

Financial Commitments of Federal Credit and Insurance Programs, 2012 to 2021

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At a Glance

This report describes the size and nature of the federal government's credit and insurance portfolios. For this analysis, the Congressional Budget Office developed three measures of credit and insurance activity—the covered amount, the net covered amount, and the allowance for losses. Using publicly available information from federal agencies' financial statements and other government reports, CBO applied those measures to six program categories: housing and real estate programs, student loan programs, other credit programs, deposit insurance and orderly liquidation authority, insurance for private pensions, and flood and crop insurance.

- At the end of 2021, the covered amount for federal credit and insurance programs—that is, the sum of the outstanding balances of credit programs' loans and guarantees and the total coverage provided under insurance programs—was \$37.3 trillion, or one-third of the value of total financial assets owned by U.S. households. Approximately 70 percent of that amount stemmed from insurance coverage; the remaining amount is the face value of loans and loan guarantees in federal credit programs.
- Housing and real estate programs, mostly mortgage guarantees issued by Fannie Mae and Freddie Mac, accounted for 83 percent of the credit balances in 2021. From 2012 to 2021, the covered amount for direct loans and loan guarantees related to housing programs rose from \$7.0 trillion to \$9.7 trillion.
- Domestic deposits insured by the Federal Deposit Insurance Corporation and the National Credit Union Administration accounted for 76 percent of the insurance coverage in 2021. Those deposits totaled \$19.4 trillion that year, up from \$9.9 trillion in 2012.
- After adjustments to account for caps on guarantees and insurance coverage, previously recognized losses, and government resources available to cover future losses, the net covered amount for credit and insurance programs in 2021 was \$24.5 trillion (or about two-thirds of the full covered amount)—\$10.5 trillion in credit balances and \$13.9 trillion in insurance coverage.
- Agencies expected to lose a small portion of the net covered amount in 2021. The government recognized an allowance for losses of \$0.4 trillion for credit programs and a liability of \$0.1 trillion for insurance programs that year. Student loan programs accounted for 90 percent of the allowance for losses in credit programs.

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Unless this report specifies otherwise, values are based on financial data reported by federal agencies; they are not the Congressional Budget Office's estimates.

Unless this report indicates otherwise, all years referred to are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

Numbers in this report may not add up to totals because of rounding.

Financial Commitments of Federal Credit and Insurance Programs, 2012 to 2021

Summary

The federal government operates credit programs that provide direct loans to borrowers and loan guarantees to private financial entities as well as insurance programs that offer coverage to citizens and businesses. The loans, guarantees, and insurance provided through those programs represent financial commitments that the government has made. Accurate measures of such commitments are necessary for a complete picture of the federal budget and helpful in understanding budgetary trade-offs that policymakers might face in the future. For example, when policymakers decide whether to support a private-sector activity through grants or by making loan guarantees, they may wish to consider both the expected cash flows of the loan guarantees (which form the basis for estimates of the costs of the guarantees) and the total commitment the government would be making.

In this report, the Congressional Budget Office uses publicly available information from federal agencies' financial statements and other government reports to describe the size and nature of the federal government's credit and insurance portfolio. The report generally covers the 10-year

period ending in 2021; in some cases, data for the full period are unavailable, and fewer years are included in the analysis.

Federal loan guarantees and insurance coverage represent contingent liabilities—that is, they could result in net outflows of cash from the government depending on the outcome of various events. Similarly, direct loans could result in cash inflows that were larger or smaller than those reflected in the deficit in the year the loan was made. Thus, federal loans, loan guarantees, and insurance coverage increase the potential for deficits to be larger or smaller than expected. When rates of default on loans and loan guarantees or claims on insurance policies—such as those in deposit or flood insurance—are greater than anticipated, deficits can rise; when default rates are lower than expected or insurance claims are less than expected, deficits can fall. Administrative actions, such as the ones taken to suspend interest payments on student loans in response to the coronavirus pandemic, can also result in largerthan-expected deficits.

The measures used in this report differ in two respects from the budget projections that CBO

regularly publishes in The Budget and Economic Outlook. First, the projections in the Outlook provide baseline estimates of budgetary outcomes under current law over the next 10 years. Whereas those projections depend mainly on CBO's assessment of the loans, loan guarantees, and insurance coverage that will be provided in the future, the values in this report are not CBO's projections; rather, they measure the outstanding stock of loans, guarantees, and insurance coverage at the end of each of the past 10 years. Second, the Outlook discusses the spending and receipts associated with credit and insurance programs, whereas this report measures the balances of outstanding portfolios and allowances for losses by using accounting data supplied by other federal agencies. Those measures are only indirectly related to budgetary measures for credit programs and do not correspond to any value for insurance programs in the federal budget.

For this report, CBO divided the federal credit and insurance portfolio into six categories: housing and real estate programs, student loan programs, other credit programs, deposit insurance and orderly liquidation authority, insurance for private pensions, and flood and crop insurance.¹ Using information available in agencies' financial reports, CBO developed three measures of credit and insurance activity for this report—the covered amount, the net covered amount, and the allowance for losses. Those three measures were chosen for several reasons:

- To present the size and allocation of the federal government's credit and insurance portfolio by program category,
- To measure the share of U.S. households' total assets whose value is influenced by federal ownership and guarantees,
- To identify upper limits on credit and insurance programs' potential effects on federal deficits and debt, and
- To highlight trends in each category and in individual programs.

Overview of the Federal Financial Portfolio in 2021

The sum of the outstanding balances of loans provided or guaranteed under federal credit programs and the insurance in force under federal insurance programs—that is, the covered amount for those programs—was \$37.3 trillion in 2021. (The term "insurance in force" is used in this report to refer to either the total amount of assets or the total amount of liabilities on which there is an insurance policy or contract.)2 Approximately 70 percent of that covered amount was related to insurance in force under the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), the Pension Benefit Guaranty Corporation (PBGC), and flood and crop insurance programs. The remaining amount was the face value of loans and loan guarantees issued under federal credit programs.

After adjustments to account for caps on guarantees and insurance coverage, previously recognized losses, and government resources available to cover future losses, the net covered amount for credit and insurance programs in 2021 was \$24.5 trillion—\$10.5 trillion in credit balances and \$13.9 trillion in insurance coverage. The

government recognized losses and liabilities totaling \$0.4 trillion for credit programs and a liability of \$0.1 trillion for insurance programs.

Housing and Real Estate Programs. The federal government supports housing finance by guaranteeing home mortgages through the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), the Federal Housing Administration's (FHA's) Mutual Mortgage Insurance program, the Department of Veterans Affairs' (VA's) mortgage guarantee program, and several smaller mortgage programs administered by the Rural Housing Service (RHS). The government also provides liquidity to the housing market by purchasing mortgages, guaranteeing those loans, and selling them as mortgage-backed securities (MBSs) to investors through Fannie Mae and Freddie Mac.3

Over the past decade, the covered amount for direct loans and loan guarantees related to housing

^{1.} This report does not account for social insurance and health insurance programs (such as Social Security, Medicare, and unemployment insurance) because an analysis of the government's obligations for those large, complex programs would require in-depth discussion and different financial measures than those used here. In addition, the terrorism risk insurance program does not appear in this report because coverage is provided to customers by private insurers; the federal government serves as a backstop and is liable only for claims related to an act of terrorism. To date, no claims have been filed under that program, and the cost to the government has been negligible. For a more comprehensive list of federal insurance programs with detailed descriptions, see Government Accountability Office, Catalogue of Federal Insurance Activities, GAO-05-265R (March 4, 2005), www.gao.gov/products/gao-05-265r.

^{2.} For example, insurance in force under the deposit insurance program refers to the sum of all domestic deposits covered by the program; for the pension insurance programs, it equals the sum of all liabilities in the pension plans covered by the program; and for the flood insurance program, it represents the total value of the homes whose owners participate in the program. Insurance in force does not account for any limitations on the government's payout that may exist, such as the maximum guaranteed amount or insurance percentage.

^{3.} Fannie Mae and Freddie Mac are government-sponsored enterprises (GSEs) that were placed into conservatorship in September 2008. Since then, CBO has treated those two GSEs as government entities in its budget estimates. But even before conservatorship, most investors perceived that the debt of the two GSEs was protected by an implicit guarantee of the federal government. Today, the debt of other GSEs that support mortgage lending—including the Federal Home Loan Banks, the Federal Farm Credit Banks, and the Federal Agricultural Mortgage Corporation (Farmer Mac)—is similarly perceived to carry an implicit federal guarantee. Those other GSEs are not included in this analysis because they are treated as private companies whose financial activities do not affect the federal budget.

programs rose at an average annual rate of 4 percent, from \$7.0 trillion in 2012 to \$9.7 trillion in 2021. That increase was driven primarily by growth in the housing market. After adjustments to account for partial guarantees in some programs (such as those administered by VA and FHA) and previously recognized losses, the total net covered amount was \$6.6 trillion in 2012 and \$8.9 trillion in 2021. The allowance for losses in housing programs decreased from \$175 billion in 2012 to \$23 billion in 2021. In 2012, housing markets were still experiencing elevated default rates because of the 2007–2009 financial crisis. By contrast, default rates are historically low today.⁴

Student Loan Programs. The Department of Education provides three types of loans to help students finance their education: 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 graduate students and to parents of certain undergraduate students).

The total balances of student loans increased from \$0.9 trillion in 2012 to \$1.6 trillion in 2021. In 2012, the government projected that outstanding student loans would result in a net gain of \$29 billion. By 2021, student loans were projected to result in a loss of \$329 billion, primarily because a larger percentage of students were repaying their loans through income-driven repayment plans, which are more costly to taxpayers. The values in this report are based on the program parameters

that were in place before the Biden Administration announced on August 24, 2022, that most borrowers would be eligible for some student loan cancellation and that changes would be made to income-driven repayment plans.⁵

Other Credit Programs. The federal government provides loans and loan guarantees through many smaller credit programs offered by the Department of Agriculture, the Department of Energy, the Department of Transportation, the Export-Import Bank, and the Small Business Administration. From 2012 to 2021, the covered amount for direct loans and loan guarantees offered through those programs increased from \$321 billion to \$360 billion. After adjustments to account for partial guarantees in many of the programs and previously recognized losses, the total net covered amount was \$277 billion in 2012 and \$317 billion in 2021. The allowance for losses for other credit programs decreased from \$27 billion in 2012 to \$14 billion in 2021.

Deposit Insurance and Orderly Liquidation Authority. The Federal Deposit Insurance Corporation insures deposits in most U.S. banks. When necessary, it takes control of insolvent entities and manages them as a "receiver" to recover as much money as possible. Those recoveries are first used to pay the FDIC's own expenses and then to fulfill other claims on the entities. The National Credit Union Administration performs

a similar function for credit unions. It insures shares in most U.S. credit unions, which are taxexempt, and resolves failed entities. Over the past decade, domestic deposits covered by the FDIC and the NCUA increased from \$9.9 trillion in 2012 to \$19.4 trillion in 2021. After adjustments to account for uninsured amounts and previously recognized losses, the total net covered amount was \$8.0 trillion in 2012 and \$11.0 trillion in 2021. The allowance for losses was \$4 billion in 2012, fell to less than \$1 billion in 2015, and has continued to decrease since then, equaling just \$0.2 billion in 2021. This report does not discuss the bank failures that occurred in March 2023. and the values shown do not account for the effects of those failures.6

The FDIC also has a special authority, known as orderly liquidation authority (OLA), that it can invoke to help maintain the stability of the U.S. financial system. That authority empowers the FDIC to manage the resolution of large financial institutions whose failure could threaten financial and economic stability. Although OLA represents a contingent liability and thus is included in this analysis, values are not provided for the covered amount, net covered amount, or allowance for losses for that authority because the universe of covered institutions is highly uncertain and the government does not guarantee that it will cover the losses of institutions that are liquidated under the authority.

 [&]quot;MBA: 3Q Mortgage Delinquencies Fall to New Survey Low," MBA Newslink (November 15, 2022), https://tinyurl.com/5452z4nn.

See White House Briefing Room, "Fact Sheet: President Biden Announces Student Loan Relief for Borrowers Who Need It Most" (August 24, 2022), https://tinyurl.com/yzz45cy9. The Administration's proposal for student loan cancellation is currently being litigated.

^{6.} In March 2023, the FDIC was appointed receiver for two large banks: Silicon Valley Bank and Signature Bank. The FDIC, together with the Department of the Treasury and the Federal Reserve, invoked a "systemic risk exception" to insure all deposits at those banks, including those exceeding the insurance limits.

Insurance for Private Pensions. The Pension Benefit Guaranty Corporation insures the pension benefits of more than 35 million people who participate in defined benefit pension plans operated by private-sector employers. The liabilities of those insured pension plans total \$4.7 trillion; approximately \$1.5 trillion of that amount is guaranteed and not covered by plan assets or previously recognized as losses. PBGC expects to pay \$112 billion to cover the promised benefits of employees whose pension plan has been assumed by PBGC (that is, trusteed), is insolvent, or is expected to be trusteed or insolvent in the near future.

Flood and Crop Insurance. The federal government operates large specialty insurance programs to provide coverage for unique risks such as flooding, natural disasters, and crop failure and impairment. Those programs typically provide insurance in markets that would otherwise not be well-served by private insurers because of their risk profile or cost. The federal government provided insurance coverage totaling \$1.5 trillion for flood and crop insurance programs in 2021 and expects to lose less than 1 percent of that amount.

Limitations of the Measures Used in This Report

This report is intended to give the Congress an overview of the financial liability the government bears through its credit and insurance programs by providing information about the size of those programs based on data from agencies' financial reports. Those data represent only some of the information that policymakers would be likely to use to assess and improve the performance of those programs. The measures reported here do

not include all the benefits or costs of government credit and insurance programs, nor do they capture the cost of market risk.⁷ Thus, the three measures are not sufficient for assessing how federal credit and insurance programs affect people's economic well-being or how they contribute to economic stability.

Three Measures of Federal Financial Activities

This report describes the federal financial portfolio using three measures: the covered amount, the net covered amount, and the allowance for losses (see Figure S-1). (For a description of the data CBO used to determine the values of each measure, see Appendix A.) The accounting standards differ for credit and insurance programs, so accounting measures of the two types of programs are not generally combined. Consequently, this report presents totals for credit and insurance programs separately.

- The **covered amount** is equal to the face value of direct loans, loan guarantees, or insurance in force for each program. It represents the total amount of private activity that benefits
- 7. Market risk is the component of financial risk that remains even after investors have diversified their portfolios as much as possible. 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. 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; and Congressional Budget Office, Measuring the Cost of Government Activities That Involve Financial Risk (March 2021), www.cbo.gov/publication/56778.

- from government financial support, even if the guarantee or insurance is partial or incomplete.
- The net covered amount is the guaranteed portion of the covered amount (subject to limits on the government's payout), net of assets and fund balances available to cover future losses and losses that have already been accounted for. The measure does not account for any recoupments or for limitations on capacity to make payments under current law.8
- The allowance for losses (including the liability for losses) is a measure from an agency's or program's financial statements that identifies what that agency or program has recognized as losses due to default or insurance claims net of recoveries (or, for credit programs, net of all other future cash flows) associated with events that have already occurred or that are expected to occur in the future.

