CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

Douglas W. Elmendorf, Director

September 16, 2010

Honorable Barney Frank
Chairman
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

As you requested, the Congressional Budget Office (CBO) has estimated the budgetary impact of the activities of Fannie Mae and Freddie Mac (two government-sponsored enterprises, or GSEs, that provide credit guarantees for more than half of the outstanding residential mortgages in the United States) using the methodology specified in the Federal Credit Reform Act of 1990 (FCRA).[1] To provide a context for those estimates, this letter also discusses alternative budgetary treatments for the GSEs, describes the usefulness of alternative treatments for Congressional decisionmaking, and explains the rationale for CBO's use of fair-value subsidy estimates for the GSEs in its baseline budget projections. Those fair-value estimates deviate from FCRA-based estimates in an important way: By incorporating a market-based risk premium associated with the GSEs' credit guarantees, they reflect the fact that the government's assumption of financial risk is costly to taxpayers.

Projected Budgetary Impact of Fannie Mae and Freddie Mac

CBO has used three methodologies—the FCRA, fair-value, and cash treatments—to estimate the impact of Fannie Mae and Freddie Mac on the federal budget over the 2011–2020 period. The alternative methods result in quite different estimates of the GSEs' impact on the federal budget (see Table 1).

Procedures Specified by the Federal Credit Reform Act. FCRA specifies the procedures to be used for recording the budgetary impact of most of the federal government's loan and loan guarantee programs. Under FCRA, the budgetary cost of a direct loan or loan guarantee is calculated as the net present value of expected cash flows over the life of the obligation. The net present value is calculated by discounting cash flows to the time of loan disbursement using rates on Treasury

[1] 2 U.S.C. § 661 et seq.

Table 1.

Projections of Mandatory Outlays for Fannie Mae and Freddie Mac Under Alternative Budgetary Treatments

(By fiscal year, in billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2011–2020
FCRA	-6	-5	-5	-5	-4	-4	-4	-4	-4	-4	-44
Fair Value	14	9	5	4	4	4	4	4	4	4	53
Cash	20	10	0	-2	-5	-4	-5	-7	-7	-7	-8

Source: Congressional Budget Office.
Note: Numbers do not add up to totals because of rounding.

securities of comparable maturity. (For example, the cash flows a year after disbursement are discounted using a one-year rate, cash flows five years out are discounted using a five-year rate, and so on.) Assuming that Fannie Mae and Freddie Mac continue to operate as federal entities, CBO estimates that the mortgage guarantees they issue over the 2011–2020 period will generate net savings for the federal government of $44 billion if measured using the FCRA procedures. (CBO's estimate excludes any impact of new purchases of mortgage-backed securities [MBSs] and mortgages for the GSEs' investment portfolios. Under the GSEs' agreements with the Treasury, those portfolios are expected to shrink over the 2011–2020 period. Consequently, new purchases of securities will probably be minimal and would have a negligible budgetary impact under FCRA procedures. However, if the GSEs were to engage in substantial purchases of securities for their portfolios in the future, FCRA accounting would indicate even larger budgetary savings than those estimated here.)

Fair-Value Estimates. Because FCRA specifies the use of Treasury rates for discounting, estimates prepared using those procedures do not include the cost of market risk.[2] An alternative approach that measures the *fair value* of assets and liabilities accounts for such risk. (The fair value of an asset is defined as the price that would be received if it were sold in an orderly transaction between market participants. Similarly, for a liability such as a loan guarantee, the fair value is the price that would have to be paid to induce a market participant to assume the liability.) Fair values are often based on market prices. However, the fair value of an asset may diverge from its market value, for instance, during a financial crisis when the few transactions that occur are likely to be at distressed prices or when comparable assets or obligations are not publicly traded. In such cases, fair value can be estimated using standard financial modeling and extrapolation.

[2] Market risk is the common component of risk that investors cannot protect themselves against by diversifying their portfolios. Investors require compensation for market risk because investments exposed to such risk are more likely to have low returns when the economy as a whole is weak and resources are highly valued.

