



# Estimates of the Cost of Federal Credit Programs in 2024

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## Summary

The federal government supports some private activities by offering credit assistance to individuals and businesses. That assistance is provided through direct loans and guarantees of loans made by private financial institutions. In this report, the Congressional Budget Office estimates the lifetime costs of new loans and loan guarantees that are projected to be issued in 2024.<sup>1</sup>

The report shows two kinds of estimates: those currently used in the federal budget, which are made by following the procedures specified in the Federal Credit Reform Act of 1990 (FCRA), and those referred to as fair-value estimates, which measure the market value of the government's obligations. Most of the FCRA estimates were produced by other federal agencies; the FCRA estimates for the largest federal credit programs and all of the fair-value estimates were produced by CBO.

Using FCRA procedures, CBO estimates that new loans and loan guarantees issued in 2024 would cost the federal government \$10.9 billion over their lifetime. But using the fair-value approach, CBO estimates that those loans and guarantees would have a lifetime cost of \$76.7 billion. More than 60 percent of the difference between those amounts is attributable to three sources:

- **Guarantees made by Fannie Mae and Freddie Mac.** Analyzed on a FCRA basis, those guarantees would *save* the federal government \$13.4 billion but would *cost* \$8.3 billion on a fair-value basis.

- **The Department of Housing and Urban Development's (HUD's) loan and loan guarantee programs.** On a FCRA basis, those programs are projected to *save* \$2.2 billion but to *cost* \$11.4 billion on a fair-value basis.
- **The Department of Education's student loan programs.** Those programs are projected to cost \$19.3 billion on a FCRA basis but to cost \$25.4 billion on a fair-value basis.

## Federal Credit Programs

For this report, CBO analyzed the 131 programs through which the federal government provides credit assistance. The total amount of federal credit assistance projected for 2024 is \$1.6 trillion, consisting of new direct loans that total \$221 billion and new loan guarantees that cover \$1.3 trillion in loans. Just a few programs—namely, those offering mortgage guarantees and student loans—are projected to provide 83 percent of total federal credit assistance. The largest federal credit programs by far are the guarantees of mortgage-backed securities provided by the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac.<sup>2</sup> Together, the two GSEs are projected to provide \$804 billion in new guarantees in 2024.

Discretionary programs, which are funded through annual appropriation acts, account for 112 of the

1. Lifetime costs represent the estimated net value at the time of disbursement of the federal government's expected cash flows stemming from a credit commitment over the life of a loan. Estimates of those costs take into account the time value of money.

2. Fannie Mae and Freddie Mac have been in federal conservatorship since September 2008. CBO treats the two GSEs as government entities in its budget estimates because, under the terms of the conservatorships, the federal government retains operational control and effective ownership of Fannie Mae and Freddie Mac. For further discussion, see Congressional Budget Office, *Effects of Recapitalizing Fannie Mae and Freddie Mac Through Administrative Actions* (August 2020), [www.cbo.gov/publication/56496](http://www.cbo.gov/publication/56496), and *The Effects of Increasing Fannie Mae's and Freddie Mac's Capital* (October 2016), [www.cbo.gov/publication/52089](http://www.cbo.gov/publication/52089).

131 programs analyzed and about one-third of the projected dollar value of loans and guarantees. The largest discretionary programs are the mortgage programs administered by the Federal Housing Administration (FHA), which is part of HUD, and the Department of Agriculture's Rural Housing Service (RHS); the small-business loans provided by the Small Business Administration (SBA); and the Department of Energy's loans for advanced vehicle manufacturing and Title 17 loans for innovative technologies.

The other 19 programs include mandatory programs and commitments made through Fannie Mae's and Freddie Mac's guarantees of mortgage-backed securities. For mandatory programs, lawmakers determine spending by setting eligibility rules and other criteria in authorizing legislation rather than by appropriating specific amounts each year. The largest of the mandatory programs that CBO analyzed are the Department of Education's student loan programs and the mortgage guarantee program administered by the Department of Veterans Affairs (VA). CBO includes the commitments made by Fannie Mae and Freddie Mac in the category of mandatory programs because they are made outside of the annual appropriation process.

To compute the estimates in this analysis, CBO used its own projections of the volume of loans and cash flows for the largest credit programs. Specifically, the agency used its own estimates for Fannie Mae and Freddie Mac, the FHA's single-family mortgage and reverse mortgage guarantee programs, VA's mortgage guarantee program, and the Department of Education's student loan programs. Making such projections is a routine part of preparing CBO's baseline budget projections because those programs, which account for more than 80 percent of total federal credit assistance, have the potential to have a significant effect on the federal budget.<sup>3</sup>

For smaller federal credit programs, which are mostly funded by discretionary appropriations, CBO generally projects that under current law, subsidy costs would grow at the rate of inflation—the same approach that the agency uses to project all discretionary appropriations. Because CBO does not estimate cash flows for those smaller credit programs, the agency based its subsidy estimates for those programs on cash flow estimates prepared by the Administration, which reflect the President's proposed

funding for 2024. Nevertheless, in aggregate, CBO's baseline projections for federal credit programs are similar to those produced for this report using FCRA procedures.

The projected volume of loans and cash flows may change each year because of policy changes, the availability of more recent data, new estimation methods, changes in economic conditions, or changing characteristics of participants in programs. Because of such factors, CBO and the agencies that produce FCRA estimates have updated many of their projections for 2023 since CBO last published its estimates of the costs of federal credit programs in June 2022.<sup>4</sup> Those revisions have influenced cash flow estimates for new loans and guarantees issued in 2024.

## The FCRA and Fair-Value Approaches

In the analysis underlying this report, CBO estimated the cost of federal credit programs—referred to as the subsidy cost—using two approaches. The first follows the procedures prescribed by FCRA, which the Office of Management and Budget (OMB) currently uses for most credit programs in the federal budget. The second, called the fair-value approach, estimates the market value of the government's obligations by accounting for market risk. Market risk is the component of financial risk that remains even after investors have diversified their portfolios 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.<sup>5</sup> For taking on market risk, investors demand greater compensation than they would expect to receive from investing in Treasury securities, which are regarded as risk-free.<sup>6</sup> The additional compensation—the difference between the expected return on the investment

3. Those baseline projections, which CBO usually issues several times each year, reflect the assumption that current laws governing taxes and spending will generally remain unchanged.

4. Congressional Budget Office, *Estimates of the Cost of Federal Credit Programs in 2023* (June 2022), [www.cbo.gov/publication/58031](http://www.cbo.gov/publication/58031).

