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CBO

REPORT

Report on the Troubled Asset Relief Program—March 2010

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The Congress of the United States ■ Congressional Budget Office

Note

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

Preface

In October 2008, the Emergency Economic Stabilization Act of 2008 established the Troubled Asset Relief Program (TARP), which authorizes the Department of the Treasury to purchase or insure troubled assets as a way to promote stability in financial markets. Section 202 of that legislation requires the Congressional Budget Office (CBO) to prepare a report on those transactions within 45 days of a report issued by the Office of Management and Budget (OMB) on the TARP's activities. This third statutory report from CBO on the TARP's transactions follows the report OMB submitted to the Congress on February 1, 2010.

Avi Lerner of CBO's Budget Analysis Division prepared the report under the supervision of Peter Fontaine, Theresa Gullo, and Jeffrey Holland. Kim Kowaleski, Deborah Lucas, Wendy Kiska, Francesca Castelli, Chad Chirico, and Joe Mattey contributed significantly to the analysis. Loretta Lettner edited the report, and Leah Mazade proofread it. Maureen Costantino prepared the report for publication, with assistance from Jeanine Rees. Monte Ruffin oversaw the printing of the report, Linda Schimmel handled the print distribution, and Simone Thomas prepared the electronic versions for CBO's Web site (www.cbo.gov).

Douglas W. Elmendorf
Director

March 2010

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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 insurance of "troubled assets."[1] Section 202 of that legislation requires the Office of Management and Budget (OMB) to submit semiannual 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 third report on transactions—including investments, grants, and loans—completed, outstanding, and anticipated under the Troubled Asset Relief Program as of February 17, 2010.[3] The estimates presented in this report are consistent with those incorporated in the agency's most recently published baseline projections.[4] CBO currently estimates that the cost of the TARP's transactions, including some that have not yet been initiated, will amount to $109 billion. By comparison, OMB estimates that the cost will amount to $127 billion.

CBO and OMB value the TARP's investments using procedures similar to those specified in the Federal Credit Reform Act of 1990 but adjusting for market risk as directed by the Emergency Economic Stabilization Act. Under that methodology, the net projected cash flows from an investment, or from an expected future investment, are discounted to the present. The discount rate chosen captures the time value of money and the premium that a private investor would require as compensation for the risk of the investment or commitment. The

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. OMB's most recent report on transactions related to the TARP was submitted on February 1, 2010, as part of *Budget of the U.S. Government, Fiscal Year 2011*, www.whitehouse.gov/omb/budget/fy2011/assets/econ_analyses.pdf.

3. CBO's first and second reports on the TARP were issued in January and June of 2009, respectively. See Congressional Budget Office, *The Troubled Asset Relief Program: Report on Transactions Through December 31, 2008* (January 2009); and *The Troubled Asset Relief Program: Report on Transactions Through June 17, 2009* (June 2009).

4. In conjunction with its analysis of the President's budget, CBO routinely updates its baseline budget projections, which reflect the assumption that current tax and spending laws and policies remain the same over the next 10 years. See Congressional Budget Office, letter to the Honorable Daniel K. Inouye describing CBO's preliminary analysis of the President's budget request for 2011 (March 5, 2010).

resulting "net present value" is the cost or gain projected for the investment and represents an estimate of its market value.

Therefore, for transactions that have been initiated by the Treasury but not yet completed—for example, purchases of preferred stock that remain outstanding—the estimated cost equals the difference between what the Treasury paid to acquire an investment (or to make a loan) and the sum of the present value, as of the date of the analysis, of the assets the government obtained through that transaction and any dividend or interest payments received by the government.[5] Transactions that have been completed are valued at the net gain or loss realized by the government. For potential transactions that the government is likely to make—such as future purchases made as part of the Public-Private Investment Program (PPIP)—the estimated cost equals the expected difference between what the Treasury will pay for investments or extend in loans to companies and the value of the assets that the Treasury will obtain in return. As a result, the total estimated cost of the TARP reported here is a combination of realized and prospective costs (see Table 1).