Again assuming that Fannie Mae and Freddie Mac continue to operate as federal entities, CBO projects that the mortgage guarantees they issue over the 2011–2020 period will *cost* the federal government $53 billion if measured using fair-value estimates. (Any new purchases or sales by the GSEs of mortgages and MBSs for their portfolios made at competitive market prices would have a zero subsidy cost on a fair-value basis.) That $53 billion cost is incorporated in CBO's current baseline budget projections.[3]

Cash Transactions. The Administration takes a different approach to showing the impact of Fannie Mae and Freddie Mac on the federal budget. Rather than using one or the other of the methods discussed above, the Administration treats the GSEs as separate from the federal government. Specifically, what the budget shows is not the transactions of Fannie Mae and Freddie Mac with the private sector but rather the cash transactions between those two GSEs and the federal government—that is, the payments the government makes to those entities when it purchases preferred stock, less the dividends Fannie Mae and Freddie Mac pay to the government. CBO estimates that those cash transactions will result in net receipts to the government of $8 billion over the 2011–2020 period, reflecting additional costs for more cash infusions from the Treasury in the near term (2011 and 2012) and dividend payments from the GSEs to the Treasury that will exceed cash infusions in subsequent years.

For each of those methodologies, the estimates reported here are based on information available in August 2010, when CBO released its latest baseline budget projections. CBO projects that the GSEs will guarantee new mortgages with principal amounts that total about $1 trillion each year, on average, over the next 10 years, and that the lifetime default rate will decline from 2 percent for mortgages guaranteed in 2010 to 1 percent for those guaranteed in 2013 and subsequent years.

Background

Fannie Mae and Freddie Mac were chartered by the Congress to provide liquidity and stability to the secondary market for residential mortgages (the market in which those mortgages are bought and sold). In carrying out their charters, the two entities purchase mortgage loans made by lenders and package them into mortgage-backed securities that are sold to investors with a guarantee that principal and interest on the underlying mortgages will be paid in full. The GSEs also purchase mortgages and MBSs that they hold in their own portfolios, financed with issues of debt of the GSEs themselves (so-called agency debt).

Before the fall of 2008, Fannie Mae and Freddie Mac had generally been considered private entities owned by their shareholders, despite having a unique legal status and a long history linking them closely to the federal government.

---

[3] Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010).

However, when Fannie Mae and Freddie Mac were placed into conservatorship in September 2008, the federal government came to control both entities and now operates them to fulfill the public purpose of supporting the housing and mortgage markets. Moreover, both entities rely on federal backing to maintain their low-cost access to financial markets. Although they are not legally government agencies, and their employees are not civil servants, CBO believes it is appropriate and useful to policymakers to include their financial transactions alongside all other federal activities in the budget.[4]

Therefore, CBO includes the cost of the entities' mortgage guarantees and portfolio investments in its baseline projections of the federal budget. That is, the mortgages owned or guaranteed by Fannie Mae and Freddie Mac are treated as loans or loan guarantees of the federal government. For the entities' new guarantee commitments and portfolio purchases, CBO projects budget outlays equal to the estimated subsidy inherent in the commitments at the time they are made.

FCRA Subsidy Estimates

The budgetary treatment of federal credit obligations has evolved over time. For the most part, federal expenditures and receipts are accounted for in the budget on a cash basis; that was also the case for federal credit programs before FCRA's enactment in 1990. But cash accounting has several notable deficiencies with regard to credit programs: Direct loans and loan guarantees that are economically equivalent typically have distinctly different cash flows; there is no mechanism for meaningful comparison of the cost of credit assistance with the cost of outright grant assistance; and it is not possible to fully reflect the cost of risk that credit obligations impose on taxpayers.

The Federal Credit Reform Act of 1990 addressed some of the shortcomings of cash accounting for federal credit programs. That act put the estimation of the subsidy costs of direct and guaranteed loans on an accrual basis, and it specified that such subsidy costs should be recorded in the budget when federal loans and guarantees are provided. As a result, the lifetime cost of credit commitments is recognized in the year of loan origination, when the commitment of resources is made. Specifically, under FCRA, the budgetary cost of a direct loan or loan guarantee is calculated as the net present value of expected cash flows over the life of the obligation; the net present value is calculated by discounting cash flows to the time of loan disbursement at rates on Treasury securities of comparable maturity. The budgetary impact of most of the government's credit programs is calculated by that method.

---

[4] See Congressional Budget Office, *CBO's Budgetary Treatment of Fannie Mae and Freddie Mac*, Background Paper (January 2010).