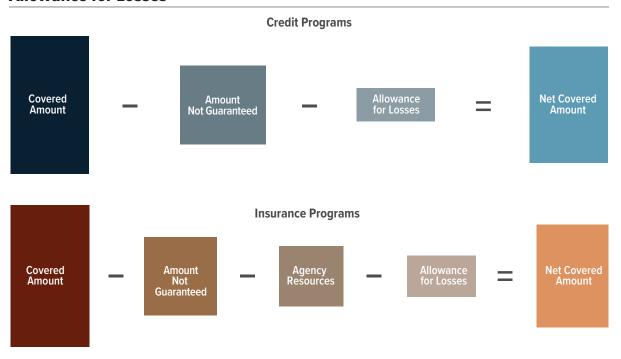
Covered Amount

The covered amount is the broadest measure of the federal financial portfolio because it represents the total amount of private activity that benefits from government financial support in credit and insurance programs. In CBO's view, it is useful for

^{8. &}quot;Limits on the government's payout" refers to partial guarantees in certain loan programs and to liability caps in certain insurance programs. "Limitations on capacity to make payments under current law" refers to an agency's available borrowing authority and to statutory limits on the resources available to a program. Examples include limits on the amount of capital that the Treasury can provide to Fannie Mae and Freddie Mac and limitations on PBGC's ability to pay insurance claims once its fund balances are exhausted.

Figure S-1.

Relationship Between the Covered Amount, Net Covered Amount, and Allowance for Losses



The covered amount is the largest measure of the financial portfolio, followed by the net covered amount, and the allowance for losses. The net covered amount is less than the covered amount because it accounts for guarantee limits, agency resources available to cover losses, and the allowance for losses. Those measures depend on several factors—including macroeconomic conditions, borrowers' repayment rates, changes in federal policies, and the incidence of natural disasters—and thus vary every year.

Data source: Congressional Budget Office.

measuring those programs' impact on the overall economy. However, the covered amount does not account for the fact that not all loans or policies create losses for the government. Nor does it represent how much the government might ultimately be required to pay out, because even in a worst-case scenario, the government would pay only part of the covered amount. Additionally, the measure does not account for expectations of recoveries on defaulted loans and insurance policies.

Most insurance programs are structured as government corporations that pass the costs of coverage through to the industries that receive it, although in some cases—namely in times of severe losses lawmakers have backstopped insurance programs with infusions from the Treasury's general fund. Insurance programs generally cover costs through premiums and other assessments and, when those are insufficient, with money borrowed from the Treasury. For example, the FDIC has flexibility to adjust deposit insurance premiums, without additional action by the Congress, to cover the expected losses associated with its insurance, to build a reserve against greater-than-expected losses, and to recoup losses after they have taken place. In the past, following heavy losses that threatened the ability of insurance programs to continue paying claims in full, the Congress changed the law to raise the premiums of those programs that did not have the flexibility to do so themselves. In other cases, lawmakers passed losses on to taxpayers by

See Congressional Budget Office, Measuring the Costs of Federal Insurance Programs: Cash or Accrual? (December 2018), www.cbo.gov/publication/53921.

transferring money from the general fund of the Treasury to the funds associated with the insurance program, or by forgiving amounts that the insurance funds had borrowed from the Treasury.

Net Covered Amount

The net covered amount is closely related to the contingent liability of the federal government—that is, the amount that it could owe depending on the outcome of future events. The net covered amount equals the covered amount minus amounts related to the following:

- Resources Available to Cover Losses. In years when premiums for insurance coverage exceed losses from insurance claims and administrative costs, government corporations, such as the FDIC, deposit the excess premiums in a government fund that can be used to pay future claims. 10 Such deposits reduce the federal budget deficit in the year in which they are made. The balances of those funds represent the capacity to cover losses with resources that originated from premiums assessed on the covered industry rather than with revenues collected from taxpayers. When a government fund, such as the Deposit Insurance Fund (DIF), incurs expenses to resolve an institution, a net outlay is recorded in the budget, thereby raising the deficit.
- Risk Sharing. The government often shares risk in credit and insurance programs with private entities. For example, the mortgage guarantee

entities. For example, the mortgage guarantee

10. Premium payments are recorded as offsetting receipts in

not revenues.

the budget—that is, they are treated as negative outlays,

- Coverage Limits. In some cases, a statute sets a limit on government payouts. For example, under current law, the FDIC insures only up to \$250,000 of an account owner's deposits per institution.
- Allowance for Losses. Credit programs have an allowance for losses that is calculated on the basis of procedures specified by the Federal Credit Reform Act of 1990 (FCRA). The allowance for a given loan or loan guarantee is a measure of the amount, net of recoveries and other cash inflows to the government (such as interest payments and fees), that the agency is likely to lose, on average, as a result of default. For insurance programs, the allowance for losses—recorded and estimated in accordance with accounting standards—is based on the liability (net of offsetting recoveries) arising from imminent and highly probable claims as well as from losses associated with events that have already taken place. The losses included in the allowance for losses for credit programs have already been recognized in the budget,

but the liabilities recorded in the allowance for losses for insurance programs have not. Although uncommon, the allowance for losses for credit programs can be negative when expected fees are greater than expected losses; negative values are excluded when calculating the net covered amount.

It is possible that the federal government could incur losses that were larger or smaller than expected. However, under no plausible scenario could the government lose all of the net covered amount, in part because claims and default rates are unlikely to ever reach 100 percent. In addition, the potential commitment of government programs is limited for the following reasons:

- Recoupment. The Congress requires that some programs recoup their losses through assessments or premiums on covered entities. For example, the FDIC effectively recoups losses covered by the DIF by setting premiums to maintain a target reserve ratio. And if the use of its orderly liquidation authority to resolve large financial institutions resulted in a loss, the FDIC would be required to recoup that money through assessments on other large financial institutions.¹²
- Limited Resources Under Current Law.
 Many insurance programs lack the authority

program run by the Department of Veterans Affairs covers a maximum of 50 percent of the value of mortgages backed by the program, and the Small Business Administration's 7(a) program guarantees up to 90 percent of loan balances. For those programs and others like them, the federal government would pay less than 100 percent of the covered amount in the event of a default or loss.

^{11.} See Congressional Budget Office, *How CBO Analyzes Public-Private Risk Sharing in Insurance Markets* (November 2022), www.cbo.gov/publication/57615.

^{12.} The FDIC's orderly liquidation authority establishes a process to liquidate a failed institution in which the FDIC acts as a receiver once the Secretary of the Treasury has determined that the institution is both systemically important and in default. A systemically important institution is a large financial company (bank or nonbank) whose failure might trigger a financial crisis.

or financial resources to pay out on all their commitments at once. For example, the FDIC can cover losses only up to the sum of the balance of the DIF and the agency's indefinite borrowing authority of \$100 billion.¹³ Likewise, PBGC can cover claims only until its trust and revolving funds have been exhausted.

Allowance for Losses

In addition to the covered and net covered amount, the report presents the allowance for losses for credit and insurance programs. The programs' allowances for losses are not estimated by CBO; rather, they are estimated by the agencies that administer the programs. Those estimates reflect projections of default and of future insurance claims for outstanding credit and insurance obligations and are often probability-weighted among different economic scenarios. ¹⁴ The allowances for losses are a very small share of the covered amount and do not indicate the amount the

government might have to outlay under a specific economic scenario.

How the Measures in This Report Differ From Budgetary Estimates

This report presents measures of the federal financial portfolio for credit and insurance programs that are different from budgetary estimates. Unlike CBO's baseline budget projections, the measures presented here reflect only outstanding loan cohorts; no attempt is made in this report to project future loan cohorts or insurance activity. The three measures discussed here complement budget projections and are useful indicators of the size and state of the federal credit and insurance portfolio.

Credit Programs. The accounting procedures currently used for credit programs in the federal budget are prescribed by the Federal Credit Reform Act of 1990. FCRA requires that the federal government estimate the cost of its loans and loan guarantees on a present-value basis. A present value is a single number that expresses the flows of current and expected 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. Under FCRA's rules, the projected interest rates on Treasury securities with similar terms to maturity

are used as the discount rates. For instance, the yield on a Treasury security maturing in one year would be used to discount cash flows one year from disbursement, a two-year rate would be used for cash flows two years from disbursement, and so on.

The expected future cash flows used to calculate the present value incorporate estimated default rates. For direct loans, expected future cash flows are equal to the principal and interest payments due minus the amount of expected defaults (net of recoveries); for loan guarantees, expected future cash flows are equal to guarantee payments for defaults (net of recoveries and fees).

That present value of a loan is referred to as its subsidy cost and is recorded in the budget in the year the loan is disbursed. The subsidy cost is reestimated each year on the basis of data for the cash flows received to date and updated assumptions about future cash flows. (The discount rates used for reestimates are the same as those used at the time of disbursement.) The difference between the reestimated subsidy cost and the most recent subsidy cost is recorded in the budget, and thus affects the deficit, in the year of the reestimate. Through that process, by the end of a loan's term, all cash flows associated with the loan will have been reflected in the annual deficits recorded since it was originated. The same process applies to loan guarantees.

^{13.} The FDIC's borrowing authority permits the corporation to have up to \$100 billion outstanding indefinitely by borrowing from the Treasury, the Federal Financing Bank, insured depository institutions, and the Federal Home Loan Banks. See sec. 14 of the Federal Deposit Insurance Act (codified at 12 U.S.C. § 1824 (2018)). For more information, see Congressional Budget Office, *Measuring the Costs of Federal Insurance Programs: Cash or Accrual?* (December 2018), www.cbo.gov/publication/53921.

^{14.} For federal credit programs, FCRA prescribes the rules for estimating the allowance for losses. Those rules differ from the current expected credit losses method prescribed for private companies by the Financial Accounting Standards Board.

^{15.} Sec. 504(d) of FCRA, 2 U.S.C. § 661c(d), https://tinyurl.com/2e47m2kv.

This report captures the realized deficit effects of outstanding cohorts of direct loans and loan guarantees with two measures calculated using FCRA procedures and reported on financial statements: the allowance for losses for direct loans and the liability for loan guarantees (collectively referred to in this report as the allowance for losses). For direct loans, the allowance for losses is the difference between the face value of the loan and the amount the financing account owes the Treasury.¹⁶ For loan guarantees, the liability measures the amount of losses incorporated in past deficits through financing account transactions and interest. Those amounts are based on loans that have already been disbursed and include defaults that have already occurred and those that are projected to occur on such loans. The covered amount is equal to the face value of outstanding direct loans and loan guarantees, and the net covered amount is equal to the guaranteed portion of the covered amount minus the allowance for losses.

For credit programs, the subsidy cost and the allowance for losses are related to each other. Suppose that an agency disburses a \$10 billion loan with an expected default rate (net of recoveries) of 10 percent. Principal and interest are due two years later at an interest rate that equals the rate on Treasury securities. The face value of the loan is \$10 billion, the allowance for losses is \$1 billion (10 percent of \$10 billion), and the financing account owes the Treasury \$9 billion. The allowance for losses matches the amount of loss (\$1 billion) that has already been incorporated in the deficit. Suppose that, after one year, the default rate on the loan is revised downward to 6 percent, for a reestimated subsidy cost of \$0.6 billion (6 percent of \$10 billion). The amount that the financing account owes the Treasury is revised upward to \$9.4 billion, and the deficit decreases by \$0.4 billion (the original subsidy cost of \$1 billion minus the reestimated subsidy cost of \$0.6 billion). Suppose that, at the same time, a second loan is disbursed for \$20 billion with an estimated default rate of 5 percent and a subsidy cost of \$1 billion. The face value of the loans is now \$30 billion, and the subsidy cost is \$1.6 billion (the reestimated subsidy cost of \$0.6 billion for the first loan plus the subsidy cost of \$1 billion for the second loan). The amount that the financing account owes the Treasury is now \$28.4 billion, equal to the difference between the face value of the loans and the subsidy cost. The allowance for losses thus reconciles the face value and financing account balance for all outstanding loans made in the current year and all previous years. However, the allowance for losses

has no relationship to the subsidy cost of future cohorts (estimates of which *are* incorporated in CBO's baseline budget projections) because it measures only past cohorts.

Insurance Programs. Unlike federal credit programs, federal insurance programs are budgeted for on a cash basis, where the program's effect on the budget deficit is measured as the difference between cash inflows and outflows in the current year. ¹⁷ Cash-basis estimates of how future deficits would be affected are based on anticipated cash inflows and outflows and are limited to 10 years into the future.

This report captures the allowance for losses for insurance programs with a measure of programs' liabilities that is reported by agencies on their financial statements. That measure represents imminent and highly probable losses not yet incurred (as projected by the administering agency) and claims that are associated with past events but not yet paid. Unlike the FCRA measures used with credit programs, those liability measures are not related to budget projections, which account for losses beyond those that are probable and imminent. The covered amount is a measure of the total insurance in force. The net covered amount is equal to the guaranteed portion of the covered amount (subject to limits on the government's payout) minus the allowance for

^{16.} The financing account is a nonbudgetary account (or accounts) associated with each credit program account that holds balances, receives the subsidy cost payment from the credit program account, and includes all other cash flows to and from the government resulting from direct loan obligations or loan guarantee commitments made on or after October 1, 1991. As required under FCRA, such accounts reconcile subsidies calculated on an accrual basis with the cash flows associated with credit activities. The account tracks flows between the Treasury, the program account, and the public. The net cash flow in each financing account for a fiscal year is shown in the federal budget as other means of financing.

^{17.} See Congressional Budget Office, Measuring the Costs of Federal Insurance Programs: Cash or Accrual? (December 2018), www.cbo.gov/publication/53921.

losses and asset and fund balances that are available to cover losses.

Measures of Financial Activities and Federal Debt

Measures of federal debt are often used to understand the federal government's overall financial position. The three main measures of federal debt—debt held by the public, debt net of financial assets, and gross debt—incorporate components of the covered amount, net covered amount, and allowance for losses (see Appendix B).

- When a direct loan is made, debt held by the public rises by the amount that is disbursed to the borrower, all other revenues and spending being equal.
- Debt net of financial assets incorporates the allowance for losses in credit programs.
- Gross debt reflects the balance of Treasury securities held by government accounts, such as the Deposit Insurance Fund, that record collections and expenditures. Treasury securities held by government accounts

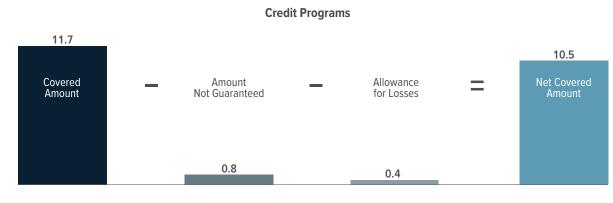
represent amounts that the Treasury owes to parts of the government as opposed to the public. In the case of insurance programs, those holdings of Treasury securities originated with premiums collected by the program. Holdings in government accounts and other agency resources are subtracted from the covered amount to calculate the net covered amount.

Overview of the Federal Financial Portfolio in 2021

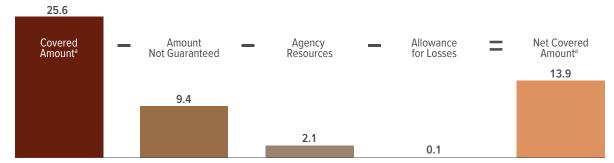
Exhibit 1.

