In October 2008, the Emergency Economic Stabilization Act of 2008 (division A of Public Law 110-343) established the Troubled Asset Relief Program (TARP) to enable the Department of the Treasury to promote stability in financial markets through the purchase and guarantee of “troubled assets.”

Section 202 of that legislation, as amended, requires annual reports from the Office of Management and Budget (OMB) on the costs of the program. The law also requires the Congressional Budget Office to submit its own report within 45 days of the issuance of OMB’s report each year. CBO’s assessment must discuss three elements:

- The costs of purchases and guarantees of troubled assets,
- Information CBO collects and the valuation methods it uses to calculate those costs, and
- The program’s effects on the federal budget deficit and debt.

1. That law defines troubled assets as “(A) residential or commercial mortgages and any securities, obligations, or other instruments that are based on or related to such mortgages, that in each case was originated or issued on or before March 14, 2008, the purchase of which the Secretary determines promotes financial market stability; and (B) any other financial instrument that the Secretary, after consultation with the Chairman of the Board of Governors of the Federal Reserve System, determines the purchase of which is necessary to promote financial market stability, but only upon transmittal of such determination, in writing, to the appropriate committees of Congress” (sec. 3 of P.L. 110-343, 122 Stat. 3767).

2. Originally, the law required OMB and the Congressional Budget Office to submit semiannual reports. That provision was changed to an annual reporting requirement by P.L. 112-204. OMB’s most recent report on the TARP was submitted on May 28, 2021, as part of Budget of the United States Government, Fiscal Year 2022: Analytical Perspectives (May 2021), pp. 194–195, www.govinfo.gov/app/details/BUDGET-2022-PER.

To fulfill that requirement, CBO has prepared this report on TARP transactions completed, outstanding, or anticipated as of April 30, 2021. By CBO’s estimate, $444 billion of the $700 billion initially authorized will be disbursed through the TARP, including $0.4 billion in projected future disbursements. (About $410 billion of the total amount was disbursed by March 2011.)

CBO estimates that the government’s total subsidy costs—including those already realized and those stemming from outstanding and anticipated transactions—will be $31 billion (see Table 1).

The estimated cost of the TARP stems largely from ongoing grant programs aimed at preventing foreclosures on home mortgages, assistance to American International Group (AIG), and aid to the automotive industry. Taken together, other transactions with financial institutions have yielded a net gain to the federal government from dividends, interest, and capital gains.

CBO’s assessment of the TARP’s costs is about the same as what the agency last reported in March 2020. CBO’s current estimate is $1 billion lower than OMB’s latest estimate of $32 billion because CBO projects a slightly lower cost for mortgage programs.

The U.S. financial system was in a precarious condition when the TARP was created, and the transactions envisioned and ultimately undertaken entailed substantial financial risk for the federal government. Nevertheless, the TARP’s net realized costs have proven to be near the low end of the range of possible outcomes anticipated at the program’s outset.

To estimate the value of the TARP’s asset purchases and guarantees, CBO uses procedures similar to those specified in the Federal Credit Reform Act of 1990, but with an adjustment to account for market risk, as directed by the Emergency Economic Stabilization Act of 2008.

Because nearly all transactions undertaken through the TARP are now completed and many programs have no outstanding investments, CBO’s current estimate largely reflects the realized costs or gains as recorded by OMB for past years. CBO converted those costs or gains to a net present value by using as a discount rate the interest rate on the Treasury securities with a maturity that most closely matched the period for which a transaction was outstanding. For the few investments that remain, the projected cash flows were converted to a present value by means of a discount rate that included a risk premium—the additional compensation that private investors would require to bear the investment risk.

All of the TARP’s future disbursements are expected to occur through its mortgage programs in the form of grants to borrowers, servicers, investors, and state housing finance agencies. For those future payments, the estimated cost ($0.4 billion) equals the projected amount of the disbursements. (Through April 30, 2021, the TARP disbursed $31 billion in grants for mortgage assistance.)

### Transactions of the TARP

The TARP’s transactions fall into four broad categories:

- Capital purchases and other support for financial institutions,
- Assistance to the automotive industry,
- Investment partnerships designed to increase liquidity in securitization markets, and
- Mortgage programs.

### Capital Purchases and Other Support for Financial Institutions

To support financial institutions, the federal government disbursed $313 billion, most of which has been repaid (see Table 2). CBO estimates a net gain to the government of $9 billion from those transactions—a net gain of about $24 billion from assistance to banks and other lending institutions, partially offset by a cost of $15 billion for assistance to AIG (see Table 3).