Although the switch from cash accounting to FCRA accounting went a considerable distance toward making different types of credit obligations more comparable to one another and to other federal expenditures, it did not fully achieve its stated purpose of making the budgetary cost of credit programs equivalent to that of other federal spending. There are two reasons for the lack of comparability: First, through its use of Treasury rates for discounting, FCRA implicitly treats market risk as having no cost to the government. FCRA procedures incorporate the expected cost of defaults on government loans or loan guarantees, but those procedures do not account for the uncertainty about how costly such defaults ultimately will be. Investors require compensation (a "market risk premium") in order to bear certain types of risk. Such a premium on a risky loan or guarantee compensates investors for the increased likelihood of sustaining a loss when the overall economy is weak and resources are scarce, and it is reflected in higher expected returns, and lower prices, for assets that carry more market risk. Second, subsidy rates computed under FCRA exclude all administrative costs, even those that are essential for preserving the value of the government's claim, such as loan servicing and collection costs (although those costs are accounted for separately in the budget).[5]

Because the cost of market risk is omitted and essential administrative costs are treated separately, the estimated budgetary cost of a credit obligation is systematically lower than the estimated budgetary cost of an economically equivalent grant or benefit payment. Moreover, federal loans or loan guarantees tend to appear less costly than comparable activity undertaken in the private sector even if the government is not intrinsically more efficient at the activity being analyzed.

By omitting the cost of market risk and thereby understating the economic cost of federal credit obligations, FCRA accounting could lead policymakers to favor federal credit assistance over other forms of aid that have a similar economic cost. For example, low-income homebuyers could be offered assistance of equivalent economic value through a grant program to help fund down payments or through a loan program offering subsidized interest rates. FCRA accounting makes the loan program appear less costly than an equivalent grant program. As another example, applying FCRA accounting to the purchase or sale of securities at competitive prices in the open market—such as Fannie Mae's and Freddie Mac's transactions involving MBSs acquired for their portfolios—generates an estimated

---

[5] Under FCRA, discretionary appropriations for the costs of administering direct loans and loan guarantees are not included in the credit subsidy calculation but are accounted for on a cash basis each year as the cost is incurred. The GSEs receive no appropriated funds, and all administrative costs of their loan guarantees are covered by a portion of the fees they charge for those guarantees. Therefore, to calculate the credit subsidy for the GSEs (either on a FCRA basis or on a fair-value basis), CBO excludes the portion of the guarantee fee that is required to cover those administrative costs. Thus, only a portion of the guarantee fee charged is available to offset the risk of default associated with those guarantees.

budgetary gain for security purchases and an estimated loss for security sales, even though those transactions entail no economic gain or loss.

Fair-Value Subsidy Estimates

The use of fair-value (or risk-adjusted) estimates is an alternative approach that more fully incorporates the cost of risk to the government that is inherent in its credit transactions. In recent years, CBO has provided supplementary information to the Congress on the fair-value cost of several federal credit and insurance programs.[6] The legislation that established the Troubled Asset Relief Program (TARP) specified that the cost of TARP obligations was to be recorded in the budget on a FCRA basis, except that the discount rate used for such budget estimates must be adjusted for the cost of market risk.[7] Thus, CBO and the Administration's Office of Management and Budget both account for the TARP on a fair-value basis.

The main conceptual difference between FCRA estimates and fair-value estimates is in the choice of discount rates—FCRA estimates use Treasury rates, whereas fair-value estimates employ discount rates that are consistent with the risk of the specific credit obligation. Fair-value estimates of federal subsidy costs also generally incorporate the administrative costs that are essential to the preservation of the value of an asset, such as servicing and collection costs.

A common argument is that market risk is not costly to the government, which can borrow at Treasury rates. However, when the government finances a risky loan or loan guarantee by selling a safe Treasury security, it is effectively shifting risk to members of the public. Specifically, if a loan is paid off as expected, the interest and principal payments cover the government's obligation to the holders of the Treasury's debt, but if the borrower defaults, the debt must be repaid through higher future taxes or lower future government benefits or other cuts in spending.

FCRA vs. Fair-Value Estimates for Fannie Mae and Freddie Mac

Both the FCRA approach and the fair-value approach use an accrual basis of accounting, and each relies on the same projections of future cash flows. Both treat Fannie Mae and Freddie Mac as federal entities, and both take into account the lifetime cost of new guarantees made in each year (net of fees collected). (Those forward-looking accrual estimates exclude the effects of outstanding guarantees made in previous years.)

