Abstract. Between March and September 2008, the federal government intervened financially with private corporations on three occasions, resulting in the government receiving significant debt and equity considerations. The firms affected were Bear Stearns, Fannie Mae and Freddie Mac, and AIG. Dissatisfaction with the case-by-case approach to addressing the ongoing financial turmoil led Treasury to propose a more comprehensive approach on September 19, 2008. On October 3, 2008, the Emergency Economic Stabilization Act (EESA, P.L. 110-343) was signed into law, authorizing the Troubled Assets Relief Program (TARP). TARP gave Treasury the option of purchasing or insuring up to $700 billion of assets from financial firms. On October 14, 2008, Treasury announced it was shifting its focus towards direct capital injections into banks through the purchase of preferred shares. Treasury’s announced “capital purchase plan” was for purchasing up to $250 billion in financial firms’ preferred stock under the TARP authority, with approximately $187.5 billion actually purchased as of December 31, 2008.
The Cost of Government Financial Interventions, Past and Present

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Summary

Between March and September 2008, the federal government intervened financially with private corporations on three occasions, resulting in the government receiving significant debt and equity considerations. The firms affected were Bear Stearns, Fannie Mae and Freddie Mac, and AIG. Dissatisfaction with the case-by-case approach to addressing the ongoing financial turmoil led Treasury to propose a more comprehensive approach on September 19, 2008. On October 3, 2008, the Emergency Economic Stabilization Act (EESA, P.L. 110-343) was signed into law, authorizing the Troubled Assets Relief Program (TARP). TARP gave Treasury the option of purchasing or insuring up to $700 billion of assets from financial firms. On October 14, 2008, Treasury announced it was shifting its focus towards direct capital injections into banks through the purchase of preferred shares. Treasury’s announced “capital purchase plan” was for purchasing up to $250 billion in financial firms’ preferred stock under the TARP authority, with approximately $187.5 billion actually purchased as of December 31, 2008.

In addition to the general capital purchase plan, there have been several other case-by-case interventions since the passage of the EESA. The initial $85 billion AIG loan from mid-September was first augmented and then revamped into a combination package of a $60 billion line of credit, $40 billion in preferred share purchases, up to $20.9 billion in commercial paper purchases, and up to $52.5 billion in troubled asset purchases. Citigroup received an additional $20 billion in preferred share purchases after an initial $25 billion, along with federal guarantees to cover losses on a $306 billion pool of assets. The U.S. automakers also received financial assistance through TARP, with a $5 billion preferred share purchase from GMAC, up to $14.4 billion in loans to GM and up to $4 billion in loans promised to Chrysler.

These interventions have prompted questions regarding the taxpayer costs and the sources of funding. The sources of funding are relatively straightforward—primarily the Federal Reserve (Fed) and the U.S. Treasury. The costs, however, are difficult to quantify at this stage. In most of the interventions, many of the financial outflows that are possible have yet to occur, and the ultimate value of the debt and equity considerations received from the private firms is uncertain. At this point, the federal government has the option to own nearly 80% of Fannie Mae, Freddie Mac, and AIG. Depending on the final proceeds from the various debt and equity considerations, the federal government may end up seeing a positive fiscal contribution from the recent interventions, as was the case in some of the past interventions summarized in the tables at the end of this report. The government may also suffer significant losses, as has also occurred in the past.

This report will be updated as warranted by legislative and market events.
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Introduction

Between March and September 2008, the federal government intervened financially with private corporations on three occasions, resulting in the government receiving significant debt and equity considerations. The firms affected were Bear Stearns, Fannie Mae and Freddie Mac, and AIG. Dissatisfaction with the case-by-case approach to addressing the ongoing financial turmoil led Treasury to propose a more comprehensive approach on September 19, 2008. On October 3, 2008, the Emergency Economic Stabilization Act (EESA, P.L. 110-343) was signed into law, authorizing the Troubled Assets Relief Program (TARP). TARP gave Treasury the option of purchasing or insuring up to $700 billion of assets from financial firms. On October 14, 2008, Treasury announced a Capital Purchase Program, under which it would use the TARP authority to purchase banks’ preferred stock rather than the mortgage-related assets that had previously been the primary focus. Other interventions under TARP have included a restructuring of the support for AIG, preferred share purchase and asset guarantees for Citigroup, and loans and preferred share purchase to support U.S. automakers.

