IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF FLORIDA
Pensacola Division

STATE OF FLORIDA, by and through
Bill McCollum, et al.,

      Plaintiffs,

v.   **Case No.: 3:10-cv-91-RV/EMT**

UNITED STATES DEPARTMENT OF
HEALTH AND HUMAN SERVICES,
et al.,

      Defendants.

_____/

APPENDIX OF EXHIBITS IN SUPPORT OF
PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

VOLUME V

(Exhibits 35-40)

Plaintiffs hereby submit Volume V of their Appendix of Exhibits in Support of their

Motion for Summary Judgment.

Respectfully submitted,
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CERTIFICATE OF SERVICE

I hereby certify that, on this 4th day of November, 2010, a copy of the foregoing Volume V of Appendix of Exhibits in Support of Plaintiffs' Motion for Summary Judgment was served on counsel of record for all Defendants through the Court's Notice of Electronic Filing system.

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Exhibit 35

CBO

Policies for Increasing Economic Growth and Employment in 2010 and 2011

January 2010

CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515

CBO

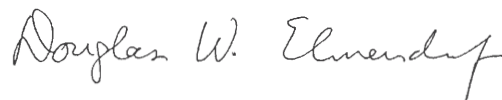# Policies for Increasing Economic Growth and Employment in 2010 and 2011

January 2010

Preface

The number of jobs in the United States has declined almost every month since December 2007. Nearly all professional forecasters believe that the economy has begun to recover from the recent recession, but many also predict that the pace of the recovery will be slow and that unemployment will remain high for several years.

At the request of the Chairman of the Senate Budget Committee, the Congressional Budget Office (CBO) has examined the potential role and efficacy of fiscal policy options in increasing economic growth and employment, particularly over the next two years. This paper updates and expands upon a January 2008 CBO analysis, *Options for Responding to Short-Term Economic Weakness*, and a January 2009 CBO testimony, *The State of the Economy and Issues in Developing an Effective Policy Response*.

The paper was written by Susan Yang of CBO's Macroeconomic Analysis Division under the supervision of Robert Dennis and William Randolph. Mark Lasky and Ben Page contributed significantly to the analysis and calculated the economic effects of the policies. Nabeel Alsalam, Christi Hawley Anthony, Robert Arnold, David Brauer, Molly Dahl, Jeff Holland, Janet Holtzblatt, Kim Kowalewski, Joyce Manchester, Joseph Mattey, Larry Ozanne, John Peterson, Frank Russek, and David Weiner provided considerable assistance and commented on early drafts. Holly Battelle prepared the figures.

Sherry Snyder edited the paper. Christine Bogusz and Kate Kelly proofread it. Maureen Costantino prepared the paper for publication with assistance from Jeanine Rees. Lenny Skutnik produced the printed copies, Linda Schimmel coordinated the print distribution, and Simone Thomas prepared the electronic version for CBO's Web site (www.cbo.gov).

Douglas W. Elmendorf
Director

January 2010

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Policies for Increasing Economic Growth and Employment in 2010 and 2011

Introduction and Summary

After the most severe recession since the 1930s, the U.S. economy appears to be recovering. Real (inflation-adjusted) gross domestic product (GDP) grew during the third quarter of 2009, after having fallen 3.7 percent since the recession began in the fourth quarter of 2007. However, the economy's output is still about 7 percent below the Congressional Budget Office's (CBO's) estimate of potential GDP—the output the economy would produce if its resources were fully employed. From December 2007 to December 2009, the unemployment rate jumped from 4.9 percent to 10.0 percent, and payrolls fell by about 7.2 million jobs.[1] Moreover, if employment had grown during this period at the same rate at which it had grown from 1990 to 2007, millions of additional jobs would have been added to the economy during that period; all told, the recession has lowered employment by about 11 million relative to what it would otherwise be. Nearly all professional forecasters believe that the economy has passed the trough of the recession, but many also predict that the pace of the recovery will be slow. In its August 2009 report *The Budget and Economic Outlook: An Update*, CBO projected that the unemployment rate would not fall below 8 percent again until 2012 (see Figure 1).

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1. The number of net job losses is based on official data at the time of writing and does not take into account the Bureau of Labor Statistics' (BLS's) benchmark revision (the annual reanchoring of the employment estimates to full population counts available principally through unemployment insurance tax records) scheduled for early February. In a preliminary announcement, BLS indicated that March 2009 employment would probably be revised downward by about 800,000. Accounting for that revision, the number of net job losses since December 2007 would be about 8 million. Estimates of employment growth since March 2009 may also be revised.

The federal tax system and social safety-net programs automatically dampen swings in economic activity by decreasing tax payments to the government and increasing benefit payments to households when economic activity slows (and by having the opposite effect when economic activity quickens). That automatic stabilizing effect is quite timely because it does not require legislative action. As the recession deepened in 2008 and early 2009, declines in real household income and business profits caused tax receipts to fall and outlays on safety-net programs, such as unemployment compensation, to rise. Those changes kept demand for goods and services by consumers and businesses stronger than it would have been otherwise, which in turn kept production and employment from falling as much as they would have otherwise. A simple measure of the impact of the automatic stabilizers is their effect on the federal budget deficit. By CBO's estimate, those stabilizers added roughly $300 billion to the federal budget deficit in fiscal year 2009 and are projected to add about $400 billion in each of fiscal years 2010 and 2011.

Those induced changes in the federal budget are complemented by similar but smaller automatic changes in state and local budgets. In contrast with automatic stabilizers at the federal level, however, those at the state and local level are largely offset by discretionary actions needed to comply with states' balanced-budget rules. Those actions include reductions in state and local spending and increases in tax rates and various fees.

The government has also taken specific actions to address the turmoil in the housing and financial markets and the severe recession. To stabilize those markets, the Federal Reserve, the Department of the Treasury, and other agencies lowered the target for the federal funds rate—the rate that the Federal Reserve uses to implement monetary

Figure 1.

The Unemployment Rate

(Percent)
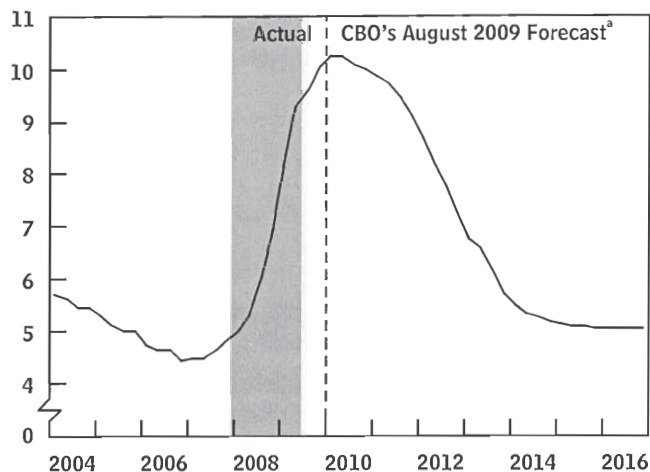
Source: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: Data are quarterly and are plotted through the fourth quarter of 2016.

The National Bureau of Economic Research establishes the dates on which recessions begin and end but has not yet done so for the end of the most recent recession. The shaded bar indicates the duration of that recession, which is shown as having ended in the second quarter of 2009.

a. CBO's economic forecast is being updated; the revised forecast will be published later in January.

policy—to almost zero, provided equity and loans to financial institutions, guaranteed debt issued by financial institutions, and put the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) into conservatorship.[2] To boost the economy, the government enacted several fiscal stimulus bills, including the Economic Stimulus Act in February 2008 (Public Law 110-85); the American Recovery and Reinvestment Act (ARRA, P.L. 111-5) in February 2009; and the Worker, Homeownership, and Business Assistance Act (WHBAA, P.L. 111-92) in November 2009 (see Box 1). Those pieces of legislation included increases in federal spending and reductions in taxes that boosted demand for goods

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2. For a summary of actions taken by the Federal Reserve, the Department of the Treasury, and other agencies in support of the housing and financial markets as of August 2009, see Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2009), Tables B-1 to B-3.

and services—similar to the effect of the automatic fiscal stabilizers.

The fiscal stimulus that has been enacted will continue to add to demand in coming years, although the amount of stimulus will begin to diminish after the middle of 2010. By last September, when fiscal year 2009 ended, about one-fifth of the spending authority and tax cuts provided in ARRA had been spent or implemented. According to estimates by CBO and the staff of the Joint Committee on Taxation, ARRA will add to federal spending or reduce revenues by about $400 billion in fiscal year 2010, by more than $100 billion in fiscal year 2011, and by smaller amounts thereafter. By CBO's estimate, the economic effects of ARRA—including direct and indirect effects—will peak in the first half of 2010. After that point, the stimulus will still be adding to demand but by smaller amounts. Consequently, although it will still help hold up the levels of GDP, its effect on growth will turn negative.

Future economic activity will also be affected by scheduled changes in tax law. In 2011, taxes will rise substantially because the tax cuts provided by the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 will expire and because the exemption amount for the alternative minimum tax (AMT) will fall (see Box 2 on page 6). (The AMT is an alternative tax originally intended to impose taxes on high-income individuals who use tax preferences to greatly reduce or eliminate their liability under the regular income tax.) Compared with an alternative path in which the tax cuts were extended and the exemption amount for the AMT was indexed, the rise in taxes under current law will increase tax revenue by roughly $300 billion in 2011, CBO estimates.[3]

In addition, it appears that the stimulus to economic activity provided by monetary policy is no longer increasing. To offset the sharp contraction in the provision of credit by the private sector that has occurred since the financial crisis began in 2007, the Federal Reserve has reduced the federal funds rate to almost zero and has initiated a number of special programs to increase the supply of credit. Those actions, as well as actions by

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3. See Congressional Budget Office, *The Budget and Economic Outlook: An Update*, Box 2-2.

the Treasury Department and other agencies, have helped stabilize the financial sector and support economic activity, and financial institutions' use of the Federal Reserve's liquidity programs has now fallen markedly. In the early phases of most past recoveries, the Federal Reserve has cut interest rates, but it does not seem likely that the Federal Reserve will provide additional monetary stimulus going forward.

Other considerations also suggest that increases in production and gains in employment will be modest for some time. The supply of credit is still limited by many financial institutions' ongoing losses on past loans and the desire to rebuild their capital. The number of vacant houses remains quite high, reducing the need for new residential construction. And consumers probably want to rebuild their savings after large losses in stock and housing wealth, which will hold down growth in consumer spending.

Concerns that the economic recovery will be slow and protracted have therefore prompted the consideration of further fiscal policy actions. For example, in December, the House of Representatives passed H.R. 2847, which would extend unemployment assistance, increase infrastructure spending, and provide more aid to state governments. In previous reports and testimony, CBO identified three key criteria for judging policy options for spurring economic growth and increasing employment:

■ Timing—providing help when it is needed most;

■ Cost-effectiveness—providing the most growth and employment per dollar cost to the federal budget; and

■ Consistency with long-term fiscal objectives—preventing a short-term deficit increase due to stimulative policy from adding excessively to federal debt in the long run.

Other considerations affecting the design of policy options include uncertainty about a policy's effectiveness, the distribution of benefits among different people, and the value of additional goods and services that would be produced.[4]

This paper summarizes the current economic outlook, reviews criteria for setting fiscal policy under such economic conditions, and assesses the potential impact on output and employment of a variety of policy options. Some options would reduce taxes on individuals or increase aid to the unemployed and others, increasing the disposable income of households and thus boosting demand. Other options would increase cash flow and reduce taxes for firms, which would encourage firms to invest and hire and thus increase employment. Additional options would increase federal spending by investing in infrastructure or providing aid to state governments, which would strengthen demand for goods and services and reduce further losses of state and local government jobs.

CBO concludes that further policy action, if properly designed, would promote economic growth and increase employment in 2010 and 2011. The policies analyzed vary in cost-effectiveness as measured by the cumulative effects on GDP and employment per dollar of budgetary cost and in the time patterns of those effects. Policies that could be implemented relatively quickly or targeted toward people whose consumption tends to be restricted by their income, such as reducing payroll taxes for firms that increase payroll or increasing aid to the unemployed, would have the largest effects on output and employment per dollar of budgetary cost in 2010 and 2011. By contrast, policies that would temporarily increase the after-tax income of people with relatively high income, such as an across-the-board reduction in income taxes or an increase in the exemption amount for the AMT, would have smaller effects because such tax cuts would probably not affect the recipients' spending significantly.

Despite the potential economic benefits in the short run, such actions would add to the already large projected budget deficits. Unless offsetting actions were taken to reverse the accumulation of additional government debt, future incomes would tend to be lower than they otherwise would have been.

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4. Congressional Budget Office, *Options for Responding to Short-Term Economic Weakness* (January 2008); and Statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the House Committee on the Budget, *The State of the Economy and Issues in Developing an Effective Policy Response* (January 27, 2009).

Box 1.

Fiscal Stimulus Legislation Enacted in 2008 and 2009

Several fiscal stimulus bills were enacted in 2008 and 2009, including the Economic Stimulus Act; the American Recovery and Reinvestment Act (ARRA); and the Worker, Homeownership, and Business Assistance Act (WHBAA).

Economic Stimulus Act of 2008

The Economic Stimulus Act (Public Law 110-185) was enacted on February 13, 2008. Qualified individual taxpayers and married couples filing joint tax returns received tax rebates of up to $600 and $1,200, respectively, and an additional $300 rebate for each qualified dependent child under age 17. In addition, people who did not pay income taxes but who had at least $3,000 of income from earnings, Social Security benefits, and certain veterans' benefits were eligible for such payments.

The act also contained tax benefits for businesses. It permitted an additional first-year depreciation deduction for qualified property placed in service in 2008; most depreciable investment other than long-lasting structures qualified. The provision is often referred to as bonus depreciation. The act also increased the maximum amount of investment that smaller firms could treat as a current expense in lieu of depreciating it over time. That amount was raised from $128,000 to $250,000 for qualifying property placed in service in 2008, subject to certain limits. Both changes temporarily increased the after-tax cash flow of businesses purchasing new plant and equipment and reduced the cost of those investments.

American Recovery and Reinvestment Act of 2009

ARRA (P.L. 111-5), enacted on February 17, 2009, provided tax benefits for individuals and businesses; increased or extended certain benefits for various social safety-net programs; and appropriated funding for spending on aid to state governments (including education and health care programs) and on infrastructure (including transportation, energy, and water projects).[1]

Among its tax benefits to individuals, ARRA provided the Making Work Pay credit of up to $400 to individuals and $800 to married taxpayers filing joint returns in 2009 and 2010. The credit phases out with modified adjusted gross income—that is, adjusted gross income used to determine federal income taxes, modified to remove the exclusion for foreign earned income and income from Puerto Rico—in excess of $75,000 for individuals and $150,000 for married couples filing jointly. ARRA also temporarily expanded the earned income tax credit by increasing the amount of the credit for taxpayers with three or more qualifying children and raising the income threshold at which the amount of the credit begins to be reduced for married couples filing jointly. In addition, the act modified the existing Hope credit (a federal tax credit for education expenses of students meeting certain criteria) in 2009 and 2010 by making the credit partially refundable, by extending the benefits to a broader class of taxpayers, and by allowing the credit to be claimed for four years of postsecondary education instead of two. Further, ARRA increased the refundability of the child tax credit; it did so by reducing the amount of earned income at which people without any income tax liability become eligible for the credit.

ARRA also modified the tax credit for first-time homebuyers, increasing the maximum credit to $8,000 with no payback required unless the home ceased to be a taxpayer's principal residence within three years.[2] The credit phases out for individuals earning more than $75,000 and for married couples earning more than $150,000. The amended homebuyer credit was set to expire on November 30, 2009, but was extended and expanded by WHBAA.

