MAY 2012

Economic Effects of Reducing the Fiscal Restraint That Is Scheduled to Occur in 2013

If the fiscal policies currently in place are continued in coming years, the revenues collected by the federal government will fall far short of federal spending. That gap will grow over time as the aging of the population and the rising cost of health care continue to boost federal spending under current policies. Therefore, putting the budget on a sustainable path will require significant changes in spending policies, tax policies, or both.

Policymakers face difficult trade-offs in deciding how quickly to implement policies to reduce budget deficits. On the one hand, cutting spending or increasing taxes slowly would lead to a greater accumulation of government debt and might raise doubts about whether longer-term deficit reduction would ultimately take effect. On the other hand, implementing spending cuts or tax increases abruptly would give families, businesses, and state and local governments little time to plan and adjust. In addition, and particularly important given the current state of the economy, immediate spending cuts or tax increases would represent an added drag on the weak economic expansion.

Under current law, the federal budget deficit will fall dramatically between 2012 and 2013 owing to scheduled increases in taxes and, to a lesser extent, scheduled reductions in spending—a development that some observers have referred to as a "fiscal cliff." The recent or scheduled expirations of tax provisions, such as those that lower income and payroll tax rates and limit the reach of the alternative minimum tax (AMT), will boost tax revenues considerably in 2013 compared with the sums that will be collected in 2012. The automatic enforcement procedures established in the Budget Control Act of 2011 (Public Law 112-25) will lower spending in 2013

compared with outlays in 2012. And other provisions of law will generate additional deficit reduction in 2013.

Taken together, CBO estimates, those policies will reduce the federal budget deficit by \$607 billion, or 4.0 percent of gross domestic product (GDP), between fiscal years 2012 and 2013. The resulting weakening of the economy will lower taxable incomes and raise unemployment, generating a reduction in tax revenues and an increase in spending on such items as unemployment insurance. With that economic feedback incorporated, the deficit will drop by \$560 billion between fiscal years 2012 and 2013, CBO projects.¹

If measured for *calendar* years 2012 and 2013, the amount of fiscal restraint is even larger. Most of the policy changes that reduce the deficit are scheduled to take effect at the beginning of calendar year 2013, so budget figures for fiscal year 2013—which begins in October 2012—reflect only about three-quarters of the effects of those policies on an annual basis. According to CBO's estimates, the tax and spending policies that will be in effect under current law will reduce the federal budget deficit by 5.1 percent of GDP between calendar years 2012 and 2013 (with the resulting economic feedback included, the reduction will be smaller).

Under those fiscal conditions, which will occur under current law, growth in real (inflation-adjusted) GDP in calendar year 2013 will be just 0.5 percent, CBO

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

^{1.} See Congressional Budget Office, *Updated Budget Projections:* Fiscal Years 2012 to 2022 (March 2012). CBO's baseline budget projections and the analysis in this letter are based on the assumption that the statutory limit on federal debt is increased as necessary to accommodate projected spending and revenues.

expects—with the economy projected to contract at an annual rate of 1.3 percent in the first half of the year and expand at an annual rate of 2.3 percent in the second half. Given the pattern of past recessions as identified by the National Bureau of Economic Research, such a contraction in output in the first half of 2013 would probably be judged to be a recession.

The projection of economic growth for 2013 under current law is a little weaker than CBO's previous projection, released in January, which showed real GDP rising by 1.1 percent in 2013.2 The downward revision stems from the enactment in February of extensions through the end of calendar year 2012 of emergency unemployment benefits and a 2 percentage-point cut in the employee's portion of payroll taxes. By CBO's estimates, those extensions will raise GDP in calendar year 2012 and will have little effect on GDP in calendar year 2013, thereby reducing the growth of GDP between those years. Economic data so far in 2012 have been broadly consistent with CBO's January projections, so the agency did not update its forecast for this report to incorporate new economic data; following its usual practice, CBO expects to release a fully updated economic forecast in August.