5. For further discussion, 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](http://www.cbo.gov/publication/53886).

6. Treasury securities are generally viewed as risk-free in the case of credit risk—the risk that the federal government will default. However, Treasury securities are subject to interest rate risk—the risk that arises when prevailing interest rates change—when the holder sells the security before its maturity date.

with market risk and the expected return on Treasury securities—is called the risk premium.<sup>7</sup>

Both the FCRA method and the fair-value method are examples of accrual accounting. Under accrual accounting, unlike cash accounting, the estimated present value of credit programs' expenses and related receipts is recorded when the legal obligation is first made rather than when subsequent cash transactions occur.<sup>8</sup> (The present value is a single number that expresses the flows of current and projected future income or payments in terms of an equivalent lump sum received or paid at a specified time. That number depends on the discount rate, or rate of interest, that is used to translate future cash flows into current dollars.)

In CBO's view, fair-value estimates are a more comprehensive measure than FCRA estimates of the costs of federal credit programs, and thus they help lawmakers better understand the advantages and drawbacks of various policies. For purposes of comparison, FCRA estimates are included alongside the fair-value estimates in this analysis. The differences between the two sets of estimates—which are based on the same projected cash flows—highlight the effect of incorporating market risk into the costs of federal credit programs.

## Estimation Methods Used in the Fair-Value Approach

Fair-value estimates are calculated using discounting methods that are consistent with the way the loan or loan guarantee would be priced in a competitive market. By contrast, for FCRA estimates, the projected interest rates on Treasury securities with corresponding terms to maturity are used as the discount rates. The difference between the FCRA and fair-value discount rates can be interpreted as a risk premium. In general, the cost of a direct loan or a loan guarantee reported in the federal budget under FCRA procedures is lower than the fair-value cost that private institutions would assign to similar credit assistance on the basis of market prices.

One common method for estimating the fair value of a direct loan or loan guarantee is to use market-based discount rates to calculate its present value. CBO used that method for all housing and real estate programs discussed in this report.<sup>9</sup>

An alternative method for obtaining fair-value subsidy costs that is consistent with the first method is to adjust projected cash flows and then discount them using the interest rates on Treasury securities.<sup>10</sup> Under that alternative method, the projected default and recovery amounts are multiplied by a factor called a loss multiple to directly incorporate the market risk into the cash flows. The multiple is equal to the ratio of the risk premium of a loan to the loss rate of the loan.<sup>11</sup> The loss multiple is an alternative measure of the compensation that investors require to take on market risk. CBO used that method for all student, commercial, and consumer loan programs discussed in this report.

The choice between adjusting the discount rates and adjusting the cash flows using the methods described above is a question of accuracy and ease of implementation. The loss-multiple method better fits the data for federal student, consumer, and commercial loans and is likely to be more accurate when extrapolated to longer maturities. In addition, the loss-multiple method is more sensitive to special features of federal credit programs, such as very long maturities and nonstandard amortization schedules. For housing and real estate programs, maturities of loans and guarantees made through government programs are like those in the private sector, and the adjusted-discount-rate and loss-multiple methods are likely to generate similar results. Therefore, CBO

7. For more details, see Michael Falkenheim and Wendy Kiska, *How CBO Estimates the Market Risk of Federal Credit Programs*, Working Paper 2021-14 (Congressional Budget Office, November 2021), [www.cbo.gov/publication/57581](http://www.cbo.gov/publication/57581).

8. For further discussion, see Congressional Budget Office, *Cash and Accrual Measures in Federal Budgeting* (January 2018), [www.cbo.gov/publication/53461](http://www.cbo.gov/publication/53461).

9. For additional information about the fair-value cost of mortgage obligations, see Michael Falkenheim and Jeffrey Perry, *A Model for Pricing Federal Housing Finance Obligations*, Working Paper 2022-06 (Congressional Budget Office, April 2022), [www.cbo.gov/publication/57844](http://www.cbo.gov/publication/57844).

10. For additional discussion, see Michael Falkenheim, *Governmental Risk Taking Under Market Imperfections*, Working Paper 2021-07 (Congressional Budget Office, June 2021), [www.cbo.gov/publication/57255](http://www.cbo.gov/publication/57255), and *Fair-Value Cost Estimation and Government Cash Flows*, Working Paper 2021-05 (Congressional Budget Office, April 2021), [www.cbo.gov/publication/57062](http://www.cbo.gov/publication/57062).

11. The loss rate of a loan is equal to the loan's default rate times one minus the recovery rate. For example, a loan with a 10 percent default rate and a 90 percent recovery rate has a loss rate of 1 percent:  $0.1 \times (1 - 0.9) = 0.01$ .

continues to use the adjusted-discount-rate method for those programs because it is easier to implement.

## Projected Costs of Federal Credit Programs Under the FCRA and Fair-Value Approaches

Using FCRA procedures, CBO estimates that the \$1.6 trillion in new loans and loan guarantees projected to be issued by the federal government in 2024 would result in budgetary costs of \$10.9 billion over their lifetime and thus add to the deficit in 2024 (see Table 1).<sup>12</sup> Using the fair-value approach, CBO estimates that those loans and guarantees would have a lifetime cost of \$76.7 billion and thus add a much larger amount to the deficit.

### Differences Between FCRA and Fair-Value Subsidy Rates

For every program that CBO analyzed, the projected fair-value subsidy rate is higher than the projected FCRA subsidy rate—about 4.2 percentage points higher, on average. (The subsidy rate is the cost divided by the amount disbursed; a positive rate indicates a government subsidy, and therefore a cost to the government, and a negative rate indicates budgetary savings.)<sup>13</sup> Weighted by the amount of the programs' credit, the average subsidy rate is 0.7 percent on a FCRA basis and 4.9 percent on a fair-value basis.

The difference between the fair-value subsidy rate and the FCRA subsidy rate varies considerably by program. The largest difference, 33.5 percentage points, is between

the subsidy rates for loan guarantees provided under the Department of Agriculture's Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program (the Section 9003 Program); that difference reflects the high degree of market risk in that program. For lending programs subject to less market risk, the difference is much smaller—for instance, the average fair-value subsidy rate for housing and real estate loans is 3.2 percentage points higher than the FCRA subsidy rate.

The only broad category of lending with a negative FCRA subsidy rate and a positive fair-value subsidy rate consists of housing and real estate loans. Under FCRA procedures, those loans generate budgetary savings; under the fair-value approach, most of those savings become costs.

