



Economic Slowdown: Issues and Policies

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Summary

Recent policies have sought to contain damages spilling over from housing and financial markets to the broader economy, including monetary policy, the responsibility of the Federal Reserve, and fiscal policy. Legislators and the President adopted an economic stimulus package (P.L. 110-185) on February 13. Another stimulus package, H.R. 7110, passed the House in 2008. Over the past few months, the government has also intervened in specific financial markets, including financial assistance to troubled firms. Legislation authorizing a massive intervention in financial markets was adopted on October 3 (P.L. 110-343); it includes authority to purchase \$700 billion in troubled assets. In addition, the Fed has lent directly to financial institutions through an array of new facilities, and the amounts of loans outstanding have risen into the hundreds of billions of dollars. Congressional leaders and President-Elect Obama have now proposed much larger stimulus packages, ranging from \$600 to \$850 billion, comprised of spending and tax cuts.

The estimated budget cost of the stimulus enacted in February was about \$150 billion for FY2008. The largest provision (in terms of budgetary cost) was a tax rebate for individuals. The Senate committee bill also included an extension in unemployment compensation benefits; the Iraq/Afghanistan supplemental appropriations completed June 26 included a 13-week extension, signed on June 30. The current stimulus proposal would increase spending on infrastructure, unemployment benefits, Medicaid, and food stamps by \$50 to \$60 billion; unemployment was extended by an additional seven weeks on November 21, 2008.

The need for additional fiscal stimulus depends on the state of the economy. The National Bureau of Economic Research (NBER) has declared the economy in recession since December 2007. Growth rates, after two strong quarters, were negative in the fourth quarter of 2007, positive in the first and second quarters of 2008, and a negative 0.5% in the third quarter. According to one data series, employment fell in every month of 2008. The unemployment rate, which rose slightly in the last half of 2007, declined in January and February of 2008, but began rising in March and in November stood at 6.7%. Some forecasters believe that the ongoing financial turmoil will result in a recession that is deeper and longer than average.

Fiscal policy temporarily stimulates the economy through an increase in the budget deficit. There is a consensus that proposals that result in more spending, can be implemented quickly, and leave no long-term effect on the budget deficit would increase the benefits and reduce the costs of fiscal stimulus. Economists generally agree that spending proposals are somewhat more stimulative than tax cuts since part of a tax cut will be saved by the recipients. The most important determinant of the effect on the economy is its size. The recent stimulus package increased the deficit by about 1% of GDP.

The broad intervention into the financial markets has been passed to avoid the spread of financial instability into the broader market but there are disadvantages, including leaving the government holding large amounts of mortgage debt.

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The National Bureau of Economic Research (NBER) has declared the U.S. economy in recession since December of 2007. Numerous actions have already been taken and continue to be considered to contain damages spilling over from housing and financial markets to the broader economy. These policies include traditional monetary and fiscal policy, as well as broader interventions into the financial sector.

Earlier in 2008, in response to weaker economic growth, legislators and the Administration proposed economic stimulus packages. After negotiations with the Administration, the Recovery Rebates and Economic Stimulus for the American People Act of 2008 (H.R. 5140) was introduced by Speaker Pelosi and passed by the House on January 29, 2008. On January 30, the Senate Committee on Finance reported the Economic Stimulus Act of 2008, which contained provisions not included in the House bill. On February 7, the Senate adopted the House bill with added rebates for retirees and the House adopted the revised bill. On February 13, the bill was signed into law as P.L. 110-185.

Some proposals discussed but not adopted in that package might be considered in a second stimulus bill. At this point the scope of a second proposal remains uncertain. A provision that was considered (but not enacted) in the February stimulus bill was a 26-week extension of unemployment benefits. The Iraq/Afghanistan supplemental appropriations, adopted by Congress on June 26 and signed by the President on June 30 as P.L. 110-252, extended benefits for 13 weeks. A second stimulus plan (H.R. 7110) passed the House on September 26 and included \$36.9 billion on infrastructure (\$12.8 billion highway and bridge, \$7.5 billion water and sewer, \$5 billion Corps of Engineers); \$6.5 billion in extended unemployment compensation; \$14.5 billion in Medicaid, and \$2.7 billion in food stamp and nutrition programs. On October 3, the House passed the Unemployment Compensation Extension Act of 2008 (H.R. 6867), which would provide extended unemployment benefits. An extension of unemployment compensation in a lame-duck session in November but not a general stimulus. Congressional leaders have now proposed packages as large as \$600 billion. According to news reports, President-elect Obama plans to propose a much larger stimulus package of around \$670 to \$770 billion that he expects, with additions in Congress to amount to \$850 billion, a figure much larger than proposals enacted or considered in 2008. This package could include grants to the states, infrastructure spending, increased transfer payments, and tax cuts.

Financial market conditions worsened significantly in September 2008. Although the real production of goods and services has so far showed unexpected resilience since financial turmoil began in August of 2007, the ability of private borrowers to access credit markets remained restricted throughout the year. Evidence of a credit crunch was seen in the persistence of wide spreads between the interest rates that private borrowers paid for credit and the yields on Treasury securities of comparable maturity. One indication of restricted credit despite stimulative Federal Reserve monetary policy was the failure of mortgage rates to fall significantly. Instead, the spread between Treasuries and Government Sponsored Enterprise (GSE) bonds remained elevated over the summer. The newly created Federal Housing Finance Agency (FHFA) cited the persistence of this wide spread as a major factor in its decision to place the GSEs in conservatorship in September. During the week of September 15-19, financial markets were further disturbed by the bankruptcy of investment bank Lehman Brothers and Federal Reserve intervention on behalf of the insurer AIG. These actions eroded market confidence further, resulting in a sudden spike of the commercial paper rate spread from just under 90 basis points to 280 basis points, a spike that in times past might have been called a panic. If financial market confidence is not restored and private market spreads remain elevated, the broader economy could slow more due to difficulties

in financing consumer durables, business investment, college education, and other big ticket items.

On September 18, Administration and Federal Reserve officials with the bipartisan support of the Congressional leadership, announced a massive intervention in the financial markets, requesting authority to purchase up to \$700 billion in assets over the next two years. The Treasury has also provided insurance for money market funds, where withdrawals have been significant. Congressional leaders and other Members raised a number of issues and made some additional proposals, which included setting up an oversight mechanism, restrictions on executive compensation of firms from which assets are purchased, acquiring equity stakes in the participating firms, and allowing judges to reduce mortgage debt in bankruptcies (not included in the final Act).

A tentative agreement announced September 26 by the Senate Banking Committee and the House Financial Services Committee would allow an initial \$250 billion of financing with an additional \$100 billion upon certification of need, with Congress allowed 30 days to object to the final \$350 billion. The plan would have oversight by an Inspector General, audit by the Governmental Accountability Office, setting standards of appropriate compensation, and providing for equity positions in all participating companies. A final proposal, H.R. 3997, which termed the program the Troubled Asset Relief Program (TARP) also included an oversight board and options for firms to purchase insurance, failed to pass in the House. A second bill (H.R. 1424) that preserved the central elements of the failed proposal but added an expansion of deposit insurance coverage was passed by the Senate on October 1, by the House on October 3, and signed into law as P.L. 110-343. There are, however, concerns about how to price acquired assets in a way that balances protection of taxpayers with providing adequate assistance to firms. The Treasury had indicated use of a reverse auction mechanism to purchase mortgage backed securities, where companies will bid to sell their assets. It is not clear how well such an auction would work with heterogeneous assets.¹

The Treasury subsequently announced that it will use the first \$250 billion authorized to purchase preferred stock in financial institutions and has now indicated it will use the funds for capital injections, consumer credit (such as auto loans, student loans, small business loans, and credit cards) and mortgage assistance.² Congressional leaders urged Treasury to provide \$25 billion in aid to U.S. auto manufacturers.³ On November 10, a restructuring of government assistance to AIG was announced which increased the amount at risk from \$143.7 billion to \$173.4 billion, extended the loan length and reduced the interest rate. The Federal Reserve also announced on October 14 that it would begin purchasing commercial paper.⁴ News reports also indicate the Federal Deposit Insurance Corporations (FDIC) has a plan, supported by congressional Democrats, to offer financial incentives to companies that agree to reduce monthly mortgage

¹ See CRS Report RL34707, *Auction Basics: Background for Assessing Proposed Treasury Purchases of Mortgage-Backed Securities*, by D. Andrew Austin.

² Testimony of Interim Assistant Secretary for Financial Stability Neel Kashkari before the House Committee on Oversight and Government Reform, Subcommittee on Domestic Policy, November 14, 2008.

³ David M. Herszenhiorn, "Chances Dwindle on Bailout Plan for Automakers," *New York Times*, November 14, p. A1.

⁴ Federal Reserve Board Press Release, October 14, 2008.

payments, but that this plan is opposed by the Bush administration.⁵ On November 23, the government announced a plan to assist Citicorp, and on November 25 the Federal Reserve revealed plans to purchase \$200 billion in asset backed securities through the Term Asset-Backed Securities Loan Facility (TALF); these securities are based on auto, credit card, student and small business loans. The Federal Reserve also announced a plan to purchase \$600 billion of mortgage related securities owned or guaranteed by the housing GSEs.

Much of the intervention up to this point has been in the financial markets. However, the big three U.S. automakers (GM, Ford, and Chrysler) have asked for \$34 billion in loans to forestall bankruptcy. The rise in gasoline prices reduced demand for profitable SUVs, and the credit crunch and recession have further decreased consumer demand. Congressional leaders proposed using some of the TARP funds, but the Treasury did not agree with that position, so such a loan would require legislation or need to be considered in 2009. Some analysts believe a failure of the auto industry could be disastrous for the Midwest and some also believe a much larger amount will be needed. Others believe bankruptcy of the firms, which would be accompanied with adjustments in payroll as in other bankruptcy cases, would be a better alternative.⁶ After Congress did not adopt an emergency loan of \$14 billion in a special post-election session in December, 2008, the Administration indicated, on December 19, that it would provide \$17.4 billion from TARP: \$9.4 billion to GM and \$4 billion to Chrysler, with an additional \$4 billion for GM if the remaining \$350 billion in TARP funds is approved.

This report first discusses the current state of the economy, including measures that have already been taken by the monetary authorities, and assesses the need for and potential consequences of fiscal stimulus. The second part of the report reviews the proposals discussed during debate on the fiscal stimulus enacted in 2008, both those adopted and those considered but not adopted. The various stimulus packages differed somewhat, and the report briefly describes those differences. This section also includes a discussion of the potential elements of a second stimulus proposal, and concludes with a discussion of the macroeconomic effects of the proposals. The final section of the paper discusses recent and proposed financial interventions.

The Current State of the Economy⁷

The need for fiscal stimulus depends, by definition, on the state of the economy. According to the National Bureau of Economic Research (NBER), the official arbiter of the business cycle, the economy has been in recession since December 2007. It defines a recession as a “significant decline in economic activity spread across the economy, lasting more than a few months” based on a number of economic indicators, with an emphasis on trends in employment and income.⁸ But because a recession is defined as a lasting decline, the NBER typically does not declare a recession until it is well under way. For example, the recession that began in March 2001 was not

⁵ Buinyamin Appelbaum, FDIC Details Plan to Alter Mortgages, Washington Post, November 14, 2008, p. A1.

⁶ See CRS Report R40003, *U.S. Motor Vehicle Industry: Federal Financial Assistance and Restructuring*, coordinated by Stephen Cooney, et al. for further discussion.

⁷ This section was prepared by Marc Labonte of the Government and Finance Division.

⁸ National Bureau of Economic Research, *The NBER's Recession Dating Procedure*, January 7, 2008.

declared by the NBER until November 2001, the same month in which the NBER later declared the recession to have ended. The current recession was declared in late November of 2008.

In October 2008, a consensus among forecasters developed that the economy was in, or was about to enter, in a recession and in November and December the forecast worsened.⁹ After two strong quarters, economic growth fell by 0.2% in the fourth quarter of 2007 and increased by 0.9% in the first quarter of 2008. Revised figures show a 2.8% growth rate in the second quarter of 2008. The Bureau of Economic Analysis's estimate, however, indicates that real GDP decreased by 0.5% in the third quarter. (Although negative growth is not an official prerequisite for a recession, all historical recessions have featured it.)