What would happen if lawmakers changed fiscal policy in late 2012 to remove or offset all of the policies that are scheduled to reduce the federal budget deficit by 5.1 percent of GDP between calendar years 2012 and 2013? In that case, CBO estimates, the growth of real GDP in calendar year 2013 would lie in a broad range around 4.4 percent, well above the 0.5 percent projected for 2013 under current law.

However, eliminating or reducing the fiscal restraint scheduled to occur next year without imposing comparable restraint in future years would reduce output and income in the longer run relative to what would occur if the scheduled fiscal restraint remained in place. If all current policies were extended for a prolonged period, federal debt held by the public—currently about 70 percent of GDP, its highest mark since 1950—would continue to rise much faster than GDP. Such a path for federal debt could not be sustained indefinitely, and policy changes would be required at some point.

The more that debt increased before policies were changed, the greater would be the negative consequences.3 Large budget deficits would reduce national saving, thereby curtailing investment in productive capital and diminishing future output and income. Interest payments on the debt would consume a growing share of the federal budget, eventually requiring either higher taxes or a reduction in government benefits and services. In addition, rising debt would increasingly restrict policymakers' ability to use tax and spending policies to respond to unexpected challenges, such as economic downturns or international crises. Growing debt also would increase the likelihood of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget and the government would lose its ability to borrow at affordable rates. Moreover, the longer the necessary adjustments in policies were delayed, the more uncertain individuals and businesses would be about future government policies, and the more drastic the ultimate changes in policy would need to be.

What might policymakers do under these circumstances? They could address the short-term economic challenge by eliminating or reducing the fiscal restraint scheduled to occur next year without imposing comparable restraint in future years—but that would have substantial economic costs over the longer run. Alternatively, they could move rapidly to address the longer-run budgetary problem by allowing the full measure of fiscal restraint now embodied in current law to take effect next year—but that would have substantial economic costs in the short run. Or, if policymakers wanted to minimize the short-run costs of narrowing the deficit very quickly while also minimizing the longer-run costs of allowing large deficits to persist, they could enact a combination of policies: changes in taxes and spending that would widen the deficit in 2013 relative to what would occur under current law but that would reduce deficits later in the decade relative to what would occur if current policies were extended for a prolonged period.

^{2.} See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2012 to 2022* (January 2012).

See the statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Joint Select Committee on Deficit Reduction, Confronting the Nation's Fiscal Policy Challenges (September 13, 2011).

Fiscal Restraint in 2013 Under Current Law

Under current law, many temporary changes in tax and spending policies that have been enacted or extended in recent years expire at the end of December 2012, while other provisions take effect. All told, fiscal policies will reduce the federal deficit between fiscal years 2012 and 2013 by \$607 billion, CBO estimates, excluding any feedback from their impact on the economy (see Table 1). About two-thirds of that effect (or \$399 billion) stems from the following changes in tax policies:

- Provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312) that limited the reach of the AMT expired on December 31, 2011. The resulting increase in tax liabilities for 2012 will not be paid by most taxpayers until calendar year 2013, as they file their 2012 returns. Other provisions of the 2010 tax act that extended the lower tax rates and expanded credits and deductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (P.L. 108-27), and the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) are set to expire on December 31, 2012. The increase in individual income taxes will affect tax payments beginning in calendar year 2013, when withholding schedules will reflect those expirations. Altogether, those changes will reduce the deficit by \$221 billion between fiscal year 2012 and 2013.
- The Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96) extended through December 31, 2012, the 2 percentage-point cut in the payroll tax that first went into effect in January 2011. The expiration of that provision will raise revenues by \$95 billion.
- Various other provisions affecting the tax code are also slated to expire by the end of this year or expired at the end of 2011 but have lagged effects on revenues. The largest such provision involves the expiration at the end of 2012 of partial expensing of investment property. Those changes will raise revenues by \$65 billion between 2012 and 2013.
- Some tax provisions of the Affordable Care Act, including increased tax rates on earnings and

investment income for high-income taxpayers, are scheduled to take effect in January 2013. ⁴ Those provisions will raise revenues by \$18 billion.

