Congressional Budget Office

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Report on the Troubled Asset Relief Program—June 2017

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."[1] Section 202 of that legislation, as amended, requires the Office of Management and Budget (OMB) to submit annual reports on the costs of the Treasury's purchases and guarantees of troubled assets.[2] The law also requires the Congressional Budget Office to prepare its own assessment of the TARP's costs within 45 days of the issuance of OMB's report. That assessment must discuss three elements:

- The costs of purchases and guarantees of troubled assets,
- The information and valuation methods used to calculate those costs, and
- The impact on the federal budget deficit and debt.

To fulfill its statutory requirement, CBO has prepared this report on the TARP's transactions that were completed, outstanding, or anticipated as of May 31, 2017. By CBO's estimate, $445 billion of the initially authorized $700 billion will be disbursed through the TARP, including $438 billion that has already been disbursed and $8 billion in additional projected disbursements. CBO's current estimate of the cost to the federal government of the TARP's transactions (also referred to as the subsidy cost)—which accounts for the realized costs of completed transactions and the estimated costs of outstanding and anticipated transactions—amounts to $33 billion (see Table 1).

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

CBO's current assessment of the cost of the TARP's transactions is $3 billion higher than the $30 billion estimate shown in the agency's previous report on the TARP (issued in March 2016).[3] That increase in the estimated cost stems from an increase in projected disbursements for mortgage programs. CBO's current estimate for all TARP transactions is slightly greater than OMB's latest estimate of $32 billion because CBO projects a slightly higher cost for those mortgage programs.

When the TARP was created, the U.S. financial system was in a precarious condition, and the transactions

1. The 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 the Emergency Economic Stabilization Act of 2008, P.L. 110-343, 122 Stat. 3767.

2. Originally, the law required OMB and CBO 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 23, 2017, as part of the *Budget of the United States Government, Fiscal Year 2018: Analytical Perspectives*, pp. 231–240, www.whitehouse.gov/omb/budget/Analytical_Perspectives.

3. See Congressional Budget Office, *Report on the Troubled Asset Relief Program—March 2016* (March 2016), www.cbo.gov/publication/51378.

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

Table 1.

Activities of the Troubled Asset Relief Program

Billions of Dollars

Amount of Principal[a]	
Repaid	377
Written off[b]	61
Outstanding	*
Subtotal	438
Additional Disbursements Anticipated	8
Total[c]	**445**
Memorandum:	
Estimated Subsidy Cost[d]	33

Sources: Congressional Budget Office; Department of the Treasury.

Transactions are as of May 31, 2017.

* = between zero and $500 million.

a. Other funds were made available through asset guarantee programs, but no disbursements were made from those funds.

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; however, that total was reduced to $475 billion in the Dodd-Frank Wall Street Reform and Consumer Protection Act (Public Law 111-203).

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 (Division A of P.L. 110-343).

envisioned and ultimately undertaken engendered substantial financial risk for the federal government. Nevertheless, the net realized costs directly associated with the TARP, when taken in isolation, have been near the low end of the range of possible outcomes anticipated when the program was launched—in part because funds invested, loaned, or granted to participating institutions through the Federal Reserve and government programs other than the TARP helped limit those costs.

Estimating the Costs of the TARP

CBO estimates the value of the TARP's asset purchases and guarantees using 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. However, because the overwhelming majority of transactions undertaken through the TARP have been completed and many programs have no outstanding investments, CBO's estimate largely reflects the realized costs or gains as recorded by OMB for prior years. Those costs or gains were converted to a present value using the rate on Treasury securities with a maturity that most closely matches the period for which the transaction was outstanding. For the few remaining investments, projected cash flows are converted to a present value using a discount rate that includes a risk premium that would be required by a private investor.[4]

All of the TARP's future disbursements are expected to occur in its mortgage programs as grants to borrowers, servicers, investors, and state housing finance agencies. For those future payments, the estimated cost ($8 billion) is equal to the projected amount of the disbursements. (In addition, the TARP has previously disbursed $25 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,
- Financial 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 provide support for financial institutions, the federal government disbursed $313 billion, most of which has already 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 on page 4).

Capital Purchase Program. Through the TARP's Capital Purchase Program (CPP), the Treasury purchased $205 billion in shares of preferred stock from 707 financial

4. For a detailed explanation of the methodology used by CBO to value the investments made through the TARP, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—April 2014* (April 2014), www.cbo.gov/publication/45260.

Table 2.