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1. For cost estimates and analysis of the economic effects of ARRA, see Congressional Budget Office, "Estimated Macroeconomic Impacts of the American Recovery and Reinvestment Act of 2009," letter to the Honorable Charles E. Grassley (March 2, 2009); and Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output as of September 2009* (November 2009).

2. The first-time homebuyer credit was initially enacted by the Housing and Economic Recovery Act of 2008 (P.L. 110-289) and was required to be repaid over a period of time.

Box 1.   **Continued**

Fiscal Stimulus Legislation Enacted in 2008 and 2009

Among its tax benefits to businesses, ARRA extended the provisions of the Economic Stimulus Act regarding expensing and bonus depreciation for another year (through 2009). It also allowed small businesses that had net operating losses for a taxable year ending or beginning in 2008 to carry back those losses (that is, use the losses to reduce tax liability in an earlier period) for five years and to reclaim taxes previously paid. To be eligible, the business must have an average of less than $15 million in gross receipts over a three-year period ending with the year in which the loss to be carried back occurred.

ARRA also increased spending on benefit programs for individuals. Benefits for the Supplemental Nutrition Assistance Program (formerly called Food Stamps) were increased, and a one-time payment was made to Social Security recipients, people on Supplemental Security Income, and veterans receiving disability benefits and pensions. The act increased unemployment insurance benefits by $25 per week and extended the period for which benefits would be paid to individuals who exhaust their regular unemployment benefits by the end of 2009.[3] (WHBAA further expanded unemployment benefits, and the program was extended again as part of the Department of Defense Appropriation Act, 2010—P.L. 111-18.)

In addition, ARRA provided for government payments of 65 percent of health insurance premiums for up to nine months of coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) for individuals whose employment was involuntarily terminated between September 1, 2008, and December 31, 2009.[4] That program was expanded and extended by the Department of Defense Appropriation Act, 2010. Under current law, the duration of premium assistance is 15 months for workers who were involuntarily terminated from

their job between September 1, 2008, and February 28, 2010.

In addition, ARRA provided aid to state governments by temporarily increasing the federal share of Medicaid costs through the end of calendar year 2010. To minimize reductions in education and other public services provided by state governments, the act provided funds for grants to states for education and other purposes. ARRA provided increased funding for higher education, most of which was for Pell grants. The act also provided funding for a variety of other programs, including highway construction and other infrastructure projects, energy efficiency projects, housing, health information technology, health research, and other scientific research.

Worker, Homeownership, and Business Assistance Act of 2009

Enacted on November 6, 2009, WHBAA (P.L. 111-92) expanded or extended three provisions that were scheduled to expire at the end of 2009: the extension and expansion of emergency unemployment compensation, the first-time homebuyer tax credit, and the carryback for net operating losses.

WHBAA provided unemployment benefits for an additional 14 weeks, and for 6 weeks more for those living in a state with an unemployment rate higher than 8.5 percent. The eligibility dates were extended by an amendment to the Department of Defense Appropriation Act, 2010. Currently, emergency unemployment compensation is available for as many as 53 additional weeks to people who exhaust their regular benefits by the end of February 2010. WHBAA also extended eligibility for the $8,000 homebuyer credit to homes purchased or under contract by April 30, 2010. In addition, it expanded the program to provide credits of up to $6,500 for homeowners who have lived in their home for at least five years and who purchase a new home.

WHBAA also extended and expanded the carryback provision in ARRA, allowing all businesses, regardless of size, to carry back losses incurred in 2008 and 2009 for five years.

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3. The current emergency unemployment compensation program was first enacted in July 2008 and was expanded and extended in November 2008 before being further expanded and extended by ARRA.

4. COBRA facilitates the continuation of group health insurance for individuals who have lost their job.

Box 2.

Future Tax Changes Under Current Law

Under current law, the tax cuts provided by the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) are scheduled to expire at the end of 2010. Also expiring then are the Making Work Pay credit, enacted in the American Recovery and Reinvestment Act of 2009 (ARRA, Public Law 111-5, see Box 1 on page 4), and certain other provisions. In addition, temporary relief for many households from the alternative minimum tax (AMT) expired at the end of 2009; most of the resulting increase in tax payments will occur in 2011 because many taxpayers will be allowed to pay their 2010 AMT liability in 2011.[1]

When the various provisions of EGTRRA and JGTRRA expire in 2011, income earned in the current 10 percent tax bracket will be taxed instead at a rate of 15 percent; the reduced tax rates of 25, 28, 33, and 35 percent in the top four tax brackets will revert to 28, 31, 36, and 39.6 percent, respectively. In addition, the highest tax rate on capital gains and dividends, currently 15 percent, will rise sharply. Capital gains will be taxed at a maximum of 20 percent; dividends will no longer have a special low tax rate but will be taxed at regular tax rates instead, so the top rate will be 39.6 percent. In recent years, the Congress has steadily increased the exemption amount for the AMT, but that amount falls from $46,700 (for individuals) and $70,950 (for couples) in the 2009 tax year to $33,750 and $45,000, respectively, in 2010. Other expiring provisions include the temporary expansion in the child tax credit, the Hope credit for certain expenses for higher education, and the credit for first-time home buyers.

All told, the expiration of those provisions will increase tax revenue (and correspondingly decrease disposable personal income) by about $300 billion, or 2.7 percent, in 2011. The expiring provisions in EGTRRA and JGTRRA account for roughly half of that amount, the AMT change for about $60 billion, and the expiration of the Making Work Pay credit for roughly $50 billion. Other expiring provisions account for the remainder.[2]

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1. The AMT is an alternative tax originally intended to impose taxes on high-income individuals who use tax preferences to greatly reduce or eliminate their liability under the regular income tax.

2. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2009), Box 2-2.

The Outlook for a Slow Recovery

In its most recent economic forecast, issued in August 2009, CBO projected a modest turnaround in economic activity in the second half of that year.[5] Contributing to that outlook were the growing fiscal stimulus from ARRA, improving conditions in financial markets, slower declines in residential and business investment, and a slower pace of inventory reductions. The economy now appears to have begun the anticipated recovery. According to the Bureau of Economic Analysis, real GDP rose at an annual rate of 2.2 percent in the third quarter of 2009,

the first increase since the second quarter of 2008. Industrial production grew at an average monthly rate of about 0.7 percent between July and November.

Deep recessions can be followed by steep recoveries, driven by firms' decisions to stop liquidating inventories and to replace capital equipment when demand stops falling. However, several factors suggest that this recovery will be weaker than usual: Fiscal and monetary policy will not be providing the same boost to economic growth that they often have during the early stages of recoveries; financial and housing markets remain fragile; and consumers may want to rebuild their savings after large losses in stock and housing wealth. In addition, improvements in employment will probably lag well behind growth in

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5. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2009). CBO will issue a new forecast later this month.

demand and production, in part because that growth is expected to be slow.

Credit Markets

Even though credit markets have substantially improved since mid-2009, credit has remained tight for borrowers who have lower credit ratings. Several factors help explain the reluctance of banks to lend. After a period of significant distrust of the health of their institutional counterparts, some banks are holding a larger amount of liquid assets than before. Loan losses remain high, with the performance of bank loans continuing to deteriorate through the third quarter of 2009; that pattern makes banks cautious about taking more risks. The private securitization market for residential mortgages that was providing financing for borrowers with lower credit ratings is far from being restored, mainly because private investors lack confidence in that market.

The foreclosure rate on houses remains high, and foreclosures are spreading to parts of the housing market that previously were less affected. Foreclosure starts for prime fixed-rate mortgages, in particular, increased rapidly between early last year and the third quarter (the latest available data). Most economists expect foreclosures to rise further in 2010, which could have a negative impact on home prices and thus (because of the reduction in wealth) on consumer spending.

Consumer Spending

Large losses of wealth in the stock and housing markets, tight borrowing conditions, and weak income growth have held down consumer spending. Although the Standard and Poor's (S&P) 500 stock market index is up by more than 50 percent since its low point in March 2009, it is still about 30 percent below its high point in October 2007. Average house prices have also turned back up: The Federal Housing Finance Agency (FHFA) Index (derived from data on conforming mortgages obtained from Fannie Mae and Freddie Mac) has stabilized since the beginning of 2009, and the S&P/Case-Shiller Index (derived from data on conforming and nonconforming mortgages obtained from county assessors and recorders) rose at an annual rate of almost 8 percent during both the second and third quarters of 2009.[6] In the third quarter, how-

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6. Conforming mortgages are loans that have a dollar amount below the limit that Fannie Mae and Freddie Mac are allowed to purchase and terms and conditions that meet the funding criteria of Fannie Mae and Freddie Mac.

ever, those indexes were still about 10 percent (FHFA) and 30 percent (S&P/Case-Shiller) below their peak values reached in 2007 and 2006, respectively. Those losses of wealth encourage households to increase their saving and rebuild their wealth; in addition, the reduction in housing equity reduces the opportunities of some households to borrow money to facilitate spending.

Saving might also be boosted by consumers who view the losses in wealth and jobs in the past few years as signaling a riskier economic environment than they had previously expected and therefore decide to do more precautionary saving. The personal saving rate has increased from about 2.0 percent of disposable income in 2007 to 4.5 percent in the third quarter of 2009. Combined with slow growth in disposable income, the rise in saving has sharply reduced consumption spending below its previous trend. At the end of 2009, real consumption spending was still 1.2 percent below what it had been at the end of 2007, when the recession began; had real consumption spending instead continued to increase at its average growth rate during the preceding six years, it would have grown cumulatively by about 6.0 percent from 2007 to 2009.

Employment and Unemployment

Although output began to rebound during the second half of 2009, the unemployment rate continued to rise, reaching 10.0 percent in December, and payroll employment has not yet shown significant growth. (For the effects of the recession on unemployment, see Box 3.) Conditions in the labor market deteriorated less rapidly during the second half of 2009 than in the preceding year and a half, but a sustained turnaround in the unemployment rate and a recovery in employment are clearly lagging behind the recovery in production and output. New claims for unemployment insurance have fallen substantially since early 2009, but they remain well above prerecession levels. At the same time, hiring rates are still very low, with only weak signals pointing to imminent improvement.

That pattern is typical of recent recessions, in which the unemployment rate continued to rise and employment continued to fall for 6 to 12 months after real GDP began to grow. Hiring usually lags behind output during the initial stages of a recovery because firms tend to increase output first by boosting productivity and by raising the number of hours existing employees work; adding to payrolls tends to occur somewhat later. Indeed, productivity in the nonfarm business sector surged at an

Box 3.

## Effects of the Recession on Unemployment

The unemployment rate has risen almost continuously since December 2007. It climbed to 10.1 percent in October 2009 and stood at 10.0 percent in December 2009. At the beginning of the recession, only 4 states had an unemployment rate at 6 percent or above. In November 2009, that number increased to 48; in 15 states the rate was above 10 percent, and the highest rate was 14.7 percent (see the figure on the right).

In the recent recession, those who have been hit especially hard include men, younger workers, and less educated workers. The unemployment rate for men age 20 or older rose from 4 percent in the fourth quarter of 2007 to 10 percent in the fourth quarter of 2009; the rate for women, also 4 percent in late 2007, rose less—to 8 percent. Unemployment among workers between ages 20 and 24 rose from 9 percent in late 2007 to 16 percent in the fourth quarter of 2009. During the same period, the unemployment rate for workers age 25 or older who had less than a high school diploma rose from 8 percent to 15 percent.

The long duration of this recession has sharply increased the number of discouraged and part-time workers. An alternative measure of unemployment that accounts for "marginally attached" workers (people who say they have given up looking for work) and for part-time workers who would prefer full-time employment rose from 9 percent in December 2007 to 17 percent in December 2009.[1]

Distribution of States, by State Unemployment Rates

(Number of states)
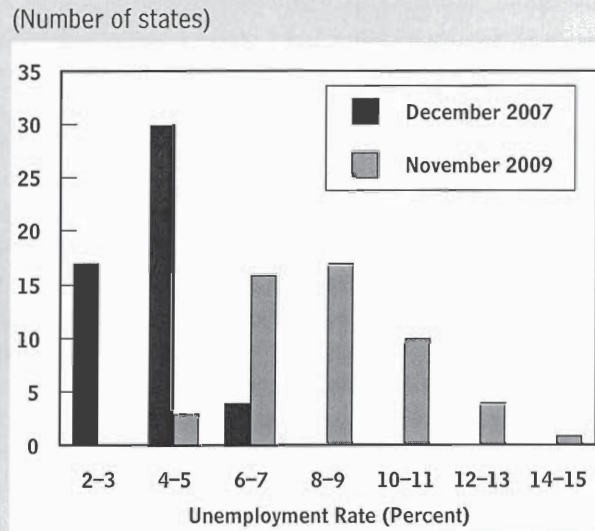
Source: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

The recession has also had dramatic effects on the flows of workers through the job market. In an average month in 2007, about 5.3 million people were hired and 5.2 million people left their jobs (separations by quitting, retiring, being fired, or changing jobs). The net effect of those huge flows was an increase in employment each month of about 100,000. By the third quarter of 2009, the average monthly number of hires and separations had fallen to 4.1 million and about 4.3 million, respectively; those smaller but still very large flows resulted in a net decline in employment that averaged about 240,000 each month. Separations declined despite an increase in layoffs and discharges because the number of people quitting their jobs declined dramatically.

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1.   Department of Labor, Bureau of Labor Statistics, Table A-12, Alternative Measures of Labor Underutilization, measure U-6. The data are available from 1994. Marginally attached workers are individuals who currently are not working and are not looking for work but indicate that they want and are available for a job and have looked for work sometime in the recent past. Individuals employed part time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule.
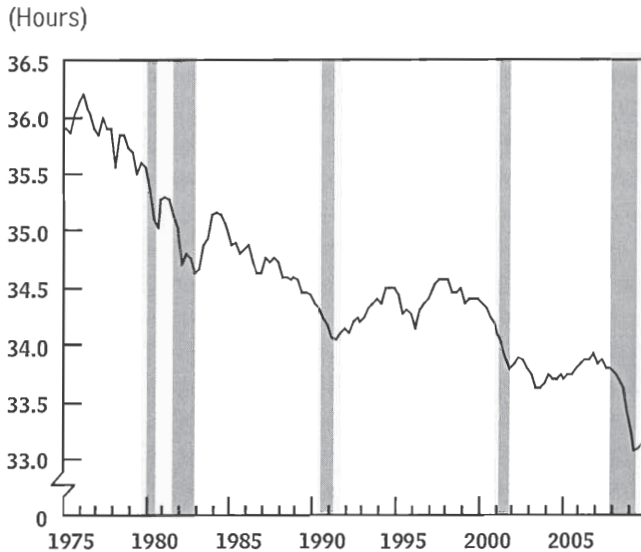
Figure 2.

Average Weekly Hours Worked in Private Industries

(Hours)

Source: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: Data are quarterly and are plotted through the fourth quarter of 2009.

The shaded bars indicate the duration of recessions. The National Bureau of Economic Research establishes the dates on which recessions begin and end but has not yet done so for the end of the most recent recession, which is shown as having ended in the second quarter of 2009.

annual rate of about 7½ percent during the second and third quarters and appears to have grown rapidly in the fourth quarter as well. Moreover, the unemployment rate generally lags further behind the turning point in output because the number of people seeking work early in a recovery tends to rebound faster than employment. Like the consensus in the most recent *Blue Chip* survey (comprising about 50 private-sector forecasts), CBO envisions only a gradual recovery in employment and other measures of the labor market. Several factors are important to this outlook.

First, and most important, output is expected to grow fairly slowly. Following the two previous most severe recessions in the postwar period—1973–1975 and 1981–1982—employment recovered much more rapidly than CBO and others currently expect. But those recoveries featured much faster growth in output than is now anticipated, with real GDP growing by 6.2 percent in the four quarters following the 1973–1975 recession and by

7.8 percent in the same period following the 1981–1982 recession. In contrast, employment changed little during the four quarters following the 1990–1991 recession, when real GDP rose by 2.6 percent; and employment fell by more than one million in the six quarters following the 2001 recession, when real GDP grew at an average annual rate of 2.1 percent. In CBO's August update, real GDP was projected to increase by an average annual rate of a little more than 3 percent from the fourth quarter of 2009 to the fourth quarter of 2011.