### Table 1.

<table>
<thead>
<tr>
<th>Activities of the Troubled Asset Relief Program as of April 30, 2021</th>
<th>Billions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Principal(^a)</td>
<td></td>
</tr>
<tr>
<td>Repaid</td>
<td>377</td>
</tr>
<tr>
<td>Written off(^b)</td>
<td>66</td>
</tr>
<tr>
<td>Outstanding</td>
<td>*</td>
</tr>
<tr>
<td>Subtotal</td>
<td>443</td>
</tr>
<tr>
<td>Additional Disbursements Anticipated</td>
<td>*</td>
</tr>
<tr>
<td>Total(^c)</td>
<td>444</td>
</tr>
</tbody>
</table>

**Memorandum:**

Estimated Subsidy Cost\(^d\) 31

Data sources: Congressional Budget Office; Department of the Treasury. See [www.cbo.gov/publication/57256#data](http://www.cbo.gov/publication/57256#data).

\(^a\) = between zero and $500 million.

\(^b\) Includes realized losses on sales of common stock. For mortgage programs, the amount represents disbursements to loan servicers.

\(^c\) Authority for the Troubled Asset Relief Program was originally set at a maximum of $700 billion; that total was reduced to $475 billion by the Dodd-Frank Wall Street Reform and Consumer Protection Act.

\(^d\) The subsidy cost is estimated using procedures similar to those specified in the Federal Credit Reform Act of 1990, but with an adjustment for market risk as directed by the Emergency Economic Stabilization Act of 2008.

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4. A net present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time. The present value depends on the rate of interest (the discount rate) that is used to translate future cash flows into current dollars.


6. Preferred stock consists of shares of equity that provide a specific dividend that is to be paid before any dividends are paid to those who hold common stock. Preferred stock takes precedence over common stock in the event of a liquidation.
$12 million of that stock remained outstanding.\textsuperscript{7} CBO estimates a net gain to the government of $16 billion from the CPP in the form of dividends, interest, and capital gains.

The preferred stock purchased through the CPP carried a promised dividend equal to 5 percent of the government’s investment for the first five years and 9 percent thereafter. The shares of preferred stock were accompanied by warrants that allowed the government to purchase common stock equal in cost to 15 percent of the amount invested in preferred stock.\textsuperscript{8} Financial institutions that were not publicly owned provided the government with additional shares of preferred stock instead of warrants. Under the terms of the CPP, the financial institutions that remain in the program continue to be subject to restrictions on the compensation they provide to executives, the dividends they pay to shareholders, and the amount of common stock they can repurchase.

### Additional Assistance to Citigroup and Bank of America

In addition to funds from the CPP, Citigroup

\begin{table}[h]
\centering
\begin{tabular}{lccccc}
\hline
\textbf{Support for Financial Institutions} & \multicolumn{4}{c}{\textbf{Results to Date for Principal Disbursed}} & \textbf{Additional Disbursements Anticipated} \\
& \textbf{Principal Disbursed} & \textbf{Repaid} & \textbf{Written Off}\textsuperscript{a} & \textbf{Outstanding} & \\
\hline
Capital Purchase Program & 205 & 200 & 5 & * & 0 \\
Additional assistance to Citigroup and Bank of America\textsuperscript{b} & 40 & 40 & 0 & 0 & 0 \\
Community Development Capital Initiative & 1 & 1 & * & * & 0 \\
Assistance to American International Group & 68 & 54 & 13 & 0 & 0 \\
Subtotal & 313 & 295 & 19 & * & 0 \\
Assistance to the Automotive Industry & 80 & 63 & 17 & 0 & 0 \\
Investment Partnerships & & & & & \\
Term Asset-Backed Securities Loan Facility\textsuperscript{c} & * & * & 0 & 0 & 0 \\
Public-Private Investment Program & 19 & 19 & 0 & 0 & 0 \\
SBA 7(a) Purchase Program & * & * & * & 0 & 0 \\
Subtotal & 19 & 19 & * & 0 & 0 \\
Mortgage Programs\textsuperscript{d} & 31 & 0 & 31 & 0 & * \\
Total & 443 & 377 & 66 & * & * \\
\hline
\end{tabular}
\caption{Actual and Projected Cash Disbursements of the Troubled Asset Relief Program as of April 30, 2021}
\end{table}

\textbf{Data sources:} Congressional Budget Office; Department of the Treasury. See \url{www.cbo.gov/publication/57256#data}.

\textbf{SBA = Small Business Administration; * = between zero and $500 million.}

\textbf{a.} Includes realized losses on sales of common stock. For mortgage programs, the amount represents disbursements to loan servicers.