After a long and unprecedented housing boom, the median house price of existing homes fell by 1.8% in 2007—possibly the first year of falling prices since the Great Depression, according to one organization which compiles the data.¹⁰ And the decline continued in 2008 and appears to be worsening over time. Other housing data fell even further—existing home sales fell by 22% in the twelve months through December 2007, and residential investment (house building) fell by 18% in the four quarters ending in the fourth quarter of 2007. The decline in residential investment has acted as a drag on overall GDP growth, while the other components of GDP have grown at more healthy rates. Many economists argued that the housing boom was not fully caused by improvements in economic fundamentals (such as rising incomes and lower mortgage rates), and instead represented a housing *bubble*—a situation where prices were being pushed up by “irrational exuberance.”¹¹

Most economists believe that a housing downturn alone would not be enough to singlehandedly cause a recession.¹² But in August 2007, the housing downturn spilled over to widespread financial turmoil.¹³ Triggered by a dramatic decline in the price of subprime mortgage-backed securities and collateralized debt obligations, large losses and a decline in liquidity spread throughout the financial system. The Federal Reserve (Fed) was forced to create unusually large amounts of liquidity to keep short-term interest rates from rising in August 2007, and has since reduced interest rates significantly. Recent cuts in interest rates by the Federal Reserve included a cut the federal funds rate by three-quarters of a percentage point on March 18 and an additional cut of a quarter of a percentage point on April 30, a one half of a percentage point cut on October 8, a cut of one half of a percentage point on October 29, and a cut of $\frac{3}{4}$ to 1 percentage point on December 16. This last cut reduced the federal funds target rate to 0 to 0.25%. In addition, the Fed has lent directly to financial institutions through an array of new facilities, and the amounts of loans outstanding have risen into the hundreds of billions of dollars.¹⁴ A reduction in lending

⁹ Blue Chip, *Economic Indicators*, vol. 33, no. 10, October 10, 2008; no. 11, November 10, 2008 and no. 12, December 10, 2008. The consensus was that the recession will be deeper and last longer than the 2001 recession and perhaps deeper and longer than any post-World-War-II contraction.

¹⁰ Michael Grynbaum, “Home Prices Sank in 2007, and Buyers Hid,” *New York Times*, January 25, 2008. Prices are compiled by the National Association of Realtors.

¹¹ For more information, see CRS Report RL34244, *Would a Housing Crash Cause a Recession?*, by Marc Labonte.

¹² See, for example, Frederic Mishkin, “Housing and the Monetary Transmission Mechanism,” working paper presented at the Federal Reserve Bank of Kansas City symposium, August 2007.

¹³ See CRS Report RL34182, *Financial Crisis? The Liquidity Crunch of August 2007*, by Darryl E. Getter et al.

¹⁴ See CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.

by financial institutions in response to uncertainty or financial losses is another channel through which the economy could enter a recession.

To date, financial markets remain volatile, new losses have been announced at major financial institutions, and responses outside traditional monetary policy have been undertaken. In March, the financial firm Bear Stearns encountered liquidity problems, was provided emergency financing by JPMorgan Chase and the Federal Reserve Bank of New York, and was purchased, after a plummet in stock value, by JPMorgan Chase. Then in July, the government sponsored enterprises (GSEs) Fannie Mae and Freddie Mac experienced rapidly falling equity prices in response to concerns about the value of their mortgage backed securities assets. In July, Congress authorized Treasury to extend the GSEs an unlimited credit line (which has not been utilized to date) in H.R. 3221 because of concern that the failure of a GSE would cause a systemic financial crisis. The federal government took control of Fannie Mae and Freddie Mac in early September. In November 2008 Treasury purchased \$2.8 billion of senior preferred stock from Freddie Mac to prevent its net worth from becoming negative. According to news reports, government officials decided not to intervene on behalf of Lehman Brothers and Merrill Lynch;¹⁵ on September 14, Bank of America took over Merrill Lynch without federal intervention, and on September 15, Lehman Brothers filed for bankruptcy. The Treasury and Federal Reserve were trying to engineer a private bailout of the nations largest insurance company, AIG, but on September 16 seized control with an \$85 billion emergency loan.¹⁶

On September 18, Administration and Federal Reserve officials with the bipartisan support of the Congressional leadership, announced a massive intervention in the financial markets.¹⁷ The proposal asked for authority to purchase up to \$700 billion in assets over the next two years. The Treasury has also provided insurance for money market funds, where withdrawals have been significant. These proposals suggest that government economists see problems with the transmission of traditional monetary stimulus into the financial sector and ultimately into the broader economy, where a significant contraction of credit could significantly reduce aggregate demand. Although the legislation passed with some delay, the stock market has fallen significantly. The original proposal had discussed buying mortgage related assets, particularly mortgage-backed securities, but the Treasury has indicated it will spend the initial \$250 billion on preferred stock in financial institutions. The Federal Reserve has also announced purchases of commercial paper, \$200 billion of asset backed securities, and \$600 billion of mortgage related securities; the government has also announced a plan to assist Citigroup.

At the same time as the economy and financial sector has been grappling with the housing downturn, energy prices had risen significantly, from \$48 per barrel in January 2007 to \$115 dollars on April 30, 2008 and \$144 as of July 2, 2008. After that, oil prices began a downward trend, and had fallen below \$70 by October and \$60 by the end of November. On December 10,

¹⁵ David Cho and Neil Irwin, "No Bailout: Feds Made New Policy Clear in One Intense Weekend," *Washington Post*, September 16, 2008, pp. A1, A6-A7.

¹⁶ Glenn Kessler and David S. Hilzenrath, "AIG at Risk; \$700 Billion in Shareholder Value Vanishes," *Washington Post*, September 16, 2008; U.S. Seizes Control of AIG With \$85 Billion Emergency Loan, *Washington Post*, September 17, 2008, pp. A1, A8.

¹⁷ See CRS Report RS22957, *Proposal to Allow Treasury to Buy Mortgage-Related Assets to Address Financial Instability*, by Edward V. Murphy and Baird Webel.

the price was \$43. Most recessions since World War II, including the most recent, have been preceded by an increase in energy prices.¹⁸ Energy prices had gone up almost continuously in the current expansion, however, without causing a recession, which may point to the relative decline in importance of energy consumption to production. Although a housing downturn (and associated financial turmoil) or an energy shock might not be enough to cause a recession in isolation, the combination could be sufficient. Unless energy prices begin to rise again, there is little reason to believe they will place any further downward pressure on economic growth going forward.

In sum, there are some indications that a slowdown has occurred and that there are problems in several sectors. Growth rates, after two strong quarters, were negative in the fourth quarter of 2007, were positive in the first and second quarters of 2008, and negative in the third quarter of 2008. According to one data series, employment fell in the first 10 months of 2008. The unemployment rate, which was 4.8% in February 2008, rose to 6.1% in August 2008, remained there in September 2008, and rose again to 6.5% in October 2008 and to 6.6% in November. Forecasters project slower growth for 2008, and appear to have reached a consensus that the U.S. is in a recession. Problems exist in several different sectors of the economy: housing, energy, and financial markets. The continuing turmoil in financial markets could result in a credit crunch and result in contractions in the interest sensitive sectors of the economy.

Is Additional Fiscal Stimulus Needed?

The economy naturally experiences a boom and bust pattern called the business cycle. A recession can be characterized as a situation where total spending in the economy (*aggregate demand*) is too low to match the economy's potential output (*aggregate supply*). As a result, some of the economy's labor and capital resources lay idle, causing unemployment and a low capacity utilization rate, respectively. Recessions are short-term in nature—eventually, markets adjust and bring spending and output back in line, even in the absence of policy intervention.¹⁹

Policymakers may prefer to use stimulative policy to attempt to hasten that adjustment process, in order to avoid the detrimental effects of cyclical unemployment. By definition, a stimulus proposal can be judged by its effectiveness at boosting total spending in the economy. Total spending includes personal consumption, business investment in plant and equipment, residential investment, net exports (exports less imports), and government spending. Effective stimulus could boost spending in any of these categories.

Fiscal stimulus can take the form of higher government spending (direct spending or transfer payments) or tax reductions, but generally it can boost spending only through a larger budget deficit. A deficit-financed increase in government spending directly boosts spending by borrowing to finance higher government spending or transfer payments to households. A deficit-financed tax cut indirectly boosts spending if the recipient uses the tax cut to increase his spending. If an increase in spending or a tax cut is financed through a decrease in other spending

¹⁸ For more information, see CRS Report RL31608, *The Effects of Oil Shocks on the Economy: A Review of the Empirical Evidence*, by Marc Labonte.

¹⁹ For more information, see CRS Report RL34072, *Economic Growth and the Business Cycle: Characteristics, Causes, and Policy Implications*, by Marc Labonte.

or increase in other taxes, the economy would not be stimulated since the deficit-increasing and deficit-decreasing provisions would cancel each other out.

How much a larger deficit can stimulate economic activity depends on the state of the economy at that time. When the economy is in a recession, fiscal stimulus could mitigate the decline in GDP growth by bringing idle labor and capital resources back into use. When the economy is already robust, a boost in spending could be largely inflationary—since there would be no idle resources to bring back into production when spending is boosted, the boost would instead bid up the prices of those resources, eventually causing all prices to rise.

Because total spending can be boosted only temporarily, stimulus has no long-term benefits, and may have long-term costs. Most notably, the increase in the budget deficit “crowds out” private investment spending because both must be financed out of the same finite pool of national saving, with the greater demand for saving pushing up interest rates.²⁰ To the extent that private investment is crowded out by a larger deficit, it would reduce the future size of the economy since the economy would operate with a smaller capital stock in the long run. In recent years, the U.S. economy has become highly dependent on foreign capital to finance business investment and budget deficits.²¹ Since foreign capital can come to the United States only in the form of a trade deficit, a higher budget deficit could result in a higher trade deficit, in which case the higher trade deficit could dissipate the boost in spending as consumers purchase imported goods. Indeed, conventional economic theory predicts that fiscal policy has no stimulative effect in an economy with perfectly mobile capital flows.²² Some economists argue that these costs outweigh the benefits of fiscal stimulus.

The most important determinant of a stimulus’ macroeconomic effect is its size. The recently adopted stimulus package (P.L. 110-185) increased the budget deficit by about 1% of gross domestic product (GDP). In a healthy year, GDP grows about 3%. In the moderate recessions that the U.S. experienced in 1990-1991 and 2001, GDP contracted in some quarters by 0.5% to 3%. (The U.S. economy has not experienced contraction in a full calendar year since 1991.) Thus, a swing from expansion to recession would result in a change in GDP growth equal to at least 3.5 percentage points. A stimulus package of 1% of GDP could be expected to increase total spending by about 1%.²³ To the extent that spending begets new spending, there could be a multiplier effect that makes the total increase in spending larger than the increase in the deficit. Offsetting the multiplier effect, the increase in spending could be neutralized if it results in crowding out of investment spending, a larger trade deficit, or higher inflation. The extent to which the increase in spending would be offset by these three factors depends on how quickly the economy is growing at the time of the stimulus—an increase in the budget deficit would lead to less of an increase in spending if the economy were growing faster.

²⁰ Crowding out is likely to be less of a concern if the economy enters a recession since recessions are typically characterized by falling business investment.

²¹ If foreign borrowing prevents crowding out, the future size of the economy will not decrease but capital income will accrue to foreigners instead of Americans.

²² For more information, see CRS Report RS21409, *The Budget Deficit and the Trade Deficit: What Is Their Relationship?*, by Marc Labonte and Gail E. Makinen.

²³ See, for example, “Options for Responding to Short-term Economic Weakness,” Testimony of CBO Director Peter Orszag before the Committee on Finance, January 22, 2008.

Thus, if the slowdown proved to be short and mild, additional stimulus may not be necessary for the economy to revive relatively quickly. If, on the other hand, the economy entered a deeper, prolonged recession, as some economists believe to be likely, then fiscal stimulus may not be powerful enough to avoid it. Economic forecasts are notoriously inaccurate due to the highly complex and changing nature of the economy, so it is difficult to accurately assess how deep the downturn will be, and how much fiscal stimulus would be an appropriate response.

