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Report on the Troubled Asset Relief Program—May 2013

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 (CBO) to prepare an assessment of each OMB report within 45 days of its issuance. 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 had been completed, were outstanding, and were anticipated as of April 17, 2013. By CBO's estimate, $428 billion of the initially authorized $700 billion will be disbursed through the TARP, including $419 billion that has already been disbursed and $9 billion in additional projected disbursements. The cost to the federal government of the TARP's transactions (also referred to as the subsidy cost), including grants for mortgage programs that have not yet been made, will amount to $21 billion, CBO estimates (see Table 1).

The estimated cost of the TARP stems largely from assistance to American International Group (AIG), aid to the automotive industry, and grant programs aimed at avoiding home mortgage foreclosures. Other transactions with financial institutions will, taken together, yield 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 lower than the $24 billion estimate shown in the agency's previous report on the TARP

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."

2. Originally, the law required OMB and CBO to submit semiannual reports. That provision was changed by Public Law 112-204 to an annual reporting requirement. OMB's most recent report on the TARP was submitted on April 10, 2013, as part of Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2014: Analytical Perspectives,* (April 2013), pp. 30–48, www.whitehouse.gov/omb/budget/Analytical_Perspectives.

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	351
Written off[b]	35
Outstanding	33
Subtotal	419
Additional Disbursements Anticipated	9
Total[c]	**428**
Memorandum:	
Estimated Subsidy Cost[d]	21

Sources: Congressional Budget Office; Department of the Treasury.

Note: Transactions are as of April 17, 2013.

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

(issued in October 2012).[3] That decrease in the estimated cost stems primarily from an increase in the market value of the government's investments in General Motors and sales of a portion of those investments at prices that were higher than the market price at the time of CBO's last report. CBO's current estimate for all TARP transactions is less than OMB's latest estimate of $47 billion, largely because CBO projects a lower cost for the mortgage programs.

When the TARP was created, the U.S. financial system was in a precarious condition, and the transactions envisioned and ultimately undertaken engendered substantial financial risk for the federal government. Nevertheless, the net 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 values 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 for market risk, as directed by the Emergency Economic Stabilization Act. The total estimated cost of the TARP reported here is a combination of prospective and realized costs. In brief, projected future cash flows are discounted to a present value using a discount rate that accounts for (a) the fact that money in hand now is worth more than the same amount received in the future and (b) the premium that a private investor would require as compensation for the risk of the transaction. The risk premium used by CBO varies depending on the riskiness of the transaction. Also, cash flows that have already occurred—for instance, the Treasury's purchase of assets or its receipt of dividends or debt repayments—are converted to a present value using the rate on Treasury securities with a maturity that most closely matches the time period for which the transaction was outstanding.

To explain more thoroughly, transactions that have been completed are valued by bringing all cash flows forward to the date of analysis using the Treasury's borrowing rate for the relevant period. For investments the Treasury has written off as uncollectible, the subsidy cost is considered to be 100 percent of the unrecovered amount. Thus, CBO's estimate of the value of completed transactions equals the realized gain or loss for the government.

Transactions that are outstanding—that is, transactions that have been initiated by the Treasury but are not yet completed—are valued by converting past cash flows to present values and combining them with the current values of assets held by the Treasury. For example, the estimated net cost of shares of preferred stock held through the TARP equals what the Treasury paid to

3. See Congressional Budget Office, *Report on the Troubled Asset Relief Program—October 2012* (October 11, 2012), www.cbo.gov/publication/43662.

acquire the shares (brought forward to the present using the Treasury's borrowing rate) minus the current value of the shares (based on market prices, if available) and any dividend payments already received by the government (also brought forward to the present using the Treasury's borrowing rate).

All of the TARP's future activity is expected to occur as grants in its mortgage programs; for those payments, the estimated cost ($9 billion) is equal to the projected amount of the disbursements.

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 $10 billion from those transactions—a net gain of about $25 billion from assistance to banks and other lending institutions, partially offset by a cost of $15 billion for assistance to AIG (see Table 3).

Capital Purchase Program. Through the TARP's Capital Purchase Program (CPP), the Treasury purchased $205 billion in shares of preferred stock from 707 financial institutions.[4] As of April 17, 2013, only $6 billion (or 3 percent) of that preferred stock remained outstanding.[5] CBO estimates a net gain to the government of $17 billion from the CPP.

Preferred stock purchased through the CPP carries 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 are accompanied by warrants that allow the government to purchase common stock equal in cost to 15 percent of the amount invested in preferred stock; the warrants specify that the price at which the government may purchase shares is the average price of the institution's common stock over the 20 trading days preceding the date of the government's investment.[6] Financial institutions that are not publicly owned provided the government with additional shares of preferred stock instead of warrants. Under the terms of the CPP, participating financial institutions are subject to restrictions on the compensation they provide to their executives, the dividends they pay to their shareholders, and the amount of common stock they repurchase.