Trillions of Dollars

Overall Financial Position of Credit and Insurance Programs, 2021







Data source: Congressional Budget Office, using the data sources for specific programs identified in later exhibits. Except where noted below, all values shown are based on data reported by federal agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

a. CBO used data reported for 2018 (the latest data available) to estimate the values for the covered amount and net covered amount for insurance for private pensions.

In 2021, the total covered amount for credit programs was \$11.7 trillion; for insurance programs, it was \$25.6 trillion. According to the September 2022 release of the Financial Accounts of the United States, U.S. households owned financial assets that were worth a total of \$113.9 trillion in 2021. The combined total covered amount for federal credit and insurance thus equaled one-third of the value of total financial assets owned by U.S. households (down from 41 percent in 2012). Such a comparison of the total covered amount with a measure of assets is, in CBO's view, more useful than a comparison of that amount with gross domestic product, which measures the annual flow of income.

Not all the covered amount is at risk of loss, because in many cases government guarantees and insurance commitments are partial and subject to limits. After limits on the government's payout, assets and fund balances available to cover losses, and previously recognized losses are accounted for, the net covered amount in 2021 was \$10.5 trillion for credit programs and \$13.9 trillion for insurance programs.

Agencies expected to lose a small portion of the net covered amount in 2021. The allowance for losses for credit programs was \$0.4 trillion; for insurance programs, it was \$0.1 trillion. The procedures used to estimate losses for credit programs differ from those used for insurance programs. FCRA estimates of the subsidy cost for credit programs are based on the net present value of all future cash flows for the loans or loan guarantees. By contrast, loss estimates for insurance programs are net of recoveries but do not account for fees and premiums that may partially or fully offset losses.

Exhibit 2.





Data source: Congressional Budget Office, using the data sources for specific programs identified in later exhibits. Values shown are based on data reported by federal agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

Of the credit programs, housing and real estate programs accounted for most of the total covered amount (\$9.7 trillion out of \$11.7 trillion) and most of the total net covered amount (\$8.9 trillion out of \$10.5 trillion), but they accounted for only \$23 billion (6 percent) of the total allowance for losses in 2021. Given the size of housing programs' commitments, the allowance for losses for those programs was relatively small because the financial state of the housing market, mortgage lenders, and borrowers was relatively healthy in 2021. However, in 2021, the housing market became more volatile, and the allowance for losses may thus increase.

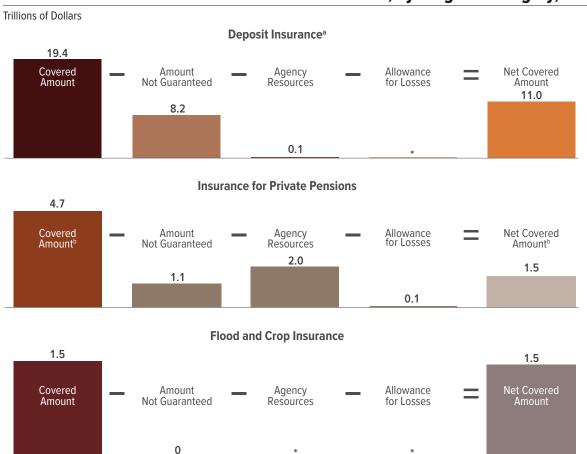
By contrast, student loans accounted for \$1.6 trillion (14 percent) of the covered amount and \$1.3 trillion (12 percent) of the net covered amount for all credit programs in 2021, yet \$0.3 trillion (90 percent) of the total allowance zfor losses for credit programs (\$0.4 trillion) was attributable to student loans.

^{* =} less than \$50 billion.

a. Includes programs administered by the Department of Agriculture, the Department of Energy, the Department of Transportation, the
Export-Import Bank, and the Small Business Administration. For a list of the credit programs administered by those agencies, see Office of
Management and Budget, Budget of the U.S. Government, Fiscal Year 2023: Federal Credit Supplement (April 2022), www.govinfo.gov/app/
details/BUDGET-2023-FCS/summary.

Exhibit 3.





Data source: Congressional Budget Office, using the data sources for specific programs identified in later exhibits. Except where noted below, all values shown are based on data reported by federal agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

Deposit insurance programs—including both the FDIC's insurance for bank deposits and the NCUA's insurance for shares in credit unions accounted for 76 percent of the total covered amount (\$19.4 trillion out of \$25.6 trillion) and 79 percent of the total net covered amount (\$11.0 trillion out of \$13.9 trillion) for insurance programs, but they accounted for only one-tenth of one percent of the total allowance for losses in 2021. Because the banking industry was healthy in 2021, the allowance for losses for deposit insurance programs was very small (less than \$1 billion). By contrast, private pensions have been considerably underfunded; insurance for private pensions represents \$112 billion (89 percent) of the total allowance for losses (\$126 billion) for insurance programs.

^{* =} less than \$50 billion.

a. Includes the Federal Deposit Insurance Corporation's (FDIC's) Deposit Insurance Fund and the National Credit Union Administration's Share Insurance Fund. These values do not account for the FDIC's orderly liquidation authority.

b. CBO used data reported for 2018 (the latest data available) to estimate the values for the covered amount and net covered amount for insurance for private pensions.

Housing and Real Estate Programs

The federal government's housing and real estate portfolio includes direct loans and loan guarantees made by Fannie Mae, Freddie Mac, the Federal Housing Administration (which is part of the Department of Housing and Urban Development), the Department of Veterans Affairs, and the Rural Housing Service (which is part of the Department of Agriculture).

Under current law, the federal government's financial support for Fannie Mae and Freddie Mac is capped by the Department of the Treasury's authority to purchase senior preferred stock of the two government-sponsored enterprises (GSEs), leaving the private sector responsible for any losses the GSEs incur that exceed the Treasury's purchasing authority. At the end of September 2021, \$254 billion of the Treasury's available authority remained unused. The exhibits in this report do not account for restrictions on the Treasury's borrowing authority.

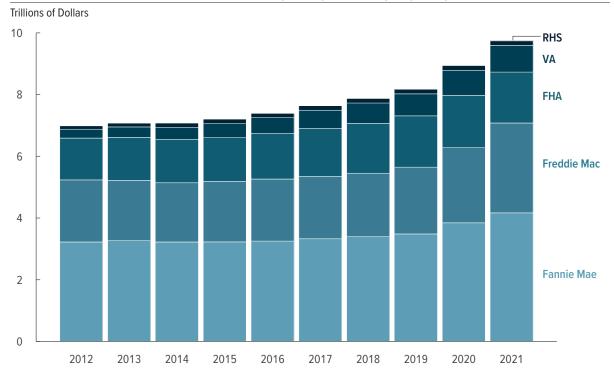
CBO excludes guarantees provided by the Government National Mortgage Association (Ginnie Mae) from the financial activities presented in this report because they are incremental guarantees on loans already included in the totals for loans guaranteed by FHA, VA, and RHS.

^{18.} See Federal Housing Finance Agency, "Senior Preferred Stock Purchase Agreements" (October 17, 2022), https://tinyurl.com/2s49k4mp.

^{19.} See Department of the Treasury, Agency Financial Report, Fiscal Year 2021 (November 2021), https://tinyurl.com/ycxenazx.

Exhibit 4.

Covered Amount for Federal Housing Programs, by Agency, 2012 to 2021



Data sources: Department of Agriculture, *Agency Financial Report* (2012–21), https://tinyurl.com/mr3sp5s5; Department of Veterans Affairs, *Agency Financial Report* (2012–21), www.va.gov/finance/afr/index.asp; Fannie Mae, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/3vr65nh5; Federal Housing Administration, *Annual Management Report* (2012–21), https://tinyurl.com/yjb62saf; and Freddie Mac, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/46fa3wph. Values shown are based on data reported by those agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

FHA = Federal Housing Administration; RHS = Rural Housing Service; VA = Department of Veterans Affairs.

For Fannie Mae and Freddie Mac, the covered amount equals the total amount of liabilities. For FHA, VA, and RHS, the covered amount equals the outstanding balance of direct loans and loan guarantees issued by the agencies.

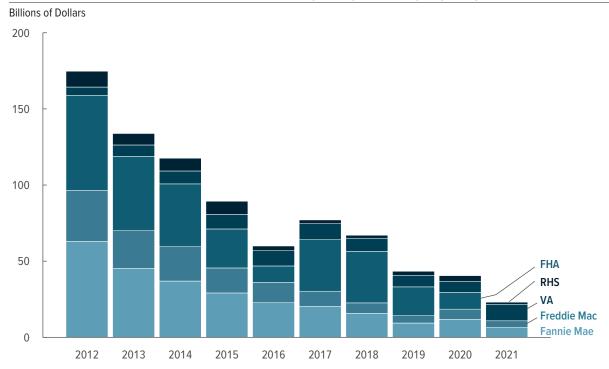
The covered amount for direct loans and loan guarantees related to housing programs increased from \$7.0 trillion in 2012 to \$8.2 trillion in 2019, growing by an average of 2 percent annually. During that period, the average annual growth rates of the covered amount for Fannie Mae (1 percent) and Freddie Mac (1 percent) were slower than those for FHA (3 percent), VA (14 percent), and RHS (5 percent).

Over the following two years, the housing market expanded, and the total covered amount for housing programs rose much faster—by 9 percent in 2020 (to \$8.9 trillion) and in 2021 (to \$9.7 trillion). Those increases were driven primarily by rapid growth in the volume of guarantees for Fannie Mae (an increase of 10 percent in 2020 and 8 percent in 2021), Freddie Mac (an increase of 13 percent in 2020 and 19 percent in 2021), and VA (an increase of 15 percent in 2020 and 6 percent in 2021).

In 2021, Fannie Mae and Freddie Mac accounted for 73 percent (\$7.1 trillion) of the total covered amount; FHA, for 17 percent (\$1.6 trillion); and VA, for 9 percent (\$0.9 trillion).

Exhibit 5.

Allowance for Losses for Federal Housing Programs, by Agency, 2012 to 2021



Data sources: Department of Agriculture, *Agency Financial Report* (2012–21), https://tinyurl.com/mr3sp5s5; Department of Veterans Affairs, *Agency Financial Report* (2012–21), www.va.gov/finance/afr/index.asp; Fannie Mae, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/3vr65nh5; Federal Housing Administration, *Annual Management Report* (2012–21), https://tinyurl.com/yjb62saf; and Freddie Mac, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/46fa3wph. Values shown are based on data reported by those agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

FHA = Federal Housing Administration; RHS = Rural Housing Service; VA = Department of Veterans Affairs.

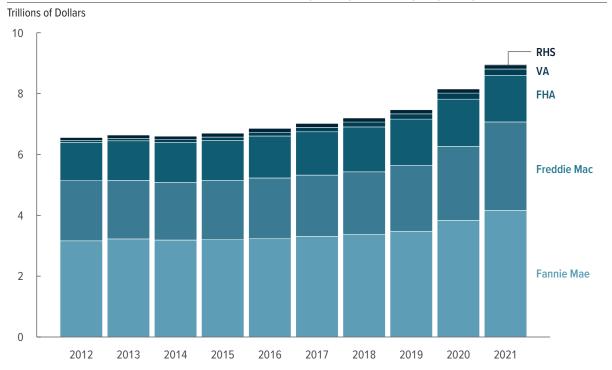
For Fannie Mae and Freddie Mac, the allowance for losses is estimated and reported in accordance with accounting standards. For FHA, VA, and RHS, the allowance for losses equals the allowance for losses on direct loans plus the liability for loan guarantees; that allowance is measured on a FCRA basis.

The allowance for losses for housing programs fell from \$175 billion in 2012 to \$60 billion in 2016, decreasing by an average of 23 percent per year. During that period, only VA's allowance for losses increased. The allowance for losses for housing programs was notably higher in 2017 and 2018, primarily because FHA's allowance for losses roughly tripled from \$11 billion in 2016 to \$34 billion in 2017 and 2018.

In 2019, the allowance for losses for housing programs fell by 35 percent, to a total of \$43 billion; it remained at about that level—\$40 billion—in 2020. That decrease was driven mainly by a 44 percent reduction in FHA's allowance for losses. In 2021, the total allowance for losses fell further—by 43 percent—to \$23 billion. That year, the allowance for losses of all but one of the agencies declined. (VA's increased by 46 percent, from \$7 billion to \$11 billion.) FHA even reported a negative allowance for losses—that is, a gain—in 2021 (—\$0.3 billion, not shown in the exhibit).

Exhibit 6.

Net Covered Amount for Federal Housing Programs, by Agency, 2012 to 2021



Data sources: Department of Agriculture, *Agency Financial Report* (2012–21), https://tinyurl.com/mr3sp5s5; Department of Veterans Affairs, *Agency Financial Report* (2012–21), www.va.gov/finance/afr/index.asp; Fannie Mae, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/3vr65nh5; Federal Housing Administration, *Annual Management Report* (2012–21), https://tinyurl.com/yjb62saf; and Freddie Mac, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/46fa3wph. Values shown are based on data reported by those agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

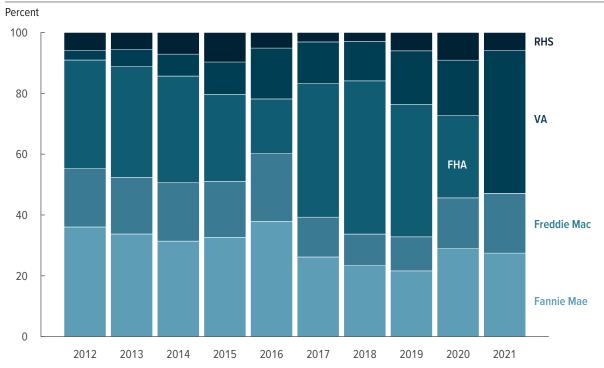
FHA = Federal Housing Administration; RHS = Rural Housing Service; VA = Department of Veterans Affairs.

The net covered amount is equal to the covered amount (for Fannie Mae and Freddie Mac) or the guaranteed portion of the covered amount (for FHA, VA, and RHS), minus the allowance for losses. The total net covered amount for housing programs rose from \$6.6 trillion in 2012 to \$7.5 trillion in 2019—an increase of 2 percent per year, on average. VA had the largest average annual rate of increase (13 percent), followed by RHS (6 percent). In 2020, the total net covered amount for housing programs increased by 9 percent (to \$8.2 trillion), and in 2021, it rose by 10 percent (to \$8.9 trillion). Those increases mirror increases in the covered amount and were driven primarily by the large volume of guarantees made by Fannie Mae, Freddie Mac, and VA.

In 2021, Fannie Mae and Freddie Mac accounted for 79 percent (\$7.1 trillion) of the total net covered amount; FHA, for 17 percent (\$1.5 trillion); and VA, for 2 percent (\$0.2 trillion).

Exhibit 7.

Agencies' Shares of the Total Allowance for Losses for Federal Housing Programs, 2012 to 2021



Data sources: Department of Agriculture, *Agency Financial Report* (2012–21), https://tinyurl.com/mr3sp5s5; Department of Veterans Affairs, *Agency Financial Report* (2012–21), www.va.gov/finance/afr/index.asp; Fannie Mae, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/3vr65nh5; Federal Housing Administration, *Annual Management Report* (2012–21), https://tinyurl.com/yjb62saf; and Freddie Mac, Form 10-Q (third-quarter financial report filed with the Securities and Exchange Commission, 2012–21), https://tinyurl.com/46fa3wph. Values shown are based on data reported by those agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

FHA = Federal Housing Administration; RHS = Rural Housing Service; VA = Department of Veterans Affairs.