Other policies will reduce outlays by \$103 billion between fiscal years 2012 and 2013:

- Provisions of the Budget Control Act that established automatic enforcement procedures designed to restrain both discretionary and mandatory spending are set to take effect in January 2013. CBO estimates that the reductions imposed during fiscal year 2013 will lower outlays by \$65 billion in that year (and by another \$41 billion in subsequent years).
- The Middle Class Tax Relief and Job Creation Act of 2012 extended emergency unemployment benefits through December 2012. The expiration of those benefits will lower spending by \$26 billion in fiscal year 2013.
- The scheduled reduction in Medicare's payment rates for physicians will lower spending by \$11 billion.

Other changes in revenues and spending (excluding any feedback from their impact on the economy) will reduce the deficit by \$105 billion between fiscal years 2012 and 2013, bringing the *gross* reduction in the deficit from all changes in fiscal policy to \$607 billion.

The weakening of the economy that will result from that fiscal restraint will lower taxable incomes and, therefore, revenues, and it will increase spending in some categories—for unemployment insurance, for instance. Those automatic responses will raise the federal deficit by \$47 billion, in CBO's estimation, leaving a *net* projected reduction in the deficit between fiscal years 2012 and 2013 of \$560 billion. As a result, the budget deficit will decline by 3.7 percent of GDP between those two fiscal years, according to CBO's estimates.

The change in fiscal policy is sharper when measured on a calendar year basis because most of the policy changes are scheduled to take effect at the beginning of calendar year

The Affordable Care Act comprises the Patient Protection and Affordable Care Act (P.L. 111-148) and the health care provisions of the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152).

Table 1.

Change in the Budget Deficit Under Current Law Between Fiscal Years 2012 and 2013

	Billions of Dollars
	Total Deficit
Deficit in 2012	-1,171
Deficit in 2013	-612
Total Change	560
	Factors Contributing to the Change in the Deficit Without Effects of Economic Feedback
Changes in Specified Revenue Policies	
Expiration of certain income tax and estate and gift tax provisions scheduled to expire on December 31, 2012, and of indexing the	
alternative minimum tax for inflation ^a	221
Expiration of the reduction in the employee's portion of the payroll tax	95
Other expiring provisions ^a	65
Taxes included in the Affordable Care Act	18
Subtotal	399
Changes in Specified Spending Policies Effects of the automatic enforcement procedures specified in the	
Budget Control Act ^a	65
Expiration of eligibility to start receiving emergency unemployment benefits	26
Reduction in Medicare's payment rates for physicians ^a	<u>11</u>
Subtotal	103
Other Changes in Revenues and Spending ^b	105
Total Change in Deficit Without Effects of Economic Feedback	607
	Contribution of Economic Feedback to the Change in the Deficit
Change in Deficit Without Effects of Economic Feedback	607
Effects of Economic Feedback ^c	-47
Total Change	560
Memorandum: Contribution of Policies Altered in the Alternative Fiscal Scenario to the	
Change in the Deficit Without Effects of Economic Feedback	362

Source: Congressional Budget Office.

Notes: Numbers may not add up to totals because of rounding.

Positive numbers indicate a decrease in the deficit.

- a. The policy is altered in CBO's alternative fiscal scenario. For details about the policies under that scenario, see Congressional Budget Office, *Updated Budget Projections: Fiscal Years 2012 to 2022* (March 2012), pp. 3–4.
- b. Not linked to specific policies; mostly reflecting changes in revenues.
- c. Economic feedback occurs because the reduction in the deficit induced by tax and spending policies would lower taxable incomes, thereby reducing revenues, and would increase spending on certain programs, such as unemployment insurance.

2013 and, therefore, partway through fiscal year 2013; as a result, fiscal year 2013 includes three quarters' worth of the effects of those policies, and calendar year 2013 includes four quarters' worth. On a calendar year basis, without the feedback from the weakening of the economy incorporated, the deficit will decline by 5.1 percent of GDP from 2012 to 2013, CBO estimates. The economic feedback will partially offset that decline by an estimated 0.4 percent of GDP between calendar years 2012 and 2013.⁵ All told, the federal budget deficit will decline by 4.7 percent of GDP between calendar year 2012 and calendar year 2013.