The main obstacle to another round of fiscal stimulus may be the size of the current budget deficit. Although the stimulus measures proposed are not that large in isolation, some observers believe the deficit will already exceed \$1 trillion in 2009. While there have been larger deficits in the past relative to GDP and current government borrowing rates are extremely low (because of the financial turmoil), there is a fear that a deficit of this size could become burdensome to service when interest rates return to normal. A larger deficit could crowd out private investment, act as a drag on economic growth, and increase reliance on foreign borrowing (which would result in a larger trade deficit). By doing so, the deficit places a burden on future generations, and could further complicate the task of coping with long-term budgetary pressures caused by the aging of the population.²⁴ In the highly unlikely, worst case scenario, if too much pressure is placed on the deficit through competing policy priorities, then investors could lose faith in the government's ability to service the debt, and borrowing rates could spike. Many of these issues could be avoided if the elements of the stimulus package are temporary, although there is often later pressure to extend policies beyond their original expiration date.

In judging the need for an additional stimulus package, policymakers might also consider that stimulus is already being delivered, in addition to the stimulus package passed in February, from two other sources. First, the federal budget has *automatic stabilizers* that cause the budget deficit to automatically increase (and thereby stimulate the economy) during a downturn in the absence of policy changes. When the economy slows, entitlement spending on programs such as unemployment compensation benefits automatically increases as program participation rates rise and the growth in tax revenues automatically declines as the recession causes the growth in taxable income to decline. In January, the Congressional Budget Office projected that under current policy, which excluded the February stimulus package, the budget deficit would increase by \$56 billion in 2008 compared to 2007. This amount is significant, although smaller than, the approximately \$150 billion deficit increase due to the recent stimulus package.²⁵

Second, the Federal Reserve has already delivered a large monetary stimulus. By the end of April 2008, the Fed had reduced overnight interest rates to 2% from 5.25% in September 2007.²⁶ On October 8, the interest rate was lowered to 1.5%, to 1.0% on October 29, and to 0 to 0.25% on December 16. Lower interest rates stimulate the economy by increasing the demand for interest-

²⁴ See CRS Report RL32747, *The Economic Implications of the Long-Term Federal Budget Outlook*, by Marc Labonte.

²⁵ In March 2008, CBO projected the budget deficit for FY2008 compared to FY2007 to increase to \$193 billion, largely reflecting the stimulus package of \$153 billion, offset by some other small reductions. Note also that, in January, CBO estimated that if supplemental military spending to maintain current troop levels overseas and an alternative minimum tax patch are enacted, and expiring tax provisions are extended, the 2008 deficit could increase by \$98 billion in total compared to 2007. This projection was made in the absence of stimulus legislation and would increase the \$56 billion deficit increase by \$42 billion.

²⁶ For interest rate changes see CRS Report 98-856, *Federal Reserve Interest Rate Changes: 2001-2008*, by Marc Labonte and Gail E. Makinen.

sensitive spending, which includes investment spending, residential housing, and consumer durables such as automobiles. In addition, lower interest rates would stimulate the economy by reducing the value of the dollar, all else equal, which would lead to higher exports and lower imports.²⁷

One might take the view that the Federal Reserve has chosen a monetary policy that it believes will best avoid a recession given the actions already taken. If it has chosen that policy correctly, an argument can be made that an additional fiscal stimulus is unnecessary since the economy is already receiving the correct boost in spending through lower interest rates and through the first stimulus package. In this light, additional fiscal policy would be useful only if monetary policy is unable to adequately boost spending—either because the Fed has chosen an incorrect policy or because the Fed cannot boost spending enough through lower interest rates to avoid a recession, and direct intervention in financial markets is not adequate.²⁸

Finally, some economists argue that if the root of the problem is concentrated in the housing and financial sectors, the economy is unlikely to return to sustainable expansion until those problems are solved. If so, fiscal stimulus may, at most, provide a temporary boost as long as those problems are outstanding, but cannot singlehandedly shift the economy to a sustainable path of expansion. For example, the first stimulus package did not prevent the economy from deteriorating in the third quarter of 2008. These problems were addressed in major housing and financial legislation in 2008, as described above, but it remains to be seen whether they have been solved.

Stimulus Proposals Enacted and Considered in 2008

Congress enacted and the President signed a stimulus package in February of 2008. During discussion of the stimulus package, a variety of proposals were advanced. The administration proposed initially to largely limit the stimulus to a tax reduction, but there was also discussion in Congress of spending programs such as extending unemployment benefits and food stamps. The House leadership initially negotiated a proposal with the administration which included refundable rebates to low income workers; the Senate added rebates for low income retirees and unemployment benefit extensions, with the former eventually adopted and the latter not adopted.

The House, Senate Finance Committee, and final versions of the economic stimulus package are briefly described below. The House version was the Recovery Rebate and Economic Stimulus for the American People Act of 2008 (H.R. 5140). The estimated budget cost of H.R. 5140 is \$145.9 billion for FY2008 and \$14.8 billion for FY2009 (see **Table 1**). The 10-year cost is estimated to be \$117.2 billion.

²⁷ For more information, see CRS Report RL30354, *Monetary Policy and the Federal Reserve: Current Policy and Conditions*, by Gail E. Makinen and Marc Labonte.

²⁸ Fed Chairman Ben Bernanke may have hinted at the latter case when he testified that “fiscal action could be helpful in principle, as fiscal and monetary stimulus together may provide broader support for the economy than monetary policy actions alone.” Quoted in Ben Bernanke, “The Economic Outlook,” testimony before the House Committee on the Budget, January 17, 2008.

The bill reported by the Senate Committee on Finance, the Economic Stimulus Act of 2008, includes additional provisions, such as energy provisions and extended unemployment compensation benefits, but excludes changes to the conforming loan limits for mortgages. There are some differences in the provisions that both bills share as well, which will be discussed below. Its estimated budget cost for FY2008 is \$158.1 billion—about 8% higher than H.R. 5140 (see **Table 2**). The 10-year budget cost is estimated to be \$155.7 billion.

Table 1. Estimated Budget Cost of Original House Bill (H.R. 5140)

(billions of dollars)

Provision	FY2008	FY2009	FY2008-2018
Rebates for Individuals	-101.1	-8.6	-109.7
Increase Sec. 179 Expensing and Phaseout Amounts for 2008	-0.9	-0.6	-0.1
50% Bonus Depreciation	-43.9	-5.6	-7.4
Total	-145.9	-14.8	-117.2

Source: Joint Committee on Taxation, JCX-6-08, Jan. 28, 2008.

Table 2. Estimated Budget Cost for the Economic Stimulus Act of 2008 as Reported by the Senate Committee on Finance

(billions of dollars)

Provision	FY2008	FY2009	FY2008-2018
Stimulus Rebate	-115.1	-11.2	-126.4
Business Stimulus Incentives	-32.3	-28.9	-11.9
Extensions of Energy Provisions	-0.7	-1.1	-5.7
Expansion of Qualified Mortgage Bonds	—	-0.1	-1.7
Extension of Unemployment Compensation	-10.1	-4.4	-9.9
Total	-158.1	-45.7	-155.7

Source: Joint Committee on Taxation, JCX-13-08, Jan. 30, 2008.

The final bill (see **Table 2**) followed the House proposal in all respects except for modifications to the rebate. The Senate's proposal to extend the House proposal's rebates to Social Security recipients and disabled veterans, and to prohibit them for illegal immigrants was included in the final bill, increasing the first year cost by \$6 billion. The legislation also included appropriations to carry out rebates.

Table 3. Estimated Budgetary Cost of the Final Bill, H.R. 5140
(billions of dollars)

Provision	FY2008	FY2009	FY2008-2018
Rebates for Individuals	-106.7	-10	-116.7
Appropriations to Carry Out Rebates	-0.2	-0.1	-0.3
Increase Sec. 179 Expensing and Phaseout Amounts for 2008	-0.9	-0.6	-0.1
50% Bonus Depreciation	-43.9	-5.6	-7.4
Total	-151.7	-16.3	-124.5

Source: Joint Committee on Taxation, JCX-17-08, Feb. 8, 2008.

Tax Rebates²⁹

The centerpiece of both the original House bill (H.R. 5140), the Senate committee proposal, and the final legislation is the tax rebate for individuals. Unlike the 2001 rebate, the rebates have elements of refundability (families without tax liability receive a rebate) although the Senate committee proposal's and the final bill's refundability is greater than in the initial House proposal. The House proposal, H.R. 5140, would provide \$109.7 billion in rebates, while the Senate committee proposal would provide \$126.3 billion.³⁰ The final proposal adds \$6 billion in the first year to the original House plan. The rebate is technically a credit for 2008, but payments would be mailed in 2008 based on 2007 returns. If taxpayers qualify for a higher credit based on their 2008 circumstances, they could claim the excess on their 2008 returns.

There are five elements of the rebate proposals that are outlined in **Table 4**. The first is the basic nature of the rebate. The House proposal effectively suspended part of the 10% income tax bracket, allowing a reduction in tax liability of 10% of the first \$6,000 of taxable income for single individuals and 10% of the first \$12,000 of taxable income for married couples. Absent any other provisions, the benefit would increase gradually until a maximum benefit was reached at \$600 for single individuals and \$1,200 for married couples. The Senate committee plan allowed a flat rebate of \$500 for single individuals and \$1,000 for couples. The basic rebate follows the House plan.

The second element is the basic refundability feature, which extends benefits to lower income households without tax liability. In the House bill, individuals without tax liability but with earnings of at least \$3,000 can receive a minimum rebate of \$300 for singles and \$600 for married couples. (Households with earnings under \$3,000 would not receive a rebate.) In the Senate committee proposal, the full flat amount can be received for households with at least \$3,000 in combined earnings and Social Security benefits. This inclusion of Social Security benefits would extend the rebate to a large group of retired individuals who do not have taxable income. The final bill allows the refundability for Social Security, but at the lower House rebate level.

²⁹ This section was prepared by Jane Gravelle, Government and Finance Division.

³⁰ Joint Committee on Taxation, See JCX-6-08 and JCX-9-08, <http://www.house.gov/jct/>.

The third element is the treatment of high income taxpayers. In both bills, the benefit is phased out at higher incomes; the phaseout points are higher in the Senate committee proposal. The final bill follows the House provisions.

The fourth element is the child rebate, which in all plans is set at \$300 per child and allowed if a basic or refundable rebate is received.

The fifth element, present initially only in the Senate committee proposal, limits and expands the scope of the rebates by extending them to veterans on disability and denying them to illegal immigrants by requiring the taxpayer identification number to be a social security number. These provisions were included in the final bill.

Table 4. Comparative Provisions of the Rebate

Provision	House Bill	Senate Committee Bill	Final Bill
General Rebate Proposal	10% of the first \$6,000 of taxable income (\$12,000 for couples), to extent of tax liability (maximum \$600/\$1,200)	Flat rebate of \$500, \$1,000 for couples	Same as House
Refundability Provisions	\$300 rebate (\$600 for couples) available if earned income is at least \$3,000	Full \$500 rebate allowed if earned income plus Social Security benefits are at least \$3,000 or taxable income is at least \$1.	Same as Senate, but with House rebate level of \$300.
High Income Phase-out Provisions	Phased out at 5% of income over \$75,000 for single individuals, \$150,000 for couples	Phased out at 5% of income over \$150,000 for single individuals, \$300,000 for couples.	Same as House
Child Provisions	\$300 per qualifying child if eligible for any other rebate	\$300 per qualifying child if eligible for any other rebate	Identical Provisions
Other Features	None	Expands rebates to veterans receiving disability; disallows the rebate to illegal immigrants.	Same as Senate, with House rebate level of \$300.

Source: CRS.

Compared to the experience with a rebate in 2001, the proposed rebates are more favorable to lower income individuals because of their refundability provisions. For a non-refundable credit, about 37% of taxpayers would not receive a credit because of lower incomes; in the original House bill, 20% would not receive a credit and in the Senate committee proposal and final legislation, 6.5% would not.³¹ The increase in coverage in the Senate committee proposal and final bill is due to coverage of the elderly. The original House bill is more progressive (i.e., relatively more favorable to lower income households) than a non-refundable rebate, and the Senate committee bill is more progressive than the House bill (except at the top of the income distribution).

³¹ See CRS Report RL34341, *Tax Rebate Refundability: Effects and Issues*, by Jane G. Gravelle.