Second, average weekly hours worked in private industries fell sharply during the recession to a level well below their long-term downward trend (see Figure 2). Restoring hours of existing employees is one way that employers can increase labor input without having to bear the fixed costs of hiring new workers. Although average weekly hours worked increased in late 2009, they remain below the long-term trend, suggesting that many firms will increase workers' hours before doing new hiring on a large scale.

Third, the movement of unemployed workers into new jobs will probably be more difficult in this recovery than in past ones. Recessions often accelerate the demise or shrinkage of less efficient and less profitable firms, especially those in declining industries and sectors. Thus, the share of unemployed workers whose previous job is permanently lost tends to rise during recessions; the rise has been especially pronounced during the past two years (see Figure 3). At the same time, workers on temporary layoff represent a smaller percentage of the unemployed than they did in past recessions.

As a result, gains in employment after this recession will probably rely more than usual on the creation of new jobs, possibly in new firms that are located in different places and require workers with different skills than those needed in the jobs that have disappeared. For workers who have lost jobs because of a permanent layoff, the process of acquiring new skills can take time. (In contrast, it is easier for workers who have been laid off temporarily to return to their jobs because the employers already know the workers and the workers already have the right skills and are familiar with the work practices at the job.) For workers who need to move to different geographic regions to find new jobs, the sharp declines in home prices during this recession, combined with the high loan-to-value ratios on many mortgages before the downturn, will hinder relocation. With a significant share of

Figure 3.

People Who Have Lost Jobs as a Percentage of the Unemployed

(Percent)
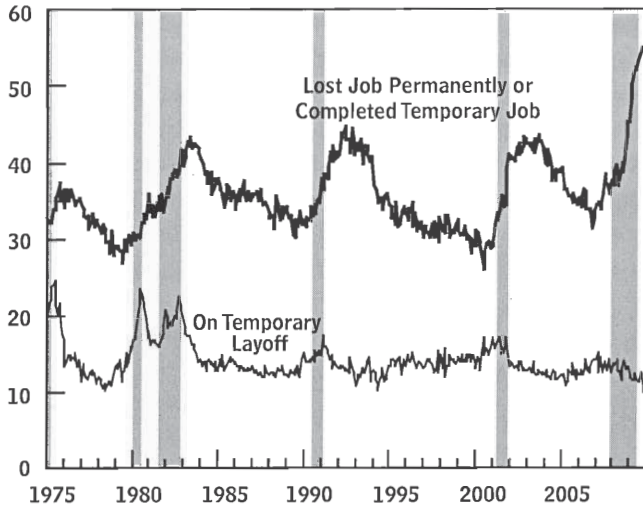
Source: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: Data are monthly and are plotted through December 2009.

The shaded bars indicate the duration of recessions. The National Bureau of Economic Research establishes the dates on which recessions begin and end but has not yet done so for the end of the most recent recession, which is shown as having ended in the second quarter of 2009.

The data do not add up to 100 percent of the unemployed because that group also includes people who quit their job, entered the labor force for the first time, or returned to the labor force after some period of absence.

homeowners now owing more on their mortgages than their homes are worth, many people may not be able to sell their house for enough money to enable them to buy one in a new area.

Finally, the labor force is expected to grow at a faster-than-normal rate, which will slow the pace of decline in the unemployment rate. During the recession, many workers were discouraged from looking for a job; when they stopped actively seeking work, they were no longer counted as part of the labor force. When they again actively seek work, they will be counted among the unemployed. Following the pattern of past recessions, those workers will probably return to the labor force as economic conditions improve, partially offsetting the improving conditions and slowing the decrease in the unemployment rate.

Although all of those factors suggest that the pace of the recovery in employment is likely to be slow during the next few years, several indicators hint that hiring conditions may improve in the near future. Employment in temporary help services, a leading indicator for the labor market, experienced large gains in late 2009. Moreover, as GDP growth resumed in midyear, the increase in output was achieved by increased productivity rather than increased employment. Although such a surge in productivity is quite typical around the end of a recession and in the early stage of a recovery, in the past such surges have not lasted more than a few quarters. Consequently, the pace of productivity growth will probably slow significantly in 2010, and as long as economic activity continues to grow at even a modest pace, some new hiring can be anticipated.

Economists generally count recoveries in output or employment from the point at which their growth rates turn positive. Such a turning point, however, is only the beginning of a recovery. After a recession, output and employment must grow at above-trend rates to catch up to the levels they would have reached in the absence of the recession. For a recession as deep as the most recent one, that process will probably take a number of years.

Principles for Increasing Economic Growth and Employment in 2010 and 2011

Even without any additional policy action, market forces—acting in concert with monetary and fiscal policy actions that have already been taken but whose effects have not yet been fully felt—would bring the economy back to potential output and full use of resources in several years. In the meantime, however, many workers would remain or would become unemployed, and much capacity of equipment and buildings would be unused. Idle workers and factories represent a waste of the economy's ability to produce goods and services, and that production cannot be made up later. Additional policy actions, if well designed, could hasten the economy's recovery and reduce the loss of output and raise employment during the next few years. However, designing an effective policy is challenging, and policies that provide economic benefits during the next few years may impose economic costs over the longer run.

In normal economic times, economists tend to emphasize the long-term benefits of saving relative to spending. The more that households, firms, and governments save, the more that can be invested in productive capital, increasing the economy's capacity to produce in the future. When existing capital and labor resources are unused, however, increased private and public spending would employ those resources and raise the economy's current production.[7] Fiscal policies that promote long-term economic growth may have little short-term effect on spending, especially if they take a long time to implement. Yet, policies that boost demand for goods and services in the short term tend to increase budget deficits and government debt, which reduces capital and thus slows economic growth in the long term.

Economists generally recommend that fiscal policy intended to boost demand in the short term be timely—providing help when it is needed most; cost-effective—providing the most additional output and employment per dollar cost to the federal budget; and consistent with long-run fiscal objectives—preventing the short-term deficit increase that results from stimulative policy, which adds excessively to federal debt in the long run.[8] Other considerations include uncertainty about a policy's effectiveness, the distribution of benefits among different people, and the value of additional goods and services that would be produced.

Timing

Policies differ greatly in how quickly they can be implemented, and some measures might take effect too slowly, in two respects. First, they might miss the period of greatest need in terms of both unemployment and unused capacity. Second, they might persist while the amount of unemployment and excess capacity drops into a range

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7. One channel through which fiscal policies may spur spending is by reducing uncertainty. After a recession, many firms may remain uncertain about the prospect of recovery and may be cautious about increasing their investment and hiring until solid and persistent signs of recovery appear. Policy actions that boost demand might help dissipate that uncertainty and increase employment. See Nicholas Bloom, "The Impact of Uncertainty Shocks," *Econometrica*, vol. 77, no. 3 (May, 2009), pp. 623–685.

8. Congressional Budget Office, *Options for Responding to Short-Term Economic Weakness* (January 2008); and Congressional Budget Office, *State of the Economy and Issues in Developing an Effective Policy Response*, testimony by Douglas W. Elmendorf, Director, before the House Committee on the Budget (January 27, 2009).

where the risk of pushing up inflation could be more significant.

Current law implies significant fiscal restraint in 2010 and 2011 as a result of declining stimulus from ARRA, the scheduled expiration of the tax cuts in EGGTRA and JGTRRA, and the increase in the exemption amounts for the AMT. Because of that restraint and the other factors cited above that make a slow recovery likely, CBO projects that the unemployment rate will not drop below 8 percent until 2012; even at that level, it will be about three percentage points above CBO's estimate of the rate that can be reached in good times without causing inflation. That projection is, however, quite uncertain, and the recovery could prove to be much stronger or weaker than expected. Additional actions to promote growth in output and jobs could offset some of the expected factors slowing growth and provide some insurance against downside risks.

Fiscal actions to promote growth run some risk of raising inflationary pressures, but that risk seems low over the next two years. Inflation is currently very low: CBO expects that the core price index for personal consumption expenditures (that is, excluding the prices of food and energy) and the price index for personal consumption expenditures increased less than 2 percent and less than half of a percent, respectively, in 2009. More important, given the substantial slack that currently exists in the use of capital and labor, and the expectation of a slow initial recovery, CBO expects that low inflation will persist for some time; there is even a risk of deflation.

Thus, additional policy actions that had their greatest impact during the next few years would affect the economy when its output will probably be well below its potential, the risk of greater weakness remains elevated, and the risk of excessive inflation appears to be low. In 2012 and beyond, however, the economy is expected to grow more strongly. Consequently, stimulus measures that lasted for a sustained period or became permanent could risk raising inflation in the later stages of the recovery.

Furthermore, CBO's expectation of a slow recovery in economic activity and persistent low inflation may turn out to be wrong. Even though the majority of forecasters expect a slow return to normal economic conditions, the uncertainty surrounding the economic outlook remains great. Large disturbances that produce sharp recessions

are sometimes followed by rapid recoveries.[9] For example, following the deep recession of 1981–1982, real GDP grew at an average annual rate of 7.8 percent between the first quarter of 1983 and the second quarter of 1984. Perhaps economic forecasters are placing too much weight in their current forecasts on the poor economic performance of the past few years and not enough weight on the natural resilience of the U.S. economy. Moreover, even if economic activity recovers only slowly, inflation might increase more quickly.

Those concerns do not mean that inflation will necessarily rise: The Federal Reserve appears to have enough tools at its disposal to keep prices stable despite the tremendous amount of liquidity provided during the past couple of years. However, in using those tools, the Federal Reserve is likely to counteract efforts by fiscal policy to promote growth if it viewed those efforts as raising the risk of significantly higher inflation (see Box 4). Thus, fiscal policies that increase demand for goods and services too slowly would have their largest effects at a time when the need is less acute and when the Federal Reserve is more likely to take actions that diminish those effects.

One possible solution to the timing problem is to build "triggers" into new measures. A program could have an expiration date tied to some macroeconomic statistics; for example, whether a payroll tax reduction would continue in effect could depend on whether the unemployment rate was below a certain level.

Cost-Effectiveness

Aside from differences in the speed of implementation, possible policy measures also differ in the magnitude of their effects—that is, how much they boost spending by households, businesses, and governments per dollar of budgetary cost (federal spending or tax reductions). Cost-effectiveness can be assessed by the cumulative dollar effect on output and employment per dollar of budgetary cost.

Households. Tax cuts and government transfers to individuals increase households' disposable income. The cost-effectiveness of such policies depends on the fraction of the additional income that is spent on purchasing goods and services. Measures targeting households facing finan-

cial problems, such as those who have low income or unemployed members, tend to have larger impacts on spending and thus are more cost-effective. By contrast, measures that are less well targeted, such as across-the-board reductions in income tax rates or broad tax rebates, would provide large parts of their relief to people who are not financially constrained. Such people are likely to save much of a tax reduction, especially if it is temporary. In that case, the policy would be much less cost-effective.

Businesses. Some policies seek to encourage business spending by providing incentives for new investment, such as allowing firms to "expense" their investment costs for tax purposes—that is, to deduct the cost of an investment in the year it is made. Those policies increase firms' after-tax return on investment by reducing the present value of taxes, and they increase firms' cash flow for the year in which the new investment is made. The success of such incentives in encouraging spending depends on the economic conditions when the incentives are in effect: A reduction in the cost of capital will generally not cause a business to buy new machinery if demand for the business's output is so low that the machinery would stand idle. Several studies suggest that the impact of being able to expense investment costs in the early 2000s, when demand was depressed (though not nearly as weak as it is now), was modest.[10]

Other policies encourage hiring by temporarily or permanently reducing the cost of labor. The cost-effectiveness of those policies depends on firms' responses to the tax benefits received: whether they pass the benefits to customers in the form of lower prices, to employees in the form of higher wages, or implicitly to shareholders by retaining them as profits—and the extent to which they increase employment and hours during a period when it is temporarily less expensive.

Government. The federal government can boost demand by increasing its own purchases of goods and services or by providing funds to state and local governments to increase their purchases of goods and services. How fast significant sums of money could be wisely spent, however, is unclear. In general, large increases in funding tend to be spent more slowly. Also, many public infrastructure

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9. Nicholas Bloom, Steven Bond, and John Van Reenen, "Uncertainty and Investment Dynamics," *Review of Economic Studies* (2007), pp. 391-415.

10. For a summary of the literature on the effects of partial expensing and bonus depreciation in the early 2000s, see Congressional Budget Office, *Options for Responding to Short-Term Economic Weakness*.

projects, which require coordination among different levels of government, take a long time to implement. Such projects can be cost-effective in terms of the number of jobs generated per dollar of budgetary cost because they involve direct purchases of goods and the hiring of workers, but only a small share of the full effect is likely to be felt in the first two years after a proposal becomes law.

Federal grants to state and local governments can contribute to national economic growth—and aid people in the jurisdictions that receive the funds—by reducing the need for those governments to cut spending or raise taxes to narrow their budget shortfalls. Analysts expect those shortfalls to be very large in the next few years. For fiscal year 2010, 18 states are projected to have budget gaps (projected revenue shortfalls as a percentage of general fund expenditures) that exceed 20 percent, and 3 have gaps exceeding 40 percent (see Figure 4).[11] Aid would be less effective in increasing employment if it simply allowed jurisdictions to borrow less. However, in the current economic environment, most states have already borrowed as much as they can under their own budget rules and will probably remain up against those limits during the next few years.

Consistency with Long-Run Fiscal Objectives

Spending increases and tax cuts raise budget deficits in the short term. Because government debt tends to "crowd out" capital, higher deficits, if persistent, slow economic growth in the long term. Given the large projected fiscal imbalance in the medium and long run under current laws and policies, new fiscal actions best meet the nation's long-run fiscal needs if they avoid enlarging the long-term fiscal gap.[12] To achieve that goal, near-term increases in government spending or reductions in taxes would need to be followed by offsetting reductions in spending or increases in taxes after the economy recovers.

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11. Calculation based on data from Pew Center for the States, *Beyond California, States in Fiscal Peril* (Washington, D.C.: Pew Charitable Trusts, November 2009).

12. Congressional Budget Office, *The Long-Term Budget Outlook* (June 2009).

The federal government recorded a total budget deficit of $1.4 trillion in fiscal year 2009. That amount equaled 10 percent of GDP—the largest shortfall relative to the size of the economy since 1945. Outlays increased by nearly $540 billion in 2009, and about 65 percent of that growth was associated with the efforts to rescue financial markets and support the economy. Federal deficits are expected to remain high in fiscal years 2010 and 2011, and the debt held by the public is likely to continue to rise as a percentage of GDP. In its August budget outlook report, CBO projected that federal debt held by the public would reach 66 percent of GDP by the end of fiscal year 2012, up from 37 percent at the end of 2007. If current policies and laws are kept in place, the debt held by the public will continue to accumulate rapidly after 2012; coupled with rising interest rates as recovery progresses, net interest payments will roughly triple (relative to the size of the economy) over the next 10 years, according to CBO's August 2009 projections. If new stimulative measures are adopted but are not accompanied by offsetting fiscal policy to reduce deficits later, the negative impact of budget deficits will be even greater.

Other Considerations

Other considerations also are relevant for decisions about new policies to promote economic growth and employment. One involves determining who would be helped the most by the new policies. In addition to the potential overall effect of higher demand, different sorts of spending increases and tax reductions would provide direct benefits to different people and firms. Such distributional considerations may play an important role in policymaking, although the distributional effects of alternative policies are not analyzed in this paper.