The distribution of the allowance for losses among agencies has changed over the past decade. Fannie Mae and Freddie Mac accounted for more than half of the total allowance for losses from 2012 to 2016. Their share decreased to about one-third in 2019 before approaching nearly half of the total again in 2020 and 2021.

By contrast, FHA accounted for about one-third of the total allowance for losses from 2012 to 2015, fell to less than one-fifth in 2016, rose to one-half in 2018, and then decreased each year before reaching zero in 2021. FHA reported no expected loss in 2021; rather, it projected a slight gain (not shown in the exhibit), indicating that the agency expected revenues from fees to more than offset credit losses.

VA's share grew exponentially—from 3 percent of the total allowance for losses reported by all housing finance agencies in 2012 to 47 percent in 2021. That increase is due mostly to decreases in other agencies' allowance for losses, but in part it is attributable to certain characteristics of VA's programs—namely, VA's loan guarantees have fewer underwriting restrictions than those issued by FHA and the GSEs, neither a down payment nor private mortgage insurance is required for a mortgage obtained through VA, and there is no limit on the mortgage amount.

Student Loan Programs

The Department of Education operates two programs that provide loans to borrowers interested in pursuing a postsecondary education. The agency extends loans directly to borrowers through the William D. Ford Federal Direct Loan Program. The Federal Family Education Loan Program guaranteed student loans made by private lenders until it was discontinued on June 3, 2010. The program stopped issuing new guarantees on that date and has been winding down since then.

The direct loan program makes loans to eligible undergraduate, graduate, and professional students to help pay for education expenses and tuition. Depending on the undergraduate borrower's financial need, the Department of Education may not charge interest on the loan while the borrower is in school or during deferment periods.

The values in this report for the covered amount, net covered amount, and allowance for losses

are based on program parameters in place before the Biden Administration's announcement on August 24, 2022, about student loan cancellation, payment suspensions, and a new income-driven repayment plan. That executive action will make borrowers with an individual income of less than \$125,000 or a household income of less than \$250,000 eligible for up to \$20,000 in student loan cancellation; it also suspended payments and interest accruals on student loans.²⁰

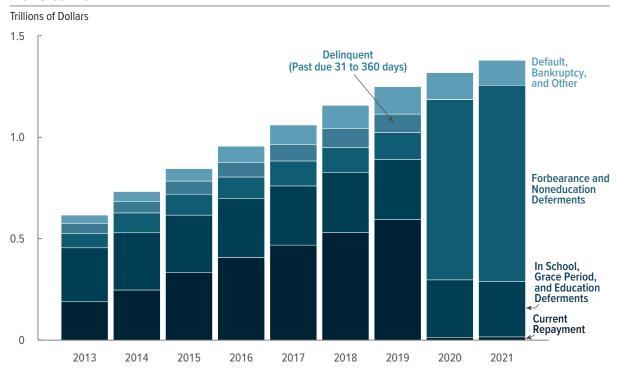
Under the Administration's proposed income-driven repayment plan, borrowers will pay 5 percent of their discretionary income monthly on their undergraduate loans and 10 percent on their graduate loans. (Currently, borrowers in income-driven repayment plans pay 10 percent for all loans.) In addition, after 10 years of repayment, those borrowers who originally borrowed \$12,000 or less will be eligible for forgiveness. Under the new plan, discretionary income is defined as income above 225 percent of the federal poverty guidelines, whereas currently it is defined as income above 150 percent of those guidelines. Furthermore, under the new plan, unpaid interest will not accrue.

^{20.} Following several legal challenges, the Administration's plan is currently being reviewed by the Supreme Court. On November 22, 2022, the Department of Education announced that the suspension of loan payments would continue until 60 days after the litigation over the student loan cancellation program is resolved or 60 days after June 30, 2023, if the litigation has not been resolved by that date. See Department of Education, "Biden-Harris Administration Continues Fight for Student Debt Relief for Millions of Borrowers, Extends Student Loan Repayment Pause" (press release, November 22, 2022), https://tinyurl.com/3772fspm.

^{21.} Department of Education, "New Proposed Regulations Would Transform Income-Driven Repayment by Cutting Undergraduate Loan Payments in Half and Preventing Unpaid Interest Accumulation" (press release, January 10, 2023), https://tinyurl.com/24dj6655.

Exhibit 8.

Covered Amount for the Direct Student Loan Portfolio, by Loan Status, 2013 to 2021



Data sources: Department of Education, *Agency Financial Report* (2012–21), www2.ed.gov/about/reports/annual/index.html. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

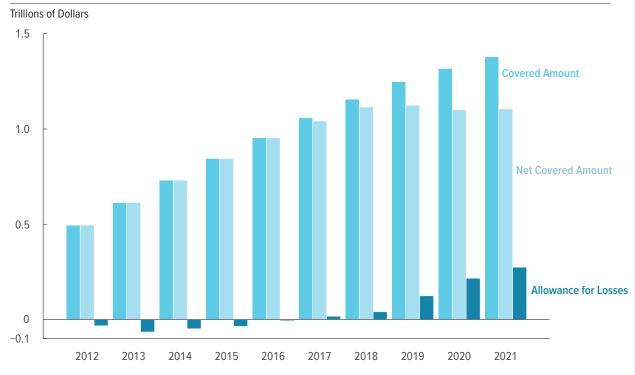
The current repayment status refers to loans that are being repaid on time. That category includes some loans in income-driven repayment plans for which the amount of interest accruing exceeds the amount of the payments being made.

Over the past decade, the covered amount for the direct loan program (that is, the outstanding principal and interest balance) increased by 12 percent per year, on average—from \$0.5 trillion in 2012 to \$1.4 trillion in 2021. The increased volume was largely driven by the elimination of the guaranteed student loan program in 2010; many loans that previously would have been made by private lenders and guaranteed by the federal government were instead made directly by the government.

After the coronavirus pandemic began in 2020, the federal government implemented several temporary measures to provide economic relief to borrowers of federal student loans: It suspended payments, implemented a zero percent interest rate, and stopped collecting on defaulted loans. As a result, the percentage of loans in forbearance and noneducation deferment increased sharply (from 11 percent in 2019 to 70 percent in 2021), and no loans were in delinquent status. (In 2019, 7 percent of loans were delinquent.) Those temporary measures have been extended through August 2023, which will keep levels of forbearance high and delinquency low for all of 2022 and most of 2023.

Exhibit 9.

Financial Position of the Direct Student Loan Portfolio, 2012 to 2021



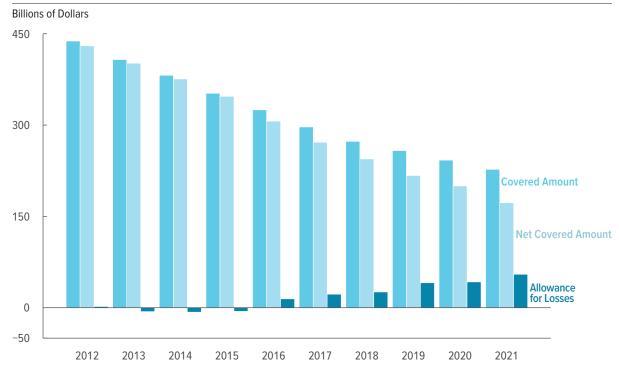
Data sources: Department of Education, *Agency Financial Report* (2012–21), www2.ed.gov/about/reports/annual/index.html. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

In 2012, the Department of Education projected a gain of \$32 billion on the outstanding student loan portfolio and thus reported an allowance for losses of -\$32 billion (equal to 6 percent of the total covered amount). But in 2017, the agency began projecting a loss on the outstanding portfolio because the share of borrowers participating in income-driven repayment plans increased. Those plans are more costly to the government than fixed payment plans because the required payments depend on borrowers' income and because borrowers may be eligible to have their unpaid balances forgiven after a certain number of payments. The measures taken during the pandemic drove the allowance for losses up further, from \$17 billion (2 percent of the covered amount) in 2017 to \$274 billion (20 percent of the covered amount) in 2021.

The allowance for losses is estimated in accordance with FCRA. It accounts for the subsidy for current-year disbursements, loan modifications, fees received, loans written off, the subsidy allowance for amortization, and net subsidy reestimates.

Exhibit 10.

Financial Position of the Guaranteed Student Loan Portfolio, 2012 to 2021



Data sources: Department of Education, *Agency Financial Report* (2012–21), www2.ed.gov/about/reports/annual/index.html. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

The Department of Education has not made any new loan guarantees since 2010. The program's portfolio will continue to shrink as outstanding loans are repaid or, in the event of default, terminated. Since 2016, the department has estimated that it would incur losses on the guaranteed student loan portfolio, primarily because it has increased its estimates of loan forgiveness as the number of borrowers using income-driven repayment plans has risen. As they have for the direct loan program, the pandemic-related measures affecting student loans have further pushed up the allowance for losses for the guaranteed student loan portfolio.

Other Credit Programs

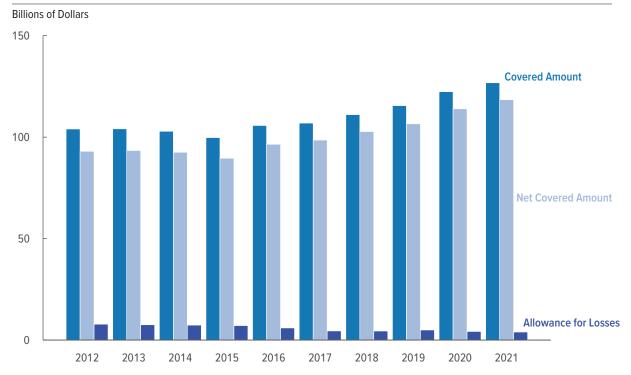
The federal government provides loans and loan guarantees through many smaller credit programs unrelated to housing and real estate or student loans. Those programs typically receive annual appropriations that support a relatively stable amount of credit activity and subsidy cost. The agencies discussed in this section—the Department of Agriculture, the Department of Energy, the Department of Transportation, the Export-Import Bank (Ex-Im Bank), and the Small Business Administration (SBA)—account for most of the credit programs not discussed in other sections of this report.²²

The covered amount for the other credit programs is the outstanding balance of direct loans and loan guarantees issued by the agencies. The allowance for losses, which is measured on a FCRA basis, equals the allowance for losses on direct loans plus the liability for loan guarantees. The net covered amount equals the guaranteed portion of the covered amount minus the allowance for losses.

^{22.} For a list of all the credit programs currently administered by those agencies, see Office of Management and Budget, Budget of the U.S. Government, Fiscal Year 2023: Federal Credit Supplement (April 2022), www.govinfo.gov/app/details/BUDGET-2023-FCS/summary.

Exhibit 11.

Financial Position of the Department of Agriculture's Credit Programs, 2012 to 2021



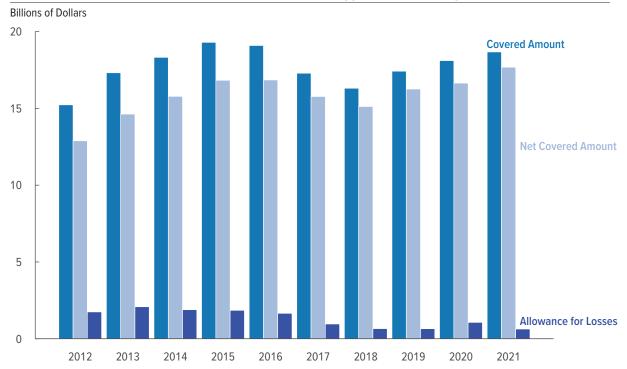
Data sources: Department of Agriculture, *Agency Financial Report* (2012–21), www.usda.gov/our-agency/about-usda/performance. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

Amounts for housing and real estate programs administered by the Rural Housing Service are not included in this exhibit. Those programs are included in the "Housing and Real Estate Programs" section of this report.

Although the covered amount for the Department of Agriculture's direct loan and loan guarantee programs declined slightly from 2012 to 2015, it increased by 2 percent per year, on average, over the past decade—from \$104 billion in 2012 to \$127 billion in 2021. During that period, the allowance for losses fell by an average of 7 percent annually, dropping from \$8 billion (8 percent of the covered amount) in 2012 to \$4 billion (3 percent of the covered amount) in 2021. The net covered amount rose by 3 percent per year, on average; that increase is larger than the rate of increase in the covered amount and is explained by the decrease in the allowance for losses for direct loans measured as a percentage of the covered amount for those loans.

Exhibit 12.

Financial Position of the Department of Energy's Credit Programs, 2012 to 2021

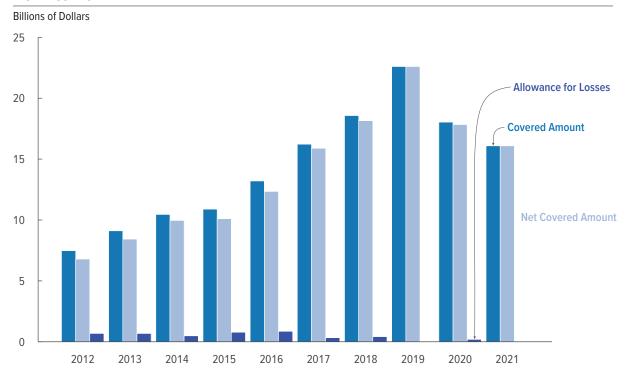


Data sources: Department of Energy, *Agency Financial Report* (2012–21), www.energy.gov/cfo/listings/agency-financial-reports. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

The covered amount for the Department of Energy's direct loan and loan guarantee programs increased from \$15 billion in 2012 to \$19 billion in 2015, dropped off for a few years, and then increased again to \$19 billion in 2021; over the course of the decade, it grew by an average of 2 percent per year. The allowance for losses decreased by an average of 11 percent per year over that period, dropping from \$2 billion (11 percent of the covered amount) in 2012 to \$1 billion (3 percent of the covered amount) in 2021. The net covered amount rose faster than the covered amount—by 4 percent per year, on average—because of the decrease in the allowance for losses for direct loans measured as a percentage of the covered amount for those loans.

Exhibit 13.

Financial Position of the Department of Transportation's Credit Programs, 2012 to 2021



Data sources: Department of Transportation, *Agency Financial Report* (2012–21), https://tinyurl.com/5yxfzapa. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

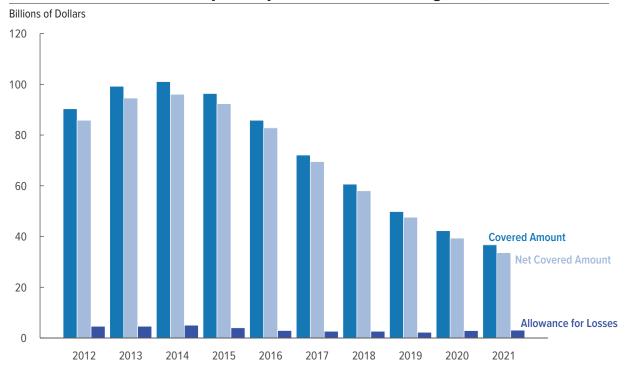
Over the past decade, the covered amount for the Department of Transportation's direct loan and loan guarantee programs rose by an average of 17 percent per year, from \$7 billion in 2012 to \$23 billion in 2019. That growth followed changes in the 2012 transportation authorization law that substantially increased funding for the Transportation Infrastructure Financing and Innovation Act program. After peaking in 2019, the covered amount fell by 20 percent in 2020 (to \$18 billion) and by 11 percent in 2021 (to \$16 billion).