### How Negative Subsidy Rates Might Occur Under the Fair-Value Approach

Although most programs that have a negative subsidy rate under FCRA procedures have a positive subsidy rate under the fair-value approach, some subsidy rates are estimated to be negative under the fair-value approach. That is the case for the Department of Education's PLUS loan program for parents of undergraduate students, the Export-Import Bank's medium- and long-term guarantees and medium-term insurance, the Department of Agriculture's two electric loan programs (which are used to finance facilities that generate, transmit, or distribute electricity), and several smaller programs.<sup>14</sup>

In principle, programs with a negative fair-value subsidy rate should be rare because such a rate should represent a profitable opportunity for a private financial institution to provide credit on the same or better terms. But negative fair-value subsidy rates could arise in situations that private entities might not find attractive—if, for example, there were barriers to entry (such as the need for private lenders to incur large fixed costs to enter a particular credit market)

12. About half of that credit assistance would be provided by Fannie Mae and Freddie Mac. Because CBO considers them to be federally owned and controlled, it treats their loan guarantees as federal commitments and accounts for them on a fair-value basis when preparing its baseline budget projections. By contrast, OMB treats those entities as private companies, and in the federal budget, it generally displays only the cash transactions between them and the Treasury. See Congressional Budget Office, *Accounting for Fannie Mae and Freddie Mac in the Federal Budget* (September 2018), [www.cbo.gov/publication/54475](http://www.cbo.gov/publication/54475). For other credit programs analyzed in this report, both CBO and OMB account for budgetary costs using the methods prescribed by FCRA.

13. To calculate the budgetary cost or savings, CBO and other federal agencies multiply the size of the commitment or obligation by the subsidy rate, so programs with high subsidy rates do not necessarily have the largest total budgetary impact. For example, under FCRA, the Federal Emergency Management Agency's Community Disaster Loan Program has the highest subsidy rate (91.2 percent) and a budgetary cost of \$34 million. By contrast, VA's mortgage guarantee program has a much lower subsidy rate (1.2 percent) but is projected to cost \$1.8 billion—more than any credit program other than student loans.

14. The Department of Agriculture administers two similar programs that provide electric loans, though the interest rate charged by each program differs. The traditional direct program adds an interest rate spread to the rate on Treasury securities; the other program, which is funded through the Federal Financing Bank, adds a liquidity premium to the rate on Treasury securities. The Federal Financing Bank is a government corporation that borrows from the Treasury and lends to federal agencies and private entities that receive federal guarantees. One of the purposes of the Federal Financing Bank is to reduce the costs of federal borrowing in a way that is least disruptive to private markets, allowing the corporation to provide lending terms for any amount required and for nearly any maturity. See Federal Financing Bank Act of 1973, 12 U.S.C. § 2281, et seq.

Table 1.

## Projected Costs of Federal Credit Programs in 2024

	Number of Programs	Obligations or Commitments (Billions of dollars)	Subsidy Rate (Percent) <sup>a</sup>		Subsidy (Billions of dollars)	
			FCRA Estimate	Fair-Value Estimate	FCRA Estimate	Fair-Value Estimate
<b>By Lending Category</b>						
Housing and Real Estate Loans	41	1,233	-1.1	2.1	-13.7	26.2
Commercial Loans	83	231	2.3	10.9	5.3	25.1
Student Loans	5	89	21.6	28.4	19.3	25.4
Consumer Loans	2	*	33.9	42.0	*	*
<b>All Lending Categories</b>	<b>131</b>	<b>1,553</b>	<b>0.7</b>	<b>4.9</b>	<b>10.9</b>	<b>76.7</b>
<b>By Department or Agency</b>						
Fannie Mae and Freddie Mac	1	804	-1.7	1.0	-13.4	8.3
Housing and Urban Development	22	247	-0.9	4.6	-2.2	11.4
Veterans Affairs	5	146	1.2	3.0	1.7	4.3
Education	6	90	21.6	28.4	19.4	25.5
Agriculture	48	74	3.3	7.5	2.4	5.5
Small Business Administration	7	59	0.4	10.4	0.2	6.1
Energy	6	46	6.1	16.7	2.8	7.7
International Assistance	14	44	0.1	7.2	*	3.2
Export-Import Bank	5	12	-5.3	-1.4	-0.6	-0.2
Transportation	3	5	1.1	13.0	0.1	0.7
Other <sup>b</sup>	14	26	2.2	15.7	0.6	4.1
<b>All Departments and Agencies</b>	<b>131</b>	<b>1,553</b>	<b>0.7</b>	<b>4.9</b>	<b>10.9</b>	<b>76.7</b>

Data sources: Congressional Budget Office; Office of Management and Budget. See [www.cbo.gov/publication/59232#data](http://www.cbo.gov/publication/59232#data).

Fair-value estimates differ from FCRA estimates in that they account for market risk—the component of financial risk that remains even with a well-diversified portfolio. Market risk arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions.

For discretionary programs, the projections of cash flows prepared by other agencies reflect the Administration's proposed funding for 2024.

The table provides estimates for every program (except for consolidation loans issued by the Department of Education) for which 2024 information is provided in Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2024: Credit Supplement* (March 2023), [www.govinfo.gov/app/details/BUDGET-2024-FCS](http://www.govinfo.gov/app/details/BUDGET-2024-FCS). CBO has added loan guarantees made by Fannie Mae and Freddie Mac.

Most of the obligations, commitments, and FCRA estimates shown are from the Office of Management and Budget. The exceptions are estimates for student loans, which are administered by the Department of Education, and for programs related to single-family mortgages administered by Fannie Mae, Freddie Mac, the Department of Veterans Affairs, and the Federal Housing Administration in the Department of Housing and Urban Development (HUD); those estimates were produced by CBO. CBO excludes guarantees provided through Ginnie Mae and secondary market guarantees provided by the Small Business Administration (SBA) from its estimate of total credit assistance because they are incremental guarantees on loans already included in the totals for loans guaranteed by HUD and the SBA.

FCRA = Federal Credit Reform Act; \* = between zero and \$50 million.

a. The subsidy rate is the cost of a program, calculated on either a FCRA or fair-value basis, divided by the amount disbursed. A positive subsidy rate indicates a cost to the government, and a negative rate indicates budgetary savings.

b. Includes the Departments of Commerce, Health and Human Services, Homeland Security, the Interior, State, and the Treasury, as well as the Environmental Protection Agency.



or if the profit opportunity was expected to be short-lived. Furthermore, in some cases, such as for student loans, the federal government has tools to collect from delinquent borrowers that private lenders do not have, giving federal programs an advantage over private-sector competitors.

Another possibility is that a fair-value subsidy rate might be estimated to be negative because of an error in one of the factors used to calculate the rate; those factors could include an underestimate of the appropriate risk premium because of a lack of good market proxies or an understatement of the true cost of a program because administrative costs are not included in the calculation.