Economic Growth in the Short Run with the Fiscal Restraint Under Current Law

In its most recent economic forecast, published in January, CBO projected that real GDP would grow by 2.0 percent in calendar year 2012 and 1.1 percent in calendar year 2013 (measured by the change from the fourth quarter of the previous year). That forecast was consistent with projected federal spending and taxes under the law then in place. It also reflected CBO's view—which was shared by many private-sector forecasters—that the forces holding back the pace of economic activity were gradually waning, so that, absent the upcoming fiscal restraint, the growth of the economy would pick up during the next few years.

Economic data so far in 2012 have been broadly consistent with CBO's January projections, so the agency has not updated its forecast for this report to incorporate new economic data. However, CBO has updated its projections to include the effects of legislation enacted since January—in particular, the extension through the end of 2012 of the payroll tax cut for employees and emergency unemployment benefits. That change in fiscal policy will boost real GDP at the end of 2012 by about 0.6 percent but will have little effect on the level of GDP at the

end of 2013, CBO estimates. Accordingly, CBO now anticipates faster growth of GDP this year but slower growth next year than it projected in January.

The fiscal restraint that will be imposed on the economy in 2013 under current law will dampen economic growth slightly in the second half of 2012. CBO expects that households will restrain their spending a little as the scheduled increases in tax rates draw near and that businesses will hold off from some investment and hiring out of concern that the economy will weaken next year. In addition, government agencies may pull back on spending in anticipation of cuts in funding at the beginning of the year. Although quantifying those anticipatory effects is difficult, CBO estimates that they will reduce the growth of real GDP by about 0.5 percentage points at an annual rate in the second half of 2012.

Fiscal restraint will have a much larger impact on the economy in 2013. The increases in taxes and decreases in government benefits will lead households to cut back their purchases of goods and services, and the decline in funding for government programs will lead to further cuts in purchases. That drop in demand will, in turn, lead businesses to lower their production, employment, and investment. The magnitude of those responses is hard to judge. On the one hand, households generally respond to declines in income by reducing both spending and saving, thereby generating changes in spending that are smaller than the changes in income. And the effects on income of some of the tax increases—for example, the reductions in the refundable child tax credit—might not be recognized by households until they file their tax returns in 2014. On the other hand, initial cutbacks in spending have so-called multiplier effects on the economy, because reductions in employment, for example, cause households to cut back on their purchases further in a reinforcing fashion.

Incorporating the effects of the legislation enacted since January, CBO now projects that real GDP will increase by just 0.5 percent next year under current law. That small gain for the year as a whole reflects a contraction in output at an annual rate of 1.3 percent during the first half of 2013 (measured as growth between the fourth quarter of 2012 and the second quarter of 2013) as the fiscal restraint takes effect and then a renewed expansion in output at an annual rate of 2.3 percent in the second half of 2013 (measured as growth between the second and fourth quarters of 2013).

^{5.} That estimate is smaller than the change in the automatic stabilizers from 2012 to 2013 that is presented in Table C-2 of *The Budget and Economic Outlook: Fiscal Years 2012 to 2022*. The change in the automatic stabilizers reported in that table includes the budgetary effect of the changes in policy holding economic output unchanged (which is not relevant for the calculations here) as well as the budgetary effect of the changes in economic conditions that result from the changes in policy (which is relevant for the calculations here).

Table 2.

Growth of Inflation-Adjusted Gross Domestic Product in 2013 Under Various Policies

(Percent at annual rates)			
	First Half (2012, 4th qtr. to 2013, 2nd qtr.)	Second Half (2013, 2nd qtr. to 2013, 4th qtr.)	Year (2012, 4th qtr. to 2013, 4th qtr.)
Under Current-Law Fiscal Policy ^a	-1.3	2.3	0.5
With No Fiscal Restraint			
Central estimate	5.3	3.4	4.4
Range	1.0 to 9.6	1.9 to 5.0	1.4 to 7.3
Alternative Fiscal Scenario ^b			
Central estimate	1.7	2.5	2.1
Range	-0.4 to 3.8	2.0 to 3.0	0.8 to 3.4

Source: Congressional Budget Office.