---

[6] See for example, Congressional Budget Office, letter to the Honorable Judd Gregg about the budgetary impact of the President's proposal to alter federal student loan programs (March 15, 2010); *Costs and Policy Options for Federal Student Loan Programs* (March 2010); *The Budgetary Impact and Subsidy Costs of the Federal Reserve's Actions During the Financial Crisis* (May 2010); and *Federal Financial Guarantees Under the Small Business Administration's 7(a) Program* (October 2007).

[7] Emergency Economic Stabilization Act of 2008 (Division A of Public Law 110-343).

The main difference between the FCRA estimates and the fair-value estimates is the discount rate used to calculate the present value of future guarantee costs and portfolio acquisitions: Projected cash flows under FCRA are discounted at Treasury rates, whereas fair-value estimates incorporate a risk premium. Thus, the FCRA estimates omit the cost of market risk that is included in the fair-value estimates.[8] Consequently, CBO's estimates using FCRA procedures show a net gain to the government of $44 billion from the projected new mortgage guarantees of the GSEs over the next decade; the corresponding estimates on a fair-value basis show a net *cost* to the government of $53 billion.

Although the new mortgage guarantees projected for the GSEs over the 2011–2020 period appear to be considerably less risky than were the guarantees made during the peak of the housing boom or during the recession, there are still significant risks. The default rates on GSE-guaranteed mortgages issued in 2008 have been consistently worse than the GSEs had expected. Foreclosure rates on houses remain high, and there is continuing uncertainty about whether house prices will fall further than they already have. Although CBO expects the economy to recover gradually over the next few years, the speed and strength of the recovery are uncertain. High future loss rates on the GSEs' new guarantees are unlikely, but should they recur, it is likely to be when the overall economy is weak and the cost of those losses is high.

In addition, the budgetary impact of any secondary-market purchases of securities by Fannie Mae and Freddie Mac for their investment portfolios will differ significantly depending on whether those purchases are accounted for using a FCRA or a fair-value approach. (That difference does not affect the estimates in Table 1 because those estimates exclude the impact of new purchases of such securities.) Investments in MBSs typically yield a return that is greater than the rates earned on Treasury securities. As a result, discounting the expected cash flows from investments in mortgage-backed securities at Treasury rates, as under FCRA, will result in a net gain from those securities. However, the higher return reflects risks associated with fluctuating interest rates, unexpected changes in mortgage repayments, and other sources of risk that investors require compensation to bear. An estimate of the fair-value subsidy for a mortgage loan or MBS would treat a portion of the income from those assets—namely, the premium attributable to those risks—as having an offsetting cost. Thus, any purchases of mortgages and MBSs by the GSEs at competitive market prices result in no estimated gain or loss on a fair-value basis.

---

[8] Thus far, in contrast, the Administration has treated the GSEs as nongovernmental and has been recording transactions between the Treasury and the GSEs on a cash basis, recording net outlays equal to the capital infusions made by the Treasury less the dividends the entities have paid to the Treasury. In particular, the Treasury recorded net cash infusions to the GSEs of $91 billion in fiscal year 2009, and CBO estimates that additional net cash payments for fiscal year 2010 will total $41 billion.

Basis for CBO's Budgetary Treatment of the GSEs

After consulting with the House and Senate Committees on the Budget, CBO decided that using a fair-value basis to estimate the subsidy cost for Fannie Mae and Freddie Mac under their conservatorship would provide the Congress with the most accurate information about the cost of supporting those entities. Specifically, the fair-value approach provides the Congress with a more comprehensive measure of cost than FCRA or cash-basis accounting because it recognizes that there is a cost to taxpayers when the government assumes financial risk.

Using the fair-value approach to estimating the cost to the government of the GSEs' conservatorship has some drawbacks, however. In particular, using different budgetary treatments for similar federal programs can cause confusion and hamper an accurate comparison of the costs of such programs. For example, although CBO's method of estimating the cost of operating Fannie Mae and Freddie Mac parallels the budget estimates for the activities of the TARP, those estimates are inconsistent with estimates made under FCRA for other federal mortgage guarantee programs, such as the programs operated by the Department of Veterans Affairs and the Federal Housing Administration.

I hope this information is useful to you. We would be pleased to provide further information on this subject. CBO's staff contact on this subject is Deborah Lucas.

Sincerely,

Douglas W. Elmendorf

Douglas W. Elmendorf
Director

cc: Honorable Spencer Bachus
Ranking Member

Honorable John M. Spratt Jr.
Chairman
Committee on the Budget

Honorable Paul Ryan
Ranking Member