Although the amount of outstanding loans and loan guarantees increased from 2012 to 2019, the allowance for losses decreased from \$0.7 billion (9 percent of the covered amount) in 2012 to -\$0.2 billion (that is, a projected gain equal to 1 percent of the covered amount) in 2019. The allowance remained near zero in 2021, at -\$0.1 billion (a gain of less than 1 percent of the covered amount). Negative values for the allowance for losses are not shown in the exhibit.

The covered amount and the net covered amount for the Department of Transportation's credit programs differed very little, because nearly all the loans made through those programs are fully guaranteed and the allowance for losses is small as a percentage of the covered amount.

Exhibit 14.

Financial Position of the Export-Import Bank's Credit Programs, 2012 to 2021



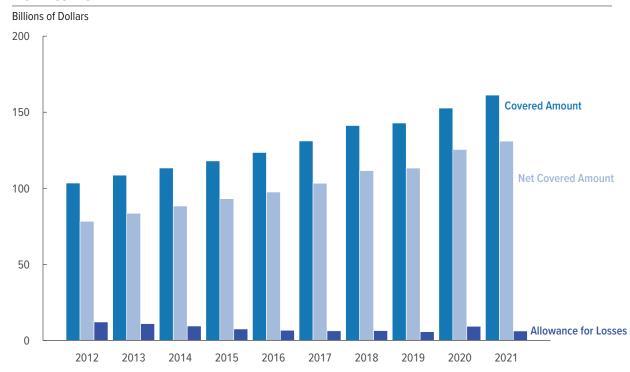
Data sources: Export-Import Bank, *Annual Report* (2012–21), www.exim.gov/news/reports. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

The covered amount for the Ex-Im Bank's direct loan and loan guarantee programs peaked at \$101 billion in 2014 and then declined by 13 percent per year, on average, to \$37 billion in 2021. Although the allowance for losses decreased in dollar terms from 2014 to 2021—from \$5 billion to \$3 billion—it increased as a percentage of the covered amount over that period, from 5 percent to 8 percent.

The net covered amount decreased by about the same annual rate as the covered amount from 2014 to 2021 (13.9 percent), because the change in the allowance for losses was small.

Exhibit 15.

Financial Position of the Small Business Administration's Credit Programs, 2012 to 2021



Data sources: Small Business Administration, *Agency Financial Report* (2012–21), www.sba.gov/document/report-agency-financial-report, and personal communication (December 2, 2022). Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

Amounts for the COVID-19 Economic Injury Disaster Loan program and the Paycheck Protection Program are not included in this exhibit.

The covered amount for SBA's direct loans and loan guarantees increased from \$103 billion in 2012 to \$161 billion in 2021 for an average annual increase of 5 percent. However, the allowance for losses decreased from \$12 billion (12 percent of the covered amount) in 2012 to \$6 billion (4 percent of the covered amount) in 2021. The net covered amount increased by an average of 6 percent per year; that rate is greater than the rate of increase in the covered amount primarily because of the decrease in the allowance for losses for loan guarantees.

In 2020 and 2021, the SBA administered two programs intended to help businesses during the pandemic: the COVID-19 Economic Injury Disaster Loan (EIDL) program and the Paycheck Protection Program (PPP). The EIDL program offered low-interest, fixed-rate, longterm loans to help small businesses meet operating expenses, such as payroll, rent or mortgage, and utilities. Borrowers in the PPP were eligible for complete loan forgiveness if they maintained employment and compensation levels, spent at least 60 percent of the loan proceeds on payroll costs, and used the remaining proceeds only on other eligible expenses. The covered amount for the EIDL program's loans and the PPP's loan guarantees totaled \$684 billion in 2020 and \$559 billion in 2021. The allowance for losses for those loans and loan guarantees totaled \$511 billion in 2020 and \$237 billion in 2021. Because the pandemic-related programs were short-lived and much larger than SBA's typical credit activities, the amounts for those programs are not included in the amounts presented for SBA.

Deposit Insurance and Orderly Liquidation Authority

The federal government runs insurance programs to help maintain the stability of the financial system. The Federal Deposit Insurance Corporation operates the Deposit Insurance Fund to insure deposits and resolve failed banks. Similarly, the National Credit Union Administration operates the Share Insurance Fund (SIF) to insure credit union members' shares (that is, deposits) and resolve failed credit unions. Orderly liquidation authority, which was established by the Dodd-Frank Wall Street Reform and Consumer Protection Act, empowers the FDIC to liquidate large financial institutions whose failure could pose a systemic risk to the economy and financial stability. Those institutions include commercial banks, investment banks, and nonbank financial institutions such as insurers.

FDIC's Deposit Insurance

The FDIC insures deposits up to \$250,000 for individual accounts and up to \$500,000 for joint accounts. That insurance is automatic for any deposit account opened at an FDIC-insured bank. In the event of a bank failure, the FDIC uses the DIF balance to pay insurance to depositors up to the insurance limit.²³ The DIF is funded primarily

by assessments (insurance premiums) on the total liabilities of FDIC-insured institutions. The FDIC sets a target reserve ratio—equal to the ratio of the DIF balance to insured deposits—that is designed to restore and maintain a positive fund balance for the DIF even during a banking crisis and to achieve steady assessment rates throughout any economic cycle. In 2021, the reserve ratio was 1.27 percent—8 basis points below the target reserve ratio of 1.35 percent.²⁴

The covered amount for the DIF is the sum of all domestic deposits at banks insured by the FDIC. The net covered amount equals total insured deposits minus the DIF balance, assessments receivable, and the allowance for losses. (Total insured deposits are less than total domestic deposits because not all domestic deposits are insured.) The allowance for losses is equal to the sum of the contingent liability for anticipated failures of FDIC-insured

institutions, guarantee payments, and litigation losses. ²⁵ The allowance for losses is very small (less than \$4 billion annually) compared with the covered amount because, historically, few banks fail each year.

NCUA's Share Insurance

Similar to the FDIC's deposit insurance, the NCUA's share insurance provides credit union members with up to \$250,000 in total coverage for their shares in individual accounts and up to \$500,000 for joint accounts. The NCUA's share insurance also offers up to \$250,000 in additional coverage for individual and Keogh retirement accounts and for revocable and irrevocable trusts.

The SIF is capitalized through credit union funds held on deposit and retained earnings. The NCUA Board establishes a desired equity ratio to protect against unexpected losses from the failure of credit unions. That ratio is calculated as the ratio of the

^{23.} The values in this report do not account for the effects of the FDIC's announcement of a "systemic risk exception" to protect all depositors at Silicon Valley Bank and Signature

Bank (regardless of the insurance limit) after the agency was appointed receiver for those banks in March 2023. See Federal Deposit Insurance Corporation, "Joint Statement by the Department of the Treasury, Federal Reserve, and FDIC" (press release, March 12, 2023), www.fdic.gov/news/press-releases/2023/pr23017.html.

^{24.} A basis point is one one-hundredth of a percentage point.

^{25.} From March 2010 through March 2013, the FDIC transferred a portfolio of loans and mortgage-backed securities held by its receiverships to several trusts. Private investors purchased the senior notes issued by the trusts, and the receiverships held the remainder. In exchange for a fee, the FDIC guaranteed timely payment of principal and interest due on the notes. The last guarantee terminated in December 2021.

contributed capital from credit union members (equal to 1 percent of member deposits) plus the cumulative results of operations to the aggregate amount of the insured shares in all insured credit unions. In December 2021, the equity ratio was 1.26 percent—7 basis points below the desired level of 1.33 percent.

The covered amount is the total amount of members' shares insured by the NCUA. The net covered amount equals total insured shares minus the SIF balance, receivables due from insured credit unions, and the allowance for losses. The allowance for losses is equal to the amount of insurance and guarantee program liabilities. The allowance for losses is small (less than \$1 billion annually) compared with the covered amount because few credit unions are liquidated or placed into conservatorship by the NCUA each year.

Orderly Liquidation Authority

Orderly liquidation authority empowers the FDIC to manage the resolution of large financial institutions—including businesses that own or are affiliated with banks and other financial companies that are not banks but that perform some of the functions of banks—outside the typical bankruptcy process. That authority can be invoked when other resolution mechanisms are insufficient to restore financial stability.

The FDIC is responsible for resolving failed banks by using the DIF to cover deposits and by liquidating banks' assets to pay liabilities other than deposits. In the event of the failure of a large, systemically important financial institution (SIFI), both the DIF and the FDIC's orderly liquidation authority would be used to resolve the failed institution.²⁷

In this report, CBO does not provide values for the covered amount, net covered amount, or allowance for losses for OLA because the universe of covered institutions is highly uncertain and the government does not guarantee that it will cover the losses of institutions that are liquidated under the authority. Since its inception in 2011, OLA has not been invoked to resolve the failure of a covered financial institution. If the FDIC uses funds from the OLA, it will recover those funds by selling some or all of the failing institution's assets, such as one or more of its lines of business or, in the case of a holding company, its subsidiaries. If the proceeds from those sales are not sufficient to recoup the FDIC's costs, then the FDIC will assess fees on other financial institutions for a limited period to recover its net loss.²⁸

^{26.} The SIF occasionally guarantees assets to facilitate mergers. It may also grant a guaranteed line of credit to a third-party lender if an insured credit union has a liquidity concern and the third-party lender refused to extend credit without a guarantee. There were no asset guarantees or guaranteed lines of credit outstanding as of December 2021.

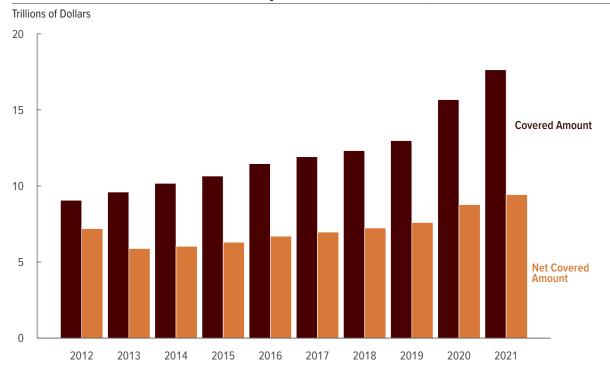
^{27.} SIFIs are large financial companies (banks and nonbanks) whose failure might trigger a financial crisis. In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act determined that bank holding companies with assets greater than \$50 billion would be designated as SIFIs and that a council of regulators called the Financial Stability Oversight Council could designate nonbanks as SIFIs as well if it determined that the nonbanks could pose a threat

to the financial stability of the United States. See Dodd-Frank Wall Street Reform and Consumer Protection Act § 113, 12 U.S.C. § 5323 (2018); and Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations, 12 C.F.R. pt. 1310, app. A (2022), https://tinyurl.com/66cns6dr.

^{28.} See Congressional Budget Office, Financial Regulation and the Federal Budget (September 2019), www.cbo.gov/publication/55586.

Exhibit 16.

Financial Position of the FDIC's Deposit Insurance Fund, 2012 to 2021



Data sources: Federal Deposit Insurance Corporation, "Quarterly Banking Profile Time Series Spreadsheet: Balance Sheet" (accessed November 29, 2022), www.fdic.gov/analysis/quarterly-banking-profile/, and *Third Quarter CFO Report to the Board* (2012–21), www.fdic.gov/about/financial-reports/corporate/index.html. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

FDIC = Federal Deposit Insurance Corporation.

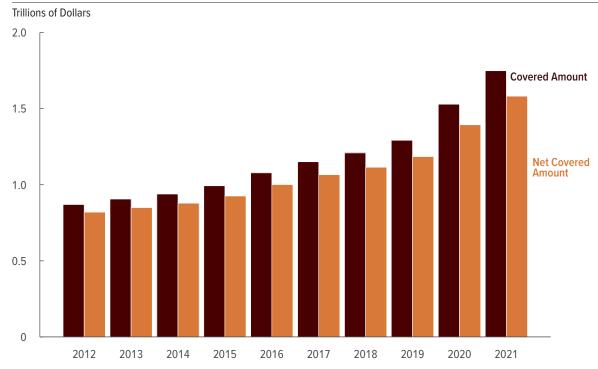
Total domestic deposits held at banks insured by the FDIC (the deposit insurance program's covered amount) increased from \$9.1 trillion in 2012 to \$13.0 trillion in 2019, averaging 5 percent growth per year. Over the next two years, deposits grew at historically high rates—21 percent in 2020 and 13 percent in 2021. That occurred because personal savings rates increased during the pandemic and because direct cash transfers and forgivable business loans provided through pandemic-related legislation—including the Coronavirus Aid, Relief, and Economic Security (CARES) Act; the Consolidated Appropriations Act, 2021; and the American Rescue Plan Act of 2021—boosted bank deposits.

The net covered amount has grown more slowly than the covered amount. From 2012 to 2019, it rose at an average annual rate of 1 percent, from \$7.2 trillion to \$7.6 trillion. Like the covered amount, the net covered amount rose more over the next two years—by 15 percent in 2020 and by 8 percent in 2021—but it still grew less than the covered amount. That growth differential between the covered amount and net covered amount resulted from more domestic deposits' becoming uninsured because the deposit insurance limit of \$250,000 per depositor has not changed as deposits have risen. The DIF balance in 2021 (\$122 billion) was almost five times the balance in 2012 (\$25 billion).

The allowance for losses is equal to the sum of the contingent liability for the anticipated failures of FDIC-insured institutions, guarantee payments, and litigation losses. Those amounts were very small (less than 1 percent of the covered amount) in all years because banks were healthy; the allowances, therefore, are not included in this exhibit.

Exhibit 17.

Financial Position of the NCUA's Share Insurance Fund, 2012 to 2021



Data sources: National Credit Union Administration, *Quarterly Credit Union Data Summary Q3* (September 2012–September 2021), https://tinyurl.com/5brhjaay, and *National Credit Union Share Insurance Fund Preliminary & Unaudited Financial Highlights* (December 2012—September 2021), https://tinyurl.com/m2b8sare. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

The net covered amount in 2012 reflects the values for the balance of the Share Insurance Fund, receivables due from insured credit unions, and the allowance for losses that are based on data reported in December of that year for the calendar year. For all other years, data are for the fiscal year.

NCUA = National Credit Union Administration.

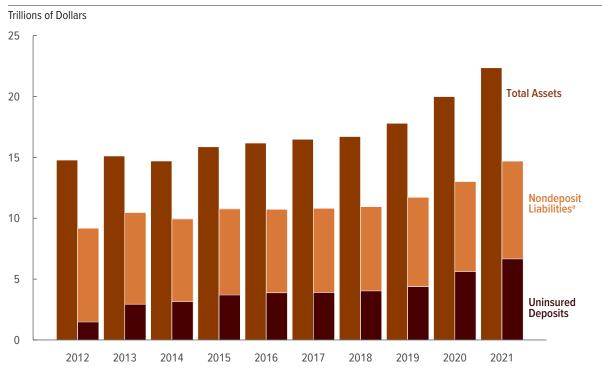
Total shares held at credit unions insured by the NCUA (the covered amount for the agency's share insurance program) increased by an average of 6 percent per year from 2012 to 2019. Those shares grew at historically high annual rates over the next two years—18 percent in 2020 and 14 percent in 2021. That rapid growth was driven by the same factors that drove the growth in deposits in FDIC-insured banks: increased personal savings rates and resources provided by pandemic-related legislation.