Currently, the Secretary of the Treasury has the authority to purchase and hold up to $699 billion in assets at one time.[6] CBO estimates that $344 billion of that authorized amount is outstanding or will be disbursed before the program expires on October 3, 2010.[7] (That figure includes an estimated $45 billion that is projected to be used for purposes not yet specified.)

5. Preferred stock refers to shares of equity that require that a specific dividend 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. Authority for the TARP was originally set at a maximum of $700 billion; however, that total was reduced by about $1.3 billion in the Helping Families Save Their Homes Act of 2009 (P.L. 111-22).

7. The Treasury certified that it was exercising its option to extend the authority provided under the Emergency Economic Stabilization Act (EESA) in letters to House Speaker Nancy Pelosi and Senate Majority Leader Harry Reid dated December 9, 2010; the text is available at www.ustreas.gov/press/releases/tg433.htm. The letters also noted that the Treasury plans "to use significantly less than the full $700 billion" authorized under the EESA.

Transactions of the TARP

The TARP's transactions fall into four broad categories:

- Capital purchases and other support for financial institutions,
- Financial assistance to automakers and related businesses,
- Investment partnerships designed to increase liquidity in the securitization markets, and
- Grants to mortgage servicers and state housing finance agencies to help mitigate homeowner foreclosures.

Capital Purchases and Other Support for Financial Institutions

Through the TARP's Capital Purchase Program (CPP), the Treasury purchased $205 billion in shares of preferred stock from 707 financial institutions. As of mid-February, nearly $130 billion in preferred stock had been repurchased by 70 of the issuing institutions. (The application period for the CPP expired on December 31, 2009.) CBO estimates a net gain to the government of $2 billion from the CPP.

Each financial institution that received funding through the CPP must pay a dividend equal to 5 percent of the government's investment in that institution 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.[8] The price at which the government may purchase shares of common stock as specified by the warrants is the average price of the institution's common stock over the 20 trading days preceding the date of the government's investment. 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 shareholders, and the amount of common stock they repurchase.

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

Table 1.

Estimated Costs or Gains of the Troubled Asset Relief Program

(Billions of dollars)

	Commitments and Potential Use of TARP Authority	Amount Outstanding[a]	CBO's Estimates: Additional Disbursements Assumed	CBO's Estimates: Estimated Use of TARP Authority in CBO's March Baseline	CBO's Estimates: Cost or Gain (-) Over the Life of the Program	OMB's Estimates: Cost or Gain (-) Over the Life of the Program	Differences Between CBO's and OMB's Estimates
Capital Purchase Program	205	75	0	75	-2	1	-3
Additional Assistance to Citigroup and Bank of America							
Targeted Investment Program	40	0	0	0	-3	-4	1
Asset Guarantee Program	5	0	0	0	-3	-3	*
Subtotal, Additional Assistance	45	0	0	0	-5	-7	1
Assistance to AIG	70	48	22	70	36	50	-14
Assistance to the Automotive Industry	85	76	5	82	34	31	3
Term Asset-Backed Securities Loan Facility[b]	20	*	20	20	1	-1	2
Public-Private Investment Program	30	5	25	30	1	*	*
Home Affordable Modification Program[c]	50	*	21	22	22	49	-27
Community Development Capital Initiative[d]	1	0	1	1	*	n.a.	*
Remaining TARP Funds[e]	193	0	45	45	23	3	20
Total	**699[f]**	**204**	**140**	**344**	**109**	**127**	**-18**

Sources: Congressional Budget Office; Department of the Treasury; and Office of Management and Budget.

Note: TARP = Troubled Asset Relief Program; AIG = American International Group; * = between zero and $500 million; n.a. = not applicable.

a. Amounts shown are net of principal repayments for the Capital Purchase Program, Targeted Investment Program, Asset Guarantee Program, and assistance to the automotive industry. Data for the Public-Private Investment Program and the Home Affordable Modification Program are as of January 31, 2010; all other figures reflect transactions through February 17, 2010.

b. Additional disbursements under the Term Asset-Backed Securities Loan Facility refer to the maximum additional support available under the program.

c. Includes $1.5 billion in direct payments to select state housing finance agencies.

