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Accounting for Fannie Mae and Freddie Mac in the Federal Budget

Fannie Mae and Freddie Mac were originally chartered as government-sponsored enterprises (GSEs) to ensure a stable supply of credit for mortgages nationwide. They dominate the secondary (resale) market for residential mortgages, in which they buy home loans, pool the loans into mortgage-backed securities, and sell the securities to investors with a guarantee against most losses from defaults on the underlying loans.[1] The two GSEs have been in federal conservatorship since the financial crisis of 2008.

The budgetary treatment of Fannie Mae and Freddie Mac is complex, as is the treatment of policy options for the housing finance system that the Congressional Budget Office analyzes. The budgetary treatment of the GSEs involves two different accounting approaches: fair-value estimating of the costs of the GSEs' mortgage guarantees and cash-based estimating of the GSEs' transactions with the Treasury.

- In CBO's judgment, Fannie Mae and Freddie Mac are effectively part of the government. Hence, in its baseline budget projections for the coming 10 years, CBO accounts for the GSEs' operations as though they are being conducted by a federal agency. CBO measures the cost of the GSEs' mortgage guarantees on a fair-value basis by effectively using market prices for those guarantees. (The fair value of a liability, such as a loan guarantee, is the price that would have to be paid to induce a private financial institution to assume the liability.)
- Although Fannie Mae and Freddie Mac are currently controlled by the government, the Administration's Office of Management and Budget (OMB) treats them as nongovernmental entities for budgetary purposes. OMB records in the budget only cash transactions between the Treasury and the GSEs. In its budget estimates for the current year, CBO too presents the projected cost of Fannie Mae and Freddie Mac on a cash basis so that its estimates for the current year are consistent with how the Administration reports budget totals.

In contrast, CBO accounts for other federal programs that guarantee mortgages—such as programs of the Federal Housing Administration (FHA) and the Department of Veterans Affairs (VA)—using the approach required by the Federal Credit Reform Act of 1990 (FCRA).

This report addresses several questions:

- How does federal control of the GSEs affect their budgetary treatment?
- What types of estimates does CBO prepare for federal credit programs?
- Why does CBO use fair-value accounting for the GSEs?

1. For more information about their operations, see Congressional Budget Office, *Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market* (December 2010), www.cbo.gov/publication/21992.

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

- How do CBO's 10-year projections differ under fair-value and FCRA accounting?

- What are the implications of that budgetary treatment for potential policy changes?

How Does Federal Control of the GSEs Affect Their Budgetary Treatment?

CBO views Fannie Mae and Freddie Mac as part of the government because they are in federal conservatorship and because they are controlled by the Federal Housing Finance Agency, their conservator, and by the Treasury, which has ownership rights to a majority of their stock. Consequently, in its baseline budget projections, CBO treats the GSEs' operations like those of a federal agency.[2] The costs shown in CBO's baseline for the 10-year period after the current year are estimates of the federal subsidies associated with the GSEs' mortgage guarantees over the life of the mortgages. The baseline shows the estimated lifetime subsidy cost of an annual cohort of new guarantees in the year in which the guarantees are projected to be made.[3]

Unlike CBO, OMB treats Fannie Mae and Freddie Mac as nongovernmental entities for the purposes of the federal budget. Instead of recording forward-looking subsidy costs for their new guarantees, OMB records only cash transactions between the Treasury and the GSEs. Those transactions include outlays for federal stock purchases made to shore up the GSEs' capital and receipts from dividends paid to the Treasury on that stock. Essentially, those dividend payments reflect the GSEs' quarterly income.[4] That accounting treatment means that the budgetary effects reported by OMB mix the expected costs (or savings) of new guarantees with the costs (or savings) from the GSEs' outstanding guarantees and other investments.

In general, CBO views transactions between the GSEs and the Treasury as intragovernmental transfers, which have no effect on the budget. However, in its budget estimates for the current fiscal year, CBO follows the Administration's approach to help align its estimate of the current year's budget deficit with the Administration's estimate.

What Types of Estimates Does CBO Prepare for Federal Credit Programs?

If Fannie Mae and Freddie Mac are federal entities (as CBO considers them to be), it is necessary to determine how best to reflect the costs of their credit activities in the budget. CBO produces two types of estimates of the costs of various federal credit programs:

- FCRA estimates, which are created by following procedures prescribed in the Federal Credit Reform Act; and

- Fair-value estimates, which account for the market value of the government's obligations and reflect the risks of those obligations for taxpayers.