Although some rebates in the past appeared to be relatively ineffective in increasing spending, there is some evidence the 2001 rebate was spent.³² In general, economic analysis suggests that benefits that go more heavily to low income individuals are likely to be more effective, per dollar of payment, than those with smaller benefits because lower income households are more likely to spend the rebate, and spending is necessary to produce a stimulus. The extension of rebates to those with Social Security payments could be quite complex administratively, since it would require filing and processing up to an additional 18 million tax returns.³³

Preliminary Evidence on the Rebates' Economic Effects

Mainstream economic theory states that overall spending in the economy is stimulated only if the rebates lead to higher consumption. But households may decide to consume or save the rebates. There are now data available on disposable income and personal consumption expenditures through September 2008 to begin to judge whether the rebates have led to higher consumer spending. **Table 5** shows the breakdown of rebate checks sent by month. Through the end of June, \$79.8 billion (or three quarters of the rebates) were received.³⁴

Table 5. Receipt of Rebates by Month

	Rebates Received (billions of dollars)
April	\$4.3
May	\$45.7
June	\$29.8
July	\$12.0

Source: CRS calculations based on data from the U.S. Treasury.

Households may choose to increase consumption before, when, or after the rebates are received. (Households might decide to increase consumption beforehand in anticipation of receiving the rebate, assuming they are not liquidity constrained, meaning they had access to credit or savings.) Thus, to evaluate the full effects of the rebate on consumption would require data for all three periods, as well as assumptions about how quickly the rebate will be spent. At this point, only prior and contemporaneous consumption data are available; some of the stimulative effects will come in future months, making this analysis incomplete at present. Furthermore, the data available at this time are preliminary, and future revisions to the data could potentially result in a fundamentally different picture of the rebates' effects.

³² See CRS Report RS22790, *Tax Cuts for Short-Run Economic Stimulus: Recent Experiences*, by Jane G. Gravelle.

³³ According to the Tax Policy Center, 18 million households over the age of 65 would receive no rebate under the House bill. See Tax Policy Center, Table T08-0030, at <http://www.taxpolicycenter.org/numbers/displayatab.cfm?Docid=1742&DocTypeID=4>.

³⁴ The remaining quarter of rebates were received since June 30 or will be received between now and next April as additional tax returns are filed.

Figure 1 illustrates that there was an increase in disposable income (i.e., income net of taxes) in June that far exceeded normal monthly fluctuations. Disposable income rose 0.1% in April, 5.2% in May, and fell 2.6% in June. (The fall in June is caused by fewer rebates being paid out in June than in May. Disposable income in June was 2.4% higher than in April.) The Bureau of Economic Analysis estimates that in the absence of the rebates, disposable income would have fallen by 0.1% in May and 0.4% in June.³⁵ Disposable income continued to fall in July and August, and was up slightly in September. Yet, as shown in **Figure 1**, the large increase in disposable income has not yet led to any perceptible rise in consumption spending above the trend.³⁶ Consumption spending rose 0.1% in April, 0.3% in May, and fell 0.2% in June, 0.6% in July, and 0.4% in September. The rise in May is slightly above average, but the changes in April and June are below average. There was a large increase in personal saving from 0.3% of disposable income in April to 5% in May and 2.8% in June, suggesting that the rebates initially resulted in mostly higher personal saving. As noted previously, there may be a lag between receiving a rebate and increasing consumption. Consumption in March, the month before the rebate checks were first sent, rose 0.3%—it is debatable how much of this increase might be attributable to the anticipation of rebate checks not yet received.

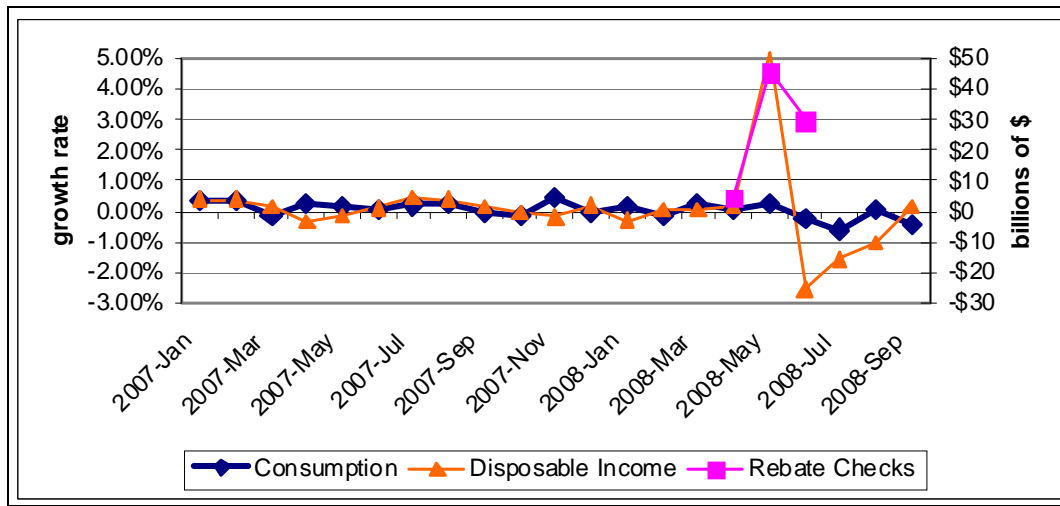
Another weakness in the argument that the rebate checks have already stimulated the economy is the fact that the overall economy grew at a more rapid pace than consumption in the second and third quarters of 2008. GDP growth was 2.8%, while consumption grew by 1.2% in the second quarter. Government spending, net exports, and even non-residential investment (which typically shrinks during a recession) all grew at a more rapid pace than consumption in the second quarter, despite the boost to disposable income from the rebate checks.³⁷

³⁵ Bureau of Economic Analysis, “Income Growth Affected by Rebates,” news release, August 4, 2008.

³⁶ All figures discussed in this paragraph measure the change since the previous month and have been adjusted for inflation.

³⁷ Inventory reduction was a large drag on growth in the second quarter, which suggests that producers responded to higher consumption by reducing inventories rather than increasing production.

Figure I. Consumption, Disposable Income, and Rebate Checks, January 2007 to September 2008



Source: CRS calculations based on data from the Bureau of Economic Analysis.

Note: Consumption and Disposable Income data are adjusted for inflation. Rebate checks are not adjusted for inflation.

The effectiveness of the rebates in boosting overall spending could in theory be reduced by “leakages” into higher inflation, interest rates, or imports.³⁸ Prices for personal consumption expenditures rose at an annualized rate of 4.2% in the second quarter of 2008. Much of this increase was due to food and energy prices. Thus, the argument can be made that most of the rise in *nominal* consumption in the second quarter went toward price increases rather than higher consumption in *inflation-adjusted* terms. Spending on real imports fell by 6.6% in the second quarter, so that does not appear to be a source of “leakage.” Likewise, interest rates in general did not show much movement during the second quarter.

The effects of the rebates on consumption cannot be determined by looking at the absolute growth of consumption in isolation. Rather, we need to compare actual growth to the growth in consumption that would have occurred in the counterfactual case without any rebates. Since there is no way of observing the counterfactual, economists must rely on economic models to conjecture about the counterfactual. One simple counterfactual would be to compare consumption following the rebates to consumption in a typical month. By this measure, the rebates seemed to have had no discernible effects so far. But there are good reasons to think that the past three months have not been typical months—namely, because of the slowdown in the economy and the resulting rise in unemployment and decline in consumer confidence.

Goldman Sachs estimates that the counterfactual would have been for consumption to have fallen by 1.5%-1.75% in the second quarter. Compared to this counterfactual, Goldman Sachs estimates the rebates to have boosted consumption by \$22.5 billion to \$25.2 billion and consumption

³⁸ For an explanation of the relationship between fiscal stimulus and these factors, see CRS Report RL34072, *Economic Growth and the Business Cycle: Characteristics, Causes, and Policy Implications*, by Marc Labonte, *Economic Growth and the Business Cycle: Characteristics, Causes, and Policy Implications*, by Marc Labonte.

growth by 3.1 to 3.3 percentage points in the second quarter. Of the total boost to spending, Goldman Sachs analysts attribute \$1.7 billion to \$2.3 billion to higher spending in March in anticipation of receiving the rebate checks.³⁹ Their counterfactual decline in consumption spending is strikingly large, however. Consumption spending has not fallen by as much as they assume (or even been negative) since the fourth quarter of 1991. Disposable income excluding the rebates does not show a similarly large decline. A less pessimistic assumption about consumption in the counterfactual would have resulted in a smaller estimate of the boost to consumption from the rebates.

The ultimate success of the rebates will depend partly on whether they help move consumption onto a path of sustainable growth in the future. If consumption falls after the effect of the rebates wears off, some may argue that the rebates will have at best postponed the economic downturn. Goldman Sachs predicts that by the fourth quarter of 2008 the effect of the rebates on GDP will have worn off, “at which point we (fore)see renewed stagnation in U.S. output.”⁴⁰

Economist Martin Feldstein argues that the rebates should be deemed a failure because they have had very little “bang for the buck.”⁴¹ He argues that rebates, which added nearly \$80 billion to disposable income to date, have resulted in additional consumption of only \$12 billion. In other words, about 15% of the money spent on the rebates served its stated purpose. (Goldman Sachs was more generous in crediting consumption spending to the rebates, concluding that the rebates added \$22.5 to \$25.2 billion to consumption, which is still considerably less than \$80 billion.) Feldstein attributes the rebates’ ineffectiveness to their having been mostly saved, and argues that a permanent tax cut would have been spent at a much higher rate than a one-time rebate. Two points can be made about Feldstein’s conclusions. First, the \$12 billion estimate understates the rebates’ ultimate effects since somewhat more of the rebates are likely to be spent in future months. Second, the ineffectiveness of the rebates due to the saving effect is a more powerful argument for direct government spending, rather than permanent tax cuts, as a more cost-effective way to stimulate the economy in the short-term since none of government spending is saved.⁴²

A study based on survey data of household non-durable consumption concluded that

the average family spent around 20% of their rebate in the first month after receipt. Extrapolating similarly over time, our estimates imply that the receipt of the tax rebates directly raised non-durable PCE (personal consumption expenditures) by 2.4% in the second quarter of 2008 and will raise it by 4.1% in the third quarter.⁴³

Their findings of relatively large effects at the household level can be reconciled to the macroeconomic data on a few grounds. First, their study examined only the consumption of non-

³⁹ Goldman Sachs, “Rebates Helped Avoid a Drop in Real Spending Last Quarter,” *U.S. Daily Financial Market Comment*, August 5, 2008.

⁴⁰ *Ibid.*

⁴¹ Martin Feldstein, “The Tax Rebate Was a Flop. Obama’s Stimulus Plan Won’t Work Either,” *Wall Street Journal*, August 6, 2008, p. A15.

⁴² See CRS Report RS21136, *Government Spending or Tax Reduction: Which Might Add More Stimulus to the Economy?*, by Marc Labonte.

⁴³ Christian Broda and Jonathan Parker, “The Impact of the 2008 Tax Rebates on Consumer Spending: Preliminary Evidence,” working paper, July 29, 2008.

durable goods. In the second quarter, non-durable consumption rose by 4% but consumption of durable goods fell by 3% at annualized rates. It is questionable why the effect of the rebates would be found in non-durable goods, and not durable goods. Second, the bulk of their estimated effect has not yet occurred and is based on their assumptions about future spending. Third, household survey data should be viewed with skepticism due to sample size, reporting error, and other issues.⁴⁴

Business Tax Incentives⁴⁵

The original House bill included two business provisions. The first was bonus depreciation, allowing 50% of investment with a life of less than 20 years (which applies mostly to equipment) to be deducted when purchased. The second addressed a provision that allowed small businesses to deduct all equipment investment when purchased, by increasing the ceiling on eligible equipment and phasing out the benefit more slowly. The Senate committee proposal had these same provisions, although it modified bonus depreciation by allowing a deduction over two years instead of one. It also added a provision that would allow companies to increase the period of time in the past that they can use to offset current net operating losses (NOLs) against past positive taxable income from two years to five, for losses generated in 2006 or 2007. The Senate committee proposal would have allowed businesses to use only one of the three provisions. The Senate committee proposal also included the extension of some energy provisions that largely relate to businesses. These provisions are compared in **Table 6**. The final bill followed the original House provisions.