Another consideration involves the types of additional goods and services that society would produce and from which it would enjoy benefits. When designing government spending programs, it clearly makes more sense to accomplish something intrinsically desirable. Paraphrasing the economist John Maynard Keynes, hiring unemployed workers to dig holes and then fill them up would generate jobs and provide income to people currently unemployed; however, it would not generate a useful

Box 4.

CBO's Modeling Approach

The analysis of each policy option presented in this paper focuses on how it affects output and employment. For each option, the Congressional Budget Office (CBO) used evidence from empirical studies and econometric models to estimate the impact on:

■ Output—the cumulative effects on gross domestic product (GDP) per dollar of total budgetary cost (additional government spending or reduction in taxes), and

■ Employment—the cumulative effects on years of full-time-equivalent employment (FTE-years) per million dollars of total budgetary cost.

The approach adopted to measure a policy's effect on output is similar to the method CBO previously used to assess the effect of the American Recovery and Reinvestment Act (ARRA, Public Law 111-5).[1]

Estimated impacts include the direct and indirect effects on the nation's output of a dollar's worth of a given policy. Direct effects consist of immediate (or first-round) effects on economic activity. For example, government purchases of goods and services directly elicit economic activity and thereby have a direct dollar-for-dollar impact on output. Indirect effects are the second-round effects, which may enhance or offset the direct effects. For example, if the economy has idle resources, as it does now, government funding for projects can lead to the hiring of otherwise unemployed workers. The additional spending by those workers, who now would have more income, would constitute a positive indirect effect. In contrast, a substantial increase in government spending tends to drive up interest rates, which discourages spending on investment and on durable goods by raising the cost of borrowed funds. Those indirect crowding-out effects would offset some of

the direct effect. Low and high estimates of multipliers for a given policy were chosen, on a judgmental basis, to encompass most economists' views about the effects of that type of policy.

To assess a policy's impact on employment, CBO used a series of steps to translate the estimated effects on output into estimated effects on FTE-years. First, CBO calculated the impact on the output gap—the percentage difference between actual output and potential output (the amount that the economy is capable of producing given its labor supply, capital stock, and technology). Next, CBO calculated the magnitude and timing of effects of changes in the output gap on productivity, hours per worker, and the unemployment rate using the historical relationships between the measures. Changes in the output gap initially have the largest effects on productivity; they affect hours per worker and unemployment gradually over several quarters. CBO also took account of the effect of changes in the unemployment rate on the labor force, since discouraged workers and people who have chosen to pursue activities such as schooling rather than work tend to return to the labor force when unemployment declines and the economic environment improves.

For policy options that would reduce labor costs and provide direct incentives for increasing employment and hours worked, CBO also accounted for firms' possible reactions, which would probably take several forms. Some firms would use additional labor to enhance the quality of products and services in ways not reflected in GDP. Some would use additional labor to increase maintenance of existing plants and equipment (such as doing preventive maintenance work on motor vehicles), which would make plants and equipment last longer and delay the need to invest in replacements. Depending on the type of products they made, some firms would also increase their use of labor that was temporarily less expensive while the policy was in effect and reduce their use of labor later. Last, some firms would hire a little sooner to cover anticipated increases in their labor needs.

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1. For the methodology to assess the economic effects of ARRA and the range of multipliers used for each policy category, see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output as of September 2009* (November 2009).

Box 4.   **Continued**

CBO's Modeling Approach

Measuring employment impacts in FTE-years, defined as 40 hours of employment per week for one year, incorporated the effects of policies on hours worked in addition to their impact on the number of people who would be employed. Increases in the number of employed people at a point in time, as estimated for ARRA, do not include shifts from part-time to full-time work or overtime and are generally somewhat smaller than increases in FTE-years.

Monetary policy is also modeled somewhat differently in this analysis than in CBO's earlier analyses of the impact of ARRA. When estimating ARRA's effects, CBO assumed that the Federal Reserve would not reduce the amount of stimulus it was providing with its own policy levers (such as low interest rates and its efforts to increase liquidity by other means) to offset the output growth caused by ARRA. That assumption rested on the assessment that the economic outlook was sufficiently worrisome that the Federal Reserve was trying to provide a great deal of stimulus and would have welcomed additional stimulus from fiscal policy. When analyzing fiscal policy actions in this paper, however, CBO assumed that as the recovery progressed, the Federal Reserve would see less need to provide monetary stimulus. Under CBO's macroeconomic forecast, that assumption implies that at the end of 2011 the Federal Reserve would gradually begin to offset fiscal policy actions by raising interest rates (or engaging in other actions to tighten monetary policy) in order to reduce the risk of excessive inflation. As a result, a fiscal policy action that had an initially positive impact on output in 2010 or 2011 would have a smaller negative effect later. Applying that methodology to ARRA implies that ARRA will have a small negative effect in 2013, because the positive effect of additional spending occurring in that year is slightly outweighed

Estimated Effects of ARRA on Real GDP

(Billions of dollars)
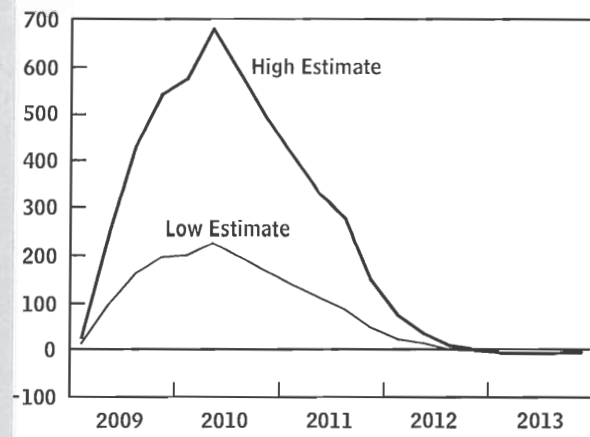
Source: Congressional Budget Office.

by the negative effect of tighter monetary policy stemming from the boost to output in 2012 (see the figure).

Another difference between this analysis and the analysis done for ARRA is that, instead of reporting a policy's multiplier or impact at a point in time, this analysis focuses on cumulative changes over specific time periods. Effects on output were measured as the cumulative effects between 2010 and 2015. Effects on employment (in terms of FTE-years for each calendar quarter) were added together to estimate cumulative effects over three time periods: 2010, 2010 and 2011, and 2010 through 2015. Because reactions of the Federal Reserve are anticipated to begin by the end of 2011, the effects of some policies on output and employment in some periods after 2011 were estimated to be negative. As a result, for some policies the cumulative effects in FTE-years from 2010 to 2015 are smaller than the effect in 2010 and 2011.

Figure 4.

State Budget Gaps, Fiscal Year 2010

Percentage of General Fund Expenditures

0 to 9	10 to 14	15 to 19	20 to 24	25 to 49
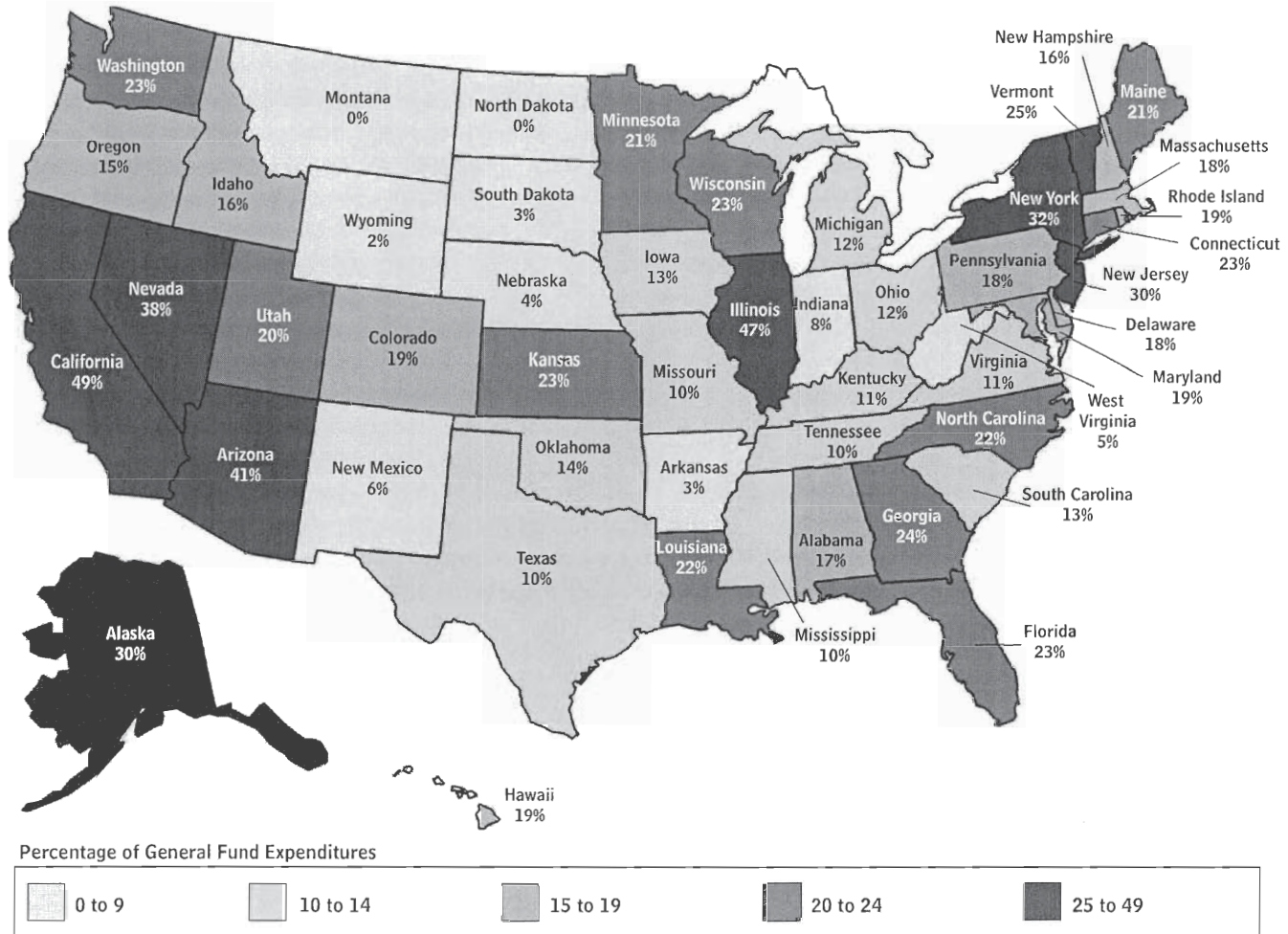
Source: Congressional Budget Office based on data from Pew Center for the States, *Beyond California: States in Fiscal Peril* (Washington, D.C.: Pew Charitable Trusts, November 2009).

Note: A state's budget gap is the difference between its expenditures and revenues expressed as a percentage of the general fund expenditures for that state.

product for society. Fiscal policies can be judged not only on their contribution to growth and job creation but also on the extent to which they accomplish other goals.

A third consideration involves the combination of policies that might be chosen. Most economists agree that fiscal policies can boost demand and help smooth business cycles, at least in the short run. However, some economists are skeptical about the efficacy of such policies and the magnitude of their effects. One benefit of a diversified portfolio of policies is that the overall effect of policy on the economy would be less uncertain than with a

single policy. Moreover, the benefits of such a portfolio of policies might spread more widely among different groups in the population and thus accomplish a larger variety of goals.

Assessing Policy Options for Increasing Economic Growth and Employment

CBO has assessed the potential of a variety of fiscal policy options for promoting economic growth and increasing employment. Some options are similar to measures

included in H.R. 2847, which was passed by the House of Representatives on December 16, 2009.[13]

The different policy options would work somewhat differently depending on whether they seek to support spending by households, businesses, or governments. Policy options aimed at assisting households would spur demand for goods and services to varying degrees and thereby boost production to varying degrees. Because businesses' decisions on investing and hiring depend on the demand for their products, higher demand and production would lead to more investment and hiring. The size of those effects would depend largely on which households got the money. Policies that would temporarily increase the after-tax income of people who are relatively well off would probably have little effect on their spending because they would be able to consume out of their income or assets. However, policies that increased the resources of families with lower income, few assets, and poor credit would probably have a larger impact on consumption spending. Because of the extent of job losses and declines in asset prices in this recession, more families probably fit those descriptions now than was the case in the immediate aftermath of many previous recessions. Policy options that support businesses would operate somewhat differently. Certain policies would reduce labor costs or the cost of investment, which would spur hiring and investment and in turn increase production and household income. The rise in income would support consumer demand and increase production by other firms. Additional government spending would also boost output and employment, both directly through the government-funded activity and indirectly through increases in consumer demand for goods and services resulting from higher income of the households and firms that directly benefit from the government activity.

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13. H.R. 2847 would extend the date to qualify for additional weeks of unemployment benefits to June 2010, extend the duration of assistance with paying the health insurance premiums of individuals who lose jobs by the end of June 2010, remove the earned income requirement for the child tax credit in 2010, authorize more funding for infrastructure and other spending programs, and provide additional aid to states. CBO and the staff of the Joint Committee on Taxation estimate that the budgetary cost of H.R. 2847 will be about $185 billion during the 2010–2019 period, comprising an increase in spending of about $181 billion and a decrease in revenue of about $4 billion.

CBO assessed the effects of various policy options on output and employment (see Table 1). To make that assessment, the agency used an approach that builds on the one it previously used to assess the economic impact of ARRA (for details of the methodology, see Box 4 on page 14). The effect of a policy on output is measured by the cumulative effects on GDP for each dollar of total budgetary cost (that cost equals the additional federal spending or reduction in federal tax revenue). The effect of a policy on employment is measured by the cumulative effects on years of full-time-equivalent employment for each dollar of total budgetary cost (a year of full-time-equivalent employment is 40 hours of employment per week for one year). By focusing on full-time equivalents, the calculations include increases in hours among people in part-time employment and possibly some overtime for full-time employees. To account for uncertainty, the analysis includes both a "low" estimate and a "high" estimate for the effect of each policy. The results cover the effects of policies between 2010 and 2015 but give particular prominence to the effects that will occur in 2010 and 2011, when CBO expects that the economy will still be in the early stages of the recovery. The estimates include the effect of the Federal Reserve gradually beginning to offset fiscal policy actions at the end of 2011 in order to avoid increasing the risk of inflation; as a result, some policies would generate cumulative effects on employment that are lower for 2010 through 2015 than for 2010 through 2011.

For this analysis, policies were assumed to be temporary (that is, to be in effect for specific time periods or for specific dollar amounts), although some of the policies could also be designed to be permanent. The total effect of a policy on economic growth and employment would depend critically on the magnitude of the reduction in taxes or increase in spending that would occur. The largest feasible magnitude of the budgetary change varies across policies, but all of the options considered are sufficiently scalable to allow tens of billions of dollars of spending increases or tax cuts in 2010 and 2011.

Policy Options with a Substantial Proportion of Impacts Beginning in 2010

Among the policy options considered here, those that were estimated to have a substantial proportion of their impacts beginning in 2010 are increasing aid to the

Table 1.