- a. Figures reflect CBO's forecast of January 2012 updated to incorporate the effects of recent legislation.
- b. For details about the policies under that scenario, see Congressional Budget Office, *Updated Budget Projections: Fiscal Years 2012 to 2022* (March 2012), pp. 3–4.

If history is a guide, such a contraction in the economy in the first half of 2013 would probably be deemed a recession by the National Bureau of Economic Research. That organization dates the peaks and troughs of U.S. business cycles by examining changes in a host of economic indicators, including GDP, employment, industrial production, and retail sales. The economic outcomes that CBO expects, under current law, for the first half of 2013 strongly resemble mild recessions that occurred in the past. It bears emphasizing, however, that economic forecasts are very uncertain. Many developments, including the evolution of banking and fiscal problems in Europe and the speed at which the U.S. housing market improves, could cause economic outcomes to differ substantially, in one direction or the other, from those CBO has projected.

Economic Effects in the Short Run of Reducing Fiscal Restraint

If lawmakers changed fiscal policy in late 2012 to remove or offset all of the restraint that is scheduled to reduce the federal budget deficit by 5.1 percent of GDP between calendar years 2012 to 2013, real GDP would grow much more rapidly in 2013 than it will under current law. CBO estimates that, if all current policies were extended, the growth of real GDP in calendar year 2013 would be 4.4 percent (well above growth in 2012 because of a strengthening of spending by households and businesses). That figure represents CBO's central estimate, which corresponds to the assumption that key parameters of economic behavior—including the extent to which government borrowing crowds out capital investment and the response of labor supply to changes in marginal tax rates—equal the midpoints of the ranges used by CBO. Allowing for the full ranges that CBO uses for those parameters leads to estimates of real GDP growth in 2013 that lie between 1.4 percent and 7.3 percent (see Table 2).

Thus, removing the fiscal restraint scheduled under current law would boost GDP growth in 2013 by an estimated 3.9 percentage points (reflecting the projected 4.4 percent growth rate with restraint removed minus the

^{6.} Until it expired in 2006, section 254(i) of the Balanced Budget and Emergency Deficit Control Act of 1985 (the Deficit Control Act; 2 U.S.C. § 904) required CBO to notify the Congress whenever the agency projected that real economic growth would be less than zero within two consecutive quarters during the period consisting of the quarter of the report, the quarter before the report, and the four quarters after the report. The Budget Control Act of 2011 (P.L. 112-25; 125 Stat. 240) revived most of the provisions of the Deficit Control Act, but section 104 of the Budget Control Act specified that certain reporting requirements, including the report required by section 254(i), no longer apply.

Effect on Employment of Reducing Fiscal Restraint in 2013
Under Various Policies

	First Half	Second Half	Year	
	(2012, 4th qtr. to 2013, 2nd qtr.)	(2013, 2nd qtr. to (2013, 4th qtr.)	(2012, 4th qtr. to 2013, 4th qtr.)	
	Employment (Millions of People)			
With No Fiscal Restraint	Employment (willions of People)			
Central estimate	1.1	2.9	2.0	
Range	0.4 to 1.8	0.9 to 5.0	0.6 to 3.4	
Alternative Fiscal Scenario ^a				
Central estimate	0.9	1.8	1.3	
Range	0.3 to 1.5	0.5 to 3.0	0.4 to 2.3	
	Full-Time-Equivalent Employment (Millions) ^b			
With No Fiscal Restraint			•	
Central estimate	1.3	3.3	2.3	
Range	0.5 to 2.1	1.0 to 5.7	0.7 to 3.9	
Alternative Fiscal Scenario ^a				
Central estimate	1.1	2.0	1.5	
Range	0.4 to 1.8	0.6 to 3.4	0.5 to 2.6	

Source: Congressional Budget Office.

projected 0.5 percent growth rate under current law).⁷ According to CBO's central estimate, removing fiscal restraint in that way would raise employment by 2.0 million, on average, during 2013, with estimates under different assumptions spanning a range of 0.6 million to 3.4 million (see Table 3). Similarly, full-time-equivalent (FTE) employment (each FTE-year being 40 hours of employment per week for one year) would increase by 2.3 million, with a range of 0.7 million

to 3.9 million. (CBO's approach to analyzing the economic effects of changes in fiscal policy is summarized in Box 1.)