The bonus depreciation provisions are the most costly of the business provisions, amounting to \$43.9 billion in FY2008 and \$5.4 billion in FY2009 for the House bill and \$16.4 billion in FY2008 and \$20.2 billion in FY2009 for the Senate committee proposal. (Apparently the election provision significantly reduces the cost of bonus depreciation in the first two years.) As with all of the provisions, which largely involve timing, revenue is gained in future years as regular depreciation deductions fall. Over 10 years, the cost is \$7.4 billion in the House bill and \$6.7 billion in the Senate committee proposal.⁴⁶

The small business expensing provision, in both plans, costs \$0.9 billion in FY2008 and \$0.6 billion in FY2009, with the 10-year cost \$0.1 billion. The net operating loss (NOL) provision in the Senate committee proposal loses \$15.4 billion in FY2008, and \$8.1 billion in FY2009, and then gains revenue, with the ten-year cost \$5.1 billion.

⁴⁴ J. Steven Landefeld, Eugene P. Seskin, and Barbara M. Fraumeni, "Taking the Pulse of the Economy: Measuring GDP," *Journal of Economic Perspectives*, Spring 2008.

⁴⁵ This section was prepared by Jane Gravelle, Government and Finance Division.

⁴⁶ Revenue estimates are from the Joint Committee on Taxation, See JCX-6-08 and JCX-9-08, <http://www.house.gov/jct/>

Table 6. Business Tax Provisions of the House, Senate Committee and Final Plans

	House Bill (H.R. 5140)	Senate Committee Bill	Final Bill
Bonus Depreciation	For 2008, allows 50% of eligible investment (generally equipment) to be deducted when incurred	For 2008, elect to allow 50% of investment to be deducted equally over the first two years	Same as House.
Small Business Expensing	For 2008, increases the amount of eligible investment (generally equipment) expensing from \$128,000 to \$250,000; begin phaseout at \$800,000 instead of \$510,000.	For 2008, elect to increase the amount of eligible investment (generally equipment) expensing from \$128,000 to \$250,000; begin phaseout out at \$800,000 instead of \$510,000.	Same as House.
Net Operating Loss (NOL) Carryback	None	Elect to increase NOL carryback from two years to five years for losses generated from 2006 to 2008; and suspends provision that NOL cannot exceed 90% of alternative minimum taxable income.	Same as House.
Other Features	None	Taxpayer may elect only one of the three business benefits above; extends through 2009 of expired or expiring energy incentives; expands tax exempt mortgage and rental housing bonds.	Same as House.

Source: CRS.

Because these benefits arise from timing, neither the initial cost nor the 10-year cost provide a good reflection of the value to the firm. For the benefit of bonus depreciation to the firm, the discounted values (using an 8% nominal interest rate) would be about \$18 billion for the House bill and about \$14 billion for the Senate committee proposal.

Overall, it is unlikely that these provisions would provide significant short-term stimulus. Investment incentives are attractive, if they work, because increasing investment does not trade off short term stimulus benefits for a reduction in capital formation, as do provisions stimulating consumption. Nevertheless, most evidence does not suggest these provisions work very well to induce short-term spending.⁴⁷ This lack of effectiveness may occur because of planning lags or because stimulus is generally provided during economic slowdowns when excess capacity may already exist.

Of business tax provisions, investment subsidies are more effective than rate cuts, but there is little evidence to support much stimulus effect. Temporary bonus depreciation is likely to be most effective in stimulating investment, more effective than a much costlier permanent investment incentive because it encourages the speed-up of investment. Although there is some dispute, most evidence on bonus depreciation enacted in 2002 nevertheless suggests that it had little effect in stimulating investment and that even if the effects were pronounced, the benefit was too small to have an appreciable effect on the economy.

⁴⁷ See CRS Report RL31134, *Using Business Tax Cuts to Stimulate the Economy*, by Jane G. Gravelle, and CRS Report RS22790, *Tax Cuts for Short-Run Economic Stimulus: Recent Experiences*, by Jane G. Gravelle.

The likelihood of the remaining provisions having much of an incentive effect is even smaller. Firms may, for example, benefit from the small business expensing, but it actually discourages investment in the (expanded) phase out range. The NOL provision, since it largely relates to events that have occurred in the past and therefore the effect is only a cash flow effect, is unlikely to have much incentive effect.

The energy provisions provide an extension through 2009 of provisions that expired at the end of 2007 or will expire at the end of 2008.⁴⁸ Their overall cost is \$5.7 billion and they are unlikely to have a stimulative effect of importance, not only because of their size and because investment incentives are unlikely to be effective, but also because market participants may already be acting under the expectation that they will be extended in any case. Finally the Senate committee proposal provides an extension of tax exempt bonds for housing, that costs \$1.7 billion and, similarly, would be unlikely to provide a significant short-term stimulus.

Housing Provisions⁴⁹

The act allows the housing government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, to purchase qualifying mortgages originated between July 1, 2007, and December 31, 2008, up to a value of \$729,750 in high-cost areas. This is an increase above the permanent conforming loan limit of \$417,000. The limit for any area is the greater of (1) the 2008 conforming loan limit (\$417,000) or (2) 125% of the area median house price, and no higher than (3) 175% of the 2008 conforming loan limit (\$729,750, which is 175% of \$417,000).

Under this provision, Fannie Mae and Freddie Mac can continue to purchase loans in high-cost areas that qualify after December 31, 2008. However the GSEs are charters restrict them to acquiring loans no more than one year old.

The Federal Housing Administration (FHA) has temporary authority to insure mortgages in high-cost areas up to this \$729,750 limit. The authority expires December 31, 2008. The FHA permanent limit ranges from \$200,160 to \$362,790 in high-cost areas.⁵⁰

H.R. 3221, Housing and Economic Recovery Act of 2008, as signed into law on July 30, 2008, permanently increases the high cost loan limit to 115% of the area median house price, but no greater than 150% of the national conforming loan limit, beginning in 2009. The national maximum will be \$625,000 for 2009. The bill would use \$417,000 as the base for future changes in the conforming loan limit, eliminating the \$700 decline that was “banked” against future increases in October 2006.⁵¹

⁴⁸ The provisions include the credit for energy efficient appliances, the credit for certain non-business energy property, the suspension of the net income limit for marginal oil and gas properties, the 30% credit for residential investments in solar and fuel cells, the placed-in-service date for the tax credit for electricity produced from renewable resources, the credit for construction of energy efficient homes, the section 48 business credit, clean renewable energy bonds, and the energy efficient commercial property deduction.

⁴⁹ This section was prepared by Eric Weiss, Government and Finance Division.

⁵⁰ FHA limits are available from HUD’s website at <https://entp.hud.gov/idapp/html/hicost1.cfm>.

⁵¹ Office of Federal Housing Enterprise Oversight, Department of Housing and Urban Development, “Notice of Final Examination Guidance—Conforming Loan Limit Calculations; Response to Comments,” 73 *Federal Register*, 16895- (continued...)

The FHA high cost limits are be similar to the conforming loan limit.

Many of those supporting the increases believe they provide a needed stimulus to housing and mortgage markets.⁵²

Factors tending to limit the impact of the increased mortgage limits are as follows:

- Existing loan-to-value ratio limits continue to apply. This prevents homeowners who owe more on a house than its appraised value from participating in the program.
- Existing credit worthiness and debt-to-income requirements apply. This prevents anyone not current on their mortgage from refinancing.
- The reduction of the 30% extra capital requirement to 20% allows the GSEs to purchase and hold an additional \$200 billion in mortgages. The GSEs could also purchase additional mortgages by following the suggestion in the Economic Stimulus Act of 2008 and H.R. 3221 to package these mortgages, add their guarantees, and sell mortgage-backed securities (MBS) to large investors.

These housing-related provisions of the act could narrow or eliminate the spread between loans above the permanent loan limit (but under temporary limits) and conforming loans already eligible for purchase. Recently, this spread has been more than 1.50%, as compared to a “normal” spread of approximately 0.20%. The provisions, and subsequent reduction in the spread, could:

- Help homebuyers with good credit obtain lower interest rates on loans in the affected range. The monthly payments on a 30-year fixed-rate \$600,000 mortgage could fall from \$3,824 to \$3,377, saving \$447 per month.⁵³ FHA’s guidelines state that mortgage payments, insurance, and taxes should not exceed 29% of monthly income. According to the guidelines, a combined monthly housing expense of \$3,377 would require a minimum annual household income of \$140,000;
- Primarily help home buyers in areas with high home prices such as California, New York City and its suburbs, the Boston area, the Seattle area, and the Washington, DC area. Most other parts of the nation have home prices that do not cause their ceiling to increase;
- The provision raising the limit on home prices to 125% of the area median house price would raise the loan ceiling in areas with a median house price of more

(...continued)

16899, March 31, 2008.

<http://www.ofheo.gov/media/guidance/CLLGuidanceFR32608.pdf>

⁵² James R. Haggerty and Damian Paletta, “Details Lacking on Mortgage-Relief Plan,” *Wall Street Journal*, January 26, 2008, p. A6.

⁵³ Interest rates are based on mortgage rates reported by Bankrate.Com at http://www.bankrate.com/brm/graphs/graph_trend.asp?tf=91&ct=Line&prods=1,325&gs=275,250&st=zz&c3d=False&web=brm&cc=1&prodtype=M&bgcolor=&topgap=&bottomgap=&rightgap=&leftgap=&seriescolor=.

than \$336,000. For example, in Barnstable, MA the limit is temporarily increased to \$462,000 in 2008, but is \$417,000 in 2009.

- Likely have little impact in areas and houses where the permanent conforming loan limits still apply;
- Not count mortgages purchased by the GSEs as a result of the higher loan limit for the purpose of low-and moderate-income housing goals and underserved areas goals. HUD establishes numeric goals based on the Housing and Community Development Act of 1992;⁵⁴ and
- Help FHA compete against private sector lenders and possibly open homeownership to borrowers who, for one reason or another, could not qualify for a conforming mortgage to purchase a more expensive home.⁵⁵

Extending Unemployment Benefits⁵⁶

The Senate proposal included an extension of unemployment benefits, but these provisions were not included in the final economic stimulus legislation.⁵⁷ However, an extension (Emergency Unemployment Compensation, EUC08) was included in the Iraq/Afghanistan supplemental appropriations (H.R. 2642), which was passed by the Senate on June 26 and sent to the President, who signed it on June 30 (P.L. 110-252).⁵⁸ On November 21, 2008, the President signed P.L. 110-449, the Unemployment Compensation Extension Act of 2008 into law. P.L. 110-449 expands the potential duration of the EUC08 benefit from up to 13 weeks of EUC08 to a maximum of 20 weeks. It also creates a second tier of benefits for workers in states with high unemployment of up to a maximum of an additional 13 weeks of tier II EUC08 benefits (for up to a cumulative 33 weeks of EUC08 benefits).

Originally, the intent of the Unemployment Compensation (UC) program was, among other things, to help counter economic fluctuations such as recessions.⁵⁹ This intent is reflected in the current UC program's funding and benefit structure. UC is financed by federal payroll taxes under the Federal Unemployment Tax Act (FUTA) and by state payroll taxes under the State Unemployment Tax Acts (SUTA). When the economy grows, UC program revenue rises through increased tax revenues, while UC program spending falls as fewer workers are unemployed. The effect of collecting more taxes than are spent is to dampen demand in the economy. This also creates a surplus of funds or a "cushion" of available funds for the UC program to draw upon

⁵⁴ 12 U.S.C. 4562-4564 and 4566.

⁵⁵ For more information on FHA, see CRS Report RS22662, *H.R. 1852 and Revisiting the FHA Premium Pricing Structure: Proposed Legislation in the 110th Congress*, by Darryl E. Getter, and CRS Report RS20530, *FHA-Insured Home Loans: An Overview*, by Bruce E. Foote and Katie Jones.

⁵⁶ This section was prepared by Julie M. Whittaker, Domestic Social Policy Division.

⁵⁷ For further discussion of proposals, see CRS Report RL34460, *Current Law and Selected Proposals Extending Unemployment Compensation*, by Julie M. Whittaker.

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See CRS Report RS22915, *Temporary Extension of Unemployment Benefits: Emergency Unemployment Compensation (EUC08)*, by Julie M. Whittaker for information on the new temporary benefit.