The net gain of $17 billion estimated for the CPP comprises the following:

- Gains of $22 billion from transactions with banks that have repaid the Treasury's investment. That amount includes a net gain to the government of roughly $7 billion realized from the sale of common shares of Citigroup; those shares had been acquired in exchange for $25 billion of preferred stock that the Treasury had purchased through the CPP.
- Unrecoverable losses of $3 billion from institutions that declared bankruptcy, were taken over by the Federal Deposit Insurance Corporation (FDIC), or were authorized by the Treasury to renegotiate the terms of the investment.
- A subsidy cost of $2 billion for the program's outstanding investments, including dividends paid and the present value of preferred shares and warrants still held by the Treasury.

4. "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.

5. 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.

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

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	196	3	6	0
Additional assistance to Citigroup and Bank of America[b]	40	40	0	0	0
Community Development Capital Initiative	1	*	*	1	0
Assistance to AIG	68	54	13	0	0
Subtotal	313	290	17	6	0
Assistance to the Automotive Industry	80	42	11	27	0
Investment Partnerships					
Term Asset-Backed Securities Loan Facility[c]	*	*	0	0	0
Public-Private Investment Program	19	18	0	1	0
SBA 7(a) Purchase Program	*	*	*	0	0
Subtotal	19	19	*	1	0
Mortgage Programs[d]	7	0	7	0	9
Total	**419**	**351**	**35**	**33**	**9**

Sources: Congressional Budget Office; Department of the Treasury.

Notes: Amounts shown are as of April 17, 2013.

AIG = American International Group; 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 has currently committed $4 billion to absorb losses on loans made by the Federal Reserve through the Term Asset-Backed Securities Loan Facility. Many of those loans remain outstanding, and no losses have occurred to date; however, the Treasury provided $100 million in initial funding.

d. Of the $50 billion initially announced for the Home Affordable Modification Program, which includes funding for state housing finance agencies and the Federal Housing Administration, $16 billion will eventually be disbursed, CBO estimates.

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). 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 received $20 billion each 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. On December 23, 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 on September 30, 2010.[7] Bank of America also repaid the $20 billion in financing it received through

7. Under the provisions of the termination agreement, the FDIC will transfer to the Treasury an additional $800 million of Citigroup preferred stock, minus any losses resulting from Citigroup's participation in the FDIC's Temporary Liquidity Guarantee Program. CBO expects the Treasury to recoup the bulk of the value of that additional stock.

Table 3.

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

(Billions of dollars)

	CBO[a]	OMB[a]	Difference
Support for Financial Institutions			
Capital Purchase Program	-17	-15	-2
Additional assistance to Citigroup and Bank of America	-8	-8	*
Community Development Capital Initiative	*	*	*
Assistance to AIG	15	15	*
Subtotal	-10	-8	-2
Assistance to the Automotive Industry	17	20	-3
Investment Partnerships			
Term Asset-Backed Securities Loan Facility	*	-1	1
Public-Private Investment Program	-2	-2	*
SBA 7(a) Purchase Program	*	*	*
Subtotal	-2	-3	1
Mortgage Programs	16	38	-22
Total	**21**	**47**	**-26**

Sources: Congressional Budget Office; Office of Management and Budget.

Notes: CBO's estimates are based on data as of April 17, 2013; OMB's are based on data as of December 31, 2012.

AIG = American International Group; SBA = Small Business Administration; * = between -$500 million and $500 million.

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

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 in "community development financial institutions" rather than financial institutions more broadly.[9] The preferred stock purchased by the Treasury under the CDCI pays only a 2 percent dividend for the first eight years, compared with 5 percent for the first five years under the CPP. After that initial period, the CDCI requires dividend payments at a rate of 9 percent, as does the CPP. CBO estimates a subsidy 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 investments of $570 million, the net cost to the government is projected to be about $150 million.

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

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.

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.

preferred stock in exchange for providing $8 billion to AIG pursuant to that line of credit.

On January 14, 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] CBO estimates a net subsidy cost to the Treasury of $15 billion for the assistance that was provided to AIG through the TARP.

Financial Assistance to the Automotive Industry

General Motors (GM) and Chrysler, along with their associated financing intermediaries, received about $79 billion in TARP funds. In addition, the federal government offered to guarantee $5 billion in loans to parts manufacturers for GM and Chrysler; only $413 million of such loans was actually disbursed, however, bringing the total assistance to the automotive industry to nearly $80 billion. About $27 billion of that amount remains outstanding.[12] The total subsidy cost for that assistance will be $17 billion, in CBO's estimation.

