Congressional Budget Office

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Budgetary Estimates for the Single-Family Mortgage Guarantee Program of the Federal Housing Administration

Loan guarantees made in the Federal Housing Administration's (FHA's) guarantee program for single-family mortgages from 1992 to 2013 are now projected to generate small costs over their lifetimes rather than the significant savings that were recorded in the federal budget at the time the guarantees were made—a deterioration that stems largely from the sharp downturn in the housing market in the late 2000s.[1] The Congressional Budget Office (CBO) has estimated the budgetary effect of those guarantees using information through April 2014 (when the agency published the projections it has used as the baseline for analyzing legislative proposals this year). CBO's estimate that the guarantees made during the 1992–2013 period will cost $2.2 billion is slightly higher than the estimate of $0.1 billion in costs that can be inferred from the subsidy rates and loan volumes reported by the Office of Management and Budget (OMB), but it is quite different from the $63.0 billion in budgetary savings implied by the original estimates for those guarantees recorded in the federal budget.

Under the accounting approach required by the Federal Credit Reform Act of 1990 (FCRA), new mortgage guarantees made by the FHA in 2014 and 2015 will produce budgetary savings, CBO projects. However, under a more comprehensive fair-value approach to estimating the cost of loan guarantees, FHA's 2014 and 2015 guarantees are projected to have small costs instead of savings.[2]

What Is FHA's Single-Family Mortgage Insurance Program?

FHA has historically guaranteed mortgages of borrowers who might otherwise find it difficult to obtain mortgage credit, including first-time homebuyers, lower-income borrowers, and borrowers with lower credit scores. Under its single-family mortgage insurance program, FHA guarantees the timely payment of principal and interest to mortgage lenders in return for fees paid by the borrowers.

Following the housing downturn that began in 2007, FHA's pool of borrowers expanded substantially as mortgage financing from sources other than FHA became more difficult to obtain. From 2008 through 2013, FHA insured over 20 percent of the mortgages made to purchasers of single-family homes each year, and the amount of outstanding mortgage borrowing insured by FHA at the end of fiscal year 2013 was more than $1 trillion.

How Are the Costs of Credit Programs Measured in the Budget?

Federal credit programs such as loans and loan guarantees are accounted for in the budget on an accrual basis, as specified by FCRA. The accrual amount is the estimated lifetime cost of the loan or guarantee; for a guarantee, it equals the present value of the estimated claim payments minus recoveries and fees over the life of the guarantee.

1. For a more detailed account of the historical costs of FHA's programs, see Congressional Budget Office, "FHA's Single-Family Mortgage Guarantee Program: Budgetary Cost or Savings?" *CBO Blog* (October 21, 2013), www.cbo.gov/publication/44628.

2. For details on the analysis summarized in this report, see Francesca Castelli, Gabriel Ehrlich, Damien Moore, and Jeffrey Perry, *Modeling the Budgetary Costs of FHA's Single Family Mortgage Insurance*, Working Paper 2014-05 (Congressional Budget Office, September 2014), www.cbo.gov/publication/45711.

Note: Numbers in the text may not add up to totals because of rounding.

(A present value is a single number that expresses a flow of current, past, and future income or payments in terms of an equivalent lump sum received or paid today.) That accrual amount is recorded in the budget in the year in which a loan is disbursed. It is often referred to as the subsidy cost for those loans or guarantees.

To estimate subsidy costs, a program's cash flows are discounted to the date of disbursement using an interest rate for each year of cash flow corresponding to the interest rate on Treasury securities of comparable maturity. For example, the projected yield on Treasury securities maturing in two years is used to discount cash flows two years from the disbursement date; a three-year Treasury rate is used for cash flows three years from disbursement, and so on. Federal administrative costs are accounted for separately and are not included in the estimated subsidies.

The Administration's estimate of the subsidy costs (or savings) associated with federal loans or guarantees made in a particular year are recorded as outlays (or negative outlays) in that year. Those estimates are adjusted as necessary in future years to reflect actual results or revised projections; such changes to the estimates (reestimates) are recorded as outlays or negative outlays in the year they are made.

What Are the Costs of FHA Loan Guarantees Made From 1992 to 2013?

Between 1992 and 2013, FHA guaranteed roughly $2.8 trillion of single-family mortgages. Using the methodology specified by FCRA, CBO estimates that those guarantees account for $2.2 billion in subsidy costs to the federal government. When the subsidy costs from different years are adjusted for inflation using the GDP price index, those loan guarantees are estimated to account for $1.5 billion in subsidy costs in fiscal year 2014 dollars.

Those estimates reflect a combination of realized gains and losses to date and the expected—but inherently uncertain—value of future gains or losses. In CBO's simulations, which quantify uncertainty about various factors, two-thirds of the outcomes were between subsidy costs of $15.4 billion and savings of $11.9 billion (see Figure 1 and the description below). CBO's central estimate of $2.2 billion is slightly higher than the $0.1 billion that is implied by OMB's reestimated subsidy costs, and much higher than the $63.0 billion in cost savings implied by the originally estimated subsidy costs recorded in the federal budget.[3]

What Are the Costs of FHA Loan Guarantees Being Made in 2014 and 2015?