The main difference between FCRA and fair-value measures involves their treatment of market risk (sometimes called systemic risk or nondiversifiable risk), which is the risk that an overall market will decline (see Table 1). Most of the risk associated with financial investments can be avoided by having a diverse portfolio of investments; market risk is the component of financial risk that remains even after a portfolio has been diversified as much as possible. It arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions. The government is exposed to market risk through the GSEs because, when the economy is weak, borrowers default on their mortgages more frequently, and recoveries from borrowers are lower. With federal mortgage guarantees, the associated market risk of those obligations is effectively passed along to taxpayers, who, as investors, would view that risk as having a cost.

Fair-value estimates reflect market risk, but FCRA estimates do not. Specifically, the two types of estimates use different discount rates to calculate the present value of the future costs of mortgage guarantees and of purchases

2. See Congressional Budget Office, *How CBO Determines Whether to Classify an Activity as Governmental When Estimating Its Budgetary Effects* (June 2017), www.cbo.gov/publication/52803.

3. For more details, see Congressional Budget Office, *CBO's Budgetary Treatment of Fannie Mae and Freddie Mac* (January 2010), www.cbo.gov/publication/41887.

4. The Federal Housing Finance Agency and the Treasury have several times amended the terms of the conservatorship agreements under which Fannie Mae and Freddie Mac have paid almost all of their earnings to the Treasury in dividends. Specifically, dividend payments are now based on the GSEs' comprehensive income as reported in their quarterly financial statements. Beginning in the fourth quarter of 2017, the government allowed each GSE to keep a $3 billion capital reserve, which means that they have recently retained some of their income.

Table 1.

Comparison of Alternative Budgetary Measures for Fannie Mae and Freddie Mac

	Fair Value	FCRA	Cash
User	Congressional Budget Office[a]	No agencies[b]	Office of Management and Budget
Transactions That Would Be Measured in the Budget	The projected lifetime costs of the GSEs' new credit guarantees	The projected lifetime costs of the GSEs' new credit guarantees	Projected cash flows between the Treasury and the GSEs
Impact of Time	A dollar today is valued more than a dollar a year from now	A dollar today is valued more than a dollar a year from now	A dollar today is valued the same as a dollar a year from now
Impact of Market Risk[c]	Market risk is included	Market risk is excluded	Market risk is excluded
Discount Rate[d]	Interest rates on Treasury securities plus a premium for market risk[e]	Interest rates on Treasury securities	Not applicable
Net Budgetary Effect of the GSEs' Activities Under Current Policy	New guarantees are projected to increase net federal spending because the GSEs' guarantee fees are not high enough to cover expected costs from mortgage losses if the cost of market risk borne by taxpayers is included	New guarantees are projected to reduce net federal spending because the GSEs' guarantee fees are high enough to cover expected costs from mortgage losses if market risk is not accounted for	The GSEs' cash transactions with the Treasury are projected to reduce net federal spending because the GSEs' future dividend payments to the Treasury are expected to exceed any new financial assistance that the GSEs receive from the Treasury

Source: Congressional Budget Office.

FCRA = Federal Credit Reform Act of 1990; GSEs = government-sponsored enterprises (in this case, Fannie Mae and Freddie Mac); OMB = Office of Management and Budget.

a. CBO reports the net budgetary effect of the GSEs in the current year on a cash basis to align its estimate of the current year's budget deficit with OMB's estimate. For later years, CBO projects the net budgetary effect of the GSEs on a fair-value basis.

b. CBO and OMB are required by law to use FCRA accounting for most other federal credit programs.

c. Market risk is the component of financial risk that remains even after a portfolio of investments has been diversified as much as possible. It is correlated with overall economic conditions.

d. The discount rate is the interest rate used to translate past and future cash flows into present values.

e. The market risk premium represents the additional compensation that private investors would demand to invest in risky assets such as mortgages.

of mortgages and mortgage-backed securities. Under FCRA, projected cash flows are discounted to the present using interest rates on Treasury securities, which are free of market risk. Fair-value estimates use higher discount rates that incorporate a premium for market risk (the additional compensation that private investors would demand to invest in risky assets such as home loans).[5]

5. For more information about the differences between fair-value and FCRA estimates, see Congressional Budget Office, *How CBO Produces Fair-Value Estimates of the Cost of Federal Credit Programs: A Primer* (July 2018), www.cbo.gov/publication/53886.