In contrast to the DIF's, the SIF's covered amount and net covered amount have increased at about the same rate, suggesting that share balances are not approaching the share insurance limit of \$250,000 per depositor. The SIF balance in 2021—\$21 billion—was almost twice the balance in 2012 (\$11 billion).

The allowance for losses for the NCUA's share insurance program is equal to the program's liabilities. Those amounts are not included in this exhibit because they are very small (less than 1 percent of the covered amount) in all years as a result of healthy banking conditions.

Exhibit 18.

Assets and Liabilities of Bank Holding Companies Identified as Systemically Important Financial Institutions Under the FDIC's Orderly Liquidation Authority, 2012 to 2021



Data source: FedFis. See www.cbo.gov/publication/58614#data.

Deposits insured by the Federal Deposit Insurance Corporation are not included in this exhibit.

a. Nondeposit liabilities include liabilities such as debt, taxes, and allowances for expected credit losses.

The amount of assets held by bank holding companies identified as systemically important financial institutions has grown over the past decade, primarily because of the growth in uninsured deposits. (In the event of the failure of a SIFI, the DIF would cover losses for insured deposits, and the uninsured deposits would be covered under OLA.) Whereas nondeposit liabilities (such as debt, taxes, and allowances for expected credit losses) increased at an average annual rate of only 0.5 percent over the past decade, from \$7.7 trillion in 2012 to \$8.0 trillion in 2021, total uninsured deposits at SIFIs rose at the much faster rate of 18 percent per year, on average, from \$1.5 trillion in 2012 to \$6.7 trillion in 2021. Because of that growth in uninsured deposits, the asset holdings covered by OLA increased at an average rate of 5 percent per year, from \$14.8 trillion in 2012 to \$22.4 trillion in 2021.

Nonbank financial institutions are not included in the exhibit. Only one nonbank, MetLife, is currently designated as a SIFI. In 2021, MetLife had total assets equal to \$762 billion and total liabilities equal to \$692 billion.

Insurance for Private Pensions

The Pension Benefit Guaranty Corporation is a federal agency responsible for insuring the benefits of more than 35 million people who participate in defined benefit pension plans provided by private employers.²⁹ The agency insures two types of defined benefit plans: single-employer

29. Defined benefit plans promise retirees a specific benefit amount (generally based on length of service) regardless of how much participants have contributed toward their pensions. Such plans are less common than defined contribution plans, in which benefit amounts depend on the value of contributions made by participants and their employers. PBGC does not insure defined contribution pensions because, by definition, such pensions are always fully funded. Employers are responsible for funding any losses in defined benefit plans, whereas participants bear the risk of loss for defined contribution plans. For additional information about PBGC's pension programs, see Wendy Kiska, Jason Levine, and Damien Moore, Modeling the Costs of the Pension Benefit Guaranty Corporation's Multiemployer Program, Working Paper 2017-04 (Congressional Budget Office, June 2017), www.cbo.gov/ publication/52749; Congressional Budget Office, Options to Improve the Financial Position of the Pension Benefit Guaranty Corporation's Multiemployer Program (August 2016), www.cbo.gov/publication/51536, The Risk Exposure of the Pension Benefit Guaranty Corporation (September 2005), www.cbo.gov/publication/17160, and A Guide to Understanding the Pension Benefit Guaranty Corporation (September 2005), www.cbo.gov/ publication/17179.

and multiemployer plans. Single-employer plans are the responsibility of a single sponsoring firm. Multiemployer plans typically are collectively bargained and offered jointly by two or more unrelated employers, usually in the same industry, such as construction or transportation.

PBGC provides insurance to participants by assuming responsibility—subject to limits on the amount guaranteed—for unfunded pension liabilities (the difference between a plan's insured liabilities and its assets) when the plan's sponsor cannot meet its pension obligations. In such cases, PBGC pays benefits directly to participants (in the single-employer program) or provides financial assistance to the plan (in the multiemployer program). PBGC's resources available to pay claims include the assets of terminated plans (in the single-employer program) and premiums paid by insured plans, including accumulated interest. If those funds are insufficient for PBGC to meet the entirety of its insurance obligations, it will not be able to pay full insured benefits under current law.

Although PBGC has no legal claim on the general fund of the Treasury, the American Rescue Plan Act of 2021 authorized special financial assistance

to critically underfunded multiemployer plans.³⁰ That assistance, which PBGC estimates will total \$82.3 billion, is paid from the general fund.³¹ If that assistance is insufficient, lawmakers may have to choose between changing the law again to provide the resources necessary to ensure that beneficiaries receive the full amount of their federally insured pension benefits or seeing beneficiaries lose part of their benefits.³²

PBGC's covered amount equals the present value of vested liabilities of insured pension plans. (Vested liabilities are pension benefits that participants have worked long enough to receive and are not subject to forfeiture, though they may not be fully guaranteed by PBGC.) The net covered amount is the guaranteed portion of the covered amount minus

Sec. 9704(b) of the American Rescue Plan Act of 2021,
 P.L. 117-2, 135 Stat. 4, 190.

^{31.} Special Financial Assistance by PBGC, 87 Fed. Reg. 40968 (July 8, 2022), https://tinyurl.com/236mhd5t.

^{32.} For another example of legislative action to expand coverage beyond current law, see the Susan Muffley Act of 2022, H.R. 6929, 117th Cong.; and Congressional Budget Office, cost estimate for H.R. 6929, the Susan Muffley Act of 2022, as modified by Amendment 2, the Manager's Amendment (July 26, 2022), www.cbo.gov/publication/58335.

pension plans' assets and the net position of each program, where the net position is equal to the difference between PBGC's assets and liabilities.³³ The allowance for losses for the single-employer program equals the present value of future benefits; for the multiemployer program, it is the present value of nonrecoverable future financial assistance. Both

values are reported by PBGC in the statements of financial position that it publishes for the two programs. The allowance for losses includes unfunded liabilities for pension plans that are trusteed, insolvent, or likely to become trusteed or insolvent within 10 years.³⁴

The most recent data available for the total liabilities of pension plans (the covered amount) are for 2018. To estimate the covered amount for private pension plans for 2019 to 2021, CBO applied a net asset return of 2 percent per year to total plan assets and

maintained a ratio of total plan assets to total plan liabilities equal to that for 2018. Additionally, to estimate the net covered amount, CBO applied an average guarantee percentage of 75 percent for all years.

The covered and net covered amounts are reported on a "plan year" basis for ongoing plans, where the plan year is the calendar year of the beginning of the reporting period. For example, plan year 2018 includes reporting periods that begin in any month during calendar year 2018. CBO adopts the plan year as the fiscal year in this report. The allowance for losses is reported by fiscal year.

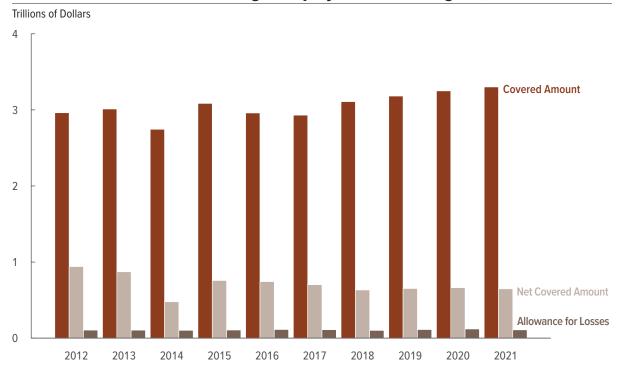
For a brief discussion of federal liabilities for civilian and military retirement benefits, see Appendix C. Under current law, there is no federal insurance for state and local pension plans, so those plans are not discussed in this report. Any federal coverage of those plans would require legislative action.

^{33.} The guaranteed amount is an approximation of the portion of scheduled benefits that PBGC would pay to beneficiaries in insolvent and terminated plans. The statutory limit on guaranteed benefits in the single-employer program in 2022 is \$74,455 (\$6,204.55 monthly) for a single-life annuity beginning at age 65. In the multiemployer program, the statutory limit on guaranteed benefits in 2022 is \$12,870 per year for a participant with 30 years of service. For additional information on the guarantee limits and restrictions, see Pension Benefit Guaranty Corporation, "PBGC's Guarantees for Single-Employer Pension Plans" (March 3, 2021), www.pbgc.gov/about/factsheets/page/guar-facts, and "Multiemployer Insurance Program Facts" (August 13, 2021), www.pbgc.gov/about/factsheets/page/multi-facts.

^{34.} PBGC takes over ("terminates") defined benefit pension plans sponsored by a single employer when that sponsor becomes distressed and does not have assets sufficient to pay its accrued pension obligations. In doing so, PBGC seizes the assets of the pension plan and becomes a trustee responsible for paying insured pension benefits; such a plan is "trusteed." By contrast, a multiemployer pension plan becomes eligible for financial assistance from PBGC when the plan becomes insolvent—that is, the plan has insufficient assets on hand to pay current benefits.

Exhibit 19.

Financial Position of PBGC's Single-Employer Pension Program, 2012 to 2021



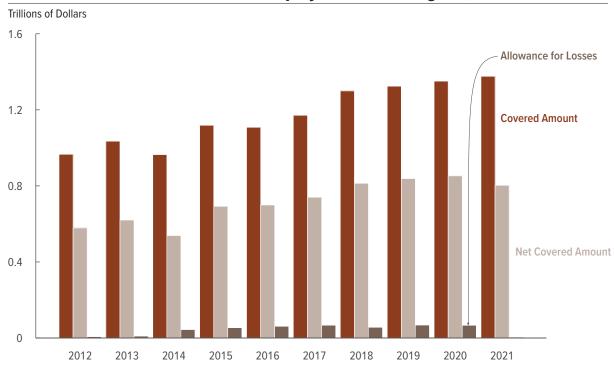
Data sources: Pension Benefit Guaranty Corporation, *Annual Performance & Financial Report* (2012–21), www.pbgc.gov/about/annual-reports, and *2019 Pension Insurance Data Tables*, www.pbgc.gov/prac/data-books. All values shown for years through 2018 are based on data reported by that agency; they are not CBO's estimates. The values for the covered amount and net covered amount for 2019 to 2021 are CBO's estimates based on data reported for 2018 (the latest data available). See www.cbo.gov/publication/58614#data.

PBGC = Pension Benefit Guaranty Corporation.

Over the past decade, the covered amount for PBGC's single-employer program increased by 1 percent per year, on average, from \$3.0 trillion in 2012 to \$3.3 trillion in 2021. However, plans' funding improved over that period as the value of pension plans' assets (which includes employers' annual contributions) increased at an average annual rate of 3 percent. The net covered amount, which accounts for the value of pension plans' assets as well as for the guaranteed amount and the net position of the single-employer program, decreased at an average annual rate of 4 percent over the period, falling from \$0.9 trillion in 2012 to \$0.6 trillion in 2021. The allowance for losses averaged 4 percent of the covered amount over the period.

Exhibit 20.

Financial Position of PBGC's Multiemployer Pension Program, 2012 to 2021



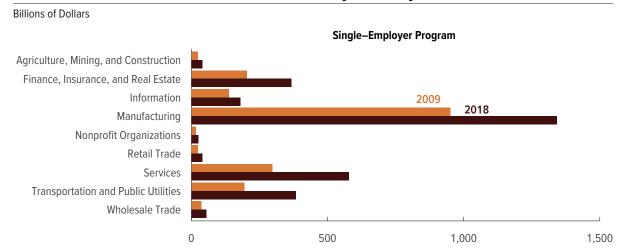
Data sources: Pension Benefit Guaranty Corporation, *Annual Performance & Financial Report* (2012–21), www.pbgc.gov/about/annual-reports, and *2019 Pension Insurance Data Tables*, www.pbgc.gov/prac/data-books. All values shown for years through 2018 are based on data reported by that agency; they are not CBO's estimates. The values for the covered amount and net covered amount for 2019 to 2021 are CBO's estimates based on data reported for 2018 (the latest data available). See www.cbo.gov/publication/58614#data.

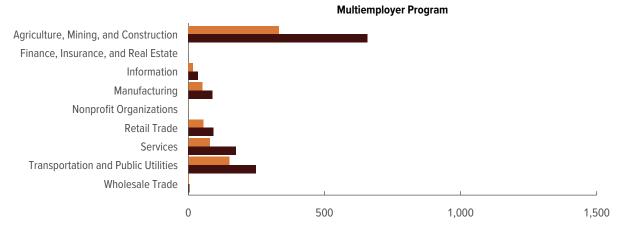
PBGC = Pension Benefit Guaranty Corporation.

In PBGC's multiemployer program, the covered amount increased at an average annual rate of about 4 percent over the 10-year period from \$1.0 trillion in 2012 to \$1.4 trillion in 2021. The net covered amount and the value of pension plans' assets also grew at about that rate. The allowance for losses increased steadily for most of the period, rising from \$7 billion (1 percent of the covered amount) in 2012 to \$67 billion (5 percent of the covered amount) in 2020. But in 2021, that allowance dropped significantly, to \$3 billion (less than 1 percent of the covered amount), because the American Rescue Plan Act of 2021 authorized special financial assistance to multiemployer plans and, as a result, PBGC estimated improvements to plans' funding that would reduce future losses.

Exhibit 21.

Liabilities of PBGC-Insured Pension Plans, by Industry, 2009 and 2018





Data sources: Pension Benefit Guaranty Corporation, *Pension Insurance Data Tables* (2010, 2019), www.pbgc.gov/prac/data-books. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

Industry classifications are based on principal business activity codes used in the North American Industry Classification System and reported by pension plans on Internal Revenue Service Form 5500. Total liabilities are equal to the present value of liabilities for all ongoing plans.

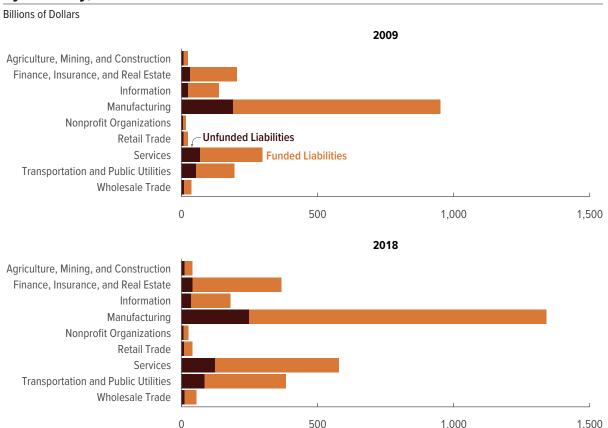
PBGC = Pension Benefit Guaranty Corporation.

From 2009 to 2018, total liabilities in the single-employer program increased at an average annual rate of 5 percent, rising from \$1.9 trillion to \$3.0 trillion. Average annual growth was fastest—8 percent—in the transportation and public utilities industries. The largest liabilities were for the plans of manufacturing firms.

In the multiemployer program, total liabilities increased at an average annual rate of 7 percent over the same period, from \$0.7 trillion in 2009 to \$1.3 trillion in 2018. The services industry had the highest average annual growth rate—9 percent. The largest liabilities were for the plans of agriculture, mining, and construction firms.

Exhibit 22.