Actual and Projected Cash Disbursements of the Troubled Asset Relief Program

Billions of Dollars

	Principal Disbursed	Results to Date for Principal Disbursed: Repaid	Written Off[a]	Outstanding	Additional Disbursements Anticipated
Support for Financial Institutions					
Capital Purchase Program	205	200	5	*	0
Additional assistance to Citigroup and Bank of America[b]	40	40	0	0	0
Community Development Capital Initiative	1	*	*	*	0
Assistance to American International Group	68	54	13	0	0
Subtotal	313	294	19	*	0
Assistance to the Automotive Industry	80	63	17	0	0
Investment Partnerships					
Term Asset-Backed Securities Loan Facility[c]	*	*	0	0	0
Public-Private Investment Program	19	19	0	0	0
SBA Purchase Program	*	*	*	0	0
Subtotal	19	19	*	0	0
Mortgage Programs[d]	25	0	25	0	8
Total	**438**	**377**	**61**	*	**8**

Sources: Congressional Budget Office; Department of the Treasury.

Amounts shown are as of May 31, 2017.

SBA = Small Business Administration; * = between zero and $500 million.

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

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.

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.

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, $33 billion will eventually be disbursed, CBO estimates.

institutions.[5] As of May 31, 2017, less than $100 million of that preferred stock remained outstanding.[6] CBO estimates a net gain to the government of $16 billion from the CPP from dividends, interest, and other gains.

5. "Preferred stock" refers to shares of equity that provide a specific dividend to be paid before any dividends are paid to those who hold common stock and that take precedence over common stock in the event of a liquidation.

6. Some of the risk associated with those investments was transferred from the TARP to the Small Business Lending Fund (SBLF), which was created by the Small Business Jobs Act of 2010 (P.L. 111-240). More than 130 institutions participating in the TARP repurchased a total of $2.2 billion of preferred stock from the Treasury using funding from the SBLF. Almost all of those loans from the SBLF have been repaid.

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.[7] 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 their executives, the dividends they pay

7. A "warrant" gives the holder the option, but not the obligation, to purchase stock at a fixed price.

Table 3.

Estimated Subsidy Cost or Gain Over the Life of the Troubled Asset Relief Program

Billions of Dollars

	CBO[a]	OMB[a]
Support for Financial Institutions		
Capital Purchase Program	-16	-16
Additional assistance to Citigroup and Bank of America	-8	-8
Community Development Capital Initiative	*	*
Assistance to American International Group	15	15
Subtotal	-9	-9
Assistance to the Automotive Industry	12	12
Investment Partnerships		
Term Asset-Backed Securities Loan Facility	-1	-1
Public-Private Investment Program	-3	-3
SBA 7(a) Purchase Program	*	*
Subtotal	-3	-3
Mortgage Programs	33	33
Total	**33**	**32**

Sources: Congressional Budget Office; Office of Management and Budget (OMB).

CBO's estimates are based on data as of May 31, 2017; OMB's are based on data as of September 30, 2016.

SBA = Small Business Administration; * = between -$500 million and $500 million.

a. Negative numbers indicate a net gain for the government; positive numbers indicate a net cost.

to their shareholders, and the amount of common stock they repurchase.

Additional Assistance to Citigroup and Bank of America. In addition to receiving funds from the CPP, two financial institutions—Citigroup and Bank of America—also received supplementary support through the Treasury's Targeted Investment Program (TIP) and Asset Guarantee Program. All of that supplementary support has since been repaid or terminated, resulting in a net gain to the federal government of $8 billion.

Citigroup and Bank of America each received $20 billion in capital through the TIP. In addition, the Treasury agreed to absorb up to $5 billion in potential losses on a $301 billion pool of Citigroup's assets and announced plans to guarantee a pool of Bank of America's assets.

In December 2009, Citigroup repaid the $20 billion in financing it received through the TIP and canceled the loss-sharing agreement. In exchange for accepting early termination of that agreement, the Treasury retained more than $2 billion of Citigroup preferred stock, which it sold in September 2010. Bank of America also repaid the $20 billion in financing it received through the TIP; the Treasury never implemented its plan to guarantee a pool of Bank of America's assets.[8]

Community Development Capital Initiative. The Community Development Capital Initiative (CDCI) has a structure similar to that of the CPP, but it invested $570 million in "community development financial institutions" rather than in financial institutions more broadly.[9] The preferred stock purchased by the Treasury under the CDCI pays a dividend of only 2 percent for the first eight years, compared with 5 percent for the first five years under the CPP. After that initial period, the CDCI requires that dividends be paid at a rate of 9 percent, as does the CPP. CBO estimates a subsidy

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

9. An eligible "community development financial institution" must be a bank, thrift, or credit union certified by the Treasury as targeting more than 60 percent of its small business lending and other economic development activities toward underserved communities.

rate for the CDCI of 27 percent, primarily reflecting the gap between the 2 percent dividend owed by participating institutions and the estimated market rates for similar investments. With outstanding investments of $90 million, the CDCI is projected to have a net cost to the government of about $70 million. That cost is lower than previously estimated because many institutions have now repaid their obligations in full.

Assistance to American International Group. The Treasury initially provided AIG with two types of financial assistance through the TARP: The Treasury purchased $40 billion in preferred stock from AIG, and it established a $30 billion line of credit for the company.[10] The Treasury subsequently received another $8 billion in preferred stock in exchange for providing $8 billion to AIG pursuant to that line of credit.