### Projected Costs of Discretionary and Mandatory Programs Under Both Approaches

For loans and loan guarantees that are expected to be issued in 2024, all discretionary credit programs, considered together, are projected to cost \$2.8 billion on a FCRA basis, and all mandatory credit programs are projected to cost \$8.1 billion. For 2023, those programs were projected to generate savings on a FCRA basis. The 2024 amounts represent an increase in costs of \$11.2 billion and \$40.8 billion, respectively, relative to the savings that were projected last year for 2023.

On a fair-value basis, discretionary programs providing loans and loan guarantees in 2024 are projected to cost \$35.2 billion, and mandatory programs are projected to cost \$41.4 billion. Those costs are, respectively, \$5.0 billion more and \$20.5 billion more than the costs that were projected last year for 2023. The largest changes—on both a FCRA and a fair-value basis—are in the costs of student loans and the mortgage guarantees made by Fannie Mae and Freddie Mac. Significant factors contributing to those changes include changes in the programs' operations and changes in CBO's economic forecast.

Of the 112 discretionary federal credit programs, 53 have a subsidy rate that is estimated to be zero or negative on a FCRA basis in 2024. CBO estimates that on a fair-value basis, 42 of those programs have a positive subsidy rate and thus would result in a cost to the federal government.<sup>15</sup> Of the 19 mandatory programs, 9 have a subsidy rate that is estimated to be zero or negative on a FCRA basis in 2024. CBO estimates that on a fair-value basis,

4 of those programs have a positive subsidy rate and thus would represent a cost to the federal government.

### Projected Costs of Particular Categories of Lending Under Both Approaches

For ease of reference, CBO has divided the loans and loans guarantees that it analyzed into four categories: housing and real estate loans, student loans, commercial loans, and consumer loans. In the discussion that follows, CBO presents the current projections for fiscal year 2024 and compares them with the projections for 2023 that the agency published in June 2022.<sup>16</sup> For discretionary programs, the outcomes will depend on the appropriation actions that were taken for 2023 and will be taken for 2024. (Appropriations for 2023 were enacted after CBO's report was issued last year and therefore were not reflected in those estimates.)

#### Housing and Real Estate Loans

In CBO's projections, most of the federal government's credit assistance in 2024 is provided by Fannie Mae and Freddie Mac. That assistance amounts to \$804 billion in mortgage guarantees. The two GSEs primarily buy mortgages from lenders and pool the mortgages to create mortgage-backed securities, which they guarantee against default and sell to investors. Because the GSEs are currently in federal conservatorship, CBO regards those loan guarantees as governmental commitments; the Administration does not. Other housing and real estate programs include loan guarantees provided by HUD (\$246 billion), VA (\$146 billion), and RHS (\$31 billion). Of the \$246 billion in loan guarantees provided by HUD, \$205 billion is attributable to guarantees of single-family mortgages provided through the FHA.

All told, the federal government's credit assistance in the form of housing and real estate loans and guarantees is projected to amount to \$1.2 trillion in 2024, or 79 percent of the projected \$1.6 trillion in total credit assistance. Even without considering the GSEs, that category accounts for the bulk of federal credit assistance. If the GSEs are excluded, federal credit assistance in this category is projected to amount to \$429 billion in 2024, or 57 percent of the smaller total (\$750 billion, which is equal to \$1.6 trillion in total credit assistance minus the \$804 billion that is attributable to the GSEs).

15. In this analysis, a subsidy rate was deemed to be zero if it fell between -0.1 percent and 0.1 percent. See Supplemental Table 2, which is posted along with this report at [www.cbo.gov/publication/59232](http://www.cbo.gov/publication/59232).

16. See Congressional Budget Office, *Estimates of the Cost of Federal Credit Programs in 2023* (June 2022), [www.cbo.gov/publication/58031](http://www.cbo.gov/publication/58031).

The federal government also provides guarantees through the Government National Mortgage Association (Ginnie Mae, which is part of HUD) for securities that are themselves backed by federally guaranteed mortgages, including mortgages guaranteed by the FHA and VA.<sup>17</sup> In CBO's projections, guarantees provided through Ginnie Mae amount to \$419 billion in 2024. However, CBO has excluded those guarantees from its estimate of total credit assistance because they are incremental guarantees on loans already included in the totals for loans guaranteed by the FHA, VA, and other federal housing guarantors. CBO estimates that the fair-value subsidy rate for Ginnie Mae is effectively zero.

**Projected Subsidies.** Calculated on a FCRA basis, the average subsidy rate for housing and real estate programs in 2024 is estimated to be -1.1 percent, and the lifetime budgetary savings are projected to be \$13.7 billion.<sup>18</sup> Subsidy rates vary considerably among the individual housing and real estate programs, from -27.9 percent for VA's Vendee Loan Program (which offers qualified borrowers the option to purchase VA-owned properties with little or no money down) to 66.8 percent for RHS's Multifamily Housing Preservation and Revitalization Seconds program (which offers second mortgages to finance the repair and rehabilitation of multifamily housing projects).

Calculated on a fair-value basis, the average subsidy rate for housing and real estate programs in 2024 is estimated to be 2.1 percent, and the lifetime cost is projected to be \$26.2 billion. The difference in budgetary impact between the FCRA and fair-value estimates is thus \$39.9 billion (see Figure 1).<sup>19</sup>

17. For further discussion, see Congressional Budget Office, *Ginnie Mae and the Securitization of Federally Guaranteed Mortgages* (January 2022), [www.cbo.gov/publication/57176](http://www.cbo.gov/publication/57176).

18. Those estimates include the FCRA estimate of the budgetary costs of loan guarantees made by Fannie Mae and Freddie Mac. Excluding those guarantees, the average subsidy rate for other housing and real estate loans is -0.1 percent, and the lifetime budgetary savings are projected to be \$0.3 billion.

19. More than half of that difference is attributable to the loan guarantees made by Fannie Mae and Freddie Mac. When making its baseline projections, CBO estimates the cost of those loan guarantees on a fair-value basis, whereas for other housing and real estate credit programs, the agency follows the procedures prescribed by FCRA. Excluding loans made and guaranteed by the GSEs, the average fair-value subsidy rate for housing and real estate loans is 4.2 percent, and the estimated cost of housing and real estate credit programs is \$17.9 billion, resulting in an \$18.2 billion difference in budgetary impact under FCRA and fair-value accounting.

CBO also examined how sensitive those fair-value estimates were to a variation of plus or minus 10 percent in the estimated risk premium.<sup>20</sup> The resulting lifetime cost of the federal credit assistance provided by housing and real estate programs ranged from \$23.1 billion to \$29.2 billion, and the fair-value subsidy rate varied by plus or minus 0.2 percentage points from the central estimate of 2.1 percent.