Funded and Unfunded Liabilities of PBGC-Insured Single-Employer Pension Plans, by Industry, 2009 and 2018



Data sources: Pension Benefit Guaranty Corporation, *Pension Insurance Data Tables* (2010, 2019), www.pbgc.gov/prac/data-books. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

Industry classifications are based on principal business activity codes used in the North American Industry Classification System and reported by pension plans on Internal Revenue Service Form 5500. Total liabilities are equal to the present value of liabilities for all ongoing plans. Unfunded liabilities equal the value of pension plan assets minus total liabilities. Funded liabilities are equal to the difference between total liabilities and unfunded liabilities.

PBGC = Pension Benefit Guaranty Corporation.

In PBGC's single-employer program, total liabilities increased from \$1.9 trillion in 2009 to \$3.0 trillion in 2018, and the percentage of liabilities that were unfunded fell from 21 percent in 2009 to 19 percent in 2018. The only industry for which the percentage of unfunded liabilities did not fall over the period was the information industry; its unfunded percentage rose by 2 percentage points. In 2018, about two-thirds of the unfunded liabilities were in the manufacturing and services industries.

A similar exhibit for the multiemployer program is not included because the data do not yet incorporate the funding that many critically underfunded plans will receive from the special financial assistance authorized by the American Rescue Plan Act of 2021. PBGC estimates that assistance will total \$82,3 billion.

Flood and Crop Insurance

The federal government operates large specialty insurance programs to provide coverage for unique risks such as flooding, natural disasters, and crop failure and impairment. Those programs typically provide insurance in markets that, because of their risk profile or cost, would otherwise not be well-served by private insurers.

The National Flood Insurance Program (NFIP) was established by the National Flood Insurance Act of 1968 and was most recently reauthorized by the Biggert-Waters Flood Insurance Reform Act of 2012. The program serves two general purposes: to offer flood insurance for properties with significant flood risk and to promote floodplain management. Communities that volunteer to participate in the NFIP have access to federal flood insurance and must meet certain requirements, such as adopting minimum standards for building codes. The NFIP also seeks to reduce flood risk by offering mitigation grants to certain properties that are deemed likely to incur damage.³⁵

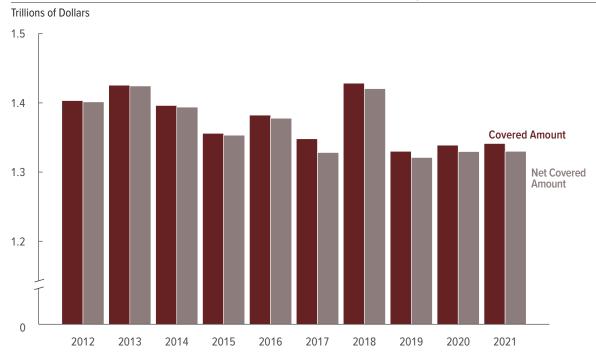
The Congress established the federal crop insurance program in 1938 to help agricultural producers recover from the Great Depression and the Dust Bowl. In 1980, to encourage producers to participate in the insurance program and reduce their reliance on other federal programs that provided compensation for disaster-related losses for free, lawmakers expanded the program to cover more crops and regions and introduced subsidies for insurance policies. The Federal Crop Insurance Act of 1980 also created a public-private partnership with private insurance companies to sell and service the policies subject to the terms established by the Federal Crop Insurance Corporation. Subsequent legislation increased the subsidies and expanded the role of the private sector. Today, the program offers policies that cover losses associated with most natural causes; those policies are sold and serviced by private insurance companies. Of the more than 100 crops insured under the program, 4 crops—corn, soybeans, wheat, and cotton—account for about three-quarters of the enrolled acreage and four-fifths of the claims paid.³⁶

^{35.} For more information, see Congressional Budget Office, *The National Flood Insurance Program: Financial Soundness and Affordability* (September 2017), www.cbo.gov/publication/53028.

^{36.} For more information, see Congressional Budget Office, *Options to Reduce the Budgetary Costs of the Federal Crop Insurance Program* (December 2017), www.cbo.gov/publication/53375.

Exhibit 23.

Financial Position of the National Flood Insurance Program, 2012 to 2021



Data sources: Department of Homeland Security, *Agency Financial Report* (2012–21), www.dhs.gov/performance-financial-reports; and Federal Emergency Management Agency, "OpenFEMA Dataset: FIMA NFIP Redacted Policies, Version 1" (August 2022), https://tinyurl.com/4kkb84n9. Most values shown are based on data reported by those agencies; they are not CBO's estimates. The exceptions are the values for the covered amount for 2012 to 2018, which CBO estimated using policy-level data from the Federal Emergency Management Agency. See www.cbo.gov/publication/58614#data.

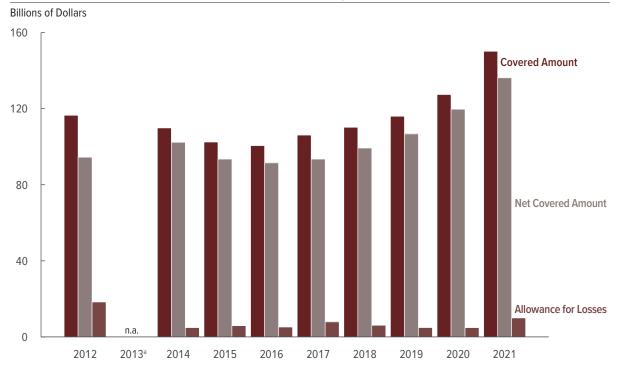
The covered amount for the NFIP equals the total amount of insurance in force, and the allowance for losses is the total amount of insurance liabilities. The allowance for losses is estimated and reported in accordance with accounting standards. The net covered amount is calculated by subtracting the allowance for losses from the covered amount. (The balance of the NFIP fund is not subtracted from the net covered amount, because the fund balance is owed to the Treasury and is not an additional resource of the program.)

The size of the program, as measured by the covered amount, fluctuated between \$1.3 trillion and \$1.4 trillion each year from 2012 to 2021. The allowance for losses is not included in the exhibit because it is very small (less than \$4 billion, or 1 percent of the covered amount) in all years except for 2017. That year, the allowance for losses was \$12 billion (or 1 percent of the covered amount) because of losses incurred from Hurricanes Harvey, Irma, and Maria.

The NFIP is authorized to borrow up to \$30.425 billion from the Treasury and has drawn on that authority as needed. The program had borrowed the full amount in 2017, but after additional borrowing (\$6.1 billion) and partial debt cancellation (\$16 billion) in 2018, the NFIP owed the Treasury \$20.5 billion at the end of 2021 and had \$9.9 billion in borrowing authority available. At that point, the balance of the NFIP fund was \$7.8 billion, and the program could pay claims totaling \$16.6 billion (the fund balance, after adjustments for other investments and obligations totaling \$1.1 billion, plus the remaining borrowing authority of \$9.9 billion).

Exhibit 24.

Financial Position of the Crop Insurance Program, 2012 to 2021



Data sources: Department of Agriculture, Federal Crop Insurance Corporation/Risk Management Agency's Financial Statements (2012–21), https://tinyurl.com/mutwbd7u. Values shown are based on data reported by that agency; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

n.a. = not available.

a. The Department of Agriculture did not publish 2013 financial data for the Federal Crop Insurance Corporation.

The covered amount for the crop insurance program is the total amount of insurance protection, and the allowance for losses equals the estimated losses on insurance claims. Those amounts are measured in accordance with accounting standards. To calculate the net covered amount, the balance of the insurance fund and the allowance for losses are subtracted from the covered amount.

Over the past decade, the program's covered amount grew by 3 percent per year, on average—from \$116 billion in 2012 to \$150 billion in 2021. The allowance for losses fluctuates annually because of the varying severity of weather events and uncertain crop prices, and thus the allowance is not a stable percentage of the covered amount. From 2014 to 2021, it was as low as 4 percent of the covered amount and as high as 7 percent. In 2012, a year characterized by exceptionally severe drought conditions and unusually warm winter temperatures, the allowance for losses was 16 percent of the covered amount.

Appendix A: Financial Portfolio Definitions by Sector

The three measures used in this report to describe the government's financial portfolio—the covered amount, the net covered amount, and the allowance for losses—are derived from information reported by agencies in their financial statements and in other reports and data releases. The information provided varies by agency. Below, the Congressional Budget Office identifies the accounting terms or concepts reported by individual agencies that it used to calculate the three measures (see Table A-1).

Table A-1.

Financial Portfolio Definitions by Program Category

Program Category	Agency or Program	Covered Amount	Net Covered Amount	Allowance for Losses	
Housing and Real Estate Programs	Federal Housing Administration (FHA), Department of Veterans Affairs (VA), and Department of Agriculture (USDA)	Outstanding balance of direct loans and loan guarantees issued by FHA, VA, and USDA	Guaranteed portion of the covered amount, minus the allowance for losses	Sum of the allowance for losses on direct loans and defaulted loan guarantees and the liability for outstanding loan guarantees	
	Fannie Mae and Freddie Mac	Total amount of liabilities	Covered amount, minus the allowance for losses	Allowance for loan losses	
Student Loan Programs	William D. Ford Federal Direct Loan Program	Outstanding balance of direct loans	Covered amount, minus the allowance for losses	Allowance for subsidy	
	Federal Family Education Loan (FFEL) Program	Outstanding balance of loan guarantees	Guaranteed portion of the covered amount, minus the allowance for losses	Sum of the allowance for subsidy and the liability for loan guarantees	
Other Credit Programs	Department of Agriculture, Department of Energy, Department of Transportation, Export-Import Bank, and Small Business Administration	Outstanding balance of direct loans and loan guarantees	Guaranteed portion of the covered amount, minus the allowance for losses	Sum of the allowance for losses on direct loans and defaulted loan guarantees and the liability for outstanding loan guarantees	
Deposit Insurance	Deposit Insurance Fund (DIF)	Total amount of domestic deposits held at banks insured by the Federal Deposit Insurance Corporation (FDIC)	Total amount of insured deposits held at FDIC-insured banks, minus the DIF balance, assessments receivable, and the allowance for losses	Contingent liability for anticipated failures of FDIC-insured institutions, guarantee payments, and litigation losses	
	Share Insurance Fund (SIF)	Total amount of member shares (that is, deposits) insured by the National Credit Union Administration (NCUA)	Total amount of insured shares held at NCUA- insured credit unions, minus the SIF balance, receivables due from insured credit unions, and the allowance for losses	Amount of insurance and guarantee program liabilities	
Insurance for Private Pensions	Pension Benefit Guaranty Corporation, Single-Employer Program	Present value of vested liabilities of single-employer defined benefit pension plans	Guaranteed portion of the covered amount (after subtracting pension plan assets), minus the net position of the single-employer program	Present value of future benefits for single-employer pension plans that are trusteed or likely to become trusteed within 10 years	
	Pension Benefit Guaranty Corporation, Multiemployer Program	Present value of vested liabilities of multiemployer defined benefit pension plans	Guaranteed portion of the covered amount (after subtracting pension plan assets), minus the net position of the multiemployer program	Present value of nonrecoverable future financial assistance to multiemployer pension plans that are insolvent or likely to become insolvent within 10 years	
Flood and Crop Insurance	Flood Insurance	Total amount of insurance in force	Covered amount, minus the allowance for losses	Total amount of insurance liabilities	
	Crop Insurance	Total amount of insurance protection	Covered amount, minus the balance of the insurance fund and the allowance for losses	Estimated losses on insurance claims	

Appendix B: Financial Activities and Federal Debt

Financial activities are contingent liabilities that might add to the federal government's cash outflows, and thus to the amount that it needs to borrow, if greater-than-expected losses occur. To some degree, expected and potential losses are already reflected in measures of federal debt.

The principal measure of federal debt used by the Congressional Budget Office is debt held by the public, which encompasses securities issued by the Treasury to finance the government's activities. Two other measures are debt net of financial assets and gross debt. Debt net of financial assets equals debt held by the public minus the value of the government's holdings of financial assets, such as direct loans. Gross debt includes both debt held by the public and debt held in other government accounts, such as the Social Security trust funds and the Federal Deposit Insurance Corporation's (FDIC's) Deposit Insurance Fund. Of the three measures, debt net of financial assets is the smallest, and gross debt, the largest. Accordingly, debt net of financial assets incorporates the least amount of expected potential losses, and gross debt, the most.

Resources to cover losses (for credit programs) or pay claims (for insurance programs) are incorporated in a measure of debt if the losses could be covered without increasing the measure of debt. The government's capacity to pay for losses related to direct loans, loan guarantees, other credit guarantees, and insurance programs derives from several types of sources that are reflected in federal debt to different degrees. For example, the amounts that agencies expect to lose on outstanding loans and loan guarantees are included in debt net of financial assets, whereas most of the resources available to pay the Pension Benefit Guaranty Corporation's (PBGC's) obligations are not reflected in any measure of federal debt.

Greater-than-expected losses would affect measures of debt in varying ways. If agencies were to lose the remaining balance of their direct loans, debt held by the public would not immediately rise. Debt net of financial assets would rise, however, and if the value of all assets was lost—if all loans were written off, for example—that measure of debt would match debt held by the public because the government would no longer expect to receive a cash inflow from financial assets. Over time, debt

held by the public would be increased by the loss of loan repayments.

For Fannie Mae, Freddie Mac, and most insurance programs, the government does not, under current law, have the authority to cover losses or pay claims on the entire covered amount that is guaranteed or insured. (That amount is shown in the first column of each table.) Loan guarantees, the commitments made to Fannie Mae and Freddie Mac, and insurance programs all introduce the potential for losses that exceed the amounts incorporated in debt held by the public. Typically, insurance programs have assets in government accounts, which are reflected in gross debt, that can cover some of the losses they might incur.

Direct Loans

The face value of direct loans (which is the covered amount) is reflected in debt held by the public because the government has disbursed those amounts. Debt net of financial assets is calculated by subtracting the value of financial assets (including direct loans) held by the government from debt held by the public. The value of direct loans equals the face value of the loans minus the

Table B-1.

Agencies' Resources to Cover Losses in Credit Programs, 2021

Billions of Dollars

		Resources to Cover Losses						
Program Category	Covered Amount Minus Amount Not Guaranteed	Resources Incorporated in Gross Debt but Not Debt Held by the Public ^a	Resources Incorporated in Debt Net of Financial Assets ^b	Value of Financial Assets	Resources Not Incorporated in Any Measure of Federal Debt ^c	Authority to Cover Losses That Exceed Resources ^d	Total	
		Direct Loans						
Housing and Real Estate Programs, Excluding Fannie Mae and Freddie Mac	27 1.381	n.a.	2 274	25 1,106	n.a.	n.a.	27	
Student Loan Programs	1,361	n.a.	6	1,106	n.a.	n.a.	1,381 154	
Other Credit Programs		n.a.			n.a.	n.a.		
Total, Direct Loans	1,561	n.a.	282	1,279	n.a.	n.a.	1,561	
Housing and Real Estate Programs, Excluding Fannie Mae and Freddie Mac	1.859	94	10	-10	n a	1.765	1 950	
	1,659	94 n.a.	55	-10 -55	n.a. n.a.	228	1,859 228	
Student Loan Programs	177		8	-55 -8		177	177	
Other Credit Programs		<u>n.a.</u>			n.a.			
Total, Loan Guarantees	2,264	94	73	-73	n.a.	2,170	2,264	
		Other Credit Assistance						
Fannie Mae and Freddie Mac	7,080	n.a.	n.a.	n.a.	78	254	332	
Total, All Credit Programs	10,905	94	355	1,206	78	2,518	4,158	

Data source: Congressional Budget Office, using data from Department of the Treasury, *Agency Financial Report, Fiscal Year 2022* (November 2022), p. 127, https://tinyurl.com/ycxenazx, and *U.S. Treasury Monthly Statement of the Public Debt* (September 2021), Table III, https://tinyurl.com/bd9dej3j; and the data sources for specific programs identified in the exhibits. Values shown are based on data reported by federal agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

- n.a. = not applicable.
- a. Includes the value of Treasury securities held by the Mutual Mortgage Insurance program's Capital Reserve Account.
- b. Includes the allowance for losses.
- c. Includes the allowance for losses and the entire net worth of Fannie Mae and Freddie Mac.
- d. Includes the amount agencies are authorized to pay for loan guarantees and the amount of Treasury assistance available to Fannie Mae and Freddie Mac.

allowance for losses estimated under the Federal Credit Reform Act of 1990 (FCRA). If the government finances loans by issuing Treasury debt, debt net of financial assets increases by an amount equal to the face value of the loans minus the estimated value of the loans under FCRA; that amount equals the allowance for losses. (If the amount is negative, it represents a projected gain and thus decreases debt net of financial assets.)