⁵⁹ See, for example, President Franklin Roosevelt's remarks at the signing of the Social Security Act <http://www.ssa.gov/history/fdrstmts.html#signing>.

during a recession. In a recession, UC tax revenue falls and UC program spending rises as more workers lose their jobs and receive UC benefits. The increased amount of UC payments to unemployed workers dampens the economic effect of earnings losses by injecting additional funds into the economy.⁶⁰

The limited duration of UC benefits (generally no more than 26 weeks) results in some unemployed individuals exhausting their UC benefits before finding work or voluntarily leaving the labor force for other activities such as retirement, disability, family care, or education. The Extended Benefit (EB) program, established by P.L. 91-373 (26 U.S.C. 3304, note), may extend UC benefits at the state level if certain economic situations exist within the state. The EB program, like the UC program, is permanently authorized. The EB program is currently active solely in North Carolina (up to 13 weeks) and Rhode Island (up to 20 weeks). On December 7, 2008, the EB program will be activated on in Oregon.

In addition to the current EUC08 program, Congress acted seven other times—in 1958, 1961, 1971, 1974, 1982, 1991, and 2002—to establish temporary programs of extended UC benefits. These programs extended the time an individual might claim UC benefits (ranging from an additional 6 to 33 weeks) and had expiration dates. Some extensions took into account state economic conditions; many temporary programs considered the state's TUR and/or the state's insured unemployment rate (IUR).

Recently, congressional and popular debate has examined the relative efficacy of the expansion of UC benefits and duration compared to other potential economic stimuli. In his January 22, 2008 congressional testimony, the Director of the Congressional Budget Office (CBO) stated that increasing the value or duration of UC benefits may be one of the more effective economic stimulus plans.⁶¹ This is because many of the unemployed are severely cash constrained and would be expected to rapidly spend any increase in benefits that they may receive.⁶²

Others point out that increasing either the value or length of UC benefits may, however, discourage recipients from searching for work or from accepting less desirable jobs.⁶³ A rationale for making an extension in UC benefits only temporary is to mitigate disincentives to work, since the extension would expire once the economy improves and cyclical unemployment declines.

⁶⁰ For a detailed examination of how the federal government has extended UC benefits during recessions see CRS Report RL34340, *Extending Unemployment Compensation Benefits During Recessions*, by Julie M. Whittaker.

⁶¹ See CBO Testimony of Peter Orszag on Options for Responding to Short-Term Economic Weakness before the Committee on Finance United States Senate on January 22, 2008, <http://www.cbo.gov/ftpdocs/89xx/doc8932/01-22-TestimonyEconStimulus.pdf>.

⁶² For another paper that takes this position see the following: Elmendorf, Douglas W. and Jason Furman, *If, When, How: A Primer on Fiscal Stimulus*, January 2008, http://www.brookings.edu/papers/2008/0110_fiscal_stimulus_elmendorf_furman.aspx.

⁶³ For example, Shrek, James and Patrick Tyrell, *Unemployment Insurance Does Not Stimulate the Economy*, Web memo #1777, January 2008: http://www.heritage.org/Research/Economy/wm1777.cfm#_ftn1. Martin Feldstein in testimony before the Senate Committee on Finance on January 24, 2008 stated that “(w)hile raising unemployment benefits or extending the duration of benefits beyond weeks would help some individuals ... it would also create undesirable incentives for individuals to delay returning to work. That would lower earnings and total spending.” <http://www.senate.gov/~finance/hearings/testimony/2008test/012408mftest.pdf>

A vigorous debate on how to determine when the federal government should extend unemployment benefits has been active for decades. Generally, this debate has examined the efficacy of using the IUR or TUR as triggers for extending benefits. The debate also has examined whether the intervention should be at a national or state level. Recently, serious consideration of alternative labor market measures has become increasingly common. In particular, the increase in the number of unemployed from the previous year has emerged in several proposals as a new trigger for a nation-wide extension in unemployment benefits.

Senate Committee Proposal

The bill, as passed by the Senate Finance Committee on January 30, 2008, would create a new temporary extension of UC that would entitle certain unemployed individuals to unemployment benefits that are not available under current law. (The House bill contained no provisions relating to unemployment benefits.) Individuals who had exhausted all rights to regular UC benefits under the state or federal law with respect to a benefit year (excluding any benefit year that ended before February 1, 2007) would be eligible for these additional benefits. The amount of the benefit would be the equivalent of the individual's weekly regular UC benefit (including any dependents' allowances). The temporary extension would be financed 100% by the federal government.

The number of weeks an individual would be eligible for these temporary extended UC benefits would be the lesser of 50% of the total regular UC eligibility or 13 weeks. Under a special rule, if the state is in an EB period (which has a special definition for purposes of this temporary extension), the amount of temporary extended UC benefits would be augmented by an additional amount that is equivalent to the temporary UC benefit. Thus, in those "high-unemployment" states where the EB program was triggered, temporary benefits of up to 26 weeks would be possible.⁶⁴

Governors of the states would be able to pay the temporary extended UC benefit in lieu of the Extended Benefit (EB) payment (if state law permits). Thus, once the regular UC benefit was exhausted, a state would be able to opt for the individual to receive the temporary extended UC benefit (100% federal funding) rather than receiving the EB benefit (50% federal funding and 50% state funding).

The program would terminate on December 31, 2008. Unemployed individuals who had qualified for the temporary extended UC benefit or had qualified for the additional "high-unemployment" provision would continue to receive payments for the number of weeks they were deemed eligible. However, if the unemployed individual has not exhausted the first temporary extension of UC benefits by December 31, 2008, regardless of state economic conditions, the individual would not be eligible for an additional "high-unemployment" extension of the temporary UC

⁶⁴ The bill would temporarily change the definition of an EB period only for the purposes of the bill. Regardless of whether a state had opted for section 203(f) of the Federal-State Extended Unemployment Compensation Act of 1970, an EB period would be in effect for such state in determining the level of temporary extended UC benefits in the state. The bill would temporarily change that trigger by removing the requirement that the TUR be at least 110% of the state's average TUR for the same 13-weeks in either of the previous two years. The bill would also change the base EB trigger described in section 203(d) only for purposes of the bill, reducing it from an IUR of 5% to an IUR of 4%.

benefit. If an individual exhausts his or her regular UC benefits after December 31, 2008, the individual would not be eligible for any temporary extended UC benefit. No such benefits would be payable for any week beginning after March 31, 2009.

P.L. 110-252 [http://www.congress.gov/cgi-lis/bdquery/R?d110:FLD002:@1\(110+252\)](http://www.congress.gov/cgi-lis/bdquery/R?d110:FLD002:@1(110+252)), Emergency Unemployment Compensation (EUC08). The Emergency Unemployment Compensation (EUC08) program was created by P.L. 110-252 and has been amended by P.L. 110-449. This temporary unemployment insurance program provides up to 20 additional weeks of unemployment benefits to certain workers who have exhausted their rights to regular unemployment compensation (UC) benefits. A second tier of benefits exists in states with a total unemployment rate of at least 6% and provides up to an additional 13 weeks of EUC08 benefits (for a total of 33 weeks of EUC08 benefits.) The program effectively began July 6, 2008, and will terminate on March 28, 2009. No EUC08 benefit will be paid beyond the week ending August 22, 2009.

EUC08 and EB Interactions

The EUC08 program allows states to determine which benefit is paid first. Thus, states may choose to pay EUC08 before EB or vice versa. States balance the decision of which benefit to pay first by examining the potential cost savings to the state with the potential loss of unemployment benefits for unemployed individuals in the state. It may be less costly for the state to choose to pay for the EUC08 benefit first as the EUC08 benefit is 100% federally financed (whereas the EB benefit is 50% state financed).⁶⁵ However, if the state opts to pay EUC08 first, individuals in the state might receive less in total unemployment benefits if the EB program triggers off before the individuals exhaust their EUC08 benefits. Both North Carolina and Rhode Island have opted to pay EUC08 benefits before EB.

A Proposed 2009 Stimulus Package⁶⁶

A second stimulus proposal was discussed during 2008 and some unemployment benefits extensions enacted, but worsening economic news has led to proposals for a much larger package in the range of \$600 to \$850 billion.

Proposals Discussed in 2008

Some of the proposals included in stimulus package adopted in February 2008 or discussed in the course of the debate became part of a second stimulus package proposed but not adopted in 2008. A second stimulus plan (H.R. 3997) was proposed involving \$50 to \$60 billion in additional spending on infrastructure, unemployment benefits, Medicaid and nutrition programs. The bill passed the House on September 26 (as H.R. 7110) and included \$36.9 billion on infrastructure (\$12.8 billion highway and bridge, \$7.5 billion water and sewer, \$5 billion Corps of Engineers);

⁶⁵ Some recipients may find jobs before becoming eligible for EB. In addition, the state may trigger off of the EB program before some recipients exhaust EUC08.

⁶⁶ This section was prepared by Jane Gravelle, Government and Finance Division.

\$6.5 billion in extended unemployment compensation, and \$14.5 billion in Medicaid, and \$2.7 billion in food stamp and nutrition programs. A similar bill has not been able to pass the Senate and the President has indicated that he would veto the House bill. Earlier, a bill relating to housing relief was passed.

The Senate budget resolution set aside \$35 billion for a second package, which is allocated between taxes and spending.⁶⁷ The accompanying Committee Print discussed the unemployment benefit extension discussed above as part of a potential future package, along with two other spending programs: expanding food stamps and aid to the states. It also discussed spending on ready-to-go infrastructure investments discussed during the stimulus debate, additional spending on LIHEAP (Low Income Energy Assistance Program) and WIC (Special Supplemental Nutrition Program for Women Infants and Children), and the summer jobs program.

The resolution also discussed a current proposal under consideration to address housing issues, the Foreclosure Prevention Act of 2008 (S. 2636). This proposal was passed by the Senate as H.R. 3221 on April 10. It was not a broad stimulus package, but was largely targeted at the housing sector. It included some regulatory and direct spending provisions; in the latter case, primarily a \$4 billion authorization for state and local governments to redevelop abandoned and foreclosed homes.

It also included some tax reductions. The largest of these (in short run revenue cost) was a provision similar to that enacted by the Senate for the first stimulus bill, allowing firms to elect an extended net operating loss carryback provision and a temporary suspension of the alternative minimum tax limitation for bonus depreciation and small business expensing for 2008 and 2009. The net operating loss carryback period was extended to four years. This provision cost \$25 billion from FY2008-2010, although it would raise revenues thereafter with a total cost of \$6 billion over ten years. The bill also included liberalization of tax-exempt mortgage revenue bonds, a tax credit for buyers of homes in foreclosure, a temporary deduction for property taxes by homeowners who do not itemize (capped at \$500 for single and \$1000 for couples), and an election to refund certain corporate credits in lieu of other business provisions. There were also some limited provisions for areas still recovering from hurricanes and from storms and tornados in Kansas. Altogether, the package would have cost \$22 billion over ten years.

The House also considered housing legislation, H.R. 5720, which had been reported out of the Ways and Means Committee. That provision has a more limited number of tax incentives. It includes a credit for first-time homebuyers (to be repaid over 15 years) as well as the property tax deduction in the Senate bill (but with lower caps of \$350 and \$700), along with some provisions affecting the low-income housing credits and tax exempt bonds for housing. The bill provided revenue offsets, however, and is therefore revenue neutral. On May 8, the House combined the tax legislation with other housing legislation and passed its version of H.R. 3221. The measure was delayed in the Senate, but the perceived need for a rapid legislative response to the GSE's problems resulted in Senate passage (where the provisions have been negotiated with the House; the net operating loss provision was eliminated and the tax credit is now similar to the House bill) of the bill on July 10. A final vote was taken by the House on July 23 and by the Senate on July

⁶⁷ See *Concurrent Resolution of the Budget for 2009, Senate Report to Accompany S.Con.Res. 70*, Senate Print 110-039, March 2008, p. 6.

26, with the bill signed on July 30 by President Bush, who had withdrawn his veto threat (related to non-tax provisions). The tax benefits are, however, generally offset.