Under current law and using the FCRA methodology, CBO projects that the single-family loan guarantees that FHA has made and will make in 2014 and 2015 will generate savings—negative subsidy costs—of $16.4 billion. Although the actual savings that will be realized are uncertain, CBO estimates that those guarantees are quite unlikely to result in a budgetary cost on a FCRA basis (see Figure 1).

CBO's projected subsidy rate (the subsidy cost divided by the dollar volume of loans guaranteed) for the guarantees to be made in 2015 is −5.3 percent; that negative subsidy rate represents substantially smaller savings than the estimated subsidy rate of −9.0 percent reported in the *Fiscal Year 2015 Federal Credit Supplement* issued by OMB. That difference stems mainly from CBO's higher estimate of prepayment rates, and correspondingly lower estimate of fees, for mortgages that FHA will guarantee in 2015.

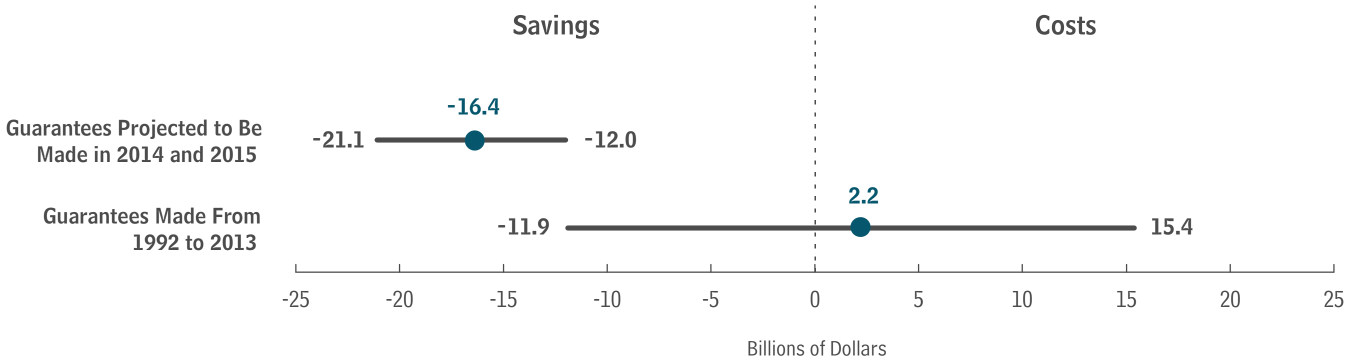
What Is the Program's Capital Reserve Account?

FHA's capital reserve account is one of the supporting accounts that reconciles the subsidy costs recorded in the budget deficit with the program's cash flows. The estimated subsidy savings from new FHA loan guarantees are credited to FHA's capital reserve account, adding to its balance. The balance of the account is revised each year as subsidies for loan guarantees issued in previous years are reestimated. The account balance does not represent budgetary resources that can be used to offset future spending or higher-than-estimated costs of FHA's loan guarantees; rather, the estimated and reestimated subsidy savings or costs are reflected in the deficit in the year those estimates are made. Furthermore, the presence or absence of a balance in the account does not affect FHA's ability to meet its obligations because, under FCRA, all credit programs receive permanent and indefinite budget authority to cover any costs above those that were originally estimated.

3. For OMB's original and reestimated subsidy costs, see Office of Management and Budget, *Fiscal Year 2015 Federal Credit Supplement* (March 2014), http://go.usa.gov/yv9V (PDF; 603 KB).

Figure 1.

Projected Lifetime Costs to the Federal Budget From FHA's Single-Family Loan Guarantees



Source: Congressional Budget Office.

Notes: Circles are central estimates, which use CBO's projections for key inputs such as loan values and macroeconomic conditions as of April 2014. Lines include the middle two-thirds of the outcomes from CBO's simulations, which incorporate uncertainty about the key inputs.

Costs are estimated using the approach specified by the Federal Credit Reform Act of 1990.

FHA = Federal Housing Administration.

FHA is required to maintain capital reserves equal to at least 2 percent of the outstanding mortgage borrowing it has guaranteed (the insurance in force), although FHA has not met that requirement since 2009 because it suffered large losses on defaults during the sharp downturn in the housing market and the severe recession. Those losses depleted the value of FHA's capital reserve account because the subsidies on many cohorts of loans were revised sharply upward. To prevent the account from reporting a negative balance in fiscal year 2013, $1.7 billion was transferred into the account from the Treasury. Although that was the first time the account has received such a transfer from the Treasury, it underscores the fact that taxpayers ultimately bear the risk of FHA's mortgage guarantees.