These interventions have prompted questions regarding the taxpayer costs and the sources of funding. The sources of funding are relatively straightforward; the costs, however, are difficult to quantify at this stage. Many of the financial outflows that are possible have yet to occur, and the ultimate value of the debt and equity considerations received from the private firms is uncertain. At this point, the federal government has the option to own nearly 80% of Fannie Mae, Freddie Mac, and AIG, as well as loans to, and preferred stock holdings in, a large number of institutions. Depending on the final proceeds from the various debt and equity considerations, the federal government may end up seeing a positive fiscal contribution from the recent interventions, as was the case in some of the past interventions summarized in the tables at the end of this report. The government may also suffer significant losses, as has also occurred in the past.

Where Has the Money Come From?

In the recent interventions, there have been two primary sources of immediate funding: the Federal Reserve (Fed) and the U.S. Treasury. Under its founding statute, the Fed has the authority to loan money “in unusual and exigent circumstances” to “any individual, partnership, or corporation” provided five members of the Board of Governors of the Federal Reserve system agree. This authority has been cited in three of the interventions in 2008, namely Bear Stearns, AIG, and Citigroup. The source of money loaned under this section derives from the Fed’s general control of the money supply, which is essentially unlimited subject to the statutory mandates of maintaining stable inflation and promoting economic growth. Because the profits of the Fed are overwhelmingly remitted to the Treasury, the indirect source of the funds is the Treasury. In the case of Fannie Mae and Freddie Mac, the direct source of funding is the Treasury, pursuant to the statutory authority granted in the Housing and Economic Recovery Act of 2008. In the case of

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1 The Federal Deposit Insurance Corporation (FDIC) will absorb up to $5 billion in losses from the guarantee of Citigroup assets.
3 For more information on the Federal Reserve’s actions, please see CRS Report RL34427, Financial Turmoil: Federal Reserve Policy Responses, by Marc Labonte.
4 P.L. 110-289, Title I.
the Troubled Assets Relief Program, the direct source of funding is the Treasury, pursuant to the statutory authority granted in the Emergency Economic Stabilization Act of 2008.\(^5\) Treasury finances these activities by issuing bonds and increasing the federal debt.

## The Cost of Financial Interventions

Determining the cost of government interventions, particularly those currently in progress, is not straightforward. Assistance often comes in forms other than direct monies from the Treasury, including loan guarantees, lines of credit, or preferred stock purchases. Such assistance may have little or no up-front cost to the government, although loan guarantees in legislation are scored by the Congressional Budget Office (CBO) as an up front budgetary cost. This score reflects the fact that a loan guarantee, which can be thought of as a sort of insurance, has value even if it is never used. Many insurance policies are never used, but individuals and companies purchase them to reduce the risk of loss. In many past cases, the value to various companies of federal guarantees was to enable them to access the private credit markets, issuing bonds or obtaining bank loans that they would not otherwise have been able to obtain. In other past cases, the federal guarantee resulted in a lower interest rate on the bonds or loans.

Depending on the conditions attached to each specific intervention and how events proceed thereafter, the government may see a net inflow of funds from the actions taken, rather than a net outflow. Even with a net inflow of funds, however, intervention may have a cost if this inflow is less than the benefit that could have been derived from expending the funds for another purpose. The summaries below address the maximum amounts promised in federal assistance and attempt to quantify the amounts that have actually been disbursed. There are also other, more diffuse costs that could be weighed. For example, many would argue that the cost to the taxpayers of any intervention should be weighed against the potential costs of financial system instability resulting from inaction, or that one intervention may lead to more private sector risk-taking, and thus necessitate additional future interventions (moral hazard). Such costs, however, are even harder to quantify than the realized cost of the interventions. This report acknowledges but does not attempt to address them.

