Homeowners' Loan Program.

\* Does not include lost or unpaid property taxes or utility bills or property maintenance costs.

<sup>5</sup> See appendix A of Apgar and Duda (2005) for a complete explanation and listing of the administrative and legal costs included in this estimate.

<sup>6</sup> The assumption of 15 percent is approximately twice the national rate of homeowners seriously delinquent or in foreclosure. Because all the participants are distressed, a rate higher than the national rate is reasonable.

## **Costs**

The costs of this rule include the administrative costs of implementing the program, including the outreach and processing of applications and loan servicing functions. In addition, lenders are expected to bear costs related to delayed foreclosure for those homeowners who receive EHLF loans but are still unable to avoid foreclosure.

## **Administration**

The costs imposed by this program include the administrative costs of the program and the incremental costs associated with assisted households that experience foreclosure despite an EHLF loan. For the servicing functions of EHLF, HUD can choose a third-party organization to administer the program or can delegate this function to states with substantially similar programs already in place. Of the 32 states for which this program affects, 10 applied for self-administration. Administration under the third-party method will separate outreach efforts from loan servicing. Approved housing counselors will conduct outreach efforts that include marketing, counseling, and acceptance of EHLF applications and related documentation. The total costs for all of these services are reimbursed from the estimated amount of \$87.281 million from the EHLF appropriation. All servicing functions will be managed by a third-party organization that has extensive loan servicing capacity. Annual mortgage loan servicing costs typically range from 0.25 to 0.5 percent of loan principal. HUD anticipates the cost of servicing EHLF loans to be on the low end, or about 0.25 percent. Using the assumption of 22,546 loans averaging \$26,148, the loans will total \$579.129 million, producing a servicing cost of \$1,483,800 each year over a 5-year period or about \$7.4 million. If all \$901 million is loaned (minus the administrative costs), the 5-year servicing cost estimate would increase to \$11.3 million.

## **Lender**

Despite assistance through EHLF, some homeowners will be unable to remain current on their mortgages and will still experience foreclosure. These homeowners will have borne the costs of foreclosure regardless of whether they received EHLF assistance. There may be incremental costs of delaying foreclosure to lenders, however. For example, homeowners may let their property deteriorate while they receive the EHLF assistance, or, in some cases, neighborhood values will decline further during the delay in foreclosure caused by EHLF participation. Although successful screening of applicants should minimize this possibility, it is impossible to completely avoid some foreclosures within the program. Assuming that costs to lenders increase 5 percent because of additional property deterioration on program foreclosures, the incremental cost per foreclosed house would total \$3,421 (exhibit 2).

**Exhibit 2****Expected Economic Costs**

<b>Category of Cost</b>	<b>Expected Costs at Program Foreclosure Rate of 0% (\$)</b>	<b>Expected Costs at Program Foreclosure Rate of 15% (\$)</b>	<b>Expected Costs at Program Foreclosure Rate of 25% (\$)</b>
Lender (incremental costs of foreclosure)	3,421	3,421	3,421
<b>Administration</b>			
Outreach by approved counselors	87,281,000	87,281,000	87,281,000
<b>Servicing</b>			
For 22,546 households	7,369,160	7,369,160	7,369,160
For 34,474 households	11,267,827	11,267,827	11,267,827
<b>Aggregate for 22,546 households</b>	<b>94,650,160</b>	<b>106,219,640</b>	<b>113,932,627</b>
<b>Aggregate for 34,474 households</b>	<b>98,548,827</b>	<b>116,239,160</b>	<b>128,032,715</b>

**Transfers**

Finally, transfers will occur from two groups: (1) from the federal government to homeowners and (2) from homeowners to mortgage lenders. Homeowners receiving loans receive an interest rate subsidy from the federal government, which must borrow the funds loaned through the EHLP program. In addition, homeowners transfer interest payments to the mortgage lenders—payments that would not have been made in the event of foreclosure.

**Homeowners**

In addition to the costs and benefits produced by the program, homeowners will receive a transfer from the federal government equal to the federal government's cost of borrowing the funds. The federal government must borrow the funds with no interest payments received from the homeowners. At the current 10-year Treasury rate of 3.33 percent, over the 7-year period, the transfer would total \$1,256 per loan.

**Lenders**

As explained previously, a portion of the total gain to the lender represents a benefit to society. For much of the lender's gain, the foreclosure affects the determination of whether the lender or homeowner bears the burden of a specific cost, but not the aggregate cost to society. As explained previously, most of the overall lender gain derived is not a benefit but is instead a transfer. Of the estimated gain, \$43,915 is counted as a transfer from the homeowner to the original lender (exhibit 3). This portion, although a gain for the lender, does not result in a welfare gain for society because, for every dollar gained, there is a corresponding loss for another party. For example, interest on the mortgage is not paid from the homeowner to the lender in the event of foreclosure.

In sum, transfers total \$45,171 per avoided foreclosure. At the expected 15-percent foreclosure rate, this average decreases to \$38,584.

**Exhibit 3****Expected Transfers**

Recipient of Transfer	Expected Transfers per Foreclosure Prevented (\$)	Expected Transfers per EHLP Loan at Program Foreclosure Rate of 15% (\$)	Expected Transfers per EHLP Loan at Program Foreclosure Rate of 25% (\$)
Homeowner	1,256	1,256	1,256
Lender	43,915	37,328	32,936
<b>Average transfers</b>	<b>45,171</b>	<b>38,584</b>	<b>34,192</b>
<b>Aggregate for 22,546 households</b>	<b>1,018,425,366</b>	<b>869,909,228</b>	<b>770,898,469</b>
<b>Aggregate for 34,474 households</b>	<b>1,557,225,054</b>	<b>1,330,136,198</b>	<b>1,178,743,627</b>

EHLP = Emergency Homeowners' Loan Program.

**Summary of Effects**

EHLP is expected to help between 22,546 and 34,474 distressed homeowners avoid foreclosure. Exhibit 4 summarizes the expected benefits, costs, and transfers from this program. Even at a high rate of foreclosures within the program, it is clear that benefits will greatly exceed costs. At a reasonable program foreclosure rate of 15 percent and the extension of 22,546 loans, benefits are estimated to total \$1.052 billion, offset by costs of \$106 million.

**Exhibit 4****Expected Benefits, Costs, and Transfers at Various Participation Levels**

Participation Level	Program Foreclosure Rate of 0% (\$)	Program Foreclosure Rate of 15% (\$)	Program Foreclosure Rate of 25% (\$)
<b>(1) 22,546 Loans</b>			
Total Benefits	1,237,910,676	1,052,224,075	928,433,007
Total Costs	94,650,160	106,219,640	113,932,627
Net Benefits	1,143,260,516	946,004,435	814,500,380
Transfers	1,018,425,366	869,909,228	770,898,469
<b>(2) 34,474 Loans</b>			
Total Benefits	1,892,829,444	1,608,905,027	1,419,622,083
Total Costs	98,548,827	116,239,160	128,032,715
Net Benefits	1,794,280,617	1,492,665,867	1,291,589,368
Transfers	1,557,225,054	1,330,136,198	1,178,743,627

Note: The origination of approximately 1,900 loans creates total benefits that exactly equal total costs in the 15-percent program foreclosure rate scenario.

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