Estimated Effects of Policy Options on Output and Employment

	Cumulative Effects on GDP, 2010–2015[a] (Dollars per dollar of total budgetary cost)		Cumulative Effects on Employment[b] (Years of full-time-equivalent employment per million dollars of total budgetary cost)					
			2010		2010–2011		2010–2015	
	Low	High	Low	High	Low	High	Low	High
Policy Options with a Substantial Proportion of Impacts Beginning in 2010								
Increasing Aid to the Unemployed[c]	0.70	1.90	4	7	8	19	6	15
Reducing Employers' Payroll Taxes	0.40	1.20	3	5	5	13	4	11
Reducing Employers' Payroll Taxes for Firms That Increase Their Payroll	0.40	1.30	5	9	8	18	7	16
Reducing Employees' Payroll Taxes	0.30	0.90	2	4	3	9	2	7
Providing an Additional One-Time Social Security Payment	0.30	0.90	2	6	3	9	2	8
Allowing Full or Partial Expensing of Investment Costs[d]	0.20	1.00	1	3	2	9	1	8
Policy Options with a Substantial Proportion of Impacts Beginning in 2011								
Investing in Infrastructure[e]	0.50	1.20	*	1	2	4	4	10
Providing Aid to States for Purposes Other Than Infrastructure[e]	0.40	1.10	1	1	3	7	3	9
Providing Additional Refundable Tax Credits for Lower- and Middle-Income Households in 2011	0.30	0.90	*	*	3	6	3	7
Extending Higher Exemption Amounts for the Alternative Minimum Tax	0.10	0.40	*	*	1	4	1	4
Reducing Income Taxes in 2011[f]	0.10	0.40	*	*	1	3	1	4

Source: Congressional Budget Office.

Notes: Additional details on each policy option are provided on pages 19–26 of the text.

In estimates of the effects on output and employment, the total budgetary cost is the amount of tax revenue or budget authority over the full duration of the policies' effects unless otherwise specified.

All years are calendar years.

The ranges between low and high estimates are designed to encompass most economists' views.

Unless otherwise specified, spending policy options are assumed to provide budget authority as of April 2010, and tax policy options are assumed to be in effect for 2010 only.

* = between zero and 0.5.

a. Estimated as gross domestic product (GDP) with a policy minus GDP without the policy.

b. Estimated as years of full-time-equivalent employment (FTE-years) with a policy minus FTE-years without the policy. An FTE-year is 40 hours of employment per week for one year. For example, four people working 20 hours per week for six months equals one FTE-year.

c. Spending begins in March 2010, and no benefit payments are made after July 2011.

d. Initial reductions in revenues are nearly fully offset by later increases. The policy's effects are therefore estimated per dollar of the present discounted value of the policy (discounted at the businesses' cost of debt and equity) instead of per dollar of total budgetary cost.

e. Timing of spending from new funding follows historical experience.

f. Includes the effects of extending higher exemption amounts for the alternative minimum tax in 2010.

unemployed, reducing employers' payroll taxes, reducing payroll taxes for firms that increase their payroll, reducing employees' payroll taxes, providing an additional one-time Social Security payment, and allowing full or partial expensing of investment costs.

Increasing Aid to the Unemployed. Under current law, some people who exhaust their unemployment benefits by the end of February 2010 will be eligible for additional weeks of benefits through emergency unemployment compensation (see Box 1 on page 4). People receiving those benefits also are eligible to collect an additional weekly payment of $25; payments for those supplements are scheduled to phase out beginning in March 2010. In addition, under amendments to the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA, Public Law 99-272), the government will pay for 65 percent of health insurance premiums for up to 15 months for individuals whose employment was involuntarily terminated between September 2008 and February 2010. The policy option analyzed by CBO would provide further assistance to the unemployed by extending through December 2010 the benefits that will begin to phase out in March 2010 under current law; under this option, no added benefits would be paid after July 2011.

Extending additional unemployment benefits would directly help those who would otherwise exhaust their unemployment benefits between March and December of this year. Households receiving unemployment benefits tend to spend the additional benefits quickly, making this option both timely and cost-effective in spurring economic activity and employment. A variant of this option would extend assistance with paying health insurance premiums, which would allow some recipients to maintain health insurance coverage they would otherwise have dropped. This variant would result in increased demand for health care services, and it would increase the income available to purchase other goods and services for recipients who would have purchased insurance even without this special assistance. Both policy options could dampen people's efforts to look for work, although that concern is less of a factor when employment opportunities are expected to be limited for some time.

CBO estimates that the policies would raise output cumulatively between 2010 and 2015 by $0.70 to $1.90 per dollar of total budgetary cost. CBO also estimates

that the policies would add 8 to 19 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Reducing Employers' Payroll Taxes. Social Security, which consists of Old-Age, Survivors, and Disability Insurance, is financed by payroll taxes. Under current law, both employers and employees pay 6.2 percent of an employee's annual earnings up to a ceiling that is adjusted for wage growth and equals $106,800 in 2010. CBO analyzed an option that would reduce employers' payroll taxes for 2010.

Firms would probably respond to this temporary reduction in their portion of the payroll tax through a combination of four channels. First, some firms would respond to lower employment costs by reducing the prices they charge in order to sell more goods or services. Those higher sales would in turn spur production, which would then increase hours worked and hiring. Second, some firms would pass the tax savings on to employees in the form of higher wages or other forms of compensation, which in turn encourage more spending by those employees. However, wages tend to be inflexible in the short run because of negotiation and administrative costs, so that response is not likely to be very large. Third, some firms would retain the tax savings as profits. Higher profits would raise companies' stock prices, and the resulting higher household wealth would encourage more consumption, although shareholders are likely to spend only a small portion of their gains. Higher profits would also improve cash flow, enabling firms facing borrowing constraints to buy new equipment. Fourth, some firms would use slightly more labor during a period when it was temporarily less expensive. However, most of the money forgone by the government would go to reduce taxes for existing workers, so—per dollar of forgone revenue—the added incentive to increase employment and hours worked would be small. (For discussion of CBO's modeling approach for the effects of reduced labor costs, see Box 4 on page 14.)

CBO estimates that reducing employers' payroll taxes would raise output cumulatively between 2010 and 2015 by $0.40 to $1.20 per dollar of total budgetary cost. CBO also estimates that the policy would add 5 to 13 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Box 5.

The New Jobs Tax Credit in 1977 and 1978

In response to the slow recovery in the labor market after the recession of 1973–1975, the New Jobs Tax Credit was created to encourage the hiring of additional workers. Under the program, firms that increased total employment by at least 2 percent received a credit corresponding to half the increase in their FUTA (Federal Unemployment Tax Act) wage base above 102 percent of the previous year's base. The maximum credit was $2,100 per worker (about $7,000 in 2009 dollars). The total credits for a firm were capped at the lesser of 25 percent of the covered wage bill or $100,000. Those restrictions were meant to reduce the per-worker credit for new firms and large firms. Also, the credit could not be more than half the difference between the current year's total wage bill and 105 percent of the previous year's wage bill. That restriction was intended to discourage firms from firing their current full-time workers and replacing them with twice as many part-time workers.

The complexity of the New Jobs Tax Credit may have discouraged some firms, especially small ones, from using the credit when making hiring decisions. A survey in 1978 by the Bureau of the Census showed that about one-quarter of firms who knew about the credit did not know whether they qualified. Data from tax returns also indicated that small firms were much less likely to participate in the program than were large firms. The participation rate among eligible firms was less than 2 percent for firms with total receipts below $25,000 in 1977 and more than 80 percent for those with total receipts above $100 million.[1]

Assessments of the program's impact are inconclusive. At its peak, the program directly subsidized about 2.1 million new workers, but the net number of jobs induced is unclear. One study using data from a survey by the Bureau of the Census indicated that firms that knew about the program hired 3 percent more workers than did firms that reported not knowing about it, but only 6 percent of the firms who knew about the credit said that it had prompted them to hire more workers.[2] Another study using the same survey data concluded that the program was responsible for a significant share of the increase in employment in the construction and distribution industries between mid-1977 and mid-1978.[3] However, those gains in employment may have been offset by losses in other firms and industries. A report by the Departments of Labor and the Treasury later argued that the two studies could not determine whether the New Jobs Tax Credit increased aggregate employment, because it is impossible to observe what hiring would have been without the credit.[4]

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1. Department of Labor and Department of the Treasury, *The Use of Tax Subsidies for Employment: A Report to Congress* (May 1986).

2. Jeffrey M. Perloff and Michael L. Wachter, "The New Jobs Tax Credit: An Evaluation of the 1977–78 Wage Subsidy Program," *American Economic Review Papers and Proceedings*, vol. 69, no. 2 (1979), pp. 173–179.

3. John Bishop, "Employment in Construction and Distribution Industries: The Impact of the New Jobs Tax Credit," in Sherwin Rosen, ed., *Studies in Labor Markets* (Cambridge, Mass.: National Bureau of Economic Research, 1981), pp. 209–246.

4. Department of Labor and Department of the Treasury, *The Use of Tax Subsidies for Employment.*

Reducing Employers' Payroll Taxes for Firms That Increase Their Payroll. In the late 1970s, the New Jobs Tax Credit was enacted in order to increase employment by reducing labor costs (see Box 5). CBO analyzed a

related policy that would give employers a one-year non-refundable credit against their payroll tax liability for incremental increases in their payrolls during 2010. Because the credit would be nonrefundable, the credit

amount would not exceed the firm's payroll tax liability. Such a credit could be based on payrolls in each calendar quarter so that firms could receive the credit quickly. To prevent firms from firing existing employees and hiring new ones, the credit could be based on the difference between the wage base in the current quarter and the wage base four quarters previously (the "reference period"). Also, to reduce the incentive for firms to delay hiring or to lower their wage base before the policy was implemented, the policy could be retroactive to the beginning of the quarter of enactment. In addition, the eligible wage base could be capped at an annual amount for each employee. Wage bases for the Federal Insurance Contributions Act (up to $106,800 in annual earnings for 2010) and the Federal Unemployment Tax Act (up to $7,000 in annual earnings) can be calculated quarterly for most employers from information already reported to the Internal Revenue Service, thus reducing the administrative costs of this option.

Providing tax credits for increases in payrolls would increase both output and employment. The effect on output would come through the same four channels as the effect on output of reducing employers' payroll taxes. CBO estimates that this option and the preceding one would have approximately the same economic impact per dollar of budgetary cost through the first three channels discussed above. Through the fourth channel, however, this option provides a substantially larger increase in employment and hours than the previous option because this policy would provide tax benefits linked to payroll *growth*; fewer budget dollars would be used to cut taxes for workers who would have been employed anyway, so the incentive to increase payroll per dollar of forgone revenue would be greater. However, linking the availability of the credit to payroll growth would provide no incentive to maintain employment at firms that have been contracting and thus less incentive to maintain employment overall in industries and regions where the economy remains the weakest.

The choice of what cap (if any) to impose on the eligible wage base would affect the types of employment the policy would foster. A low cap would especially encourage the hiring of low-wage and part-time workers. For example, if the credit was calculated using the Federal Unemployment Tax Act wage base, firms might have incentives to hire, say, three part-time employees with annual wages of $20,000 each instead of one full-time employee with annual wages of $60,000, because the former would increase payroll by $21,000 for the purpose of the credit compared with an increase of only $7,000 for the latter. Thus, a lower cap would induce more hiring of new employees, and a higher cap would induce greater increases in hours per employee.

Another design choice is whether the tax credit would be broad based or apply only to a subset of firms. For example, if the main objective was to assist small businesses in hiring, the credit could be made available just for firms with a total number of employees, or total revenues, below some specified threshold. However, because small firms have more volatile employment dynamics (exhibiting high rates of job creation and job loss along with high rates of firms entering and leaving the market), the average duration and hence the economic benefits of each subsidized job are likely to be shorter and smaller than those under a broad-based program. In addition, because of that volatility, a greater fraction of the tax credits would be paid in response to payroll growth that would have occurred even without the policy.

The effects of tax credits also would depend on other design choices. To reduce efforts by firms to maximize their credits in ways inconsistent with the intent of the policy, growth through acquisition of existing firms might be deemed not to count as a net increase in employment; however, such restrictions would make the policy more difficult to administer. If the credit was nonrefundable and was applied against businesses' income tax liability instead of their payroll tax liability, the policy would have a smaller effect: Employers that did not owe any income taxes—including firms with net operating losses, tax-exempt organizations, and state and local governments—would not be eligible for the credit. Firms with net operating losses could be allowed to apply the credit to tax liabilities in a subsequent year; still, among firms with net operating losses, the effect on hiring would be smaller because the credit would not be received immediately even if their payrolls increased in 2010.

CBO estimates that reducing payroll taxes for firms that increase their payrolls would raise output cumulatively between 2010 and 2015 by $0.40 to $1.30 per dollar of total budgetary cost. CBO also estimates that the policy would add 8 to 18 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Reducing Employees' Payroll Taxes. Under current law, employees pay 6.2 percent of their annual earnings in Social Security payroll taxes up to a ceiling that is adjusted for wage growth and equals $106,800 in 2010. Self-employed workers pay 12.4 percent of their earnings up to the same ceiling. This option would reduce these taxes for 2010.

A temporary reduction in the employees' portion of the payroll tax would not immediately affect employers' costs. Instead, it would have initial effects similar to those of reducing other taxes for people below the 2010 income cap. The increase in take-home pay would spur additional spending by the households receiving the higher income, and that higher spending would, in turn, increase production and employment. Those effects will be spread over time, however, and the majority of the increased take-home pay would be saved rather than spent.

CBO estimates that reducing employees' payroll taxes would raise output cumulatively between 2010 and 2015 by $0.30 to $0.90 per dollar of total budgetary cost. CBO also estimates that the policy would add 3 to 9 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

In comparison with the effects of reducing employees' payroll taxes, the effects of reducing employers' payroll taxes are somewhat larger per dollar of forgone revenue. Reducing employers' payroll taxes for one year has an economic effect related to that of a temporary cut in sales taxes because a temporary reduction in prices (the first channel described in the section on reducing employers' payroll taxes) would encourage purchases while the reduction was in effect. The effects on spending, output, and employment through this channel are estimated to be somewhat larger than the corresponding effects of increases in take-home pay from reducing employees' payroll taxes.

Providing An Additional One-Time Social Security Payment. Income tax reductions and additional unemployment benefits would have small effects on senior citizens because many of them do not pay income taxes and most are not in the labor force. One way to reach senior citizens is to provide direct payments. In 2009, for example, ARRA provided $250 in additional income to each senior citizen who received Social Security benefits in any

month between November 2008 and January 2009 and to certain other retirees and disabled veterans.[14] This option would provide an additional one-time Social Security payment in 2010.

An additional payment of this sort in 2010 would increase demand to the extent that the recipients spend the additional income. Many of the elderly save at rates similar to those of the working-age population, suggesting that part of the additional income to seniors would not be spent (or at least not spent quickly) and part would. Hence, the option would probably have a moderate effect on demand and thus a moderate effect on output and employment.

CBO estimates that an additional Social Security payment in 2010 would raise output cumulatively between 2010 and 2015 by $0.30 to $0.90 per dollar of total budgetary cost and would add 3 to 9 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Allowing Full or Partial Expensing of Investment Costs. ARRA raised the maximum amount a firm can expense to $250,000 for equipment purchased in 2009. The amount that could be expensed phased out dollar for dollar for purchase amounts above $800,000, so the provision targeted relatively small firms. ARRA also extended to the end of 2009 the additional first-year depreciation of 50 percent for qualified investments that was first instituted in 2008. CBO analyzed a policy option to provide further incentives to invest by extending both provisions in ARRA for one more year.

Partial expensing (sometimes called "bonus depreciation") or full expensing of investment costs allows firms to realize the tax benefits of depreciation deductions more quickly, which provides a greater incentive for investment because a dollar of tax benefit this year is more valuable than a dollar of tax benefit in a future year. The effect of the incentive may be smaller when the economy is weak than when it is strong: Firms may be less likely to increase

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14. Social Security beneficiaries received a cost-of-living adjustment in 2009 that was larger than usual because a run-up in oil prices boosted the consumer price index. The subsequent decline in oil prices pushed down the consumer price index. If the rules for Social Security benefits treated increases and decreases in prices symmetrically, the cost-of-living adjustment in 2010 would have been negative; however, the rules do not operate in that way, so beneficiaries received no cost-of-living adjustment in 2010.

investment when they have idle capacity and when they are less confident about the future demand for their products and services. In addition, when the economy slows, more firms incur losses and pay no income tax; some of those firms therefore get less benefit from immediate tax deductions, although firms that paid taxes in previous years may be able to reclaim some of those taxes. To the extent that temporarily reducing the after-tax price of investment accelerates the purchase of capital goods into the period when the credit is available, that increased investment may be partially offset by a subsequent decrease when the credit expires. In addition, the policy would probably have the greatest effect on investment just before it expired at the end of 2010 (as firms accelerated equipment purchases from 2011), so much of the indirect effects on output and employment would spill over into 2011.