**Comparison With Last Year's Projections.** The projected subsidy rates for 2024 are greater than those estimated for 2023. The average subsidy rate for credit assistance for housing and real estate, excluding what is provided through the GSEs, is projected to increase by 1.2 percentage points on a FCRA basis and by 0.4 percentage points on a fair-value basis from 2023 to 2024. Including the GSEs' loan guarantees, the subsidy rate is projected to increase by 1.1 percentage points on a FCRA basis and by 0.7 percentage points on a fair-value basis.

The projected budgetary savings in 2024 from the GSEs' mortgage guarantees are \$20.4 billion less on a FCRA basis than the savings that were projected last year for 2023. On a fair-value basis, the projected budgetary costs are \$4.4 billion more than the costs that were projected last year for 2023. Those differences are driven partially by an increase of 1.0 percentage point in the projected subsidy rate on a FCRA basis (resulting in a \$10.0 billion decrease in savings) and an increase of 0.7 percentage points on a fair-value basis (resulting in a \$7.6 billion increase in subsidy costs).<sup>21</sup> A decrease of \$484 billion in projected credit obligations reduced budgetary savings by \$10.4 billion on a FCRA basis and decreased subsidy costs by \$3.2 billion on a fair-value basis. The changes in the subsidy costs and rates are the result of changes in CBO's economic forecast, including an increase in interest rates and a decrease in home prices, which, in combination, led to a decrease in loan volume and an increase in the expected costs of defaults (net of recoveries).

20. CBO used 10 percent differences partly because most annual shifts in the risk premium for stocks are less than 10 percent; differences amounting to 20 percent would have larger effects than those reported here, although those differences would not necessarily be twice as large.

21. The changes in the amount of subsidy costs attributable to changes in credit obligations and subsidy rates—here and throughout the report—are approximate because estimating them requires an allocation of overlapping effects. CBO allocated 50 percent of the change for overlapping effects to the change in obligations and the rest to the change in the subsidy rate.

Figure 1.

### Differences Between FCRA and Fair-Value Estimates of Subsidies in 2024

Billions of Dollars



Data sources: Congressional Budget Office; Office of Management and Budget. See [www.cbo.gov/publication/59232#data](http://www.cbo.gov/publication/59232#data).

Fair-value estimates differ from FCRA estimates in that they account for market risk—the component of financial risk that remains even with a well-diversified portfolio. Market risk arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions.

For discretionary programs, the projections of cash flows prepared by other agencies reflect the Administration’s proposed funding for 2024.

Most of the FCRA estimates shown are from the Office of Management and Budget. The exceptions are estimates for student loans, which are administered by the Department of Education, and for programs related to single-family mortgages administered by Fannie Mae, Freddie Mac, the Department of Veterans Affairs, and the Federal Housing Administration in the Department of Housing and Urban Development; those estimates were produced by CBO.

The figure excludes consolidation loans issued by the Department of Education.

FCRA = Federal Credit Reform Act; \* = between zero and \$50 million.

a. Includes the Departments of Commerce, Health and Human Services, Homeland Security, the Interior, State, and the Treasury, as well as the Environmental Protection Agency.





The projected budgetary savings in 2024 from the FHA's single-family mortgage guarantee program are \$7.0 billion less on a FCRA basis than the savings that were projected last year for 2023. The projected budgetary costs on a fair-value basis are \$0.1 billion less than the costs that were projected last year for 2023. A decomposition of the changes on a FCRA basis indicates that they are the result of an increase of 2.4 percentage points in the subsidy rate (resulting in a \$5.9 billion decrease in savings) and a decrease of \$73 billion in projected credit obligations (resulting in a \$1.1 billion decrease in savings). On a fair-value basis, an increase of 1.2 percentage points in the projected subsidy rate (resulting in a \$2.8 billion increase in subsidy costs) was more than offset by the decrease in projected credit obligations (resulting in a \$2.9 billion decrease in subsidy costs). The projected increase in the subsidy rate is driven primarily by a decrease in the value of guarantee fees collected, which was attributable to a drop in the FHA's annual fee. (That reduction was implemented in March 2023.)

The projected budgetary cost of VA's home loan guarantees in 2024 is \$0.8 billion less on a FCRA basis and \$4.7 billion less on a fair-value basis than the cost that was projected last year for 2023. Each decrease is driven mainly by a large decrease in the projected amount of credit obligations (from \$265 billion in 2023 to \$146 billion in 2024).<sup>22</sup> The subsidy rate increased by 0.2 percentage points on a FCRA basis (resulting in a \$0.5 billion increase in subsidy costs) but decreased by 0.4 percentage points on a fair-value basis (resulting in a \$0.9 billion decrease in subsidy costs). The change in the FCRA subsidy rate was driven by an increase in projected default costs (net of recoveries) that exceeded a projected increase in revenues from fees. On a fair-value basis, the decrease in the subsidy rate is the result of the combination of an increase in interest rates and changes to CBO's forecast of default and prepayment cash flows.<sup>23</sup>

## Student Loans

The Department of Education's student loan programs provide several types of loans—subsidized Stafford loans (which are available to undergraduate students), unsubsidized

Stafford loans (which are available to undergraduate and graduate students), and PLUS loans (which are available to parents and to graduate students). Those programs are projected to account for \$90 billion of federal credit in 2024.

CBO uses a hybrid approach to separately estimate fair-value subsidies for the portion of each student loan program whose borrowers are enrolled in fixed-payment repayment plans and income-driven repayment (IDR) plans. For borrowers enrolled in fixed-payment repayment plans, CBO uses the loss-multiple approach to estimate the subsidy rate on a fair-value basis. For borrowers enrolled in IDR plans, CBO's fair-value estimates incorporate an adjustment to the projection of wages.

IDR plans tie required payments to borrowers' income and provide loan forgiveness after a certain period. Those plans involve more market risk than fixed-payment repayment plans because the required payments depend on borrowers' income and because borrowers may be eligible to have their unpaid balances forgiven. When the economy performs poorly, borrowers' earnings are more likely to decrease, lowering the required payments. Those reduced payments will eventually lead to more loan forgiveness. (That additional risk is partly offset because borrowers enrolled in IDR plans are less likely than borrowers enrolled in fixed-payment repayment plans to default on their loans.) To develop an adjustment for IDR plans, CBO applied methods from academic studies that estimate the financial value of required payments that are a function of future wages.<sup>24</sup> Those studies devel-

22. CBO now estimates obligations in 2023 to be \$143 billion, which is less than both the amount that CBO projected last year for 2023 and the amount that it now projects for 2024.