The cost of a loan guarantee calculated using the fair-value approach is higher than the cost as estimated under FCRA. When the government guarantees a mortgage, it bears the losses resulting from default on the loan and any market risk associated with those losses. Thus, a lender places more value on a mortgage with a guarantee than on the same loan without a guarantee. The difference between those two values is the fair value of the guarantee, which reflects the greater losses that a private lender would expect on a loan without a guarantee and the higher discount rate that the lender would require to compensate for the market risk associated with such a loan. Under FCRA, projected losses would be included in the cost of a loan guarantee, but the value of market risk would not. Because a loan without a guarantee has more market risk than the same loan with a guarantee, assigning a cost to market risk through fair-value accounting results in a higher estimated cost for the guarantee than under the FCRA approach.

Why Does CBO Use Fair-Value Accounting for the GSEs?

CBO and OMB are required by law to account for most federal credit programs on a FCRA basis. However, after consulting with the House and Senate Committees on the Budget, CBO concluded that using a fair-value approach to estimate federal subsidy costs for Fannie Mae and Freddie Mac would give lawmakers the most accurate and complete information about the budgetary costs of supporting the GSEs.[6]

For every new set of baseline budget projections, CBO estimates the federal subsidy cost of the GSEs' new guarantees in the budget year (the fiscal year for which the budget is being considered) and in each of the following nine years on a fair-value basis.[7] The average subsidy rate (the subsidy cost per dollar of mortgage principal guaranteed) of the GSEs' new business has fallen since the peak of the financial crisis as the housing markets have recovered.

The law that created the Troubled Asset Relief Program (TARP) in 2008 specified that a fair-value approach be used to account for the program's purchases and guarantees of troubled assets (including mortgages).[8] Using fair-value measures for the GSEs meant that the government's risky financial assistance programs during the financial crisis were accounted for on the same basis.

Fair-value estimates represent the up-front payment that a private entity in an orderly transaction would require to assume the federal government's responsibility for the GSEs' obligations. (An orderly transaction precludes the types of "fire sales" of financial assets at distressed prices that some firms engaged in during the financial crisis.) The fair-value approach produces estimates of the value of assets and liabilities that either correspond to or approximate market prices.[9]

In CBO's judgment, using fair-value accounting rather than an alternative budgetary treatment to estimate federal subsidy costs for Fannie Mae and Freddie Mac has two main advantages:

- By incorporating market risk, the fair-value approach provides lawmakers with a more comprehensive measure of the cost of supporting the GSEs in conservatorship, reflecting the risks to taxpayers of the GSEs' transactions.

- That approach aligns the budgetary costs with the economic costs of any eventual transition to a new model for the federal role in the secondary mortgage market. By taking into account how the public assesses financial risks, as expressed through market prices, fair-value estimates can help policymakers understand trade-offs between some types of policies.

The fair-value approach also has some disadvantages:

- Because fair-value estimates include a premium for market risk, they do not equal the expected average budgetary effects of federal credit programs, unlike FCRA measures and most other estimates used in the budget process. (Average budgetary effects are sometimes not the most useful measure of a program's cost, however.)

- Using fair-value accounting for the GSEs' guarantees and FCRA accounting for other federal mortgage

6. 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.

7. For information about the models that CBO uses to produce estimates for Fannie Mae, Freddie Mac, and FHA, see Congressional Budget Office, *Modeling the Subsidy Rate for Federal Single-Family Mortgage Insurance Programs* (January 2018), www.cbo.gov/publication/53402.

8. The TARP was created by the Emergency Economic Stabilization Act of 2008 (Division A of Public Law 110-343). For information about the program, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—March 2018* (March 2018), www.cbo.gov/publication/53617.

9. For an analysis of the advantages and disadvantages of fair-value accounting, see the testimony of Douglas W. Elmendorf, Director, Congressional Budget Office, before the House Committee on Financial Services, *Estimates of the Cost of the Credit Programs of the Export-Import Bank* (June 25, 2014), www.cbo.gov/publication/45468.

guarantees—such as those provided by FHA and VA—creates inconsistency because similar transactions are valued differently.

- Although FCRA requires agencies that operate credit programs to reestimate the costs of previous credit activity in light of outcomes for loans and guarantees or other developments, fair-value estimates would add complexity to that process. Because market risk is not a cost that affects average cash flows, the adjustment for market risk would ultimately need to be factored out of the budget once the loan transactions were completed.