CBO estimates that allowing full or partial expensing would raise output cumulatively between 2010 and 2015 by $0.20 to $1.00 per dollar of total budgetary cost. CBO also estimates that the policy would add 2 to 9 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Policy Options with a Substantial Proportion of Impacts Beginning in 2011

Among the policy options considered here, those that were estimated to have a substantial proportion of their impacts beginning in 2011 are investing in infrastructure, providing aid to states for purposes other than infrastructure, providing additional refundable tax credits for lower- and middle-income households in 2011, extending higher exemption amounts for the AMT in 2010, and reducing income taxes in 2011.

Investing in Infrastructure. ARRA appropriated about $60 billion for spending on water, transportation, and housing projects. CBO analyzed a policy option that would boost the demand for goods and services and thereby increase output and employment by providing additional increases in federal funding for infrastructure projects.

Infrastructure spending directly increases employment because workers are hired to undertake construction projects. It also adds to demand for goods and services through purchases of material and equipment and through additional spending by the extra workers who are

hired; as with other policy options discussed in this paper, that increase in demand leads to further hiring. One drawback of this option is that infrastructure projects often involve considerable start-up lags. To be sure, some projects, such as highway repair and resurfacing, can be implemented relatively quickly. However, large-scale construction projects generally require years of planning and preparation; for example, building new transportation infrastructure that requires establishing new rights-of-way and developing and implementing alternative energy sources would probably have their biggest effects on output and employment after the recovery was well along. As a practical matter, the experience with ARRA suggests that fewer projects are "shovel ready" than one might expect: By the end of fiscal year 2009, outlays for infrastructure spending from ARRA made up less than 10 percent of the budget authority granted for infrastructure in that year. Moreover, given the substantial increase in infrastructure funding provided by ARRA, achieving significant increases in outlays above the amounts funded by ARRA would probably take even longer. Thus, most of the increases in output and employment from this option would probably occur after 2011.

CBO estimates that additional investments in infrastructure would raise output cumulatively between 2010 and 2015 by $0.50 to $1.20 per dollar of total budgetary cost and would add 2 to 4 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Providing Aid to States for Purposes Other Than Infrastructure. Many states have experienced a high degree of fiscal stress and are expected to have large budget gaps in the next few years. Eighteen states have budget gaps larger than 20 percent of general fund expenditures. Those budget gaps have occurred despite more than $200 billion provided to state governments by ARRA for purposes other than infrastructure. CBO analyzed a policy to further assist states by providing funding to state governments for a variety of purposes. Even if funding were intended for a specific activity, such as education or health care, CBO anticipates that the availability of those additional funds would both increase net state spending for that activity and affect other aspects of state budgets.

Without further aid from the federal government, many states would have to raise taxes or cut spending by more than they would if aid were provided. Such actions would dampen spending by those governments and by house-

holds in those states, and more state and private jobs would be lost. Under current policies, states will be taking such balancing actions on an ongoing basis, so federal aid that was provided promptly would probably have a significant effect on output and employment in 2010 and 2011. Such aid could lead to fewer layoffs, more pay raises, more government purchases of goods and services, increases in state safety-net programs, tax cuts, and savings for future use.

CBO estimates that providing aid to states for purposes other than infrastructure would raise output cumulatively between 2010 and 2015 by $0.40 to $1.10 per dollar of total budgetary cost. CBO also estimates that the policy would add 3 to 7 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Providing Additional Refundable Tax Credits for Lower- and Middle-Income Households in 2011. Some tax credits are refundable—that is, the government makes cash payments to people who do not have enough income to pay income taxes. ARRA contains several provisions for reducing taxes for individuals and families in 2009 and 2010 that serve as examples of refundable credits that could be provided again in 2011. One such provision is the Making Work Pay credit, which provides a tax credit of up to $400 for individuals and up to $800 for married taxpayers filing joint returns; that credit is phased out as income exceeds $75,000 ($150,000 for joint filers). Another provision temporarily increased the earned income tax credit for taxpayers with three or more qualifying children and raised the threshold at which the amount of the credit begins to be reduced for married couples filing jointly. Yet another provision modified the existing Hope credit (a federal tax credit for education expenses of students meeting certain criteria) in 2009 and 2010 to make the credit partially refundable, providing education tax benefits to a larger group of taxpayers and allowing the credit to be claimed for four years of postsecondary education instead of two. CBO analyzed an option to extend those credits through 2011.

Refundable credits are often phased out when income increases above some amount and thus are effectively limited to lower- and middle- income households. Moreover, credits that are refundable provide a larger income boost to those households than do comparable credits that are not refundable, because lower-income households are more likely not to owe income tax. Therefore, providing

additional refundable credits would increase after-tax income for households that are more likely than average to be restricted in their consumption by their current income and hence would spend a greater share of the funds received. As a result, such credits would increase output and employment by more per dollar of budgetary cost than would cutting taxes for a broader set of taxpayers whose consumption is less likely to be restrained by their current income.

CBO estimates that providing additional refundable tax credits would raise output cumulatively between 2010 and 2015 by $0.30 to $0.90 per dollar of total budgetary cost. CBO also estimates that the policy would add 3 to 6 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Extending Higher Exemption Amounts for the Alternative Minimum Tax. The alternative minimum tax was originally intended to impose taxes on high-income individuals who used tax preferences to greatly reduce or eliminate their liability under the regular income tax. For most of its existence, the AMT has played a minor role in the tax system, accounting for less than 2 percent of individual income tax revenues and affecting less than 1 percent of taxpayers in any year before 2000. However, unlike the regular income tax, the AMT is not indexed for inflation. As a result, the AMT would affect significantly larger numbers of taxpayers over time, and lawmakers have intervened each year since 2001 to slow the expansion of the AMT and prevent it from affecting more taxpayers outside of the higher-income groups. At the expiration of each of those annual "patches," the exemptions would have reverted to their prior-law levels, so the prospective year-to-year change in tax revenue if current law regarding the AMT was maintained has become larger each year. In 2010, under current law, the AMT will affect about 17 percent of taxpayers (up from less than 3 percent in 2009), paying on average $3,900 more in tax than they would under the regular income tax system; nearly every married taxpayer filing jointly with income between $100,000 and $500,000 will owe some alternative tax. The option considered here would reduce taxes by making another adjustment to the amount of income that is exempt from the AMT during 2010 only.

The impact of this option on consumption is likely to be limited, because the AMT largely affects people in the upper half of the income distribution, and their con-

sumption is unlikely to be constrained by their income in a given year. In addition, although the AMT extension would affect tax liability in 2010, most of its impact on consumption would probably occur in 2011. The effect would be delayed both because many taxpayers are allowed to pay their 2010 AMT liability in 2011 and because the increase in liability in 2010 would probably not be recognized immediately. In particular, taxpayers who have not previously paid the AMT may not know that they are becoming liable, and those previously liable for the AMT probably expect that another extension will be enacted; for both of those groups, the AMT liability under current law would not affect their consumption much until 2011, so changing the law would also not have much effect on their consumption until 2011.

CBO estimates that a one-year AMT patch would raise output cumulatively between 2010 and 2015 by $0.10 to $0.40 per dollar of total budgetary cost. CBO also estimates that the policy would add 1 to 4 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost.

Reducing Income Taxes in 2011. Various provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) will expire at the end of 2010, raising tax liabilities for most people (see Box 2 on page 6). If policymakers wanted to avoid increasing taxes during a period of economic weakness, they could defer those increases as well as extend the higher exemption amounts for the AMT. Accordingly, CBO analyzed a policy that would defer the scheduled 2011 income tax increases in EGTRRA and JGTRRA for one year and would increase the exemption amounts for the AMT in 2010 and 2011.

As compared with the one-year AMT patch, a greater share of the tax reduction from this option would benefit households who are somewhat farther down the income scale and therefore would probably spend a larger fraction of an increase in after-tax income. Still, only a fraction of the tax cut in this option would be received by those whose consumption is restricted by their current disposable income.

Deferring the scheduled increases in tax rates in 2011 would help some businesses as well as households. In par-

ticular, it would keep lower tax rates in place in that year for businesses that do not pay the corporate income tax (the pass-through entities such as sole proprietorships, partnerships, S corporations, and limited liability companies). However, increasing the after-tax income of businesses typically does not create much incentive for them to hire more workers in order to produce more, because production depends principally on their ability to sell their products.

The economic effects of this option relative to those of the one-year AMT patch are influenced by two additional factors. First, the effects would occur later, because the option would primarily reduce taxes in 2011 and much of the economic impact would not be felt until 2012. Second, because the economic effects would be delayed, more of them would occur in a period when CBO assumes that the Federal Reserve will begin to offset stimulative fiscal policy actions in order to avoid increasing the risk of excessive inflation (as discussed in Box 4 on page 14). That response would reduce the overall boost to growth and employment from this option.

CBO estimates that a two-year AMT patch and one-year deferral of the EGTRRA and JGTRRA tax increases would raise output cumulatively between 2010 and 2015 by $0.10 to $0.40 per dollar of total budgetary cost. CBO also estimates that the policy would add 1 to 3 cumulative years of full-time-equivalent employment in 2010 and 2011 per million dollars of total budgetary cost. Although the effects of this policy per dollar of budgetary cost are smaller than the effects of extending ARRA's tax credits, the dollar amount of tax cuts under this option is substantially larger, so the total effects on output and employment also would be larger.

One variant on this option is to defer most of the tax increases in EGTRRA and JGTRRA for one year but allow the rate increases for the top brackets to go into effect. This option would cost less than would deferring all of the scheduled tax increases, and it would be more cost-effective because the higher-income households that would be excluded would probably save a larger fraction of their increase in after-tax income. However, the difference relative to the option analyzed here would be small, because much of the remaining tax reduction would still go to higher-income taxpayers—largely because of the changes in the AMT and other income tax changes.

A related option is to permanently eliminate the scheduled tax increases in EGTRRA and JGTRRA. A permanent extension would have a bigger effect on demand in 2011 than would a temporary extension, because households that expected higher after-tax income in subsequent years would spend a larger share of the additional income they receive in 2011. However, a permanent extension would entail large revenue losses after the recovery is over, so its effects on output and employment in the next few years per dollar of total budgetary cost would be much lower than those of the one-year deferral analyzed here.

Exhibit 36

MEMORANDUM   September 8, 2010

To: General Distribution Memorandum

From: Evelyne Baumrucker, Analyst in Health Care Financing, 7-8913
               Bernadette Fernandez, Specialist in Health Care Financing, 7-0322

Subject: **Variation in Analyses of PPACA's Fiscal Impact on States**

This congressional distribution memorandum, prepared to enable distribution to more than one congressional client, summarizes existing analyses of the impact of the new federal health reform law, the Patient Protection and Affordable Care Act (PPACA), on state costs. The memorandum identifies select coverage provisions (specifically Medicaid and private health insurance) that relate directly to state costs, and discusses the challenges to producing state-level estimates. Such challenges include the pre-reform variation across states; uncertainty about future federal guidance and regulations relating to health reform implementation; state decisions regarding such implementation; data issues; and other factors outside of the health reform law and its implementation.

Introduction

The President signed into law H.R. 3590, the Patient Protection and Affordable Care Act (P.L. 111-148) on March 23, 2010, which has since been amended by several laws. PPACA, as amended, makes many significant changes to the private and public markets for health insurance, and modifies aspects of the publicly financed health care delivery system. Among the major provisions, the law establishes an individual mandate for most U.S. residents to obtain health insurance, reforms the private health insurance market, establishes American Health Benefits Exchanges for individuals and small businesses to shop for private coverage; expands Medicaid eligibility; creates programs to improve quality of care; addresses healthcare workforce issues; and makes a number of other Medicaid and Medicare program and federal tax code changes. It also offers mechanisms to increase care coordination, encourage more use of preventive health, and improve the quality of care.

Enormous variation already exists across states in terms of health insurance coverage rates, generosity of coverage under state-administered public programs, generosity of state-financed programs to purchase private coverage, health insurance regulation, and other factors that affect state responsibilities and budgets. PPACA modifies many of those programs and insurance standards. Given the complexity of the health care system prior to PPACA, and the many changes generated by the new law, the impact on states will vary and will be difficult to estimate, even with the best modeling.

Another challenge in producing cost estimates of the impact of PPACA will be to disentangle such costs from the overall trend of increasing health care costs that would have occurred in its absence. In recent years, "the cost of health coverage continued its steady climb, while employer-sponsored coverage fell.

While the full impact of the recession on employer-sponsored coverage (and overall rates of uninsurance) remains to be seen, state revenues declined just when demand for services rose."[1] Given such trends, it would be useful to identify the costs that states would face in the absence of comprehensive reform in order to understand the cost differences associated with PPACA. One study attempted to do such an analysis, modeling best, intermediate, and worst case scenarios over a 10-year span. Even in the best case, the researchers estimated that without reform, about ¼ of states would see Medicaid/CHIP cost growth of more than 65 percent over the 10 year period, and that employer spending on health insurance premiums would increase in all states.[2]

In response to congressional interest resulting from PPACA, we developed this memorandum to address issues related to potential costs to states. The focus of this memorandum is on health insurance coverage provisions of PPACA, specifically major provisions that permanently change existing state programs and requirements, such as Medicaid and private health insurance regulations. For ease of analysis we address Medicaid and private health insurance separately, but implementation of PPACA necessitates interaction between private and public provisions. Likewise, any thorough estimate of costs should consider these provisions in the context of the current health insurance system and its multiple moving parts.

Given that CRS does not produce cost estimates, we have no plan to produce fiscal impact statements for any state. However, individual states, CBO, and other organizations have generated national and, in some cases, state-level cost estimates based on PPACA coverage provisions (or some portion thereof).[3] In general the cost estimates that we identified focused on the Medicaid program, presumably because it generally represents a substantial portion of state health care budgets, and is an existing program for which current and historical data exists. To the extent that these state studies discussed private health insurance provisions, the discussion focused on mainly descriptive analyses of state responsibilities under PPACA.

It is not our intent to evaluate the validity of the assumptions or the analytic rigor of the methodological approaches used to generate these estimates. Instead, we present the general findings as well as selected assumptions and limitations as reported in the studies that will help the reader put the results into context and better understand the complexity involved in generating estimates of the law's impacts.

In some cases it is unclear whether the cost analyses only consider changes to existing programs and regulations, and do not account for new funding opportunities which may help states with implementation costs.[4] In addition, analyses might not account for the interaction among provisions that could significantly affect costs. According to the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary, "the actual future impacts of the PPACA on health expenditures, insured status, individual decisions, and employer behavior are uncertain. The legislation would result in numerous changes in the

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[1] "State of the States: The State We're In," Robert Wood Johnson Foundation, Jan. 2010, p. 5, available online at http://www.statecoverage.org/files/State%20of%20the%20States%202010.pdf.

[2] J. Holohan, L. Doan, and I. Headen, "The Cost of Failure to Enact Health Reform: Implications for States," Urban Institute, Oct. 1, 2009, available online at http://www.urban.org/publications/411965.html.

[3] We use the phrase "coverage provisions" to refer to the provisions in PPACA that would affect existing public programs (e.g., Medicaid) or establish new coverage options (e.g., exchanges). Generally, these provisions are in Titles I and II of PPACA.