d. The Community Development Capital Initiative was announced after the Office of Management and Budget released its most recent report on the TARP (which was submitted on February 1, 2010, as part of *Budget of the U.S. Government, Fiscal Year 2011)*. Whereas CBO derived its market-based valuations from data available through mid-February, OMB's cutoff date was December 31, 2009.

e. Reflects CBO's assessment that, of the funds remaining under the original authority for the program, $45 billion will be disbursed at a subsidy rate of 50 percent.

f. Authority for the TARP was originally set at a maximum of $700 billion outstanding at one time; that total was reduced by nearly $1.3 billion in the Helping Families Save Their Homes Act of 2009 (Public Law 111-22).

The net gain calculated for the CPP takes into account the effect of repayments, sales of warrants, and write-offs that have already occurred. Those transactions include the following:

- The sale of warrants from several large financial institutions, including Goldman Sachs, JPMorgan Chase, and Morgan Stanley, which have either been repurchased by those institutions or publicly auctioned by the Treasury. As of February 17, 2010, the Treasury had received over $4 billion in proceeds from the disposition of warrants.

- The receipt of more than $8 billion in dividends collected by the Treasury from banks that received financing through the CPP. Of that total, about $5 billion was paid by institutions that have exited the program.

- Unrecoverable losses of over $2 billion from funds invested in CIT Group (which declared bankruptcy) and Pacific Coast National Bancorp (which was taken over by the Federal Deposit Insurance Corporation).

CBO's estimate also includes a cost of $4 billion for the program's outstanding investments. That figure reflects the estimated subsidy cost of preferred shares still held by the Treasury, which, in turn, is partially offset by the market value of warrants held by the Treasury and the value of the Treasury's common shares in Citigroup.[9]

In addition to receiving funds from the CPP, two financial institutions, Citigroup and Bank of America, also received supplementary support from the Treasury; all of that support has since been repaid or terminated. Citigroup and Bank of America each received $45 billion in capital—$25 billion through the CPP, plus a subsequent $20 billion through the Treasury's Targeted Investment Program (TIP). Furthermore, the Treasury agreed to absorb up to $5 billion in losses that could result from a federal guarantee of a $301 billion pool of Citigroup's assets. On December 23, 2009, Citigroup repaid the $20 billion in financing it received through the TIP and canceled the loss-sharing agreement it entered into for the asset guarantee. In exchange for accepting early termination of the guarantee, the Treasury retained over $2 billion of Citigroup preferred stock. The $25 billion that the Treasury invested in Citigroup through the CPP was exchanged for common stock and warrants to purchase additional shares. Bank of America has repaid the $45 billion in combined financing it secured through the CPP and the TIP. The Treasury had announced plans to guarantee a pool of Bank of America's assets, but that guarantee was not implemented.[10] CBO estimates that the additional assistance to Citigroup and Bank of America will result in a net gain to the government of $5 billion.

American International Group (AIG) has received financial assistance in two forms through the TARP: The Treasury purchased $40 billion in preferred stock from AIG and created a $30 billion preferred line of credit for the company.[11] All of the preferred stock is still outstanding; however, the company has failed to pay the quarterly cash dividends due on those investments. As of mid-February 2010, approximately $7.5 billion had been drawn down from the line of credit, and CBO estimates that AIG will use all of the remaining funds. Overall, CBO estimates the subsidy rate for the AIG transactions to be roughly 50 percent, or about $36 billion for the $70 billion in assistance.

Financial Assistance to Automobile Manufacturers and Related Businesses

U.S. automotive companies—along with associated financing agents and parts manufacturers—have received a total of $85 billion in commitments of TARP funds

9. To price warrants obtained under the TARP, CBO uses a Black-Scholes options-pricing model that relies on observed stock prices, estimated dividend yields, and historical data on volatility in stock prices. Those data were compiled from weekly securities returns recorded over a 10-year period.

10. Bank of America paid the Treasury $276 million in connection with terminating the asset guarantee plan. For details of the original agreement, see Department of the Treasury, "Treasury, Federal Reserve and the FDIC Provide Assistance to Bank of America," HP-1356 (January 16, 2009), www.treasury.gov/press/releases/hp1356.htm; and "Summary of Terms" (January 15, 2009), www.treas.gov/press/releases/reports/011508bofatermsheet.pdf.