- Communicating the basis for fair-value estimates to policymakers and the public is harder than communicating the basis for FCRA estimates.

How Do CBO's 10-Year Projections Differ Under Fair-Value and FCRA Accounting?

The fair-value and FCRA approaches paint very different pictures of the cost of continuing to operate Fannie Mae and Freddie Mac over the next decade under current law. Measured on a fair-value basis, the $12 trillion of new loan guarantees that the GSEs are projected to make between 2019 and 2028 would have a total *cost* to the government of $19 billion, CBO estimates.[10] That cost occurs because the guarantee fees that the GSEs charge are slightly below those that private insurers would charge, in CBO's estimation. By contrast, a baseline prepared on a FCRA basis would show a total *savings* of $172 billion on the 2019–2028 cohorts of guarantees, because the GSEs' guarantee fees are currently high enough to more than cover projected losses (though not high enough to cover the risk that a competitive insurance company would factor in when charging for the same guarantees).[11]

What Are the Implications of That Budgetary Treatment for Potential Policy Changes?

The choice of accounting treatment has implications for the estimated budgetary effects of options to attract more private capital to the secondary mortgage market and of transitions to alternative structures for that market.[12] For most proposals, fair-value accounting would show savings from a reduced federal role in the secondary market. However, the Administration's cash-based accounting (which treats the GSEs as nongovernmental entities) or the FCRA approach would not report any savings from such proposals compared with current law. Under those accounting methods, transitioning to greater private-sector involvement in the secondary mortgage market would probably result in estimated costs to the federal government.[13]

An example illustrates how the choice between fair-value and FCRA accounting would affect whether adopting a new structure for the secondary mortgage market would result in estimated savings or costs. The example focuses on a joint public-private market structure in which the government, through a new federal guarantee agency, would act as "guarantor of last resort" for new mortgages. (That example is one of several structures that CBO examined in a recent report.)[14]

Under that structure, most new mortgages issued in normal economic times would not qualify to be guaranteed by the new federal entity, but they could be privately guaranteed. During a financial crisis, however, the new federal agency would increase its role and fully guarantee

10. See Congressional Budget Office, "Federal Programs That Guarantee Mortgages—CBO's April 2018 Baseline" (April 2018), www.cbo.gov/sites/default/files/recurringdata/51297-2018-04-mortgages.pdf (51 KB). For additional information, see Congressional Budget Office, *Fair-Value Estimates of the Cost of Federal Credit Programs in 2019* (June 2018), www.cbo.gov/publication/54095.

11. For an analysis of the costs of Fannie Mae and Freddie Mac under different accounting measures, see Congressional Budget Office, letter to the Honorable Barney Frank about the budgetary impact of Fannie Mae and Freddie Mac (September 16, 2010), www.cbo.gov/publication/21707.

12. For illustrative examples of such options, see Congressional Budget Office, *Transitioning to Alternative Structures for Housing Finance: An Update* (August 2018), www.cbo.gov/publication/54218.

13. In its cost estimates for policy options to restructure the GSEs, as well as for options that would affect FHA's and VA's housing programs, CBO provides estimates of the changes in spending on both a FCRA basis and a fair-value basis. For example, see Congressional Budget Office, cost estimate for S. 1217, the Housing Finance Reform and Taxpayer Protection Act of 2014 (September 5, 2014), www.cbo.gov/publication/45687. Also see Congressional Budget Office, *CBO's Cost Estimates Explained* (September 2018), www.cbo.gov/publication/54437.

14. See Congressional Budget Office, *Transitioning to Alternative Structures for Housing Finance: An Update* (August 2018), www.cbo.gov/publication/54218. The new federal guarantee agency could be created from Fannie Mae or Freddie Mac, or its role could be played by FHA or Ginnie Mae.

Table 2.

An Example of How Different Accounting Treatments Affect Estimates of Federal Subsidy Costs for New Mortgage Guarantees, 2019 to 2028

Billions of Dollars

	Transition Period, 2019—2023	New Structure, 2024—2028	Total, 2019—2028
		On a Fair-Value Basis	
Subsidy Costs Under Current Policy (CBO's Baseline)[a]	8.0	11.1	19.0
Subsidy Costs Under a Market With the Government as Guarantor of Last Resort	5.2	2.2	7.4
Difference on a Fair-Value Basis	**-2.8**	**-8.9**	**-11.7**
		On a FCRA Basis	
Subsidy Costs Under Current Policy[b]	-79.2	-93.0	-172.2
Subsidy Costs Under a Market With the Government as Guarantor of Last Resort[b]	-58.1	-10.4	-68.4
Difference on a FCRA Basis	**21.2**	**82.6**	**103.8**

Source: Congressional Budget Office.