## Recent Financial Interventions

### Troubled Assets Relief Program (TARP)\(^6\)

As the government intervened in 2008 to prevent the failure of troubled financial firms, market conditions seemed to get worse instead of better. After the initial AIG intervention, Treasury argued that a more comprehensive solution was needed to restore financial calm. It proposed creating a Troubled Assets Relief Program to purchase up to $700 billion of troubled assets from financial firms as a way to restore investors’ confidence in the health of the financial sector. It was argued that financial firms would be unable to replenish their capital (by selling equity to private investors) unless certain assets were transferred to the government. Once financial

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\(^5\) P.L. 110-343, Division A, Title 1.

markets stabilized, Treasury would be able to sell these assets, recouping some or perhaps all (if asset prices rose above their purchase price) of the costs.

On October 3, 2008, the Emergency Economic Stabilization Act (EESA, Division A of P.L. 110-343) was signed into law, creating TARP. In addition to an asset purchase program, P.L. 110-343 included an insurance program providing federal guarantees for troubled assets in return for premiums paid by companies. It also allowed the government to take an equity stake in companies participating in the asset purchase program. P.L. 110-343 provided broad discretion to the Treasury to design the parameters of the program, making it difficult to evaluate the ultimate costs of the program at this time.

Under the Credit Reform Act and P.L. 110-343, CBO has projected that the total net cost to the government of the $700 billion outlaid under TARP will be approximately $185 billion in net present value terms. CBO makes this estimate by comparing the price paid by the government to acquire assets under TARP to the present discounted value of future income accruing to the government from the assets plus future proceeds from the sale of the assets, using a discount rate that has been adjusted for the risks inherent in holding the assets being purchased.

TARP Capital Purchase Program

On October 14, 2008, Treasury announced its ongoing focus would be to inject capital directly into financial institutions through the purchase of preferred stock rather than purchasing the troubled assets that had previously been the focus of the program. Treasury also announced that nine large banks were participating in the initial preferred share purchase, which amounted to $125 billion. Treasury indicated that an additional $125 billion was being reserved for preferred share purchases from smaller banks. As of December 31, 2008, approximately $62.5 billion of the $125 billion for smaller banks had been used.

In addition to the general capital purchase program, the purchase of preferred shares under TARP has been a component of several of the specific interventions detailed below.

U.S. Automakers

On December 20, 2008, the U.S. Treasury announced it was providing support through TARP to General Motors and Chrysler. The package included up to $13.4 billion in a secured loan to GM and $4 billion in a secured loan to Chrysler. In addition, up to $1 billion was lent to GM for its participation in a rights offering by GMAC, GM’s former financing arm which is now becoming a bank holding company. GMAC also received a $5 billion capital injection through preferred share purchases. As of December 31, 2008, the Treasury reports that $10.4 billion had been disbursed to GM, $5 billion to GMAC, and $4 billion to Chrysler. The secured loans to the automakers are contingent on their

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7 Congressional Budget Office, *Budget and Economic Outlook*, p. 25, Jan. 2009. More specifically, CBO projects that transactions undertaken in 2009 will have a net present value cost of $180 billion and transactions undertaken in 2010 will have a net present value cost of $5 billion.


producing plans for long-term profitability by March 31, 2009 at which point the loans can be called if these plans are judged unsatisfactory.