At the end of 2013, the balance of FHA's capital reserve account was zero; to meet the capital reserve requirement, FHA would have needed about $22 billion in that account. In response to the decline in the balance of that account, FHA has increased the fees it charges on new loan guarantees. CBO's estimate of large negative subsidies for the loan guarantees issued in 2014 and 2015—reflecting both higher fees and improved housing market conditions relative to previous years—suggests that the value of the account will grow substantially over the next two years. Future reestimates of the credit subsidies, interest paid on the account balance, and any transfers between the account and the accounts of certain other FHA programs will also affect that balance.[4]

What Are the Costs When Measured Under an Alternative, Fair-Value Approach?

The fair-value approach to estimating the cost of federal loans and loan guarantees provides a more comprehensive measure of cost, in CBO's view, because it incorporates the cost of market risk. Market risk is the component of risk that remains even after a portfolio has been diversified as much as possible. It arises because most investments tend to perform relatively poorly when the economy is weak and relatively well when the economy is strong. Market risk is costly to investors because people tend to value income from investments more when the economy is weak and incomes are relatively low, and so they assign a higher cost to losses that occur during economic downturns. The government is exposed to market risk through its credit programs because, when the economy is weak, borrowers default on their debt obligations more frequently and recoveries from defaulting borrowers are smaller. That market risk is effectively passed along to taxpayers and beneficiaries of government programs because they bear the consequences of the government's financial losses, and the risk is costly to those taxpayers and beneficiaries.[5]

4. For a more detailed explanation of FHA's accounting, see Congressional Budget Office, "How FHA's Mutual Mortgage Insurance Fund Accounts for the Cost of Mortgage Guarantees," *CBO Blog* (October 22, 2013), www.cbo.gov/publication/44634.

Estimates of the cost of loans and loan guarantees on a fair-value basis are, like estimates on a FCRA basis, equal to the net present values of future cash flows. Moreover, the same projected cash flows are used for the two types of estimates. However, in the fair-value approach, those cash flows are discounted using rates of return that include the cost of market risk, rather than using the rates on Treasury securities as in the FCRA approach. For fair-value estimates of the cost of FHA's loan guarantees, CBO infers the appropriate rates of return from the prices charged by private mortgage insurers and other private providers of mortgage credit.

Under the fair-value methodology, CBO projects that the single-family loan guarantees that FHA has made in 2014 and will make in 2015 will have a cost of $2.0 billion. Under the FCRA methodology, the projected savings are $16.4 billion.

The usefulness of each approach depends on the purpose for which it is used. Fair-value estimates may be less useful than FCRA estimates in projecting the average budgetary effects of programs that provide credit assistance, but projecting such effects is not the only, or necessarily even the primary, purpose of cost estimates. Cost estimates are tools that policymakers can use to make trade-offs between different policies that work toward a particular policy goal. By taking into account how the public assesses financial risks as expressed through market prices, fair-value estimates may be more useful than FCRA estimates in helping policymakers understand trade-offs between policies that involve such risks.

How Did CBO Estimate the Costs?

CBO used a statistical simulation model to project ranges of possible outcomes for FHA's subsidy rates. The model simulates defaults, recoveries, and prepayments on mortgages insured by FHA in different years, with key parameters estimated from a data set of FHA-insured mortgages. The macroeconomic variables that CBO projected were interest rates, average house prices nationwide and the regional dispersion around the national average, and the unemployment rate. Those variables' effects on loan performance are subject to uncertainty, which CBO considers explicitly in the simulations. CBO also conducted separate sensitivity analyses to assess the influence of other factors, such as uncertainty about the credit scores of future FHA borrowers, the loan-to-value ratios on loans that FHA refinances, and the effectiveness of some of FHA's loss mitigation practices.

In its April 2014 baseline and in the calculations presented in this report, CBO projected that FHA would guarantee $150 billion in mortgages. CBO now expects FHA to guarantee about $130 billion in mortgages in 2014, which would reduce the budgetary savings in that year by 14 percent. CBO did not incorporate uncertainty about the amount of new loan guarantees that would be made in fiscal year 2015 in its simulations; incorporating that uncertainty would widen the range of potential dollar outcomes for the 2015 guarantees.

5. For further discussion of the advantages and disadvantages of the fair-value approach, see testimony of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Committee on Financial Services, U.S. House of Representatives, *Estimates of the Cost of the Credit Programs of the Export-Import Bank* (June 25, 2014), pp. 8–10, www.cbo.gov/publication/45468.

This Congressional Budget Office (CBO) report provides additional information that supplements the projections of the federal deficit in *An Update to the Budget and Economic Outlook: 2014 to 2024.* In keeping with CBO's mandate to provide objective, impartial analysis, this report makes no recommendations.

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Jeffrey Kling and Robert Sunshine reviewed the report, and Jeanine Rees edited it and prepared it for publication. An electronic version is available on CBO's website www.cbo.gov/publication/45740).

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