There continued to be indications that interest remained in the House in a possible second stimulus bill; House Speaker Pelosi indicated such an interest in a press conference to mark the payment of rebates, on April 25, 2008. A letter to the speaker by 30 members on April 17 suggested a wide variety of spending programs including unemployment benefits, food stamps, and infrastructure. On June 12, Senator Charles Schumer indicated that a second stimulus package should contain provisions other than spending increases. On July 15, House Speaker Pelosi indicated she intends to push a second stimulus bill in through Congress in September, and that a second rebate is a possibility, but should not exclusively dominate the package. She reiterated her plan for a second stimulus on July 31, when the new GDP growth rates were released. The Senate is considered a \$24 billion supplemental spending bill which would include spending on infrastructure, energy programs, and disaster aid.

In the week of September 22, following the request of the administration for authority to purchase assets, Congressional leaders indicated that a stimulus bill, which could include extension of unemployment benefits, infrastructure spending, and spending on home heating oil, food stamps and health care, would also be considered. Recent proposals of this nature proposed spending of around \$50 billion. The bill, H.R. 7110, passed the House on September 26, but a Senate proposal for a \$56.2 billion plan has not obtained enough votes to pass the Senate.

Congress returned after the election to consider a second stimulus package; the unemployment compensation extension was passed, but not the other elements.

The 2009 Proposals

Discussions now suggest a much larger package supported by Congressional leaders and President Elect Obama which would build off of some of the proposals discussed for 2008 but would also include tax cuts.

On December 15, House Speaker Pelosi suggested a \$600 billion package with \$400 billion of spending and \$200 billion in tax cuts as a starting point for discussion. The package would probably include infrastructure spending, aid to the states, unemployment compensation, and food stamps. Earlier, on December 11, Finance Committee Chairman Baucus suggested that half of an expected \$700 billion plan might be in tax cuts; he mentioned child tax credits, state and local property tax deductions, the R&D tax credit, the marriage penalty, tax exempt bonds and energy incentives. House Republican Leader Boehner proposed a tax package that included increases in the child tax credit, suspending the capital gains tax on newly acquired assets, increasing expensing, extending bonus depreciation and raising the share expensed from 50% to 75%, extending net operating loss carrybacks to three years, lowering the corporate tax rate from 35% to 25%, and expanding energy subsidies.

Reports on December 29 suggested President Elect Obama would propose a package of \$670 billion to \$770 billion, but that additions in Congress might raise the total to \$850 billion. The package could include \$100 billion in aid to the States to fund Medicaid, possibly with additional grants, at least \$350 billion for public works, alternative energy, health care and school modernization, and expanding unemployment insurance and food stamp benefits. The package would also include middle class tax cuts. While these cuts have not been specified, congressional

leaders have referred to the child credit, state and local property taxes, marriage penalties, the R&D tax credit and tax exempt bonds.

Fiscal stimulus is only effective if the money is spent, and many economists also view fiscal policy as less effective than monetary policy in an open economy. Tax cuts may be less effective than spending because some of the tax cut may be saved. Tax cuts that are temporary, that appear in a lump sum rather than in withholding, or that are aimed at higher income individuals are thought more likely to be saved. For example, some evidence suggests that only two thirds of the 2001 tax rebate was spent.

The challenge to spending programs is that there may be a lag time for planning and administration before the money is spent. For that reason, infrastructure spending is often discussed in the context of “ready-to-go” projects where all of the planning is in place and the only missing factor is funding. Some analysts suggest that aid to state and local governments may be more quickly spent because these governments are likely to cut back on spending in downturns, and the aid may forestall these cuts.⁶⁸

Concerns have also been expressed that, the larger the package, the greater the risk that the spending will not be effective, especially for certain types of infrastructure some economists advocate a quick enactment of a smaller package followed by additional spending that can be more carefully considered.⁶⁹

These delays in spending are less of a concern if the downturn appears likely to be protracted or the recovery slow.

Comparing the Macroeconomic Effects of Various Proposals⁷⁰

The relative effectiveness of different proposals in stimulating the economy has been evaluated along a number of lines that will be discussed in this section.⁷¹

Bang for the Buck

In terms of first-order effects, any stimulus proposal that is deficit financed would increase total spending in the economy.⁷² For second-order effects, different proposals could get modestly more

⁶⁸ See CRS Report 92-937, *Counter Cyclical Job Creation Programs*, for a discussion of some of these issues.

⁶⁹ See Lori Montgomery, “Obama Team Assembling \$850 Billion Stimulus,” *Washington Post*, December 29, 2008, p. A1, A30.

⁷⁰ This section was prepared by Marc Labonte, Government and Finance Division.

⁷¹ For a more detailed analysis, see Congressional Budget Office, *Options for Responding to Short-Term Economic Weakness*, January 2008.

⁷² There may be a few proposals that would not increase spending. For example, increasing tax incentives to save would probably not increase spending significantly. These examples are arguably exceptions that prove the rule.

“bang for the buck” than others if they result in more total spending. If the goal of stimulus is to maximize the boost to total spending while minimizing the increase in the budget deficit (in order to minimize the deleterious effects of “crowding out”), then maximum bang for the buck would be desirable. The primary way to achieve the most bang for the buck is by choosing policies that result in spending, not saving.⁷³ Direct government spending on goods and services would therefore lead to the most bang for the buck since none of it would be saved. The largest categories of direct federal spending are national defense, health, infrastructure, public order and safety, and natural resources.⁷⁴

Higher government transfer payments, such as extended unemployment compensation benefits or increased food stamps, or tax cuts could theoretically be spent or saved by their recipients.⁷⁵ While there is no way to be certain how to target a stimulus package toward recipients who would spend it, many economists have reasoned that higher income recipients would save more than lower income recipients since U.S. saving is highly correlated with income. For example, two-thirds of families in the bottom 20% of the income distribution did not save at all in 2004, whereas only one-fifth of families in the top 10% of the income distribution did not save.⁷⁶ Presumably, recipients in economic distress, such as those receiving unemployment benefits, would be even more likely to spend a transfer or tax cut than a typical family. As discussed previously, business tax incentives can be crafted so that they can be claimed only in response to higher investment spending, but businesses may be unwilling to increase their investment spending when faced with a cyclically-induced decline in demand for their products.⁷⁷

Mark Zandi of *Moody's Economy.com* has estimated multiplier effects for several different policy options, as shown in **Table 7**.⁷⁸ The multiplier estimates the increase in total spending in the economy that would result from a dollar spent on a given policy option. Zandi does not explain how these multipliers were estimated, other than to say that they were calculated using his firm's macroeconomic model. Therefore, it is difficult to offer a thorough analysis of the estimates. In general, many of the assumptions that would be needed to calculate these estimates are widely disputed (notably, the difference in marginal propensity to consume among different recipients and the size of multipliers in general), and no macroeconomic model has a highly successful track record predicting economic activity. Thus, the range of values that other economists would assign

⁷³ Policies that result in more bang for the buck also result in more crowding out of investment spending, which could reduce the long-term size of the economy (unless the policy change increases public investment or induces private investment).

⁷⁴ For the purpose of this discussion, government transfer payments, such as entitlement benefits, are not classified as government spending.

⁷⁵ Food stamps cannot be directly saved since they can only be used on qualifying purchases, but a recipient could theoretically keep their overall consumption constant by increasing their other saving.

⁷⁶ Brian Bucks et al, “Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances,” *Federal Reserve Bulletin*, vol. 92, February 2006, pp. A1-A38.

⁷⁷ For more information, see CRS Report RS21136, *Government Spending or Tax Reduction: Which Might Add More Stimulus to the Economy?*, by Marc Labonte; CRS Report RL21126, *Tax Cuts and Economic Stimulus: How Effective are the Alternatives?*, by Jane G. Gravelle; and CRS Report RL31134, *Using Business Tax cuts to Stimulate the Economy*, by Jane G. Gravelle. Also see *Fiscal Policy for the Crisis*, IMF Staff Position Note, December 29, 2008, SPN/08/01 [<http://www.imf.org/external/np/pp/eng/2008/122308.pdf>].

⁷⁸ Mark Zandi, “Washington Throws the Economy a Rope,” *Dismal Scientist*, *Moody's Economy.com*, January 22, 2008.

to these estimates is probably large. Qualitatively, most economists would likely agree with the general thrust of his estimates, however—spending provisions have higher multipliers because tax cuts are partially saved, and some types of tax cuts are more likely to be saved by their recipients than others. As discussed above, a noticeable increase in consumption spending has not yet accompanied the receipt of the rebates from the first stimulus package. (Note, however, that these effects do not account for the possibility of extensive delay in direct spending taking place).

Timeliness

Timeliness is another criterion by which different stimulus proposals have been evaluated. There are lags before a policy change affects spending. As a result, stimulus could be delivered after the economy has already entered a recession or a recession has already ended. First, there is a legislative process lag that applies to all policy proposals—a stimulus package cannot take effect until bills are passed by the House and Senate, both chambers can reconcile differences between their bills, and the President signs the bill. Many bills get delayed at some step in this process. As seen in **Table 8**, many past stimulus bills have not become law until a recession was already underway or finished.

Table 7. Zandi’s Estimates of the Multiplier Effect for Various Policy Proposals

Policy Proposal	One-year change in real GDP for a given policy change per dollar
Tax Provisions	
Non-refundable rebate	1.02
Refundable rebate	1.26
Payroll tax holiday	1.29
Across the board tax cut	1.03
Accelerated depreciation	0.27
Extend alternative minimum patch	0.48
Make income tax cuts expiring in 2010 permanent	0.29
Make expiring dividend and capital gains tax cuts permanent	0.37
Reduce corporate tax rates	0.3
Spending Provisions	
Extend unemployment compensation benefits	1.64
Temporary increase in food stamps	1.73
Revenue transfers to state governments	1.36

Policy Proposal	One-year change in real GDP for a given policy change per dollar
Increase infrastructure spending	1.59

Source: Mark Zandi, *Moody's Economy.com*.

Table 8. Timing of Past Recessions and Stimulus Legislation

Beginning of Recession	End of Recession	Stimulus Legislation Enacted
Nov. 1948	Oct. 1949	Oct. 1949
Aug. 1957	Apr. 1958	Apr. 1958, July 1958
Apr. 1960	Feb. 1961	May 1961, Sep. 1962
Dec. 1969	Nov. 1970	Aug. 1971
Nov. 1973	Mar. 1975	Mar. 1975, July 1976, May 1977
July 1981	Nov. 1982	Jan. 1983, Mar. 1983
July 1990	Mar. 1991	Dec. 1991, Apr. 1993
Mar. 2001	Nov. 2001	June 2001

Source: Bruce Bartlett, "Maybe Too Little, Always Too Late," *New York Times*, Jan. 23, 2008.

Second, there is an administrative delay between the enactment of legislation and the implementation of the policy change. For example, although the stimulus package was signed into law in February, the first rebate checks were not sent out until the end of April, and the last rebate checks were not sent out until July. When the emergency unemployment compensation (EUC08) program began in July 2008 there was about a three week lag between enactment and the first payments of the new EUC08 benefit. Many economists have argued that new government spending on infrastructure could not be implemented quickly enough to stimulate the economy in time since infrastructure projects require significant planning. (Others have argued that this problem has been exaggerated because existing plans or routine maintenance could be implemented more quickly.) Others have argued that although federal spending cannot be implemented quickly enough, fiscal transfers to state and local governments would be spent quickly because many states currently face budgetary shortfalls, and fiscal transfers would allow them to avoid cutting spending.⁷⁹

Finally, there is a behavioral lag, since time elapses before the recipient of a transfer or tax cut increases their spending. For example, the initial reaction to the receipt of rebate checks was a

⁷⁹ Transfers to state and local governments could be less stimulative than direct federal spending because state and local governments could, in theory, increase their total spending by less than the amount of the transfer. (For example, some of the money that would have been spent in the absence of the transfer could now be diverted to the state's budget reserves.) But if states are facing budgetary shortfalls, many would argue that in practice spending would increase by as much as the transfer.

large spike in the personal saving rate (see above). It is unclear how to target recipients that would spend most quickly, although presumably liquidity-constrained households (i.e., those with limited access to credit) would spend more quickly than others. In this regard, the advantage to direct government spending is that there is no analogous lag. Although monetary policy changes have no legislative or administrative lags, research suggests they do face longer behavioral lags than fiscal policy changes because households and business generally respond more slowly to interest rate changes than tax or transfer changes.