In its January Budget and Economic Outlook, CBO examined changes in policy short of removing all of the fiscal restraint scheduled to occur. The agency analyzed an alternative fiscal scenario that reflects a combination of possible changes to current law, including changes that would maintain major policies that have been in place for a number of years. That scenario incorporates the assumptions that expiring tax provisions (other than the payroll tax reduction) are extended; the AMT is indexed for inflation after 2011; Medicare's payment rates for physicians' services are held constant at their current level; and the automatic spending reductions required by the Budget Control Act do not occur (although the original caps on discretionary appropriations in that law are assumed to remain in place). Enacting that set of policies would reduce fiscal restraint in 2013 but not eliminate it. For example, the expiration of the extensions of the cut in

For details about the policies under that scenario, see Congressional Budget Office, Updated Budget Projections: Fiscal Years 2012 to 2022 (March 2012), pp. 3–4.

b. A year of full-time-equivalent employment is 40 hours of employment per week for one year.

^{7.} That effect is smaller than the effect of removing the fiscal restraint on the deficit itself, which is 5.1 percent of GDP in calendar year 2013 without accounting for economic feedback on the budget. The difference arises for two main reasons. First, the strengthening of the economy from removing the fiscal restraint would lead to higher incomes and hence tax revenues, as well as lower spending on such programs as unemployment insurance. That economic feedback would reduce the net change in the deficit to 4.7 percent of GDP. Second, the demand for goods and services in 2013 would change less than would the deficit: Most of the fiscal restraint under current law stems from increases in personal taxes, and removing that restraint would lead to higher saving as well as higher spending.

payroll taxes and emergency unemployment benefits, which the scenario does not include, is a significant source of fiscal restraint next year. Under the alternative fiscal scenario, real GDP growth would be 2.1 percent in 2013, according to CBO's central estimate, with a range of estimates from 0.8 percent to 3.4 percent (see Table 2).8 Employment would be 1.5 million higher in 2013, with a range of 0.5 million to 2.6 million (see Table 3).

Economic Effects in the Longer Run of Reducing Fiscal Restraint

Although removing or reducing the fiscal restraint scheduled to occur next year would boost the economy in the short run, doing so would reduce output and income in the longer run relative to what would otherwise occur. The fiscal restraint embodied in current law will reduce deficits markedly in the next few years, to an average of 1.4 percent of GDP over the 2013–2022 period. With deficits small relative to the size of the economy, federal debt held by the public will fall from 73 percent of GDP in 2012 to 61 percent in 2022, according to CBO's latest baseline budget projections. That decline in debt relative to the size of the economy will induce additional private investment, raising the stock of productive capital and boosting output and wages.

By contrast, if the scheduled fiscal restraint was eliminated by extending all current policies—not just in the short run, but for a prolonged period—debt would continue to rise much faster than GDP. For example, under the alternative fiscal scenario, which includes the extension of some but not all current policies, federal debt held by the public would reach 93 percent of GDP by 2022.¹⁰

If all current policies were extended, debt would be substantially higher.

However, debt cannot continually increase as a share of the economy: Policy changes would be required at some point. The longer the necessary adjustments in policies were delayed, and the more that debt increased, the greater would be the negative consequences. Specifically, a greater accumulation of debt would have a number of costs:

- Rising debt would cause a growing portion of people's savings to go to purchase government debt rather than to finance investments in productive capital, such as factories and computers. For example, under the alternative fiscal scenario, gross national product (GNP) would be 2.5 percent lower in 2022 than it would be under current law, according to CBO's estimates.