23. Although cumulative defaults for VA are slightly higher in 2024 than in 2023—which increases default costs (net of recoveries)—higher market interest rates reduce the present value of those defaults more under the fair-value discounting approach than under the FCRA discounting approach. As a result, the present value of fair-value default costs decreased from 2023 to 2024, whereas the FCRA default costs increased.

24. See Michael Falkenheim and Wendy Kiska, *How CBO Estimates the Market Risk of Federal Credit Programs*, Working Paper 2021-14 (Congressional Budget Office, November 2021), [www.cbo.gov/publication/57581](http://www.cbo.gov/publication/57581); Congressional Budget Office, "Including Market Risk in Estimates of the Budgetary Effects of Changing the Federal Retirement System for Civilian Workers" (supplemental material for *Options for Changing the Retirement System for Federal Civilian Workers*, August 2017), [www.cbo.gov/publication/53003](http://www.cbo.gov/publication/53003); Mark Huggett and Greg Kaplan, "How Large Is the Stock Component of Human Capital?" *Review of Economic Dynamics*, vol. 22 (October 2016), pp. 21–51, <https://doi.org/10.1016/j.red.2016.06.002>; John Geanakoplos and Stephen P. Zeldes, "Market Valuation of Accrued Social Security Benefits," in Deborah Lucas, ed., *Measuring and Managing Federal Financial Risk* (University of Chicago Press, 2010), pp. 213–233, <http://papers.nber.org/books/luca07-1>; Luca Benzoni, Pierre Collin-Dufresne, and Robert S. Goldstein, "Portfolio Choice Over the Life-Cycle When the Stock and Labor Markets Are Cointegrated," *Journal of Finance*, vol. 62, no. 5 (October 2007), pp. 2123–2167, <https://doi.org/10.1111/j.1540-6261.2007.01271.x>; and Deborah Lucas and Stephen P. Zeldes, "Valuing and Hedging Defined Benefit Pension Obligations: The Role of Stocks Revisited" (draft, Columbia Business School, September 2006), <https://tinyurl.com/yc49kcea> (PDF).

oped methods to adjust projections of future wages on the basis of their relationship with stock prices.

In July 2023, the Administration published a final rule in the Federal Register that created a new IDR plan.<sup>25</sup> Under that plan, borrowers will pay 5 percent of their discretionary income monthly on their undergraduate loans and 10 percent of their income on graduate loans. (Currently, borrowers in IDR plans pay 10 percent of their discretionary income for all loans.) In addition, after 10 years of repayment, borrowers who originally borrowed \$12,000 or less will be eligible for forgiveness. Moreover, discretionary income will be defined as income above 225 percent of the federal poverty guidelines, whereas it currently is defined as income above 150 percent of those guidelines.<sup>26</sup> Furthermore, under the new plan, unpaid interest will not accrue.

**Projected Subsidies.** Calculated on a FCRA basis, the average subsidy rate for the Department of Education's student loan programs in 2024 is estimated to be 21.6 percent, and the lifetime budgetary costs are projected to be \$19.3 billion. FCRA subsidy rates vary considerably among the individual programs, from -16.2 percent for the PLUS loan program for parents to 33.1 percent for the subsidized Stafford loan program. In CBO's assessment, the difference is explained by four key factors:

- The average interest rate in the subsidized Stafford loan program is 5.9 percent, whereas the average rate in the PLUS loan program for parents is 8.4 percent.
- Subsidized Stafford loans accrue no interest while the borrower is enrolled in school at least half time or during other periods of deferment, whereas

PLUS loans for parents begin to accrue interest immediately after origination.<sup>27</sup>

- Student borrowers in the subsidized Stafford program are eligible for most IDR plans, including the new plan—under which they will pay 5 percent of their discretionary income and will be eligible for forgiveness in as few as 10 years—whereas parent borrowers are ineligible for most IDR plans.<sup>28</sup>
- The origination fee is 1.1 percent for subsidized Stafford loans but 4.2 percent for PLUS loans for parents.

Calculated on a fair-value basis, the average subsidy rate for the student loan programs in 2024 is estimated to be 28.4 percent, and the lifetime cost is projected to be \$25.4 billion. The difference in budgetary impact between the FCRA and fair-value estimates is thus \$6.1 billion. Although the difference between the FCRA and fair-value subsidy rates (6.8 percent) is similar to that for commercial loans (8.6 percent), the dollar amount of the difference is much smaller because credit obligations for student loans are only about 40 percent of those for commercial loans. The fair-value subsidy rates differ substantially among the individual programs, from -2.7 percent for the PLUS loan program for parents to 38.3 percent for the subsidized Stafford loan program.

When CBO used loss multiples that were 0.5 higher or lower and wage adjustments of plus or minus 0.5 percentage points, the resulting cost on a fair-value basis ranged from \$24.2 billion to \$26.7 billion. Similarly, the fair-value subsidy rate varied by plus or minus 1.4 percentage points from the central estimate of 28.4 percent.

**Comparison With Last Year's Projections.** Calculated on a FCRA basis, the projected subsidy rates for student loans in 2024 are much higher than those estimated for 2023. The average subsidy rate for student loans is projected to increase by 23.3 percentage points, from -1.7 percent in 2023 to 21.6 percent in 2024, resulting in a \$20.8 billion increase in projected budgetary costs. Changes in subsidy rates varied for individual programs, from an increase of 13.1 percentage points for the PLUS loan program for parents (resulting in a

25. For more details on the Administration's final rule, see Improving Income Driven Repayment for the William D. Ford Federal Direct Loan Program and the Federal Family Education Loan (FFEL) Program, 88 Fed. Reg. 43820 (July 10, 2023). A final rule is based on a proposed rule that announces and explains the Administration's or an agency's plan to address a problem or accomplish a goal. Once the proposed rule has been published in the Federal Register and the public has had an opportunity to provide feedback, the rule becomes final and is similarly published in the Federal Register along with an effective date.

26. For a description of federal poverty guidelines, see Department of Health and Human Services, "U.S. Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Programs" (January 19, 2023), <https://tinyurl.com/2767tvpa>.

27. Under deferment, a borrower may temporarily stop making payments on a student loan, usually without interest accruing on the balance of subsidized loans.

28. The IDR plan available to parent borrowers requires annual payments of 20 percent of discretionary income and forgives outstanding balances after 25 years.

\$1.3 billion increase in subsidy costs) to an increase of 28.3 percentage points for the PLUS loan program for graduate students (resulting in a \$3.9 billion increase in subsidy costs). Calculated on a fair-value basis, the average subsidy rate for student loans is projected to increase by 19.2 percentage points, from 9.1 percent in 2023 to 28.4 percent in 2024, and the projected cost of student loans issued in 2024 is \$17.7 billion more than the amount projected last year for 2023.