[4] Examples of such state funding opportunities include grants for planning and implementing exchanges, and grants to establish (or expand) health insurance consumer assistance programs. See "Patient Protection and Affordable Care Act (P.L. 111-148): Potential Funding Opportunities for States," National Association of Insurance Commissioners, April 7, 2010, available online at http://www.naic.org/documents/index_health_reform_general_nga_funding_chart.pdf.

way that health care insurance is provided and paid for in the U.S., and the scope and magnitude of these changes are such that few precedents exist for use in estimation."[5]

What follows is a summary of selected state-level cost analyses (available as of August 31, 2010) that were prepared by a variety of organizations to assess the impact of PPACA on the state's budget. These organizations include: (1) state agencies that administer Medicaid and/or the State Children's Health Insurance Program (CHIP); (2) state legislative support agencies, (3) independent consultants retained by the state to provide a financial review of the impacts of PPACA on the state's budget, and (4) organizations (e.g., independent Boards established by the state legislature) whose role is to provide input into policy and planning for the state. **Table 1** (see Appendix) summarizes state-specific analyses of PPACA's impact on enrollment in public programs, the uninsured, and costs.

State-specific cost estimates vary. This variation is a function of the fact that each state analysis employs different methods and assumptions, and considers different sets of variables in producing coverage and cost estimates. For example, the Texas study (April 2010) provides cost estimates associated with the Medicaid and CHIP provisions for the time period between state fiscal year (SFY) 2014 through SFY2023. In addition to the fact that cost estimate is reported in terms of the state's fiscal year (as compared to federal fiscal year), it represents a timeframe that includes 4 additional years beyond the budget horizon that CBO, for example, takes into account in its cost estimate (through FY2019).[6] In another example, the Kansas study (May 2010) reports that its cost estimates are expressed in constant dollars using 2011 as a base, but other states do not specify how their estimate is expressed. Finally, because many non-citizens are not eligible for either Medicaid or CHIP, and unlawfully present individuals are ineligible for subsidies to purchase coverage through state exchanges, imputations to account for immigration status must also be applied. In the Kaiser report (May 2010) the methodology section describes how the researchers attempted to account for legal immigrant status in their model. However, it is not clear whether or to what extent other state specific cost estimates have attempted to capture this component. Because these state-specific analyses vary considerably in terms of what they have tried to take into consideration, it is not useful or advisable to compare their results against one another. Nonetheless, the state-specific analyses do provide value in understanding the law's provisions that states are currently focusing on the impacts on their state budgets.

Table 2 (see Appendix) summarizes studies whose state cost estimates provided a break out of the Medicaid/CHIP effects of PPACA's coverage provisions (e.g., increases in enrollment due to the individual mandate, the mandatory expansions of the Medicaid program, and the requirement for Medicaid and CHIP to coordinate with exchange coverage). It is important to note that while these studies have attempted to answer the same basic question, variation in the findings exists. To further underscore this point, the Kaiser study (May 2010)[7] shows that results fluctuate considerably when different

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[5] Foster, R. S., "Estimated Financial Effects of the "Patient Protection and Affordable Care Act," as Amended," Centers for Medicare and Medicaid Services, Baltimore, MD, April 22, 2010, available at http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf.

[6] CBO's estimate covers the FY2010-FY2019 time frame to be consistent with the budget horizon used under S. Con. Res. 13, the Concurrent Resolution on the Budget for Fiscal Year 2010. Congressional Budget Office, letter to Honorable Nancy Pelosi, March 20, 2010.

[7] John Holahan and Irene Headen, Medicaid Coverage and Spending in Health Reform: National and State-by-State Results for Adults at or below 133% FPL, Kaiser Commission on Medicaid and the Uninsured, May 2010, available at http://www.kff.org/healthreform/upload/Medicaid-Coverage-and-Spending-in-Health-Reform-National-and-State-By-State-Results-for-Adults-at-or-Below-133-FPL.pdf.

participation rates are assumed. In an attempt to capture a range of potential impacts, Kaiser modeled the PPACA's impacts on Medicaid and CHIP enrollment and spending based on two levels of program participation (i.e., 57% participation rate as compared to a 75% participation rate). **Table 2** shows the variation that results when these different participation rates are applied.

Major PPACA Provisions with Potential State Cost Implications

For ease of analysis we address Medicaid and private health insurance provisions separately here, but implementation of PPACA necessitates interaction between private and public provisions. Likewise, cost estimates should account for such interactions within the context of the broader health insurance system.

Medicaid and CHIP

PPACA makes significant changes to the Medicaid[8] and CHIP[9] programs.[10] Although not an exhaustive list, some of the major changes that could potentially increase state costs include:

- State requirement to expand Medicaid to nonelderly, nonpregnant adults with income up to 133% of the federal poverty level (FPL).[11] From 2014 to 2016, the federal government will cover 100% of the Medicaid costs of "newly eligible"[12] individuals, with the percentage dropping to 90% by 2020. States cover the percentage not paid by the federal government.

- State requirement to maintain existing Medicaid and CHIP eligibility levels (MOE) for adults until exchanges are fully operational (presumably CY 2014) and for children through 2019 as a condition of receiving federal matching funds for Medicaid expenditures.

- State requirement to improve outreach, streamline enrollment, and coordinate with CHIP and the proposed exchanges that may result in increases in applications and enrollment

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[8] Medicaid is a federal and state matching program that finances the delivery of health care services for certain populations with limited incomes. Each state that chooses to participate designs and administers its own version of Medicaid under broad federal rules. Individuals who meet state eligibility requirements are entitled to services covered under the state plan. To qualify, an individual must meet both categorical (i.e., must be a member of a covered group such as children, pregnant women, families with dependent children, the elderly, or the disabled), and financial eligibility requirements.

[9] CHIP, also a federal and state matching program, provides health care coverage to certain low-income, uninsured children in families with income above Medicaid income standards. States may also extend CHIP coverage to pregnant women when certain conditions are met. In designing their CHIP programs, states may choose to expand Medicaid, create a stand-alone program, or use a combined approach.

[10] For more information on PPACA's changes to Medicaid and CHIP see CRS report R41210, *Medicaid and the State Children's Health Insurance Program (CHIP): Summary and Timeline,* Coordinated by Julie Stone, August 19, 2010.

[11] For individuals whose income will be determined using new income counting rules, the law also specifies that an income disregard in the amount of 5% FPL be deducted from an individual's income when determining Medicaid eligibility. This income counting rule effectively raises the upper income eligibility threshold for the new Medicaid eligibility group to 138% FPL.

[12] "Newly eligible" individuals are defined as nonelderly, nonpregnant individuals with family income below 133% FPL who (1) are not under the age of 19 (or such higher age as the state may have elected), and (2) are not eligible under the state plan (or a waiver) for full Medicaid state plan benefits or for Medicaid benchmark or benchmark-equivalent coverage, or are eligible but not enrolled (or are on a waiting list) in such coverage as of December 1, 2009.

among those who were previously eligible but not yet enrolled, as well as increases in administrative costs in the short run.

- Federal requirement to apply reductions in Medicaid disproportionate share hospital (DSH) allotments. While the health reform law is designed to reduce the number of low-income and patients whose care would otherwise be funded in part by DSH payments to hospitals who treat such individuals, with the law's requirement to apply aggregate reductions in DSH payments going forward it remains to be seen if the states will have to finance care that was previously paid in part through federal DSH allotments.

- Federal requirement to increase the amount of Medicaid drug rebates going to the federal government. Medicaid law requires prescription drug manufacturers who wish to sell their products to Medicaid agencies to enter into rebate agreements with the Secretary on behalf of states. Beginning January 1, 2010, with certain exceptions, PPACA increases the flat rebate percentage used to calculate Medicaid's basic rebate by an amount that varies by drug class. PPACA also requires the Secretary to recover the additional funds states received from drug manufacturers from increases in the basic Medicaid rebates (some of which were previously retained by states).

However, there are also a number of changes to Medicaid and CHIP that may offset some of the increased state costs. Some examples include:

- States that currently finance care for childless adults with state-only dollars will now have access to federal matching funds for those individuals under Medicaid.

- With the expiration of the adult coverage MOE requirement in 2014, states may opt to cut back on some of their prior law income eligibility levels for certain groups with annual income greater than 133% FPL, and move them into state exchange coverage where they would be eligible for federal subsidies to share in the cost of their care.

- CHIP allotments were extended through FY2015. This extension guarantees states access to the program's enhanced federal matching rate for two years beyond the prior expiration date of FY2013.

- The law requires states to set Medicaid payments for primary care services relative to Medicare payment rates, and fully finances the payment rate increase for a temporary period (i.e., 2013 and 2014). After this two year period, it is unclear whether states will continue to pay primary care physicians at the higher rate.

- The law also provides additional options for states to expand home and community-based services as an alternative to institutional care and provides states with increased matching rates for certain long-term care services.

Private Health Insurance

PPACA makes significant changes to private health insurance and therefore directly affects multiple stakeholders. States are impacted by the private market provisions through the various roles they play: as sponsors of health benefits to state employees, dependents, and retirees; as administrators of coverage; and financial assistance programs, and as the primary regulators of the insurance industry. Among the major private market provisions in PPACA that permanently affect these state roles are the new federal insurance standards, establishment of health insurance exchanges, and monitoring and enforcement activities related to the regulation of the health insurance industry.

- The federal market reforms that *may* impact private coverage offered to state employees include the prohibition on certain annual and lifetime dollar limits, coverage of preventive health services with no cost-sharing requirements, extension of dependent coverage, use of uniform coverage documents, prohibition of salary-based discrimination, quality of care provisions, reporting of medical loss ratios and rebates, grievance and appeals processes, standards for electronic billing and other administrative transactions, patient protections, and prohibition on excessive waiting periods.[13] Such requirements may add to the cost of coverage in the private market, which, in turn, may affect states' costs related to offering such health benefits.

- PPACA requires the states to establish exchanges (with federal fallback) to facilitate the purchase of private insurance by individuals, families, and small businesses. PPACA provides appropriations (no specified amount), prior to 2015, for state grants to establish and run exchanges. The general assumption is that states will have to provide ongoing funding for exchanges through assessments on insurers or other means, except in those states that fail to establish their own exchange, in which case the HHS Secretary is required to establish it.[14]

- While PPACA does not include specific enforcement provisions, the addition of the federal market reforms discussed above expands the scope of existing state enforcement responsibilities, which may have implications for state costs. In addition, PPACA establishes a federal standard in a regulatory area that has been solely under the jurisdiction of states: review of health insurance rates submitted by insurance carriers. While PPACA requires an insurer to justify "unreasonable" premium increases to both HHS and the relevant state, it is the state's responsibility to review the materials and provide information to the Secretary based on the rate review. PPACA appropriates $250 million in grants to states to support this effort, however total state costs are not known, in part because HHS guidance on the rate review process is still forthcoming and states vary in their existing authority and resources to conduct rate reviews.

However, despite these potential sources of increased state costs, interactions of various provisions may lead to cost offsets in other areas. Examples include:

- The Texas Health and Human Services Commission noted in its presentation to the Texas House Select Committee on Federal Legislation that a potential cost offset resulting from health reform may be increased premium revenue.[15] Estimates of the impact of PPACA on health insurance coverage generally finds substantial growth in private coverage, including through exchanges. Given that states currently generate revenue through

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[13] This list of reforms was generated based on these assumptions: state employee health benefit plans include fully and self-insured plans, and would be provided to large groups only. The list excluded reforms that largely duplicate existing requirements in the group market (e.g., non-discrimination based on health factors), are not permanent (e.g., temporary high-risk health insurance pool), or likely would not have a direct impact on state employee health benefits plans (e.g., guaranteed issue).

[14] On July 29, 2010, HHS issued a Funding Opportunity Announcement (FOA) that announced the availability for the first round of funding for these state grants. Each state and D.C. could apply for up to $1 million in grant money during this first round. The filing date for applications was September 1, 2010. For additional information, see "State Planning and Establishment Grants," at http://www.hhs.gov/ociio/initiative/index.html.

[15] "Federal Health Care Reform – Impact to Texas Health and Human Services," Texas Health and Human Services Commission, April 22, 2010.

premium taxation, growth in private coverage is assumed to lead to increased revenue to states.

- California's Legislative Analyst's Office noted that once the full implementation date of PPACA is reached, the state could likely terminate an existing state-financed health insurance program because other programs under health reform would be established by then.[16]

Analysis

While Medicaid and CHIP differ from private health insurance, both public programs and private coverage share similar challenges with respect to producing state-level cost estimates. Such challenges include pre-reform variation across states; uncertainty about future federal guidance and regulations relating to health reform implementation; state preferences regarding implementation; data issues; and factors outside of health reform. The following discussion describes these challenges in more detail and provides examples from Medicaid and CHIP, as well as private health insurance.

Pre-Reform Variation across States

State impacts will vary based on current coverage levels across states, generosity of the state's Medicaid/CHIP eligibility rules and other state-financed coverage programs, existing private insurance regulatory authority, standards, and resources, current state fiscal health, and other factors. Such variation creates difficulties in accurately estimating costs across states.

- There are substantial differences among states in terms of the percentages of the states' populations that would meet the definition of "newly eligible" under the mandatory Medicaid expansion as compared to previously eligible individuals. Federal matching rates to share in the cost of Medicaid/CHIP coverage for these individuals under health reform will vary by state, by year, and by eligibility status. Although from 2014-2016, the federal government will cover 100% of the Medicaid costs of "newly eligible" individuals.

- It could be argued that PPACA will require limited changes to the benefits of state and local government employee health plans, as current employment-based health plans are grandfathered. Grandfathered plans are exempt from all but a handful of reforms under PPACA. That said, it is difficult to assess the impact of the changes that are required, as some requirements may already be in place. For example, one new requirement under PPACA is that children up to age 26 (and until 2014, who are not offered coverage through their own employer) can remain/enroll on their parent's plan. Some plans may not necessarily see a difference because some states already impose requirements beyond age 26, and may continue to do so. For states that do not have a dependent coverage requirement already in place, insurers may see this as adding to the cost of coverage and *may* pass such costs along to consumers and employers (e.g., states as employers providing health benefits to state employees).

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[16] "The Patient Protection and Affordable Care Act: An Overview of Its Potential Impact on State Health Programs," Legislative Analyst's Office, May 13, 2010.

Federal Guidance to Shape Implementation

State-by-state impacts of PPACA's program and regulatory changes will depend, in part, on future federal guidance and interaction with states in implementing the new law.

- Medicaid program participation rates are among the many moving parts that are relevant in assessing the impacts of PPACA. While PPACA includes provisions to encourage states to improve outreach, streamline enrollment, and coordinate with exchanges, states face mixed fiscal priorities that may inhibit their ability and/or willingness to maximize program enrollment. As a result, federal guidance laying out the minimum requirements in these areas will ultimately affect state costs.

- There is a great deal of uncertainty regarding state costs associated with establishing and running exchanges, in part because HHS has not issued guidance regarding the form and structure of exchanges. Moreover, PPACA appropriated an unspecified amount for the purpose of providing grants to the states for planning and establishment of the exchanges.[17] The grants can be renewed if states comply with specific requirements, but no grant may be awarded after January 1, 2015 when exchanges must be self-sustaining. This lack of specificity regarding the amount of federal funding is another source of uncertainty regarding potential state costs.

State Preferences Regarding Implementation

PPACA provides states with some flexibility regarding implementation of many of the law's coverage provisions. Given that states are still formulating their approach to implementation, this creates uncertainty in the scope of future state activities and associated costs.

- PPACA gives states some flexibility regarding implementation and operation of exchanges. A state may opt to have HHS establish its exchange. States also have the option to establish separate exchanges for individuals and small businesses, or establish just one exchange for both. Individual states also may decide to allow large businesses in the exchange. These decisions, individually and collectively, may impact state spending on exchanges.

- The PPACA insurance reforms do *not* uniformly apply to all employer-provided coverage. The type of plan matters with respect to which market reforms it must comply with. For example, a self-insured plan does not have to comply with the medical loss ratio provisions, but a fully-insured plan does.[18] Thus, the decision states make in

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[17] See footnote 14.