 That figure represents the net effect of the crowding out of capital investment and the encouragement that lower tax rates provide for work and saving. If all current policies were extended for the entire decade, the reduction in GNP by 2022 would probably be substantially larger.
- Higher amounts of debt would necessitate higher interest payments on that debt, which would eventually require either higher taxes or a reduction in government benefits and services.
- Rising debt would increasingly restrict policymakers' ability to use tax and spending policies to respond to unexpected challenges, such as economic downturns, financial turmoil, or international crises—especially because debt held by the public is already much larger relative to GDP than it has been in recent decades.

^{8.} The estimates of economic outcomes under the alternative fiscal scenario presented here differ from the estimates reported in the January *Budget and Economic Outlook* because of the effects of the legislation enacted since January. The policies assumed for the alternative fiscal scenario would change the deficit in fiscal year 2013 by more than half as much as removing all fiscal restraint, but they would change GDP growth in calendar year 2013 by less than half as much as removing all fiscal restraint. That disparity reflects differences between the two alternatives in both the nature and timing of policies.

^{9.} See Congressional Budget Office, *Updated Budget Projections:* Fiscal Years 2012 to 2022 (March 2012).

^{10.} Ibid.

^{11.} GNP excludes foreigners' earnings on investments in the domestic economy but includes U.S. residents' earnings overseas; thus, changes in GNP are a better measure of a policy's effects on U.S. residents' income than are changes in GDP. The differences between the effects of fiscal policies on GDP and GNP are very small in the short run but increase over time. According to CBO's estimates published earlier this year, real GNP in 2022 would between 1.0 percent and 3.7 percent lower under the alternative fiscal scenario than under current law. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2012 to 2022* (January 2012), pp. 29–30. The 2.5 percent figure cited in the text represents the estimate assuming that key parameters of the economy equal the midpoints of the ranges used by CBO.

Box 1.

CBO's Approach to Estimating the Economic Effects of Changes in Fiscal Policy

The Congressional Budget Office (CBO) analyzes the economic effects of changes in fiscal policy by using models and historical evidence to estimate the direct and indirect effects of budgetary policies on the economy. Direct effects change gross domestic product (GDP) by influencing the demand for goods and services, by either the federal government or the people and organizations directly affected by the policy—for example, the recipients of a tax cut. The size of a direct effect depends on a tax or spending provision's impact on the behavior of recipients. For example, if someone receives a tax reduction of a dollar and spends 80 cents (saving the other 20 cents), and production increases over time to meet the additional demand generated by that spending, the direct impact on output is 80 cents. The size of the direct effect, per dollar of budgetary cost, varies depending on the nature of the policy (for example, whether it is permanent or temporary) and the characteristics of those affected by the policy (for example, whether the recipients of tax cuts or transfers have high or low income); in general, direct effects per dollar of budgetary cost are between zero and 1.0.

Indirect effects enhance or offset direct effects. For example, the direct effects of lower taxes or higher spending are magnified when stronger demand for goods and services prompts companies to increase investment. In the other direction, direct effects are muted if higher government borrowing caused by tax decreases or spending increases leads to higher interest rates that discourage spending by households and businesses. With a large amount of unemployed resources in the U.S. economy today, CBO estimates that the indirect effects probably enhance the direct effects, on balance. Those additional effects can be represented by a demand multiplier, defined as the total change in GDP per dollar of direct effect on demand. Because there is considerable uncertainty about the economic relationships underlying indirect effects, CBO used estimates of that demand multiplier under current economic conditions ranging from 0.5 to 2.5, encompassing a broad range of economists' views.