Most of the changes to CBO's estimates of subsidy rates are explained by administrative changes to the student loan programs. First, the final rule that the Department of Education issued on October 31, 2022, expanded eligibility for the discharge of loans, eliminated the addition of unpaid interest to loan balances in certain circumstances, and increased eligibility for the Public Service Loan Forgiveness Program.<sup>29</sup> Second, the final rule published on January 10, 2022, created a more generous IDR plan that increased subsidy rates, especially for undergraduate borrowers.

### Commercial Loans

The federal government provides assistance to businesses in the form of direct loans and loan guarantees. That assistance to commercial entities is projected to total \$231 billion in 2024. Most of it would be provided through the SBA (\$59 billion), the Department of Energy (\$46 billion), and international assistance programs (\$44 billion). The SBA also guarantees securities that are themselves backed by federally guaranteed loans, but CBO has excluded those guarantees from its estimate of total credit assistance because they are incremental guarantees on loans already included in the totals for loans guaranteed by the SBA. CBO estimates that the fair-value subsidy rate for those guarantees is effectively zero.

**Projected Subsidies.** Calculated on a FCRA basis, the average subsidy rate for commercial loan programs in 2024 is estimated to be 2.3 percent, and the lifetime budgetary cost is projected to be \$5.3 billion. The positive subsidy rate and the net cost for such programs

in 2024 stem mainly from the Department of Energy's loans for advanced vehicle manufacturing (projected to cost \$1.2 billion) and Title 17 direct loans and loan guarantees for innovative technologies (projected to cost \$1.3 billion), and the Department of Agriculture's loans from funding provided by the 2022 reconciliation act (projected to cost \$2.0 billion).<sup>30</sup>

More than 40 percent of the commercial loan programs have a subsidy rate that is zero or negative on a FCRA basis; those programs are projected to save the federal government \$1.4 billion. Of those savings, 80 percent is attributable to the Export-Import Bank's long-term guarantees and the International Development Finance Corporation's direct loan and direct loan investment funds programs.

Calculated on a fair-value basis, the average subsidy rate for commercial loan programs in 2024 is estimated to be 10.9 percent, and the lifetime cost is projected to be \$25.1 billion. The difference in budgetary impact between the FCRA and fair-value estimates is \$19.7 billion. Two-thirds of the projected cost on a fair-value basis results from the following programs:

- The Department of Energy's loans for advanced vehicle manufacturing (\$2.6 billion) and Title 17 direct loans and loan guarantees (\$4.3 billion);
- Direct loans made by the Department of Commerce to produce semiconductors (\$2.5 billion);<sup>31</sup>
- Direct loans made by the Department of Agriculture under the 2022 reconciliation act (\$2.0 billion); and
- The SBA's 7(a) loan guarantees for small businesses (\$2.9 billion), 504 loan guarantees for debentures (a type of security) issued through certified development

29. For more details, see Department of Education, "Education Department Releases Final Regulations to Expand and Improve Targeted Debt Relief Programs" (press release, October 31, 2022), <https://tinyurl.com/ms7x8vy9>, and Institutional Eligibility Under the Higher Education Act of 1965, as Amended; Student Assistance General Provisions; Federal Perkins Loan Program; Federal Family Education Loan Program; and William D. Ford Federal Direct Loan Program, 87 Fed. Reg. 65904 (November 1, 2022).

30. The Energy Policy Act of 2005 provides broad authority for the Department of Energy to finance projects that support clean energy and energy infrastructure reinvestment. See secs. 1703 and 1706 of the Energy Policy Act of 2005, Public Law 109-58, 42 U.S.C. §§ 16,513, 16,517. The 2022 reconciliation act provided \$1.0 billion for the Rural Utilities Service to offer loans for renewable energy infrastructure and provided \$9.7 billion for the Rural Utilities Service to offer loans, grants, and other financial assistance to support the purchase of renewable energy systems, zero-emission systems, and carbon capture systems. See secs. 22001 and 22004 of the 2022 reconciliation act, P.L. 117-169, 136 Stat.

31. The CHIPS Act of 2022 provided up to \$6 billion for the Department of Commerce to provide direct funding, loans, and loan guarantees for projects to construct, expand, or modernize commercial semiconductor facilities. See CHIPS Act of 2022, P.L. 117-167, 136 Stat. 1372.

companies (\$1.3 billion), and loan guarantees for debentures issued by small business investment companies (\$1.1 billion).

When CBO varied the loss multiples for commercial loans by plus or minus 0.5, the resulting cost on a fair-value basis ranged from \$21.0 billion to \$29.1 billion. Similarly, the fair-value subsidy rate varied by plus or minus 1.8 percentage points from the central estimate of 10.9 percent.

**Comparison With Last Year's Projections.** Calculated on a FCRA basis, the average subsidy rate for commercial loans is projected to increase from 1.2 percent in 2023 to 2.3 percent in 2024, and the budgetary cost projected for 2024 is \$3.3 billion more than the amount that was projected last year for 2023. The subsidy cost for 15 new programs in 2024 is \$3.4 billion, meaning that they account for all of the increase in budgetary costs.<sup>32</sup>

There were notable—but offsetting—changes in the FCRA subsidies for two commercial loan programs currently offered by the Department of Energy. First, the projected cost of the Section 1703 direct loan program for innovative technologies increased by \$0.8 billion on a FCRA basis. A 4.0 percentage-point increase in the subsidy rate raised the projected budgetary cost of the program by \$0.4 billion. (That effect was primarily attributable to a decrease in projected fees.) The effect was magnified by an increase of \$13.0 billion in proposed credit obligations, from \$4.5 billion in 2023 to \$17.5 billion in 2024 (an increase of \$0.3 billion in subsidy costs).<sup>33</sup>

Second, the projected budgetary cost of the Department of Energy's loans for the advanced vehicle manufacturing program decreased by \$0.8 billion on a FCRA basis. An 8.0 percentage-point decrease in the subsidy rate—primarily attributable to a decrease in the projected default rate (net of recoveries)—lowered the projected costs by \$1.1 billion. That effect was partially offset by an increase of \$3.1 billion in proposed credit obligations, from \$12.8 billion in 2023 to \$15.9 billion in 2024 (an increase of \$0.3 billion in subsidy costs).<sup>34</sup>

32. New programs are identified in Supplemental Table 3, which is posted along with this report at [www.cbo.gov/publication/59232](http://www.cbo.gov/publication/59232).