[18] Organizations that self-insure (or self-fund) do not purchase health insurance from an insurance carrier. Self-insurance refers to coverage that is provided by the organization seeking coverage for its members (e.g., an employer offering health benefits to his employees). Such organizations set aside funds and pay for health benefits directly. (Enrollees may still be charged a premium.) Under self-insurance, the organization itself bears the risk for covering medical expenses. Firms that self-fund health benefits typically contract with third-party administrators to handle administrative duties such as enrollment, premium collection, customer service, and utilization review. With fully insured plans, the insurance carrier charges the plan sponsor (e.g., employer) a fee for providing coverage for the benefits specified in the insurance contract. The fee typically is in the form of a monthly premium. (In turn, the sponsor may decide that each person or family who wishes to enroll must pay part of the premium cost.) Under the fully insured scenario, the insurance carrier bears the insurance risk; that is, the carrier is responsible for covering the applicable costs associated with covered benefits.

funding employee health benefits plans has implications for what insurance reforms such plans are subject to. As mentioned previously, insurers may see these additional requirements as adding to the cost of coverage and *may* pass such costs along to consumers and employers in the form of higher premiums (or higher cost-sharing or reduced benefits).

Data Issues

Data issues range from limitations of existing data sources to a lack of data.

- Some state specific cost estimates use national surveys such as the Current Population Survey (CPS), the American Community Survey (ACS) or the National Health Interview Survey (NHIS) to simulate eligibility for Medicaid, CHIP, or exchange subsidies. However, these national surveys have their own limitations many of which have been well documented and acknowledged by the Census Bureau and other research organizations.[19] For example, the CPS and NHIS have historically undercounted Medicaid enrollees and are less reliable for small states.[20] With much larger sample sizes than that of the CPS or NHIS, the ACS does a better job of reducing error associated with small sample size. However, regardless of the survey used, discrepancies exist between survey estimates of enrollment in Medicaid and the number of enrollees reported in state and national administrative data.

- Given that so many aspects of exchanges are as of yet not known, costs cannot be attributed to the various components with a sufficient degree of confidence. In addition, the exchanges, as specified in the statute, are new entities. While a few states have created similar entities, none have the federal-state design of those established under PPACA. Therefore, there is no dataset from an existing program that could be used to accurately model the initial experience of the exchanges. This contrasts with, for example, the Medicaid program, which has existed for many years and has past administrative data that provides a baseline for state costs.

Factors Outside of Health Reform

Given that health insurance coverage in the U.S. traditionally has been linked with employment, changes in the labor market generally lead to changes in coverage rates. Typically, when the general economy is in decline and unemployment rises, individuals and families lose access to their primary source of insurance. Data on coverage trends typically find that when employment-based coverage decreases, enrollment in

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[19] For links to the results of research projects conducted by the University of Minnesota's State Health Access Data Assistance Center (SHADAC), the National Center for Health Statistics (NCHS), the Agency for Healthcare Research and Quality (AHRQ), the U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation (ASPE), the Centers for Medicare and Medicaid Services (CMS), and the U.S. Census Bureau to explain why discrepancies exist between survey estimates of enrollment in Medicaid and the number of enrollees reported in state and national administrative data, see http://www.census.gov/did/www/snacc/

[20] U.S. Census Bureau, "Income, Poverty, and Health Insurance Coverage in the United States: 2008," Current Population Reports P60-236(RV), Washington, DC, 2009, at [http://www.census.gov/prod/2009pubs/p60-236.pdf], p. 20, and p. 57.

Medicaid increases.[21] The public-private mix of enrollment will affect state spending related to both types of coverage.

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Private Health Insurance: Bernadette Fernandez (7-0322), Mark Newsom (7-1686), Hinda Chaikind (7-7569).

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[21] "Losing a job often means that people lose health insurance. Many individuals, especially children will become eligible for Medicaid...We estimate that if unemployment rises from an average of 4.6 percent in 2007 to 7 percent in 2009, the number of people with employer sponsored insurance (ESI) would decline by 5.9 million, Medicaid and SCHIP enrollment would increase by 2.4 million and there would be an additional 2.6 million uninsured." John Holahan and A. Bowen Garrett, "Rising Unemployment, Medicaid, and the Uninsured," Jan. 2009, p. i.

Appendix

Table 1. State-Specific Analyses of PPACA's Impact on State Costs

State	Description	Estimates of Increase in Medicaid Enrollment in thousands (timeframe)	Estimates of Reduction in the Number of Uninsured in the State (time frame)	Estimates of State Costs/Savings in millions (time frame)
California	"The Patient Protection and Affordable Care Act: An Overview of Its Potential Impact on State Health Programs" Provides an estimate of the impact of PPACA on Medicaid enrollment and state spending on Medicaid. Cost estimate attributed to increase in Medicaid enrollment, accounting for eligible but not enrolled and expansion populations (eligibility up to 133 percent FPL and former foster children), and increased primary care provider payments. Prepared by the Health Section of the Legislative Analyst's Office, a state governmental office providing fiscal and policy information to the California Legislature. http://www.lao.ca.gov/reports/2010/hlth/fed_healthcare/fed_healthcare_051310.pdf	2,000 (no timeframe provided)	N/A	"low billions of dollars" (annual)
Florida	"Overview of National Health Reform Legislation" Provides an estimate of the impact of PPACA on enrollment in the state's Medicaid and CHIP programs and the increase in Medicaid primary care provider payments. Does not include impacts associated with increases in administration costs, changes to the federal pharmacy rebate or changes to state disproportional share hospital payment allowances. Takes into account potential shift of individuals with annual income <133% FPL who are currently enrolled under private health plans to shift to the Medicaid program. Assumes CHIP children with annual income <133% FPL will shift to Medicaid program. Assumes SFY 2012-2013 Medicaid expenditures program expenditures and caseloads for non- expansion populations and uses Census data increase by 1.6% through 2014 for expansion population. Prepared by The Agency For Health Care Administration, the chief health policy and planning entity for the state.	1,772 (by 2019)	N/A	$1,203 (by 2019)

State	Description	Estimates of Increase in Medicaid Enrollment in thousands (timeframe)	Estimates of Reduction in the Number of Uninsured in the State (time frame)	Estimates of State Costs/Savings in millions (time frame)
Indiana	http://ahca.myflorida.com/Medicaid/Estimated_Projections/docs/National_Health_Care_Reform_040110.pdf	1,554 (SFYs 2011 through 2020)	N/A	$3,579 (SFYs 2011 through 2020)
	"Patient Protection and Affordable Care Act with House Reconciliation – Financial Analysis"			
	Provides a financial review of PPACA as it relates to the provisions impacting the state's Medicaid program and budget.			
	The study considered the following components when generating their assessment of the impacts of health reform on the state budget: the Medicaid Expansion to 133% FPL, the impact of the reduced federal medical assistance percentage (FMAP) rate for their Healthy Indiana Plan eligibles, spend down and their SSI eligible population, the state's projected pharmacy rebate loss, the impact of the physician fee schedule increase, the mandatory expansion to foster care children, administrative costs, the enhanced match rate under the CHIP program, the state's current thoughts on the treatment of their Breast and Cervical Cancer program and pregnant women coverage for individuals with annual income greater than 133% FPL at full implementation.			
	Prepared by Milliman, Inc., a consulting service retained by the State of Indiana, Family and Social Services Administration to provide consulting services related to the financial review of PPACA.			
	http://www.in.gov/fssa/files/Milliman_financial_analysis_May2010.pdf			
Kansas	"Preliminary Estimates of the Impact of Federal Health Reform on State Spending in Kansas"	131 (by 2020)	191 (by 2020)	$621 (by 2020)
	Provides preliminary estimates of the impact of PPACA on state spending in Kansas.			
	Estimates represent the most likely outcome of PPACA reforms. Assumes state takes no additional actions to expand coverage or reduce spending, and increased costs in program administration. Cost estimate is for spending on medical care only in the Medicaid program. Excludes administrative costs and changes in DSH spending. Estimates are expressed in constant dollars using 2011 as a base.			
	Prepared by the Kansas Health Policy Authority, an independent Board comprised of members selected by the Governor and the leadership of the state legislature to provide governance and thoughtful policy direction for the state's health care-related agenda.			
	http://www.khpa.ks.gov/ppaca/download/Impact%20of%20Federal%20Health%20Reform%20on%20Kansas%20-%20allison%20presentation.pdf			

State	Description	Estimates of Increase in Medicaid Enrollment in thousands (timeframe)	Estimates of Reduction in the Number of Uninsured in the State (time frame)	Estimates of State Costs/Savings in millions (time frame)
Kansas	"Kansas: Impact of Federal Health Reform"	120 ("post-reform")	191-237 ("post-reform")	$2-36.3 ("post-reform")
	Provides presentation of preliminary estimates of PPACA's impact on coverage and state costs based on 4 scenarios.			
	Four scenarios modeled using two different counts of remaining uninsured (98,000 and 143,000) and two different provider reimbursement rate increases (0% increase and 5% increase). Medicaid enrollment includes both Medicaid and CHIP, according to just one of the scenarios modeled. Study did not attribute the cost estimate to any particular program or coverage initiative. It is unclear what this state costs estimate represents.			
	Prepared by Schramm-Raleigh Health Strategy for the Kansas Health Policy Authority, the state's main health policy agency.			
	http://media.khi.org/news/documents/2010/05/18/5-18-10_SRHealth_Presentation.pdf			
Maryland	"Interim Report"	N/A	Decrease of 7.3 percentage points (by 2017)	Savings of $829 (FY 2011-2020)
	Provides estimates of PPACA's impact on the uninsured rate and costs associated with changes to both public and private coverage.			
	Savings estimate is the net result of cost increases due to Medicaid expansion, increased spending for state employee/retiree health benefits, and administrative costs (e.g., establishing exchange), and revenue growth/savings from increased federal support of state's CHIP program, new hospital assessments, increased premium taxation revenue, and reduction in state funding for safety net programs.			
	Prepared by the state's Health Care Reform Coordinating Council for submission to the Governor.			
	http://www.healthreform.maryland.gov/documents/100726interimreport.pdf			
Michigan	"Fiscal Analysis of the Federal Health Reform Legislation"	375 (by 2019)	N/A	$200 (by 2019)
	Examines the fiscal impacts of PPACA on state and local government in Michigan.			
	Assumes a Medicaid federal matching rate of 66.7%. Discusses the cost to the state to continue the Medicaid primary care physician payment rates at the Medicare levels beyond the two years during which the federal government will fully fund this payment rate increase, but not clear if these amounts are included in the state's expenditure estimate. Provides impacts on the CHIP program beyond the			

State	Description	Estimates of Increase in Medicaid Enrollment in thousands (timeframe)	Estimates of Reduction in the Number of Uninsured in the State (time frame)	Estimates of State Costs/Savings in millions (time frame)
	PPACA funding (i.e., through FY2015) appropriation, but it is unclear if these amounts are included in the state's expenditure estimates. Acknowledges impacts of Medicaid drug rebate provisions, but does not provide a state specific cost estimate of the impacts. Acknowledges the potential impacts of the various long-term care related provisions and provisions directed at increasing care coordination, encouraging more use of health prevention, and improving the quality of care. However, the state did not report a dollar figures associated with these potential costs. Acknowledges impacts of Medicaid DSH reduction provisions, but does not provide a state specific cost estimate of the impacts.			
	Prepared by the Senate Fiscal Agency whose role is to provide technical, analytical, and preparatory support to the state's Senate Appropriation Committee and other members of the Senate.			
	http://www.senate.michigan.gov/sfa/Publications/Issues/HealthReform/FedHealthReformLegislation.pdf			
North Dakota	Provides preliminary estimates of the overall cost of implementing health reform.	N/A	N/A	$1,114 (2010-2019)
	The cost estimates are based on the following assumptions: current enrollees in private market will remain in grandfathered plans (based on Blue Cross/Blue Shield enrollment that represents 80+% of the market) throughout the study period (2010-2019), and all covered public-sector employees will remain in grandfathered plans through that period. The cost estimate does not include possible offsets from grants or subsidies. The analysis states that "estimates should be used with caution, as amounts will change when additional guidance and policy decisions are made at the federal level."			
	Prepared for North Dakota's Industry, Business, and Labor Committee.			
	http://www.legis.nd.gov/assembly/61-2009/interim-info/minutes/ib080310minutes.pdf			
Texas	"Federal Health Care Reform – Impact to Texas Health and Human Services"	2,345 (by 2023)	N/A	$27,000 (SFY 2014-2023)
	Discusses PPACA requirements, describes model, and provides estimates of PPACA's impact on enrollment in and state spending on Medicaid.			
	The enrollment estimate includes the eligible but not enrolled and Medicaid expansion populations. The cost estimate includes costs associated with the eligible but not enrolled and Medicaid expansion populations, and full rate increases for primary care providers. The provider rate increase is assumed to apply to both Medicaid and CHIP.			
	Prepared by the Texas Health and Human Services Commission for the House Select Committee on Federal Legislation.			

State	Description	Estimates of Increase in Medicaid Enrollment in thousands (timeframe)	Estimates of Reduction in the Number of Uninsured in the State (time frame)	Estimates of State Costs/Savings in millions (time frame)

http://www.hhsc.state.tx.us/news/presentations/2010/HouseSelectFedHlthReform.pdf

Source: CRS analysis of existing state-level cost analyses prepared by a variety of organizations including: (1) state the Agencies that administer Medicaid and/or the State Children's Health Insurance Program (CHIP), (2) state legislature support agencies, (3) independent consultants retained by the state to provide a financial review of the impacts of PPACA on the state's budget, and (4) organizations (e.g., independent Boards established by the state legislature) whose role is to provide input into policy and planning for the state.

Table 2. Summary of Published Estimates of the Impact of PPACA's Coverage Provisions on Medicaid and CHIP

Study (publication date)	Summary of Analysis	Estimates of Increase in Medicaid Enrollment in millions (time frame)	Expenditure Estimates in billions (time frame)		Selected Assumptions
			Overall State Spending	Federal Spending	
CBO Cost Estimate (March 2010)[a]	National estimate of effects of all of the insurance coverage provisions in health reform on Medicaid/CHIP	16 million (by CY2019)	$20 billion[b] (FY2010-2019)	$434 billion (FY2010-2019)	Detailed assumptions not provided in cost estimate.
Kaiser Commission on Medicaid and the Uninsured (May 2010)[c]	State-by-state estimates of impact of coverage provisions on Medicaid/CHIP for adults relative to enrollment and spending on such adults in absence of health reform for the period between 2014 and 2019.	15.9 (CY2014-CY2019)	$21.1 (CY2014-2019)	$443.5 (CY2014-2019)	Assumes moderate (57%) participation levels among uninsured in the new eligibility group and lower participation among other coverage groups.
		22.8 (CY2014-CY2019)	$43 (CY2014-2019)	$532 (CY2014-2019)	Assumes robust (75%) participation levels among uninsured in the new eligibility group, and lower participation among other coverage groups.

Source: CRS analysis of various national estimates of the impacts of PPACA's coverage provisions on Medicaid and CHIP enrollment and spending.

Notes:

a. Congressional Budget Office, letter to Honorable Nancy Pelosi, March 20, 2010.

b. The Congressional Budget Office does not prepare state-by-state estimates.

c. John Holahan and Irene Headen, Medicaid Coverage and Spending in Health Reform: National and State-by-State Results for Adults at or below 133% FPL, Kaiser Commission on Medicaid and the Uninsured, May 2010.

d. The Kaiser report shows results for three general groupings (i.e., states with low prior law Medicaid eligibility rates for adults, states that have broader prior law coverage for parents, but no coverage for childless adults, and states that cover both parents and childless adults under prior law). See the report for trends by state groupings as well as state-by-state results.