Citigroup

On November, 23, 2008, the Treasury, Federal Reserve, and FDIC announced a joint intervention in Citigroup, which had previously been a recipient of $25 billion in funding under TARP’s general capital purchase program. This specific intervention consisted of an additional $20 billion purchase of preferred shares under TARP and a government guarantee for a pool of $306 billion in Citigroup assets. The guarantee is in place for 10 years for residential assets and 5 years for non-residential assets. Should there be losses on the pool, Citigroup will exclusively bear up to the first $29 billion. Any additional losses will be split between Citigroup and the government, with Citigroup bearing 10% of the losses and the government bearing 90%. The first $5 billion of government’s losses would be borne by the Treasury using TARP funds; the next $10 billion would be borne by the FDIC; all further losses would be borne by the Fed through a non-recourse loan. Citigroup will pay the federal government a fee for the guarantee in the form of preferred stock. The assets will remain on Citigroup’s balance sheet, and Citigroup will receive the income stream generated by the assets.

American International Group (AIG)

On September 16, 2008, the Fed announced that it was taking action to support AIG, a federally chartered thrift holding company with a broad range of businesses, primarily insurance subsidiaries, which are state-chartered. This support took the form of a secured two-year line of credit with a value of up to $85 billion. The interest rate on the loan was relatively high, approximately 11.5% on the date it was announced. AIG also was to pay interest on the amount of the credit line that it did not access. In addition, the government received warrants to purchase up to 79.9% of the equity in AIG. On October 8, the Fed announced that it would lend AIG up to a further $37.8 billion against investment-grade securities held by its insurance subsidiaries. These securities had been previously lent out and were not available as collateral at the time of the original intervention. AIG also announced that it had applied to the Fed’s general Commercial Paper Facility and was approved to borrow up to $20.9 billion.

The financial support for AIG was restructured in early November 2008. The restructured financial support includes:

- A $60 billion loan from the Fed, with the term lengthened to five years and the interest rate reduced by 5.5%.
- $40 billion in preferred share purchase through the TARP Capital Purchase Program. These shares pay a 10% dividend.
- $52.5 billion total in asset purchases by the Fed through two Limited Liability Corporations (LLCs) known as Maiden Lane II and Maiden Lane III. AIG is contributing an additional $6 billion for the LLCs and will bear the first $6 billion in any losses on the asset values. Any gains from these LLCs will be shared between the government and AIG.
- $20.9 billion in possible lending through the Fed’s commercial paper facility. This was unchanged from the previous approval.
The 79.9% equity position of the government in AIG remains essentially unchanged after the restructuring of the intervention. As of December 31, 2008, the Fed reported that $38.9 billion had been lent directly to AIG, while the two LLCs supporting AIG have purchased at total of $46.9 billion in assets. The $40 billion in preferred share purchase through TARP was completed on November 25, 2008. As of November 5, 2008, AIG indicated it had borrowed $15.3 billion from the Fed’s commercial paper facility.

Fannie Mae and Freddie Mac

On September 7, 2008, the Federal Housing Finance Agency (FHFA) placed Fannie Mae and Freddie Mac into conservatorship. As part of this conservatorship, Fannie Mae and Freddie Mac have signed contracts to issue new senior preferred stock to the Treasury, which has agreed to purchase up to $100 billion of this stock from each of them. The Treasury agreed to make open market purchases of Fannie Mae- and Freddie Mac-issued mortgage-backed securities. Treasury has said that it expects to profit from the spread between the interest rate that it pays to borrow money through bonds and the mortgage payments on the mortgage-backed securities. Fannie Mae and Freddie Mac will guarantee payment of the securities. Treasury agreed that if the companies have difficulty borrowing money, which has apparently not been the case to date, Treasury will create a Government Sponsored Enterprise Credit Facility to provide liquidity to them, secured by mortgage-backed securities (MBS) pledged as collateral. There are no specific limits to these purchases or loans, but they are subject to the statutory limit on the federal government’s debt. In return for the Treasury support, each company issued the Treasury $1 billion of senior preferred stock without additional compensation, as well as warrants (options) to purchase up to 79.9% of each company’s common stock. Treasury’s authority to provide financial support will terminate December 31, 2009. According to CBO, Treasury had purchased $14 billion of preferred shares and $71 billion of mortgage-backed securities as of December 31, 2008.