33. The Administration now projects obligations in 2023 to be \$3.2 billion, which is less than the amount projected in the 2023 budget and significantly less than the amount that the Administration has proposed for 2024.

34. The Administration now projects obligations in 2023 to be \$15.0 billion, which is more than the amount projected in the 2023 budget and less than the amount that the Administration has proposed for 2024.

The projected cost of other existing commercial loan programs in 2024 is \$127 million less on a FCRA basis than the cost projected last year for 2023.

Calculated on a fair-value basis, the average subsidy rate for commercial loans is projected to increase from 9.1 percent in 2023 to 10.9 percent in 2024, and the projected cost of those programs in 2024 is \$9.4 billion more than the cost projected last year for 2023. New programs in 2024 account for \$8.4 billion of the subsidy cost on a fair-value basis.

The increase in the fair-value subsidies for commercial loans offered under existing programs is driven mainly by changes in the projected credit obligations and subsidy rates for two programs. Those changes boosted the projected budgetary cost of the Department of Energy's Section 1703 direct loan program for innovative technologies by \$2.1 billion and of the SBA's 7(a) loan guarantees for small businesses by \$1.0 billion on a fair-value basis.

The increase of \$13.0 billion in proposed credit obligations (from \$4.5 billion in 2023 to \$17.5 billion in 2024) for the Section 1703 program increased its projected budgetary cost by \$1.8 billion on a fair-value basis. That effect was magnified by a 2.7 percentage-point increase in the fair-value subsidy rate, which was primarily attributable to a decrease in projected fees and resulted in a \$0.3 billion increase in estimated subsidy costs.

The fair-value subsidy rate for the SBA's 7(a) loan guarantees increased by 2.8 percentage points—primarily because of an increase in the estimated loss multiple from 2.4 in 2023 to 3.6 in 2024—resulting in a \$1.0 billion increase in subsidy costs. There was no change in the proposed credit obligations (\$35.0 billion) for the program.<sup>35</sup>

The impact of those two programs on the overall increase in the fair-value subsidies for commercial loans was largely offset by a \$2.2 billion decrease in the fair-value subsidy for two other programs. First, the projected budgetary cost of Department of Energy's loans for advanced vehicle manufacturing decreased by \$1.2 billion. The fair-value subsidy rate for those loans decreased by 13.4 percentage points—primarily because of a decrease in the projected default rate (net of recoveries)—reducing the projected budgetary cost of the program by \$1.9 billion on a fair-value basis. That

35. The Administration now projects obligations in 2023 to be \$35 billion, which is the same as the amount projected in the 2023 budget and the amount that the Administration has proposed for 2024.



effect was partially offset by an increase of \$3.1 billion in projected credit obligations (an increase of \$0.7 billion in subsidy costs).

Second, the projected budgetary costs of direct loans made by the Department of Transportation under the Transportation Infrastructure Finance and Innovation Act (TIFIA) decreased by \$1.0 billion on a fair-value basis.<sup>36</sup> A decrease of \$7.0 billion in proposed credit obligations (from \$11.0 billion in 2023 to \$4.0 billion in 2024) decreased the cost of the program by \$0.9 billion.<sup>37</sup> That effect was slightly magnified by a 0.6 percentage-point decrease in the fair-value subsidy rate, which resulted in a decrease of \$48 million in the projected budgetary cost of the program.

The projected cost of other existing programs in 2024 is \$0.2 billion more than the cost projected last year for 2023 on a fair-value basis.

### Consumer Loans

The federal government also provides loans and loan guarantees to individual borrowers. In 2024, such credit assistance is projected to total \$5 million for two programs: the State Department's repatriation loans and VA's vocational rehabilitation loans.<sup>38</sup> In most cases,

those loans and guarantees are secured only by the borrower's income and not by the borrower's other assets, which increases the amount of market risk.

**Projected Subsidies.** Calculated on a FCRA basis, the average subsidy rate for consumer loans in 2024 is estimated to be 33.9 percent, and the lifetime budgetary cost is projected to be \$1.7 million. Of the four lending categories that CBO has described in this analysis, credit assistance to consumers has the largest positive subsidy rate when analyzed under FCRA procedures, though the dollar amounts involved are small.

Calculated on a fair-value basis, the average subsidy rate for consumer loans in 2024 is estimated to be 42.0 percent, and the lifetime cost is projected to be \$2.1 million. The difference in budgetary impact between the FCRA and fair-value estimates is \$0.4 million. VA's vocational rehabilitation loans have a maturity of one year with no expected defaults; thus, there is no risk adjustment for that program, and the fair-value estimate is the same as the FCRA estimate.

When CBO varied the loss multiple for the State Department's repatriation loans by plus or minus 0.5, the resulting cost on a fair-value basis ranged from \$1.6 million to \$2.3 million, and the fair-value subsidy rate varied from 52.4 percent to 77.1 percent, with a central estimate of 67.8 percent.

**Comparison With Last Year's Projections.** The projected subsidy costs for consumer loans in 2024 are slightly greater than the costs projected last year for 2023. The subsidy cost for the State Department's repatriation loan program increased by \$0.2 million on both a FCRA and a fair-value basis because of a projected increase in the subsidy rates. (That increase was 5.8 percentage points on a FCRA basis and 5.2 percentage points on a fair-value basis.) The estimated FCRA and fair-value subsidy rate for VA's vocational rehabilitation loans rose from 0.8 percent to 3.9 percent.

36. CBO's baseline projections for the Department of Transportation's TIFIA program differ substantially from the estimates in this report. The Federal-Aid Highway Program, which includes several grant programs in addition to the TIFIA loan program, receives obligational authority for all of its programs in a single appropriation; CBO does not separately estimate what will be allocated to TIFIA. In the President's budget, the Administration proposed separating TIFIA into its own program account.

37. The Administration now projects obligations in 2023 to be \$11 billion, which is the same as the amount projected in the 2023 budget but significantly more than the amount that the Administration has proposed for 2024.

38. The State Department provides emergency repatriation loans to Americans abroad who cannot finance their return to the United States.



This document, which is part of the Congressional Budget Office's continuing effort to make its work transparent, provides Members of Congress, their staff, and others with information about the cost of federal credit programs under two approaches: the procedures specified in the Federal Credit Reform Act of 1990, which apply to most federal credit programs, and methods based on the fair-value approach, which incorporate market risk. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

Wendy Kiska wrote the report with assistance from Michael Falkenheim, Paul B. A. Holland, Justin Humphrey, Leah Koestner, Zunara Naeem, David Newman, Robert Reese, Mitchell Remy, and Aurora Swanson and with guidance from Sebastien Gay. David Torregrosa fact-checked the report.

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