In January 2011, AIG restructured its obligations under the program. As part of that restructuring, the Treasury agreed to exchange its existing preferred stock—with a total value of $48 billion—for approximately 1.1 billion shares of AIG common stock. In addition, AIG 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 that time, 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 of AIG common stock at an average price of about $31—bringing the total amount repaid or recovered to $54 billion out of the $68 billion originally disbursed.[11] The final net subsidy cost to the Treasury for the assistance that was provided to AIG through the TARP was $15 billion.

Financial 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 or written off by the Treasury.[12] The total subsidy cost recorded for that assistance 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—"New GM" and "New Chrysler"—that emerged after bankruptcy. Since then, the Treasury has sold all of its securities in the two companies, recouping about $47 billion of the $61 billion it had invested; the Treasury has also 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, of which about $17 billion was invested in GMAC (now Ally Financial). On December 24, 2014, the Treasury recouped $1.3 billion through the sale of 55 million shares of stock in Ally Financial. That transaction liquidated the last remaining investment in the automobile companies and their financing intermediaries through the TARP. Chrysler Financial had received $1.5 billion in assistance, which it fully repaid in July 2009. In total, the 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 resulted in a gain to the federal government of about $3 billion.

Term Asset-Backed Securities Loan Facility. The Treasury initially committed $20 billion 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 assets such as automobile loans, credit card loans, student loans, and business loans guaranteed by the Small Business Administration. The TALF is closed to new loans, having yielded a gain of roughly $1 billion to the Treasury.

10. The maximum amount that could be borrowed under the line of credit was $30 billion, minus $165 million for retention bonuses paid to employees of AIG Financial Products Corporation and AIG Trading Group in March 2009.

11. In addition, outside of the TARP, the Treasury acquired and later sold roughly 560 million shares of the company's common stock for $18 billion.

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

Public-Private Investment Program. Through the Public-Private Investment Program, the Treasury agreed to provide "nonrecourse" debt and to match private-sector equity in Public-Private Investment Funds (PPIFs), which purchase illiquid assets from financial institutions.[13] In December 2012, the PPIFs' ability to draw on TARP funds expired, after they had received a total of $19 billion from the Treasury. The entire amount has been repaid, and the activities of the program, including interest, dividends, and capital gains received, resulted in a net gain to the government of about $3 billion.

Securities Guaranteed by the Small Business Administration. 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 the investments made by the Treasury under that program have been sold, resulting in a small gain to the government.

Mortgage Programs

The Treasury initially committed a total of $50 billion of TARP funds for programs to help homeowners avoid foreclosure. Subsequent legislation reduced the Treasury's authority to $40 billion, and CBO anticipates that the TARP will ultimately disburse a total of $33 billion.[14] About $10 billion has been designated for grants to certain state housing finance agencies and for programs of the Federal Housing Administration.[15]

Total disbursements of TARP funds for all mortgage programs were roughly $25 billion through May 31, 2017. Because most payments provided through those programs are direct grants and require no repayments, the government's cost is generally equal to the full amount of the disbursements (that is, the program has a 100 percent subsidy rate). CBO's current estimate of the cost for the program is $3 billion higher than it reported previously, primarily because the agency increased its estimate of the number of mortgage modifications that will occur.

Comparison of CBO's and OMB's Estimates

For completed transactions, CBO uses the actual costs recorded by OMB and presented in its May 2017 report. For ongoing programs, the two agencies have used similar approaches to value the TARP's asset purchases and grants. OMB's most recent estimate of the program's total cost, however, is lower than CBO's current estimate by less than $1 billion. That difference stems from OMB's estimate that $32.6 billion will be disbursed through the Treasury's mortgage programs, whereas CBO anticipates that $33.1 billion will be spent.

Changes From CBO's March 2016 Estimates

In its *Report on the Troubled Asset Relief Program—March 2016*, CBO projected that the TARP would cost $30 billion over its lifetime. Since the publication of that report, the estimated cost has risen by about $3 billion, primarily because of the increase to CBO's estimate of outlays for the mortgage programs.

This Congressional Budget Office report was prepared in response to the requirements of the Emergency Economic Stabilization Act of 2008, as amended.

Avi Lerner prepared the report with contributions from Elizabeth Cove Delisle and guidance from Theresa Gullo and Jeffrey Holland. Robert Sunshine reviewed the report, Loretta Lettner edited it, and Jorge Salazar prepared it for publication. An electronic version is available on CBO's website (www.cbo.gov/publication/52840).

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13. "Nonrecourse" debt refers to a loan that is secured by specifically pledged collateral—that is, if the borrower defaults, the lender has claim only to that collateral and not to any of the borrower's other assets. That debt constituted 50 percent of the total funding.

14. Most recently, the Consolidated Appropriations Act, 2016 (P.L. 114-113) increased the Treasury's authority, which had previously been reduced to $38 billion, 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.