On a risk-adjusted present value basis, CBO estimates that Fannie Mae’s and Freddie Mac’s combined liabilities exceeded their assets by $200 billion at the time of conservatorship – a gap that will be bridged with federal funds. In addition, CBO projects that, going forward, the entities will undertake new business with a cumulative net cost to the government of $104 billion in risk-adjusted present value terms (assuming no further policy change to the entities’ business activities).

Bear Stearns

On March 16, 2008, JPMorgan Chase agreed to acquire the investment bank Bear Stearns. As part of the agreement, the Fed lent $28.82 billion to a Delaware limited liability corporation (LLC) that it created to purchase financial securities from Bear Stearns. These securities are largely mortgage-related assets. The interest and principal will be repaid to the Fed by the LLC using the funds raised by the sale of the assets. The Fed’s loan will be made at an interest rate set equal to

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11 For more information see the September 7, 2008 statement by Treasury Secretary Henry Paulson at http://ustreas.gov/press/releases/hp1129.htm; and CRS Report RL34661, Fannie Mae’s and Freddie Mac’s Financial Problems, by N. Eric Weiss.
the discount rate (2.5% when the terms were announced, but fluctuating over time) for a term of 10 years, renewable by the Fed. In addition, JPMorgan Chase extended a $1.15 billion loan to the LLC that will have an interest rate equal to 4.5 percentage points above the discount rate. Thus, in order for the principal and interest to be paid off, the assets will need to appreciate enough or generate enough income so that the rate of return on the assets exceeds the weighted interest rate on the loans (plus the operating costs of the LLC). The interest on the loan will be repaid out of the asset sales, not by JPMorgan Chase.

Any difference between the proceeds and the amount of the loans will produce a profit or loss for the Fed, not JPMorgan Chase. Because JPMorgan Chase’s $1.15 billion loan was subordinate to the Fed’s $28.8 billion loan, if there are losses on the $29.95 billion assets, the first $1.15 billion of losses will be borne, in effect, by JPMorgan Chase. If the assets appreciate in value by more than operating expenses, the Fed will make a profit on the loan. If the assets decline in value by less than $1.15 billion, the Fed will not suffer any direct loss on the loan. Any losses beyond $1.15 billion will be borne by the Fed. By the end of 2008, these assets had suffered approximately $3 billion in losses.

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**Table 1. Summary of Current and Historical Financial Interventions by the Federal Government**