FCRA = Federal Credit Reform Act of 1990.

A market with the government as guarantor of last resort would be one in which the government would play a very small role during normal economic times but would fully guarantee most new mortgages issued during a financial crisis.

Fair-value and FCRA accounting can both be used to estimate the lifetime costs of the federal government's credit obligations, such as mortgage guarantees made by Fannie Mae and Freddie Mac. The two accounting treatments differ in that fair-value estimates reflect the market risk that the government is exposed to when it guarantees repayment of certain mortgages, whereas FCRA estimates do not. Because of the differences in those accounting treatments, reducing the government's role in guaranteeing mortgages results in net budgetary savings on a fair-value basis but net costs on a FCRA basis.

a. CBO's 10-year baseline projections for Fannie Mae and Freddie Mac are prepared on a fair-value basis and incorporate the assumption that current laws generally remain unchanged.

b. Negative subsidy costs represent savings.

most new mortgages (absorbing all losses and gains on securities backed by those loans). Such an expansion of the government's role could be tied to a significant drop in private mortgage lending or to some other triggering event. Once the financial crisis had passed, the government would severely curtail its volume of new guarantees.

During normal times, the government would guarantee a very small sample of mortgages to maintain its capability to do so. It would allocate those guarantees using auctions (or some other competitive process) to determine federal guarantee fees. By determining the market price of those guarantees' credit risk, auctions would better ensure that taxpayers were compensated for bearing that risk. However, even with risk-based prices for its guarantees during normal economic times, the new federal agency is estimated to have some cost to the government, because CBO's estimates account for the small probability of a financial crisis in any given year.[15]

Under that market structure, the total amount of new federally guaranteed mortgages during the 2019–2028 period would be more than $8 trillion smaller than it would be under current policy, CBO estimates. In designing an illustrative scenario for that structure, CBO envisioned a five-year transition in which the key

15. Specifically, CBO estimates that there is a probability of 1 percent to 2 percent each year of a financial crisis that would be severe enough to spill over into the rest of the economy and cause a recession.

policy change would be the use of auctions to efficiently allocate limited amounts of federal guarantees. The new federal agency would begin operating in 2024.

Having the government assume the role of guarantor of last result would have the following effects on estimated federal subsidy costs for mortgage guarantees (see Table 2 on page 6):

- Measured on a fair-value basis, that market structure would *save* $11.7 billion between 2019 and 2028 compared with CBO's current-policy baseline (which uses fair-value accounting for Fannie Mae and Freddie Mac). Reducing the amount of federal guarantees would save money on a fair-value basis primarily because those guarantees are currently priced slightly lower than private insurers would charge, in CBO's estimation.

- Measured on a FCRA basis, that market structure would *cost* $103.8 billion between 2019 and 2028 compared with current-policy estimates prepared using FCRA accounting. On that basis, reducing the amount of federal guarantees would cost money because the government would forgo a stream of cash flows that is projected to generate net income: receipts from guarantee fees that exceed the present value of outlays for credit losses on those guarantees if market risk is not accounted for.

If a proposal to change the structure of the secondary mortgage market was included in legislation reported by a Congressional committee, CBO would produce both types of estimates to give lawmakers relevant and complete information.[16] Lawmakers could consider the information provided by both fair-value and FCRA estimates for the GSEs and other federal housing activities in any restructuring of the housing finance system. However, unless lawmakers specified an alternative treatment, OMB would probably account in the budget for the cost of new loan guarantees made by a new federal agency in accordance with FCRA—the same way it would record any budgetary effects that the proposed restructuring would have on FHA. (During the transition to a new market structure, Fannie Mae and Freddie Mac would still be guaranteeing mortgage-backed securities, so CBO would continue to estimate the budgetary effects of their activities on a fair-value basis.)

16. Under section 5106 of the Concurrent Resolution on the Budget for Fiscal Year 2018 (H. Con. Res. 71), CBO is required, to the extent practicable, to provide fair-value estimates as well as FCRA estimates for federal credit programs that involve housing and student financial aid.

This document, which is part of the Congressional Budget Office's continuing effort to make its work transparent, explains how CBO accounts for Fannie Mae and Freddie Mac in the federal budget. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

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