Long-term Effects

As discussed above, while a deficit-financed policy change can stimulate short-term spending, it can also reduce the size of the economy in the long run through the crowding out effect on private investment. Stimulus proposals can minimize the crowding out effect by lasting only temporarily—an increase in the budget deficit for one year would lead to significantly less crowding out over time than a permanent increase in the deficit. Among policy options, increases in public investment spending would minimize any negative effects on long-run GDP since decreases in the private capital stock would be offset by additions to the public capital stock. Also, tax incentives to increase business investment would offset the crowding out effect since the spending increase was occurring via business investment.

Should Stimulus be Targeted?

It is clear that the slowdown has been concentrated in housing and financial markets to date. Some economists have argued that as long as problems remain in these depressed sectors, then generalized stimulus will only postpone the inevitable downturn. (As noted above, separate legislation to support housing and financial markets were recently enacted.) For example, Goldman Sachs predicts that by the fourth quarter of 2008 the effect of the rebates on GDP will have worn off, “at which point we (fore)see renewed stagnation in U.S. output.”⁸⁰ Other economists argue that if the current housing bust is being caused by the unwinding of a bubble, then it could be detrimental for the government to interfere with natural market adjustment which is bringing those markets back to equilibrium that, in the long run, is both necessary and unavoidable. And some would argue that the best way to help a troubled sector is by boosting overall demand.

Interventions for Financial Firms and Markets⁸¹

Problems in financial markets became more acute in September 2008. Troubled assets on bank balance sheets, especially mortgage-backed securities (MBS), caused financial markets to freeze, as evidenced by spiking spreads between U.S. Treasury securities and other interest rates. Policymakers had been intervening for financial firms on a case-by-case basis. In the Spring, the Federal Reserve had provided a backstop for the sale of Bear Stearns. Financial turmoil following

⁸⁰ Ibid.

⁸¹ This section was written by Edward V. Murphy, Government and Finance Division.

the decision of the government to decline such aid for Lehman Brothers, but to assist AIG, has created dissatisfaction with the case-by-case approach. Policymakers responded by passing a broad plan authorizing Treasury to spend up to \$700 billion (P.L. 110-343).⁸² Treasury is authorized to purchase any asset that may help to restore confidence in financial markets and stabilize credit markets.⁸³ Although the original draft Treasury proposal focused on purchasing illiquid mortgage-related assets from financial institutions, the plan as passed included a much broader definition of troubled asset. This broader definition encompasses any asset, including stock in banks, that Treasury in consultation with the Federal Reserve believes is necessary to provide financial stability. Following passage, Treasury committed to purchase \$150 billion of preferred shares of the nine largest banks in order to inject capital into the financial system.⁸⁴ Treasury has formally announced that it has abandoned plans to remove troubled MBS from bank balance sheets, but has also announced plans to use some of the funds to intervene in consumer-based asset-backed securities (ABS) markets such as credit card receivables, auto loans, and student loans.⁸⁵

Case-by-Case Interventions

One factor that may have contributed to financial market instability was the uncertainty created by case-by-case interventions in financial markets. Market participants were unsure which institutions would qualify for government assistance. Justifications for intervention appeared to rely on one of two arguments. First, institutions might receive aid if they were considered too big to fail. Second, institutions might receive aid if they perceived as too complex to unwind in traditional bankruptcy proceedings.

Too Big to Fail

The government sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, were placed in a conservatorship.⁸⁶ Arguably, the GSEs were considered too big to fail because their combined portfolios exceeded \$1 trillion. In addition, it was believed that their role in mortgage finance was essential in the housing market, which was a source of instability for the rest of the banking system.

The terms of this conservatorship included significant commitments of taxpayer financing. The Treasury promised to purchase sufficient preferred stock to insure institutional solvency. In addition, the Federal Reserve promised to directly lend funds to the GSEs at pre-determined interest rates. While the rescue of the GSEs would not affect smaller firms not believed to be too

⁸² Treasury Press Release, "Paulson Outlines Comprehensive Approach to Mortgage Problems," September 22, 2008, available at <http://www.treasury.gov/news/index1.html>.

⁸³ CRS Report RL34730, *The Emergency Economic Stabilization Act and Current Financial Turmoil: Issues and Analysis*, by Baird Webel and Edward V. Murphy.

⁸⁴ U.S. Department of Treasury, "Tranche Report to Congress," November 4, 2008, available at <http://www.treasury.gov/initiatives/eesa/docs/Tranche-Reportfinal.pdf>.

⁸⁵ "Remarks by Secretary Henry M. Paulson, Jr. on Financial Rescue Package and Economic Update," Press Release, U.S. Department of Treasury, November 12, 2008, available at <http://www.treasury.gov/press/releases/hp1265.htm>.

⁸⁶ CRS Report RL34661, *Fannie Mae's and Freddie Mac's Financial Problems*, by N. Eric Weiss.

big to fail, the conservatorship of Fannie Mae and Freddie Mac triggered trillions of dollars of credit derivatives that referenced the GSEs. The potential repercussions of these credit derivatives may have created uncertainty as to the financial health of other firms.

Too Complex to Fail

In addition to a too-big-to-fail test, some have argued for a too-complex-to-fail test. Firms may be too complex, in this view, if an attempt to unwind their financial commitments can cause too much uncertainty for the balance sheets of other financial firms. Because financial firms are highly leveraged, the failure of a major counterparty to their contracts could significantly damage their solvency. Because credit derivatives are traded, many firms might not know how exposed they are to particular counterparties until the derivatives are triggered.⁸⁷ Furthermore, there is no assurance that counterparties have adequate resources to fulfill their commitments.

Great uncertainty surrounded the too-complex-to-fail test. The Federal Reserve was willing to provide a financial backstop to the resolution of Bear Stearns but declined to do so for Lehman Brothers, even though both firms participated significantly in credit derivatives markets.⁸⁸ It appeared that the too-complex-to-fail test would not be applied in the future. However, three days later, the Federal Reserve provided a bridge loan to insurer AIG, partly due to AIG's positions in credit derivatives markets.⁸⁹ Financial markets promptly lost confidence and policymakers expressed dissatisfaction with a case-by-case approach.

Broad Based Intervention

Dissatisfaction with a case-by-case approach led some policymakers to advocate for a more systemic approach, but there was some disagreement concerning the merits of alternative responses. Conceivably, a systemic plan could be crafted to (1) remove existing illiquid assets from bank balance sheets,⁹⁰ (2) inject capital into banks by purchasing equity shares,⁹¹ (3) increase the liquidity of existing troubled assets by insuring them, (4) stabilize existing mortgage-related securities markets by lowering default rates by purchasing loans likely to default, and (5) support consumer credit markets by purchasing newly issued MBS and ABS. Treasury's initial draft plan focused on the first option, removing existing illiquid assets. Some Congressional leaders argued for the second option, purchasing equity positions in banks. Others in Congress argued for the third option, insuring existing illiquid assets. In the end, the draft plan was amended to be general enough to encompass any of these approaches or any combination.

⁸⁷CRS Report RS22932, *Credit Default Swaps: Frequently Asked Questions*, by Edward V. Murphy.

⁸⁸CRS Report RL34420, *Bear Stearns: Crisis and "Rescue" for a Major Provider of Mortgage-Related Products*, by Gary Shorter.

⁸⁹ Federal Reserve Press Release, September 16, 2008, available at <http://www.federalreserve.gov/newsevents/press/other/20080916a.htm>

⁹⁰ Treasury Secretary Paulson, "Turmoil in US Credit Markets: Recent Actions regarding Government Sponsored Entities, Investment Banks and other Financial Institutions," Testimony by Secretary Henry M. Paulson, Jr. before the Senate Committee on Banking, Housing, and Urban Affairs, September 23, 2008.

⁹¹CRS Report RS22962, *The U.S. Financial Crisis: Lessons From Sweden*, by James K. Jackson.

Although implementation of the plan has been evolving since its passage, the focus of the Treasury action to date has been on purchasing equity in banks.

Remove Illiquid Assets

Although subsequently abandoned, the initial draft plan was to purchase up to \$700 billion of troubled mortgage-related assets from financial institutions which was adopted. This option would attempt to remove devalued and illiquid assets from the balance sheets of financial firms at the same time to clean up the entire system. One advantage of this approach is that many firms become healthy in one swoop. Financial firms will have the ability to make new loans, not because of more capital, but because their existing capital would not be encumbered by bad assets. This approach is similar to the Resolution Trust Corporation (RTC) during the savings and loan crisis. The RTC was created to resolve insolvent thrifts.

It has the advantage of dealing with large amounts of bad debts in a short period of time. It has the disadvantage of putting the government in an awkward position. First, the government will be the holder of vast amounts of mortgage debt. The Treasury proposal says that assets should be resolved to protect the taxpayer; however, this creates a conflict of interest for those policymakers that would want to see more debt forbearance for distressed borrowers. Second, the government could also hold vast interests in real estate. If the government sells it quickly to terminate the issue then home prices could collapse. If the government holds on to the assets then the government could be in the position of being a landlord for extended periods of time. Finally, this approach may have the unintended effect of penalizing firms that acted prudently by cleaning up the balance sheets of their competitors but not of themselves.

Problems in accurately pricing the securities could complicate this approach. On the one hand, auctions can be designed to attempt to make sure that the government does not “overpay” for the illiquid securities.⁹² On the other hand, the inclusion of mandatory warrants in EESA complicates the calculation of the worth of the securities to the firms that hold them. A firm considering selling some securities must not only attempt to evaluate the worth of the security, but must also try to calculate the impact of government warrants that could dilute future shareholder positions. Furthermore, the impact on the value of individual securities would be complicated by the number of securities that the firm might consider to sell because the amount of warrants is not directly related to the amount of securities sold. A firm planning to sell many securities would discount the impact of the warrants (similar to spreading fixed costs) compared to firms that might plan to sell fewer securities. As a result, not all securities of the same intrinsic risk-weighted value would be treated the same in a potential EESA auction. In the end, Treasury decided to abandon purchasing existing illiquid mortgage-related assets.

Broad Based Injection of Capital

Rather than assuming bad assets, the government could attempt to heal bank balance sheets by injecting good assets. The government could purchase preferred stock in financial firms, an action

⁹²CRS Report RL34707, *Auction Basics: Background for Assessing Proposed Treasury Purchases of Mortgage-Backed Securities*, by D. Andrew Austin.

that has already begun following the passage of P.L. 110-343. In a similar approach, the government acquired warrants to for this purpose for Fannie Mae and Freddie Mac.⁹³ This approach has several advantages. It would leave the decisions of which assets to keep and which to dispose of to firm managers who would presumably have greater expertise. Second, it would not require the government to become the administrator of large accumulations of real estate assets. Third, if the program successfully revives financial markets then the stock will compensate the government for the cost of the program.

This approach is similar to the Reconstruction Finance Corporation (RFC) during the 1930s. The RFC was created to loan funds directly to banks, railroads, and other firms during the great depression. During the Hoover administration, the RFC primarily intervened by providing loans to banks and trusts. The names of recipient banks were announced which may have had the perverse effect of identifying weak banks, which subsequently suffered runs on their deposits. FDR made several changes, one of which allowed the Comptroller of the Currency to reorganize national banks without a receivership. The Comptroller could then have the RFC subscribe to new preferred shares of stock in the bank.

Currently, Treasury has purchased preferred shares in large banks and has set up an application system for smaller banks that may wish to participate. On October 28, 2008, Treasury purchased \$125 billion in preferred shares in the 9 largest banks representing approximately 55% of the assets in the banking system.⁹⁴ In return, Treasury is to receive dividends of 5% for the first five years followed by dividends of 9% in following years, in addition to warrants for additional stock purchases.⁹⁵ The banks must pay dividends to Treasury before any dividends can be paid to junior or equal shareholders. Smaller banks may apply for Treasury funds equal to \$25 billion or 3% of risk-weighted assets, whichever is smaller.

⁹³CRS Report RS22950, *Fannie Mae and Freddie Mac in Conservatorship*, by Mark Jickling.

⁹⁴ "Remarks by Secretary Henry M. Paulson, Jr. on Financial Rescue Package and Economic Update" Press release, U.S. Department of Treasury, November 12, 2008, available at <http://www.treasury.gov/press/releases/hp1265.htm>.

⁹⁵ U.S. Department of Treasury, "Tranche Report to Congress," November 4, 2008, available at <http://www.treasury.gov/initiatives/eesa/docs/Tranche-Reportfinal.pdf>.

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