11. The maximum amount that can be borrowed under the line of credit is $30 billion less $165 million for retention-bonus payments made to employees of AIG Financial Products Corporation and AIG Trading Group, Inc., in March 2009.

Table 2.

The Treasury's Investment in the U.S. Automotive Industry

(Billions of dollars)

	Total Commitments, Net of Principal Repayments	Ownership at Book Value		Share of Equity (Percent)
		Debt[a]	Preferred Stock	
General Motors Company	48	7	2	60.8
Chrysler Group LLC	13	13	0	9.9
GMAC	17	0	14	56.3
Automotive Parts Suppliers	3	3	0	0
Total	**82**	**23**	**16**	**n.a.**

Sources: Congressional Budget Office and Department of the Treasury.

Notes: Figures in the table reflect commitments through February 17, 2010.

LLC = limited liability company; n.a. = not applicable.

a. Includes $0.9 billion and $3.5 billion in asset claims on Motors Liquidation Company and Chrysler Holding LLC, respectively, each of which remains in bankruptcy proceedings.

and have repaid $3 billion of principal. CBO estimates a subsidy rate of 41 percent on the balance of investments and loans, resulting in a projected cost to the government of close to $34 billion.

Of the $64 billion in assistance that the Treasury provided to General Motors (GM) and Chrysler, $48 billion in financing is still outstanding for GM and $13 billion for Chrysler (see Table 2). The Treasury also provided assistance to the two financing arms previously associated with those businesses: GMAC (formerly General Motors Acceptance Corporation) has received $17 billion, including nearly $4 billion in support disbursed on December 30, 2009; and Chrysler Financial received $1.5 billion, which the company has repaid in full.[12] The Treasury has also provided $3.5 billion in loans to GM and Chrysler parts manufacturers, $0.1 billion of which has been repaid.

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. With respect to New GM, the Treasury holds over $2 billion in preferred stock, nearly $6 billion in debt obligations, and 60.8 percent of the company's equity.[13] The Treasury also retains $1 billion in debt obligations of "Old GM," which remains in bankruptcy as Motors Liquidation Corporation. As of February 17, the Treasury's investment in New Chrysler, which is a privately held company, consists of debt amounting to $9 billion and ownership of 9.9 percent of the company's equity. The Treasury maintains a $3.5 billion claim on the assets of the bankrupt entity Chrysler Holding LLC. The Treasury's $17 billion investment in GMAC consists of $14 billion in preferred stock as well as ownership of 56.3 percent of the company's equity.

Investment Partnerships

The Treasury committed $20 billion to cover potential losses of the Federal Reserve's Term Asset-Backed Securities Loan Facility (TALF), which provides financing to investors who buy highly rated securities backed by assets such as auto loans, credit card loans, student loans, and business loans guaranteed by the Small Business Adminis-

12. In late December 2008, GMAC won approval to become a bank holding company, thereby enabling it to qualify on its own for TARP assistance. Chrysler Financial also created a special-purpose entity to receive TARP funding.

13. New GM, GMAC, and both New and Old Chrysler are private companies and do not have publicly traded shares. Old GM still trades publicly. Debt and preferred stock holdings in the automotive companies are presented at book value.

tration. CBO estimates the subsidy rate for protection provided to the Federal Reserve for the TALF to be 6 percent, resulting in a net cost to the Treasury of about $1 billion.

Through the Public-Private Investment Program, the Treasury has agreed to provide a total of $30 billion in "nonrecourse" debt and equity to invest in Public-Private Investment Funds (PPIFs) in order to purchase illiquid assets from financial institutions.[14] The PPIF partnerships will end eight years from their initiation dates but may be extended for consecutive periods of up to one year each, up to a maximum of two years.

Through mid-February, the Treasury had committed about $9 billion of equity capital to the PPIFs, which was fully matched by private-sector equity. The Treasury had also agreed to provide nearly $18 billion of debt capital. CBO estimates that the program has a 2 percent subsidy rate and that all $30 billion of available funds will be used.

