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An Analysis of the President's Budgetary Proposals for Fiscal Year 2012

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Notes

Unless otherwise indicated, the years referred to in Chapter 1 are federal fiscal years (which run from October 1 to September 30), and the years referred to in Chapter 2 and Appendix A are calendar years.

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

The Congressional Budget Office's estimates in this report include the effects of legislation enacted through March 2, 2011; thus, they exclude the incremental effects on the budget of any subsequent continuing resolutions, full-year appropriation acts, or other legislation (such as the Comprehensive 1099 Taxpayer Protection and Repayment of Exchange Subsidy Overpayments Act of 2011).

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Preface

At the request of the Senate Committee on Appropriations, the Congressional Budget Office (CBO) has prepared an analysis of the President's budgetary proposals for fiscal year 2012, which were released on February 14, 2011. The analysis uses CBO's economic assumptions and estimating techniques, rather than the Administration's, to project how the proposals in the President's budget would affect federal revenues and outlays and the U.S. economy. For tax provisions, the analysis incorporates estimates prepared by the staff of the Joint Committee on Taxation.

This analysis follows and supplements CBO's "Preliminary Analysis of the President's Budget for 2012," which was released on March 18, 2011, as an attachment to a letter to the Chairman of the Senate Appropriations Committee. CBO has not changed its estimates from the ones presented there. Chapter 1 of this report reiterates that document, with additional figures and details about the differences between CBO's and the Administration's budget estimates. Chapter 2 presents CBO's analysis of how the President's proposals would affect the overall economy (relative to what would occur under current law) and, in turn, indirectly affect the budget.

The many people at CBO who worked on this report are listed in Appendix B. The report is available on the agency's Web site (www.cbo.gov).

Douglas W. Elmendorf

Douglas W. Elmendorf
Director

April 2011

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Summary

The Congressional Budget Office (CBO) has analyzed the proposals contained in the President's budget for 2012, which was released in February 2011. The analysis takes two forms: an assessment of the proposals without considering their effects on the economy, discussed in Chapter 1, and an evaluation of those proposals' potential effects on the economy and, in turn, the impact of those economic effects on the budget, discussed in Chapter 2. (Chapter 1 reiterates CBO's preliminary analysis released last month without changes to the estimates.)[1]

CBO's analysis of the President's proposals, before consideration of their potential impact on the economy, indicates the following:

- If the President's proposals were enacted, the federal government would record deficits of $1.4 trillion in 2011 and $1.2 trillion in 2012. Those deficits would amount to 9.5 percent and 7.4 percent of gross domestic product (GDP), respectively. (By comparison, the deficit in 2010 totaled 8.9 percent of GDP.) Those deficits would exceed the ones projected to occur under current law, by $26 billion and $83 billion, respectively.[2]

1. See Congressional Budget Office, "Preliminary Analysis of the President's Budget for 2012," attachment to a letter to the Honorable Daniel K. Inouye (March 18, 2011). Although CBO has not changed the estimates described in that preliminary analysis, Chapter 1 of this report now includes figures and more details about the differences between CBO's and the Administration's budget estimates.

2. Those estimates reflect legislation enacted through March 2, 2011, and have not been updated to reflect later legislation. In particular, the incremental effects of any subsequent continuing resolutions, full-year appropriation acts, or other legislation—such as the Comprehensive 1099 Taxpayer Protection and Repayment of Exchange Subsidy Overpayments Act of 2011—are not included.

- The deficit under the President's proposals would fall to 4.1 percent of GDP by 2015 but would generally rise thereafter. Compared with CBO's current-law baseline projections, deficits under the proposals would be about 0.5 percentage points of GDP higher in 2012, 1.3 percentage points higher in 2013, and 1 to 2 percentage points higher thereafter. By 2021, the deficit would reach 4.9 percent of GDP, compared with 3.1 percent under CBO's baseline projections. Over the 2012–2021 period, deficits under the President's budget would total $9.5 trillion, compared with $6.7 trillion under those baseline projections.

- Under the President's budget, debt held by the public would grow from $10.4 trillion (69 percent of GDP) at the end of 2011 to $20.8 trillion (87 percent of GDP) at the end of 2021, about $2.8 trillion more than the amount under CBO's baseline projections. Outlays for net interest would nearly quadruple between 2012 and 2021 in nominal dollars (without an adjustment for inflation); they would swell from 1.7 percent of GDP in 2012 to 3.9 percent in 2021.

- Revenues under the President's proposals would be a total of $2.3 trillion (or 6 percent) below CBO's baseline projections from 2012 to 2021, largely because of the President's proposals to index the thresholds for the alternative minimum tax (AMT) for inflation starting at their 2011 levels and to continue many of the tax reductions originally enacted in 2001 and 2003 that were extended in the 2010 tax act (the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010). Under current law, which CBO's baseline projections reflect, the parameters of the AMT will revert to earlier levels, and the reductions in the 2010 tax act will expire at the end of December 2012.