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 recouped roughly $37 billion of the $61 billion invested in the two companies through repurchases of debt and preferred stock, as well as the sale of common stock; the Treasury has also written off or realized $11 billion in losses on its investments in GM and Chrysler. The government retains about 18 percent of New GM's equity and $900 million in debt obligations of "Old GM," which remains in bankruptcy as Motors Liquidation Corporation. The Treasury has no remaining investment in Chrysler, having sold all of its shares on July 21, 2011, for $560 million.

Financing Intermediaries. The Treasury provided $19 billion in financial assistance to GMAC (General Motors Acceptance Corporation) and Chrysler Financial, of which about $14 billion remains outstanding. On March 2, 2011, the Treasury sold nearly $3 billion of preferred stock in Ally Financial (formerly GMAC); the remainder of the $17 billion investment in that company consists of $6 billion in preferred stock and ownership of 74 percent of the company's equity.[13] In addition, Chrysler Financial received $1.5 billion in assistance, which it fully repaid on July 14, 2009.

Investment Partnerships

To encourage private investment in certain financial assets, the Treasury created public-private partnerships for investment in specific sectors. Those initiatives will result in a gain to the federal government of about $2 billion, CBO estimates.

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. Because the TALF is closed to new loans and the Federal Reserve provided less financing than originally anticipated, the Treasury has reduced its commitment to $4 billion; CBO estimates a gain of less than $500,000 for that program.

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.

13. Ally Financial is a private company and thus does not have publicly traded shares.

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.[14] In December 2012, the PPIFs' ability to draw on TARP funds expired, after they had received a total of $19 billion from the Treasury. Of that amount, all but $500 million has been repaid. CBO expects that the activities of the program, including interest, dividends, and capital gains received, will result in a net gain to the government of about $2 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.

Mortgage Programs

The federal government initially committed a total of $75 billion for the Home Affordable Modification Program (HAMP), which was established to provide direct payments to mortgage servicers to allow them to modify mortgages so as to help homeowners avoid foreclosure. Of that total, $50 billion was made available through the TARP and $25 billion through Fannie Mae and Freddie Mac. Through the end of March 2013, about 1.1 million homeowners had received permanent modifications to their mortgages through HAMP, though over 310,000 of those modifications were subsequently canceled, primarily because the homeowners later defaulted.[15] The Treasury has reallocated roughly $8 billion of the $50 billion in TARP funding for grants to certain state housing finance agencies and another $8 billion for programs of the Federal Housing Administration.[16]

Total disbursements of TARP funds for all mortgage programs were roughly $7 billion through April 17, 2013, but CBO anticipates that the TARP will ultimately disburse a total of $16 billion for those programs. 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).

Comparison of CBO's and OMB's Estimates

Although OMB used an approach similar to CBO's to value the TARP's asset purchases and guarantees, its most recent estimate of the program's total cost was $26 billion higher than CBO's current estimate. That difference stems principally from two factors:

- OMB estimated that $38 billion will be disbursed through the Treasury's mortgage programs; CBO anticipates that only $16 billion will be spent. The difference between those two estimates results primarily from different estimates of the number of participating households.
- CBO derived its market-based valuations (for the nonmortgage programs) from information available through April 17, 2013, whereas OMB's most recent estimates were based on data as of December 31, 2012. Because both agencies estimate subsidy costs using market prices, fluctuations in prices and the timing of repurchases lead to different estimates of the costs. Since the date of OMB's analysis, many of those prices—most notably for shares of General Motors—have increased, which has raised the estimated value of the Treasury's outstanding investments, in turn lowering the estimated net cost of the TARP.

14. "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 other assets of the borrower. That debt constituted 50 percent of the total funding.

15. About half of all the modifications involved mortgages guaranteed or owned by Fannie Mae or Freddie Mac.

16. 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.

Changes from CBO's October 2012 Estimates

In its *Report on the Troubled Asset Relief Program—October 2012*, CBO projected that the TARP would cost $24 billion over its lifetime. Since the publication of that report, the estimated cost has fallen by $3 billion, to $21 billion, primarily because the estimated cost of assistance to General Motors has decreased. CBO's estimate of the cost of assistance to the automotive industry has dropped from $20 billion to $17 billion because the market price for shares of General Motors common stock increased significantly between October 2012 and April 2013, thereby enabling the Treasury to sell its investments at a price higher than what was available in October and increasing the value of the Treasury's remaining shares.

Avi Lerner of CBO's Budget Analysis Division prepared the report with guidance from Peter Fontaine, Theresa Gullo, and Jeffrey Holland. Chad Chirico contributed to the analysis. This report and other CBO publications are available on the agency's website (www.cbo.gov).

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