Incorporating both the direct and indirect effects leads to a range of estimated total effects on output for different budgetary policies. CBO estimates that, under current economic conditions, a one-time increase of \$1 in federal purchases of goods and services would raise GDP cumulatively over several quarters above what it would have been otherwise by between 50 cents and \$2.50; those effects are larger than for other policy changes because such purchases have a dollar-for-dollar direct effect. By contrast, CBO estimates that a \$1 reduction in the employee's portion of the payroll tax would raise GDP cumulatively by between 16 cents and \$1. Most of the portion of upcoming fiscal restraint that CBO has not linked to specific policy changes (reported in Table 1 on page 4 as "Other Changes in Revenues and Spending") reflects changes in revenues. For those changes, CBO estimated that each \$1 change would change output cumulatively by between 25 cents and \$1.50.

To assess the short-term impact on labor markets of removing or reducing fiscal restraint, CBO used a series of steps to translate the estimated effects on output into estimated effects on employment. First, CBO calculated the impact on the output gap—the percentage difference between actual output and potential output. Next, CBO calculated the magnitude and timing of effects of changes in the output gap on productivity, hours per worker, and employment using the historical relationships between those measures. Changes in the output gap affect employment gradually over several quarters: Initially, part of a rise in output shows up as higher productivity and hours per worker rather than as higher employment. CBO also took account of the effect on the size of the labor force of changes in employment, because discouraged workers and people who have chosen to pursue activities such as schooling rather than work tend to return to the labor force when the economic environment improves. The projected increase in the average number of people employed in 2013 does not include shifts from part-time to full-time work or overtime and thus is somewhat smaller than the projected increase in full-time-equivalent (FTE) years. CBO's estimates imply that, on average across most policy changes, one year of FTE employment is created for roughly every \$110,000 in additional GDP.1

For additional detail on this methodology see the statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Budget Committee, *Policies for Increasing Economic Growth and Employment in 2012 and 2013* (November 15, 2011), pp. 22–25.

■ Growing debt would increase the likelihood of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget and the government would thereby lose its ability to borrow at affordable rates. Such a crisis would confront policymakers with extremely difficult choices. Again, the current high level of debt relative to the size of the economy means that further substantial increases in debt would be especially risky in this regard.

Therefore, eliminating or reducing the fiscal restraint scheduled to occur next year without imposing comparable restraint in future years would have substantial economic costs over the longer run. However, as shown earlier in this report, allowing the full measure of fiscal restraint now embodied in current law to take effect next year would have substantial economic costs in the short run.

What might policymakers do under these circumstances? One possibility is to leave current law in place, accepting the short-run economic costs of sharp fiscal restraint in order to put the federal budget on a sustainable longerrun trajectory. Another possibility is to extend all current policies for a prolonged period, accepting the longer-run costs and risks of surging federal debt for some time. An intermediate possibility is to extend some but not all current policies indefinitely (perhaps with some offsetting changes in other policies) or to extend or enact certain policies for a limited period. In particular, if policymakers wanted to minimize the short-run costs of narrowing the deficit very quickly while also minimizing the longer-run costs of allowing large deficits to persist, they could enact a combination of policies: changes in taxes and spending that would widen the deficit in 2013 relative to what would occur under current law but that would reduce deficits later in the decade relative to what would occur if current policies were extended for a prolonged period. Such a combination of policies would use fiscal policy to support demand for goods and services in the short run, while the unemployment rate is high and many factories

and offices are underused, but would impose fiscal restraint to bolster the economy's production over the longer run, when output and employment will probably be close to their potential.

That approach to fiscal policy would work best if the future policy changes were sufficiently specific and widely supported so that households, businesses, state and local governments, and participants in the financial markets believed that the future fiscal restraint would truly take effect. If such policy changes were enacted soon, they would tend to boost output and employment in the next few years by holding down interest rates and by reducing uncertainty and enhancing business and consumer confidence. Moreover, enacting policy changes soon would allow for implementing them gradually while still limiting further increases in federal debt and the corresponding negative consequences. Therefore, although there are trade-offs in choosing when policy changes to reduce future deficits should take effect, there are important benefits and few apparent costs from deciding quickly what those changes will be. 12

12. See the statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Joint Select Committee on Deficit Reduction, *Confronting the Nation's Fiscal Policy Challenges* (September 13, 2011), pp. 29-31.

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