



The Budgetary Impact and Subsidy Costs of the Federal Reserve

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Over the past several years, the nation has experienced its most severe financial crisis since the Great Depression of the 1930s. To stabilize financial markets and institutions, the Federal Reserve System used its traditional policy tools to reduce short-term interest rates and increase the availability of funds to banks, and created a variety of nontraditional credit programs to help restore liquidity and confidence to the financial sector. In doing so, it more than doubled the size of its asset portfolio to over \$2 trillion and assumed more risk of losses than it normally takes on.

In a **study** prepared at the request of the Ranking Member of the Senate Budget Committee, CBO describes the various actions by the Federal Reserve and how those actions are likely to affect the federal budget in coming years. The report also presents estimates of the risk-adjusted (or fair-value) subsidies that the Federal Reserve provided to financial institutions through its emergency programs. Unlike the cash treatment of the Federal Reserve in the budget, fair-value subsidies include the cost of the risk that the central bank has assumed. Thus, those subsidies are a more comprehensive measure of the cost of the central bank's actions.

The Federal Reserve's activities during the crisis have had a striking impact on the amount and types of assets that it holds. In July 2007, before the financial crisis began, the Federal Reserve held about \$900 billion in assets; U.S. Treasury securities accounted for about \$790 billion of that amount. The central bank had acquired those securities during its normal operations in conducting monetary policy—the process of influencing the level of short-term interest rates and consequently the pace of U.S. economic activity. By the end of 2008, the value of the Federal Reserve's assets had grown to about \$2.3 trillion; of that amount, loans and other support extended to financial institutions made up \$1.7 trillion. At the end of 2009, the amount of direct loans and other support to financial institutions, though still quite high by historical standards, had fallen markedly to about \$280 billion, but holdings of mortgage-related securities had risen to just over \$1 trillion. There was also a marked shift in the composition of the central bank's liabilities. Before the crisis, the major liability on the Federal Reserve's balance sheet was the amount of currency in circulation—about \$814 billion as of July 2007. At the end of 2009, the amount of reserves that banks held with the Federal Reserve was the central bank's largest liability, at more than \$1 trillion.

The amount and composition of the Fed's assets and liabilities are major determinants of its impact on the federal budget. That impact is measured by the central bank's cash remittances to the Treasury, which are recorded as revenues in the budget. (The amount that is remitted is based on the Federal Reserve System's income from all of its various activities minus the costs of generating that income, dividend payments to banks that are members of the Federal Reserve System, and changes in the amount of the surplus that it holds on its books.) For fiscal years 2000 through 2008, annual remittances by the Federal Reserve ranged between \$19 billion and \$34 billion.

CBO projects that the Federal Reserve's actions to stabilize the financial system will boost its remittances to the Treasury during the next several years. That increase reflects the Federal Reserve's larger portfolio of riskier assets, most of which are likely to earn a great deal more than the amount the system must pay in interest on reserves and its other liabilities. CBO projects that remittances will grow from about \$34 billion in fiscal year 2009 to more than \$70 billion in fiscal years 2010 and 2011.

However, that estimated effect on the budget fails to account for the cost of the risks to taxpayers from those actions. When the Federal Reserve invests in a risky security, it increases its expected net earnings because the return it anticipates on that security exceeds the interest rate it pays on the debt used to fund the purchase. Nevertheless, when the riskiness of such securities is fully accounted for, the investment may be projected to produce no net gain or even a loss. If the Federal Reserve purchases the security at a fair-market price, equivalent to what private investors would have paid, then the purchase creates no economic gain or loss for taxpayers; the price compensates the central bank for the risk it has assumed. By contrast, if the Federal Reserve purchases a risky security for more than the amount that private investors would have paid, it gives a subsidy to the seller of the security, creating an economic loss, or cost, for taxpayers.

The economic cost of the Federal Reserve System's actions to stabilize the financial markets—which incorporates the risks to taxpayers—can be estimated using “fair-value” subsidies. In CBO's estimation, the “fair-value” subsidies conferred by the Federal Reserve System's actions to stabilize the financial markets totaled about \$21 billion at the time those actions were taken. The gains or losses that will ultimately be realized from the Federal Reserve's activities will almost certainly deviate from CBO's estimates of the fair-value subsidies those actions provided. Fair-value subsidies are forward-looking estimates that are based on averages over many possible future outcomes, whereas realized gains or losses reflect a particular outcome.

It bears emphasizing that CBO's fair-value estimates address the costs but not the benefits of the Federal Reserve's actions. In CBO's judgment, if the Federal Reserve had not strategically provided credit and enhanced liquidity, the financial crisis probably would have been deeper and more protracted and the damage to the rest of the economy more severe. Measuring the benefits of the Federal Reserve's interventions in avoiding those worse outcomes is much more difficult than estimating the subsidy costs of the interventions, and CBO has not attempted to do so. It is likely, though, that the benefits of the Federal Reserve's actions to stabilize the financial system exceeded the relatively small costs of the fair-value subsidies.

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