\textbf{b.} The Treasury also agreed to provide $5 billion to cover potential losses on Citigroup’s assets; however, those losses did not occur, so no disbursements were made.

\textbf{c.} The Treasury committed $4 billion to absorb losses on loans made by the Federal Reserve through the Term Asset-Backed Securities Loan Facility; however, no losses occurred, and the Treasury recouped all of the $100 million in initial funding.

\textbf{d.} Of the $50 billion initially announced for the mortgage modification programs, which include funding for state housing finance agencies and the Federal Housing Administration, $32 billion will eventually be disbursed, CBO estimates.

\textsuperscript{7} Some of the risk associated with those investments was transferred from the TARP to the Small Business Lending Fund (SBLF) created by the Small Business Jobs Act of 2010 (P.L. 111-240). More than 130 institutions participating in the TARP used funds from the SBLF to repurchase a total of $2.2 billion of preferred stock from the Treasury. Almost all of those loans have been repaid.

\textsuperscript{8} A warrant gives the holder the option, but not the obligation, to purchase stock at a fixed price.
and Bank of America received supplementary support through the Treasury’s Targeted Investment Program (TIP) and Asset Guarantee Program. All of that support has since been repaid or terminated, resulting in a net gain to the federal government of $8 billion.

The two institutions each received $20 billion in capital through the TIP. The Treasury also agreed to absorb up to $5 billion in potential losses on a $301 billion pool of Citigroup’s assets, and it announced plans to guarantee a pool of Bank of America’s assets.

In December 2009, Citigroup repaid the $20 billion it had received through the TIP and canceled its loss-sharing agreement. In exchange for accepting that early termination, the Treasury retained more than $2 billion of Citigroup’s preferred stock, which it sold in September 2010. Bank of America also repaid the $20 billion it had received; the Treasury never implemented the guarantee plan for Bank of America’s assets.9

**Community Development Capital Initiative.** Through the Community Development Capital Initiative (CDCI), which has a structure similar to the CPP’s, the Treasury invested $570 million in community development financial institutions; $1 million of that investment remains outstanding.10 Whereas the preferred stock purchased by the Treasury under the CPP paid a dividend of 5 percent for the first five years, the stock purchased under the CDCI paid a dividend of 2 percent for the first eight years. After that initial period, the CDCI requires that dividends be paid at a rate of 9 percent, as does the CPP. Including realized losses to date, the CDCI is projected to have a net cost to the government of about $70 million.

**Assistance to American International Group.** The Treasury initially provided AIG with two types of financial assistance through the TARP: It purchased $40 billion in preferred stock, and it established a $30 billion line of credit for the company.11 The Treasury subsequently received another $8 billion in preferred stock in exchange for providing $8 billion to AIG under that line of credit.

In January 2011, as part of a restructuring of AIG’s obligations, the Treasury agreed to exchange its existing preferred stock—with a total value of $48 billion—for approximately 1.1 billion shares of AIG’s common stock. AIG also drew down more than $20 billion from the balance on its line of credit to purchase preferred shares in former AIG subsidiaries from the Federal Reserve Bank of New York; the remainder of the line of credit was canceled with $2 billion remaining undrawn.

Since 2011, AIG has fully exited the TARP. The company repaid its line of credit, and the Treasury recouped an additional $34 billion from the sale of its shares.

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9. Bank of America paid the Treasury $276 million in connection with terminating the asset guarantee plan.

10. Eligible institutions are banks, thrifts, and credit unions certified by the Treasury as targeting more than 60 percent of their small-business lending and other economic development activities toward underserved communities.

11. The maximum that could be borrowed under the line of credit was $30 billion, minus $165 million for retention bonuses paid in March 2009 to employees of AIG Financial Products Corporation and AIG Trading Group.
of AIG’s common stock—bringing the total amount repaid or recovered to $54 billion out of the $68 billion originally disbursed. The final net subsidy cost of TARP assistance to AIG was $15 billion. (Also, in support of AIG outside the TARP, the Federal Reserve initiated credit facilities that were ultimately closed; the result was that the Federal Reserve remitted to the Treasury additional shares of AIG’s stock.)

**Assistance to the Automotive Industry**

General Motors (GM) and Chrysler, along with their associated financing intermediaries and suppliers, received about $80 billion in TARP funds, all of which has been repaid by the companies or written off by the Treasury. The total subsidy cost recorded was $12 billion.