- Mandatory outlays under the President's proposals would exceed CBO's baseline projections by a total of $1.3 trillion (or 5 percent) over the 2012–2021 period. Much of that increase stems from a reclassification of outlays for most surface transportation programs (which are currently categorized as discretionary spending), an increase in transportation spending overall, a greater amount of refundable tax credits, and an increase in Medicare's payment rates for physicians relative to those under current law.

- Total discretionary spending between 2012 and 2021 would be about $1.45 trillion (or 10 percent) lower under the President's budget than in CBO's baseline—which incorporates the assumption that appropriations continue each year at the 2011 amount in effect in early March, with adjustments for inflation. The bulk of that decrease comes from the lower spending proposed by the President for war-related activities, the reclassification of certain outlays for transportation as mandatory, and a five-year freeze on spending for many nondefense programs.

- In comparison with the Administration's figure, CBO's estimate of the deficit for 2011 under the President's budget is $220 billion less, mostly because of lower estimates of outlays. In contrast, largely because of lower projections of revenues, CBO's estimates of the deficit are $63 billion higher than the Administration's for 2012 and $2.3 trillion higher for the 2012–2021 period.

The President's budgetary proposals would have effects on the economy, which would in turn influence the budget through changes in such factors as taxable income (which affects the amount of revenues collected), employment (which determines outlays for programs like unemployment compensation), and interest rates (which affect the government's borrowing costs). CBO's analysis of those interactions between the budget and the economy indicates the following:

- From 2012 to 2016, the President's proposals would raise the nation's real (inflation-adjusted) output relative to that under CBO's assumptions for its baseline by between 0.2 percent and 0.7 percent, on average. The proposals would boost output in the short run relative to that under current law primarily because tax reductions would increase people's disposable income.

- Over time, however, the President's proposals would reduce real output because the effects of increasing government debt would more than offset the stimulative effects of lower marginal tax rates. CBO estimates that the proposals would reduce real output relative to the amount in the agency's baseline by between 0.1 percent and 1.2 percent, on average, between 2017 and 2021, and by between 0.7 percent and 3.8 percent in the long term.

- The economic feedback from the President's proposals would increase their cumulative impact on deficits from 2012 through 2016—which is estimated to be nearly $1.0 trillion excluding any aggregate economic effects—by between $10 billion and $30 billion. From 2017 to 2021, the effects of the proposals on the economy could further boost the cumulative increase in deficits—estimated to be about $1.8 trillion, excluding any aggregate economic effects—by as much as $217 billion or could reduce it by up to $8 billion.[3]

CBO has not modified its economic forecast since January 2011, but the agency's March baseline budget projections take into account legislation enacted from January, when the previous baseline was prepared, through early March, as well as new information obtained about various aspects of the budget.[4] The resulting changes, relative to CBO's January projections, reduced the projected deficit for 2011 by $81 billion and diminished projected deficits over the 2012–2021 period by a total of $234 billion.

3. Under some assumptions about the effect of the President's proposals on the economy, projected deficits fall slightly because the tax base can increase even when gross national product (GNP) decreases. GNP is the total market value of goods and services produced in a given period by the labor and capital supplied by the country's residents, regardless of where the labor and capital are located.

4. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2011 to 2021* (January 2011).

CHAPTER

1

CBO's Estimate of the President's Budget

In March 2011, the Congressional Budget Office (CBO) released a preliminary analysis of the proposals contained in the President's budget for fiscal year 2012 and their estimated effects on federal revenues, outlays, and budget deficits.[1] CBO has not changed the estimates described in that preliminary analysis, which forms the basis for this chapter. However, the chapter includes more details about the differences between CBO's and the Administration's budget estimates.

As a basis for analyzing the President's budget, CBO updated its baseline budget projections, which were last issued in January 2011. Unlike its estimates of the President's budget, CBO's baseline projections largely reflect the assumption that current tax and spending laws will remain unchanged. Under that assumption, CBO estimates that the deficit will total $1.40 trillion in 2011—$81 billion less than the agency estimated in January. For the following 10 years (2012 to 2021), CBO now projects a cumulative deficit of $6.7 trillion—$234 billion less than the amount in the previous baseline. CBO has not modified its economic forecast since January, so the updated baseline projections mainly reflect new information that the agency has obtained about various aspects of the federal budget since the previous projections were completed.

CBO's analysis of the President's proposals is based on its own economic assumptions and estimating techniques (rather than the Administration's) and incorporates estimates prepared by the staff of the Joint Committee on Taxation (JCT) for tax provisions.[2] According to CBO's projections, if all of the President's budgetary proposals were enacted, they would add $26 billion to the baseline deficit for 2011 (see Table 1-1). As a result, the 2011 deficit would total $1.43 trillion, or 9.5 percent of gross domestic product (GDP).