<table>
<thead>
<tr>
<th>Beneficiary</th>
<th>Action</th>
<th>Financial Commitment</th>
<th>Final Cost to Treasury</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Banks/TARP Capital Purchase Program (October 14, 2008)</td>
<td>Purchase of preferred shares</td>
<td>Up to $250 billion announced; $187.5 billion in actual outlays</td>
<td>Unknown (Treasury receives dividends on stock, plus sale value of stock at the end of the program.)</td>
</tr>
<tr>
<td>U.S. Automakers (December 19, 2008)</td>
<td>Secured Loan</td>
<td>Up to $13.4 billion announced</td>
<td>Unknown (Treasury receives interest on the loans as well as stock warrants.)</td>
</tr>
<tr>
<td>GMAC (December 29, 2008)</td>
<td>Purchase of preferred shares; secured loan</td>
<td>$5 billion direct to GMAC; up to $1 billion through General Motors.</td>
<td>Unknown (Treasury receives dividends on stock, interest on the loan, plus sale value of stock at the end of the program.)</td>
</tr>
<tr>
<td>Citigroup (October 14, 2008; November 23, 2008)</td>
<td>Purchase of preferred shares</td>
<td>$45 billion total through TARP ($2.5 billion through initial Capital Purchase Program)</td>
<td>Unknown (Treasury receives dividends on stock, plus sale value of stock at the end of the program.)</td>
</tr>
<tr>
<td></td>
<td>Guarantee of asset pool</td>
<td>Up to $249.3 billion</td>
<td>Unknown (Government receives preferred stock as fee for the guarantee.)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Beneficiary</th>
<th>Action</th>
<th>Financial Commitment</th>
<th>Final Cost to Treasury</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIG</strong> (September 16, 2008; November, 10, 2008)</td>
<td>Five-Year Secured Loan from the Federal Reserve</td>
<td>Up to $60 billion against the general assets of AIG</td>
<td>Unknown (Government receives interest on loan plus stock warrants on up to 79.9% of AIG's equity.)</td>
</tr>
<tr>
<td></td>
<td>Purchase of preferred stock</td>
<td>$40 billion through TARP</td>
<td>Unknown (Treasury receives dividends on stock, plus sale value of stock at the end of the program.)</td>
</tr>
<tr>
<td></td>
<td>Asset Purchase through LLC controlled by the Federal Reserve</td>
<td>Up to $52.5 billion</td>
<td>Unknown (The Fed LLC receives relatively illiquid assets.)</td>
</tr>
<tr>
<td></td>
<td>Commercial Paper Purchase by the Fed</td>
<td>Up to $20.9 billion</td>
<td>Unknown (Interest is paid to the Fed)</td>
</tr>
<tr>
<td>Fannie Mae and Freddie Mac (September 7, 2008)</td>
<td>Senior Preferred Stock Purchase</td>
<td>Initial commitment, $100 billion each; ultimately, no set limit</td>
<td>Unknown (Treasury receives $1 billion (each) of preferred stock and 10% accrual on the stock.)</td>
</tr>
<tr>
<td></td>
<td>Purchase of Mortgage-Backed Securities issued by the companies</td>
<td>No set limit</td>
<td>Unknown (Treasury receives interest on any MBS purchased and may sell the securities in the future.)</td>
</tr>
<tr>
<td></td>
<td>Credit Facility</td>
<td>No set limit collateralized</td>
<td>Unknown (Treasury receives interest on any loans taken.)</td>
</tr>
<tr>
<td>Bear Stearns (March 14, 2008)</td>
<td>Asset Purchase through LLC controlled by the Federal Reserve</td>
<td>$28.8 billion</td>
<td>Unknown (The Federal Reserve LLC received $29.95 billion in relatively illiquid assets.)</td>
</tr>
<tr>
<td>Chrysler P.L. 96-185 (January 7, 1980)</td>
<td>Loan Guarantees</td>
<td>$1.5 billion</td>
<td>$311 million profit from sale of warrants.</td>
</tr>
<tr>
<td>New York City P.L. 95-339 (August 9, 1978)</td>
<td>Loan Guarantees</td>
<td>$1.65 billion in guaranteed bonds</td>
<td>None, except the implicit value of loan guarantee.</td>
</tr>
<tr>
<td>New York City P.L. 94-143 (December 9, 1975)</td>
<td>Short-Term Loans</td>
<td>$2.3 billion</td>
<td>None, except the implicit cost of the risk of loan.</td>
</tr>
</tbody>
</table>
### The Cost of Government Financial Interventions, Past and Present

<table>
<thead>
<tr>
<th>Beneficiary</th>
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</tr>
</thead>
</table>
| Penn Central  
P.L. 93-236  
(January 2, 1974) | Loan Guarantees in the wake of Railroad Bankruptcy | $125 million loan guarantees; $7 billion in federal operating subsidies | $3 billion net loss after sale of ownership stake plus the implicit value of loan guarantee. |
| Lockheed  
P.L. 92-70  
(August 9, 1971) | Loan Guarantees | $250 million of loans guaranteed for five years with three year renewal; guarantee and commitment fees charged | $31 million profit from sale of warrants less the lost value of loan guarantee. |

**Source:** CRS

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