**GM and Chrysler.** Following the bankruptcy proceedings of GM and Chrysler, the Treasury agreed to exchange the debt positions it held in the original companies for a blend of debt, equity, and preferred shares in the newly configured companies. Since then, the Treasury has sold all of its securities in the two companies, recovering about $47 billion of the $61 billion it had invested. All told, the Treasury has written off or realized $14 billion in losses on its investments in GM and Chrysler.

**Financing Intermediaries.** The Treasury provided $19 billion in financial assistance to GMAC (General Motors Acceptance Corporation) and Chrysler Financial. About $17 billion of that amount was invested in GMAC (now Ally Financial). In July 2009, Chrysler Financial repaid the $1.5 billion it had received from the program. In December 2014, the Treasury liquidated its remaining investment in the automobile companies and their financing intermediaries through the TARP. In total, assistance to the two financing intermediaries resulted in a gain to the government of about $1 billion.

**Investment Partnerships**

To encourage private investment in certain financial assets, the Treasury created public-private partnerships for investment in specific sectors. Those initiatives have no outstanding investments, and they resulted in a gain to the federal government of about $3 billion.

**Term Asset-Backed Securities Loan Facility.** The Treasury disbursed $100 million to cover potential losses of the Federal Reserve’s Term Asset-Backed Securities Loan Facility (TALF), which provided financing to investors who bought highly rated securities backed by automobile loans, credit card loans, student loans, and business loans guaranteed by the Small Business Administration (SBA). The TALF was closed to new loans in 2010, and the final balance was repaid in 2014, yielding the Treasury a gain of roughly $1 billion.

**Public-Private Investment Program.** Through the Public-Private Investment Program, the Treasury agreed to provide nonrecourse debt and to match private-sector equity in the Public-Private Investment Funds (PPIFs) that purchased illiquid assets from financial institutions. In December 2012, after they had received a total of $19 billion from the Treasury, the PPIFs’ ability to draw on TARP funds expired. The entire amount has been repaid, and the activities of the program, including dividends, interest, and capital gains received, resulted in a net gain to the government of about $3 billion.

**SBA 7(a) Purchase Program.** The Treasury also developed a program to purchase up to $1 billion of securities guaranteed by the Small Business Administration. As of October 3, 2010, when the TARP’s authority to make new purchases in existing programs expired, the Treasury had purchased about $400 million of those securities. All of those securities have been sold, resulting in a small gain to the government.

**Mortgage Programs**

The Treasury initially committed a total of $50 billion in TARP funds for programs to help homeowners avoid foreclosure. Subsequent legislation reduced that amount, and CBO anticipates that $32 billion will ultimately be disbursed. About $10 billion of that total was designated for grants to certain state housing finance agencies and for programs of the Federal Housing Administration.

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12. A support program for parts manufacturers ended in April 2010, yielding a small net gain to the Treasury.

13. Nonrecourse debt (which constituted 50 percent of the total funding for the program) consists of loans secured by specifically pledged collateral. If a borrower defaults on such a loan, the lender may claim that collateral but no other assets.

14. Most recently, the Consolidated Appropriations Act, 2016 (P.L. 114-113), lowered the total amount authorized for mortgage programs to $40 billion.

15. The Treasury’s Hardest Hit Fund provides funds to housing finance agencies in states identified by the agency as facing the most severe declines in home prices and employment rates. The Federal Housing Administration’s Short Refinance program makes incentive payments to lenders for refinancing existing loans to borrowers who have negative home equity.
Through April 30, 2021, total disbursements of TARP funds for all mortgage programs were roughly $31 billion. Because most of those funds were in the form of direct grants that do not require repayment, the government’s cost is generally equal to the full amount disbursed (that is, the program has a 100 percent subsidy rate). CBO’s current estimate of the cost for the mortgage programs is $0.3 billion lower than it reported previously, primarily because it decreased its estimate of the average cost of the mortgage modifications that will occur in the program.

**Comparison of CBO’s and OMB’s Estimates**

CBO has adopted the cost assessments for completed transactions that OMB published in its May 2021 report. CBO and OMB have used similar approaches to evaluate the TARP’s ongoing programs for purchasing assets and making grants. However, OMB’s most recent estimate of the program’s total cost is $0.7 billion higher than CBO’s current estimate. Specifically, OMB estimates that $32.2 billion will be disbursed through the Treasury’s mortgage programs, whereas CBO anticipates that $31.5 billion will be spent.

**Changes in CBO’s Estimates Since March 2020**

In its *Report on the Troubled Asset Relief Program—March 2020*, CBO projected that the TARP would cost $31 billion over its lifetime. Since then, CBO’s estimate has decreased by $0.3 billion, primarily because the agency now projects lower outlays for the mortgage programs.