Grants to Mitigate Foreclosures

The Treasury has committed a total of $75 billion for the Home Affordable Modification Program (HAMP), which provides direct payments to mortgage servicers to help homeowners avoid foreclosure. Of that total, $50 billion is available through the TARP (the remaining $25 billion is provided through Fannie Mae and Freddie Mac). Through January 2010, about 116,000 homeowners had received permanent modifications to their mortgages, and the Treasury had disbursed a total of $31 million to servicers. CBO anticipates that the TARP will disburse no more than $20 billion to servicers for permanent loan modifications; in addition, $1.5 billion will be provided under a newly announced housing program, which was created to supplement the HAMP by providing direct grants to state housing finance agencies in California, Arizona, Nevada, Michigan, and Florida. Because payments provided through the HAMP are grants made directly to servicers and no repayments are required, the full cost of the disbursements is recorded as an outlay in the budget (that is, as a 100 percent subsidy).

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 the borrower is not personally liable.

Pending TARP Transactions

On February 3, the Treasury announced the details of a new Community Development Capital Initiative (CDCI) that will invest up to $1 billion in "community development financial institutions."[15] The structure of the program will be similar to that of the CPP. However, the preferred stock purchased by the Treasury under the CDCI will require only a 2 percent dividend for the first eight years (as compared with 5 percent over the first five years under the CPP). After that initial eight-year period, the CDCI will require dividend payments at a rate of 9 percent, as is the case with the CPP. CBO estimates a subsidy rate for this program of 21 percent and a net cost to the government of less than $500 million.

CBO's estimate of the total cost of the TARP reflects the assumption that an additional $45 billion will be disbursed through existing or newly instituted programs. Because no details about future funding are available, however, CBO has assumed a subsidy rate of 50 percent for such transactions, which represents the midpoint between the rate for existing programs that have provided no subsidy and the 100 percent subsidy provided by other programs.

Comparison of CBO's and OMB's Estimates

In its most recent report, OMB used an approach similar to CBO's to value the cost of assistance provided under the TARP. OMB's estimate of the program's total cost was $18 billion higher than CBO's current estimate, a difference that stems principally from four factors:

- OMB estimated that $49 billion will be disbursed by the HAMP; CBO anticipates that only $22 billion will be spent. The difference between those two estimates stems primarily from disparate outlooks on the number of eligible households and the participation rate among those households.

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

- CBO's assessment of the cost of assistance to AIG is lower than that of OMB, mostly because of differences in the assumptions used to value the subsidy provided to the company and the cash flows involved in the transactions.

- CBO anticipates that $45 billion of the remaining uncommitted TARP funds will be disbursed at an estimated cost of $23 billion; OMB includes a similar $40 billion placeholder that carries an estimated subsidy cost of approximately $3 billion.

- CBO derived its market-based valuations from data available through mid-February, whereas OMB's cutoff date was December 31, 2009. Grants for the CDCI were announced after OMB's cutoff date.

Changes from CBO's January Estimates

In *The Budget and Economic Outlook: Fiscal Years 2010 to 2020*, which was released in January, CBO indicated that the projected cost of the TARP over its lifetime was about $99 billion.[16] Since then, CBO has raised its estimate by about $10 billion.

The most notable increase in the estimated cost of the program stems from an updated assessment of the Treasury's assistance to AIG. CBO has boosted the estimated cost of that assistance from the $9 billion calculated in January to $36 billion. That revision results from a higher assumed probability of default applicable to AIG's issuance of preferred stock, which reflects an increase in the risk of losses.

In contrast, CBO's estimate of the cost of assistance to the automotive industry has dropped from $47 billion to $34 billion as the auto companies have emerged from bankruptcy proceedings and demonstrated some measure of financial stability and an improved business outlook. The remaining changes result from updates to market pricing, repurchases of preferred stock, and sales of warrants related to the CPP; incorporation of the CDCI loan program; and other adjustments.

16. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2010 to 2020* (January 2010), Box 1-2, pp. 12–13.