Debt held by the public is \$1.6 trillion higher than it would be if the government did not offer direct loans because of the need to borrow cash to make those loans—most of which are student loans (see Table B-1). The estimated value of direct loans is \$1.3 trillion—the \$1.6 trillion face value minus an allowance for losses of \$0.3 trillion. Payments of principal and interest on the loans are projected to offset payments of principal and interest on the Treasury securities that make up that \$1.3 trillion. If, hypothetically, all direct loans were canceled, debt net of financial assets would immediately increase by \$1.3 trillion, but debt held by the public would not change at that moment (though it would increase over time).

Loan Guarantees

Because private lenders finance the loans that the government guarantees, debt held by the public does not increase by the amounts of those loans. Rather, when a loan guarantee is issued, the government may collect an upfront fee that *lowers* debt held by the public. Debt net of financial assets, however, is affected by the estimated net cost of the guarantees. Agencies that issue loan guarantees record a liability on their financial statements equal to the present value of the cost

Pasources to Cover Losses

of future claims (that is, projected defaults net of recoveries) minus annual guarantee fees. That liability reduces the value of financial assets and thus adds to debt net of financial assets. Still, very little of the \$2.3 trillion in loan guarantees outstanding at the end of 2021 is reflected in any measure of federal debt.

Loan guarantee programs have authority to pay claims for the full guarantee amount—beyond the amount of an agency's existing resources—without further Congressional approval. When claims are paid, debt held by the public increases by the amount paid. The effect on debt net of financial assets depends on whether actual guarantee claims exceed the amounts previously accounted for as the liability for loan guarantees. If claims are greater than the recorded liability, the value of financial assets will increase.

The Federal Housing Administration's (FHA's) Mutual Mortgage Insurance program has access to the Capital Reserve Account, a government fund that holds claims on the U.S. Treasury that are included in gross debt but not debt held by the public. That fund had a balance of \$94 billion at the end of 2021, an amount that represents the accumulated value of past negative subsidies with interest.¹

Other Credit Assistance

The Department of the Treasury's support for Fannie Mae and Freddie Mac consists of agreements to purchase preferred stock from those companies if their net worth falls below zero. Similar to a loan guarantee, that commitment does not affect the current value of debt held by the public, and no government funds are available to cover any future payments by the Treasury. Thus, none of the three measures of debt incorporate the remaining authorization to purchase up to \$254 billion of preferred stock. Fannie Mae and Freddie Mac have set aside an additional \$11 billion as an allowance for loan losses to cover the cost of the guarantee. Also, Fannie Mae's and Freddie Mac's capital serves as a buffer against credit losses. Combined, their net worth was \$67 billion at the end of 2021. Fannie Mae's and Freddie Mac's total resources to cover credit losses thus amounted to \$78 billion.

Insurance Programs

The resources to pay claims under federal insurance programs come from sources that affect federal debt in differing ways (see Table B-2):

 Some resources are invested in Treasury securities and thus are reflected in gross debt (but not debt held by the public). They include Treasury securities held in the FDIC's Deposit

report because they are incremental guarantees on loans already included in the totals for loans guaranteed by FHA, the Department of Veterans Affairs, and the Rural Housing Service.

- Insurance Fund, the National Credit Union Administration's (NCUA's) Share Insurance Fund, PBGC's revolving funds, and the National Flood Insurance Fund.
- Some resources to pay claims derive from other assets held by the agencies' funds and from sources outside of the agencies; those resources are not reflected in any measure of federal debt. They include cash balances, receivables from insured financial institutions, the net position of PBGC (after subtracting the balance of the revolving funds), and assets of ongoing pension plans.
- Some of the government's capacity to pay for losses derives from agencies' authority to spend more than could be covered by those resources; most of that additional spending would add to federal debt. That authority includes the remaining borrowing authority of the FDIC's Deposit Insurance Fund and the NCUA's Share Insurance Fund, additional appropriations for special financial assistance to multiemployer pension plans, the amount of non-Treasury securities held by PBGC's revolving funds, and authority to pay crop insurance claims in excess of the fund's balance.

Gross debt includes some government holdings of Treasury securities that are dedicated to covering losses in insurance programs. In total, such funds amount to \$186 billion. Together, the FDIC (in its Deposit Insurance Fund) and the NCUA (in its Share Insurance Fund), for example, hold

Ginnie Mae also holds Treasury securities in two accounts. CBO excluded the guarantees provided by Ginnie Mae from the financial activities presented in this

Table B-2.

Total

Agencies' Capacity to Pay Claims of Insurance Programs, 2021

Billions of Dollars

		oupacity to ray olding				
Program Category	Covered Amount Minus Amount Not Guaranteed or Insured	Resources Incorporated in Gross Debt but Not Debt Held by the Public ^a	Resources Not Incorporated in Any Measure of Federal Debt ^b	Authority to Pay Claims That Exceed Resources ^c	Total	
Deposit Insurance ^d	11,161	134	11	106	251	
Insurance for Private Pensions ^e	3,536	50	1,924	86	2,060	
Flood and Crop Insurance	1,491	1	0	<u>161</u>	163	

Canacity to Pay Claims

354

2,475

1,935

Data source: Congressional Budget Office, using Special Financial Assistance by PBGC, 87 Fed. Reg. 40968 (July 8, 2022), https://tinyurl.com/236mhd5t; Department of the Treasury, *U.S. Treasury Monthly Statement of the Public Debt* (September 2021), Table III, https://tinyurl.com/bd9dej3j; Federal Insurance & Mitigation Administration, *The Watermark*, vol. 16 (Fourth quarter, fiscal year 2021), https://tinyurl.com/3j65znyb (PDF); and the data sources for specific programs identified in the exhibits. Except where noted below, all values shown are based on data reported by federal agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

186

16,188

- a. Includes the value of Treasury securities held by the Federal Deposit Insurance Corporation's (FDIC's) Deposit Insurance Fund, the National Credit Union Administration's (NCUA's) Share Insurance Fund, the Pension Benefit Guaranty Corporation's (PBGC's) revolving funds, and the National Flood Insurance Fund.
- b. Includes receivables from insured financial institutions, the net position of PBGC (after subtracting the balance of the revolving funds), and assets of ongoing pension plans.
- c. Includes the remaining borrowing authority of the Deposit Insurance Fund and Share Insurance Fund, additional appropriations for special financial assistance to multiemployer pension plans, the value of non-Treasury securities held by PBGC's revolving funds, and the authority to pay crop insurance claims in excess of the fund balance.
- d. Includes the FDIC's Deposit Insurance Fund and the NCUA's Share Insurance Fund. These values do not account for the FDIC's orderly liquidation authority.
- e. CBO used data reported for 2018 (the latest data available) to estimate the guaranteed amount for insurance for private pensions and the value of pension plan assets (included in "Resources Not Incorporated in Any Measure of Federal Debt").

\$134 billion in Treasury securities. Those securities are included in gross debt and are available to pay claims. They account for more than half of the two agencies' total capacity—\$251 billion—to pay claims; the remaining capacity stems almost entirely from \$106 billion in borrowing authority. By contrast, most of the resources to pay claims for pension insurance come from the assets of terminated pension plans, which are not reflected in federal debt.

Appendix C: Federal Civilian and Military Retirement

Most retired federal workers receive defined benefit pensions based on formulas that account for retirees' salary history and years of service. Two major programs provide such annuities to civilian workers: the Federal Employees Retirement System (FERS) and the older Civil Service Retirement System (CSRS), which has been closed to new employees since 1983 and is winding down.¹

Most federal workers also participate in the Thrift Savings Plan (TSP), a defined contribution plan similar to a 401(k) plan used in the private sector. The government and employees contribute to individual TSP accounts that are owned and controlled by the employees. In retirement, former employees can receive payments from those accounts.

In general, federal workers covered by FERS are automatically enrolled in the TSP (although they can later opt out). Agencies make automatic

contributions to those employees' accounts and match the employees' contributions up to a specified limit. Federal workers covered by CSRS may participate in the TSP, but they do not receive contributions from their agency. After making any required contributions to the TSP, the government has no further obligations regarding benefits from the plan.

Military personnel who serve long enough to qualify for retirement benefits (usually 20 years) receive pensions paid by the Military Retirement Fund of the Department of Defense.² Unlike federal civilian workers, service members are not required to contribute monetarily to their future pension benefits. In addition, military personnel have been able to participate in the TSP since 2001, although they were not eligible to receive matching contributions from their employer until 2018.

In 2018, military agencies began implementing a new retirement plan, the Blended Retirement System (BRS). That plan combines the TSP—now with matching employer contributions—and retirees' monthly pension benefits, which are smaller than they were for earlier military retirees. Personnel who entered the armed services after December 31, 2017, are automatically enrolled in the BRS; personnel who had 12 or fewer years of service on that date could opt in to the new system. Under the BRS, annuitants can choose to receive part of their pension benefits as a lumpsum payment, an option not available to federal civilian retirees.

The total amount of liabilities continues to decline in CSRS and to increase in FERS as the defined-benefit CSRS winds down (see Figure C-1). The total amount of unfunded liabilities in CSRS remained about the same (\$0.8 trillion) from 2012 to 2020, though unfunded liabilities' share of total liabilities increased from 65 percent in 2012 to 81 percent

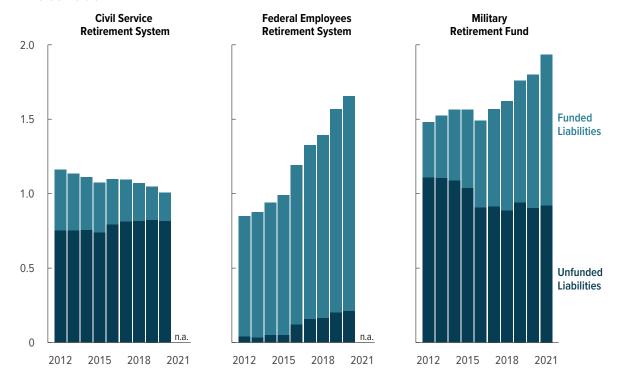
Federal civilian workers and retirees covered by FERS are eligible for Social Security benefits, whereas those covered by CSRS are not, unless they meet the requirements through other employment.

See Congressional Budget Office, Approaches to Changing Military Compensation (January 2020), www.cbo.gov/ publication/55648; and Kristy N. Kamarck, Military Retirement: Background and Recent Developments, Report RL34751, version 40 (Congressional Research Service, July 28, 2022), https://tinyurl.com/3e33j6cj.

Figure C-1.

Funded and Unfunded Liabilities of Federal Civilian and Military Retirement Programs, 2012 to 2021

Trillions of Dollars



Data sources: Office of Personnel Management, *Civil Service Retirement and Disability Fund Annual Report* (2012–21), https://tinyurl.com/5hyycxu2; and Department of Defense, *Military Retirement Fund Audited Financial Report* (2012–21), https://comptroller.defense.gov/ODCFO/afr/. Values shown are based on data reported by those agencies; they are not CBO's estimates. See www.cbo.gov/publication/58614#data.

For the Civil Service Retirement System and the Federal Employees Retirement System, total liabilities are equal to the present value of future benefits (for current employees and annuitants) and expenses. Unfunded liabilities are equal to total liabilities, minus the present value of future normal cost contributions and the net assets of the fund. (The normal cost is a measure of the incremental benefit that employees have accrued during the year.) Funded liabilities are equal to the difference between total liabilities and unfunded liabilities. Data for 2021 were not available at the time this report was released.

For the Military Retirement Fund, unfunded liabilities are equal to the difference between federal employees' and veterans' benefits payable and total assets available to pay benefits. Funded liabilities are equal to the difference between federal employee and veteran benefits payable and unfunded liabilities.

n.a. = not available.

in 2020.³ During that period, unfunded liabilities in the Military Retirement Fund fell from \$1.1 trillion (or 75 percent of total liabilities) in 2012 to \$0.9 trillion (or 48 percent) in 2021. Currently, FERS is mostly funded, CSRS is mostly unfunded, and military retirement is about half-funded.⁴

^{3.} The Civil Service Retirement and Disability Fund annual report includes actuarial valuations as of the beginning of the plan year. In this report, CBO aligns the data to federal fiscal years. For example, the actuarial valuation in the 2021 annual report is as of September 30, 2020, and included in the amounts shown in this report for 2020.

^{4.} The National Defense Authorization Act requires the U.S. Coast Guard (USCG) to be covered by the Military Retirement Fund for funding purposes no later than 2023. The USCG's actuarial liability was first included in the MRF valuation in 2022, and payments to cover the normal cost will begin in 2023. (The normal cost is a measure of the incremental benefit that employees have accrued during the year.) Treasury payments to amortize the initial unfunded liability will start in 2024.

About This Document

This report, which is part of the Congressional Budget Office's continuing efforts to make its work transparent, provides information about the credit and insurance programs that CBO often analyzes in its reports discussing accounting methods, credit reform, and fair-value estimation. In keeping with the agency's mandate to provide objective, impartial analysis, the report makes no recommendations.

Wendy Kiska wrote the report with contributions from Michael Falkenheim and Vinay Maruri and with guidance from Sebastien Gay. Kathleen Gramp (formerly of CBO), Justin Humphrey, Leah Koestner, Avi Lerner, Noah Meyerson, Erik O'Donoghue, David Rafferty, Mitchell Remy, Aurora Swanson, David Torregrosa, and Byoung Hark Yoo offered comments. Michael McGrane, Jeffrey Perry, Mitchell Remy, David Torregrosa, and Byoung Hark Yoo fact-checked the report.

Paul Cullinan (formerly of CBO), Jonathan Huntley of the Penn Wharton Budget Model, and Marvin Phaup of the Schar School of Policy and Government at George Mason University commented on an earlier draft. The assistance of external reviewers implies no responsibility for the final product; that responsibility rests solely with CBO.

Jeffrey Kling and Robert Sunshine reviewed the report. Bo Peery edited it, and Jorge Salazar created the graphics, designed the cover, and prepared the text for publication. The report is available at www.cbo.gov/publication/58614.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

Phillip L. Swagel Director

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