In 2012, the deficit under the President's budget would decline to $1.2 trillion, or 7.4 percent of GDP, CBO estimates. That shortfall is $83 billion greater than the deficit that CBO projects for 2012 in its current baseline. Deficits in succeeding years under the President's proposals would be smaller than the deficit in 2012, although they would still add significantly to federal debt. The deficit would shrink to 4.1 percent of GDP by 2015 but widen in later years, reaching 4.9 percent of GDP in 2021 (see Figure 1-1). In all, deficits would total $9.5 trillion between 2012 and 2021 under the President's budget (or 4.8 percent of total GDP projected for that period)—$2.7 trillion more than the cumulative deficit in CBO's baseline. Federal debt held by the public would double under the President's budget, growing from $10.4 trillion (69 percent of GDP) at the end of 2011 to $20.8 trillion (87 percent of GDP) at the end of 2021.

The President's policy proposals mostly affect the revenue side of the budget. Those proposals would reduce revenues, compared with CBO's baseline projections, in every year of the coming decade—for a total reduction of about 6 percent over the 2012–2021 period. Nevertheless, revenues would rise relative to GDP: from 16.2 percent in 2012 to 19.3 percent in 2021 (see Table 1-2 on page 4). The 19.3 percent figure is 1.5 percentage points below CBO's baseline projection for 2021 but 1.3 percentage points above the average ratio of revenues to GDP seen over the past 40 years.

1. Congressional Budget Office, "Preliminary Analysis of the President's Budget for 2012," attachment to a letter to the Honorable Daniel K. Inouye (March 18, 2011).

2. See Joint Committee on Taxation, *Estimated Budget Effects of the Revenue Provisions Contained in the President's Fiscal Year 2012 Budget Proposal,* JCX-19-11 (March 17, 2011), www.jct.gov/publications.html?func=startdown&id=3773.

Table 1-1.

Comparison of Projected Revenues, Outlays, and Deficits Under CBO's March 2011 Baseline and CBO's Estimate of the President's Budget

(Billions of dollars)

	Actual 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
							CBO's March 2011 Baseline							
Revenues	2,163	2,230	2,558	3,087	3,440	3,642	3,826	4,071	4,271	4,483	4,703	4,951	16,554	39,032
Outlays	3,456	3,629	3,639	3,779	3,954	4,180	4,460	4,661	4,856	5,148	5,412	5,680	20,012	45,770
Total Deficit	**-1,294**	**-1,399**	**-1,081**	**-692**	**-513**	**-538**	**-635**	**-590**	**-585**	**-665**	**-710**	**-729**	**-3,459**	**-6,737**
							CBO's Estimate of the President's Budget							
Revenues	2,163	2,229	2,544	2,899	3,212	3,442	3,635	3,818	3,994	4,179	4,382	4,597	15,732	36,702
Outlays	3,456	3,655	3,708	3,800	3,976	4,191	4,476	4,687	4,896	5,200	5,483	5,756	20,150	46,172
Total Deficit	**-1,294**	**-1,425**	**-1,164**	**-901**	**-764**	**-748**	**-841**	**-870**	**-902**	**-1,021**	**-1,101**	**-1,158**	**-4,418**	**-9,470**
							Difference Between CBO's Estimate of the President's Budget and CBO's Baseline							
Revenues	n.a.	-1	-14	-188	-228	-200	-191	-254	-277	-304	-321	-354	-822	-2,331
Outlays	n.a.	25	69	21	22	11	15	26	40	53	70	76	138	402
Total Deficit[a]	**n.a.**	**-26**	**-83**	**-209**	**-251**	**-210**	**-206**	**-279**	**-318**	**-356**	**-391**	**-429**	**-959**	**-2,733**
Memorandum:														
Total Deficit as a Percentage of GDP														
CBO's baseline	-8.9	-9.3	-6.9	-4.2	-3.0	-3.0	-3.3	-2.9	-2.8	-3.0	-3.1	-3.1	-4.0	-3.4
CBO's estimate of the President's budget	-8.9	-9.5	-7.4	-5.5	-4.4	-4.1	-4.4	-4.3	-4.3	-4.7	-4.8	-4.9	-5.1	-4.8
Debt Held by the Public as a Percentage of GDP														
CBO's baseline	62.1	68.9	73.4	75.1	74.9	74.5	74.6	74.7	74.7	75.0	75.3	75.6	n.a.	n.a.
CBO's estimate of the President's budget	62.1	69.1	74.3	77.2	78.3	78.9	79.9	81.1	82.4	84.0	85.7	87.4	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable; GDP = gross domestic product.

a. Negative numbers indicate an increase relative to the deficit in CBO's baseline.

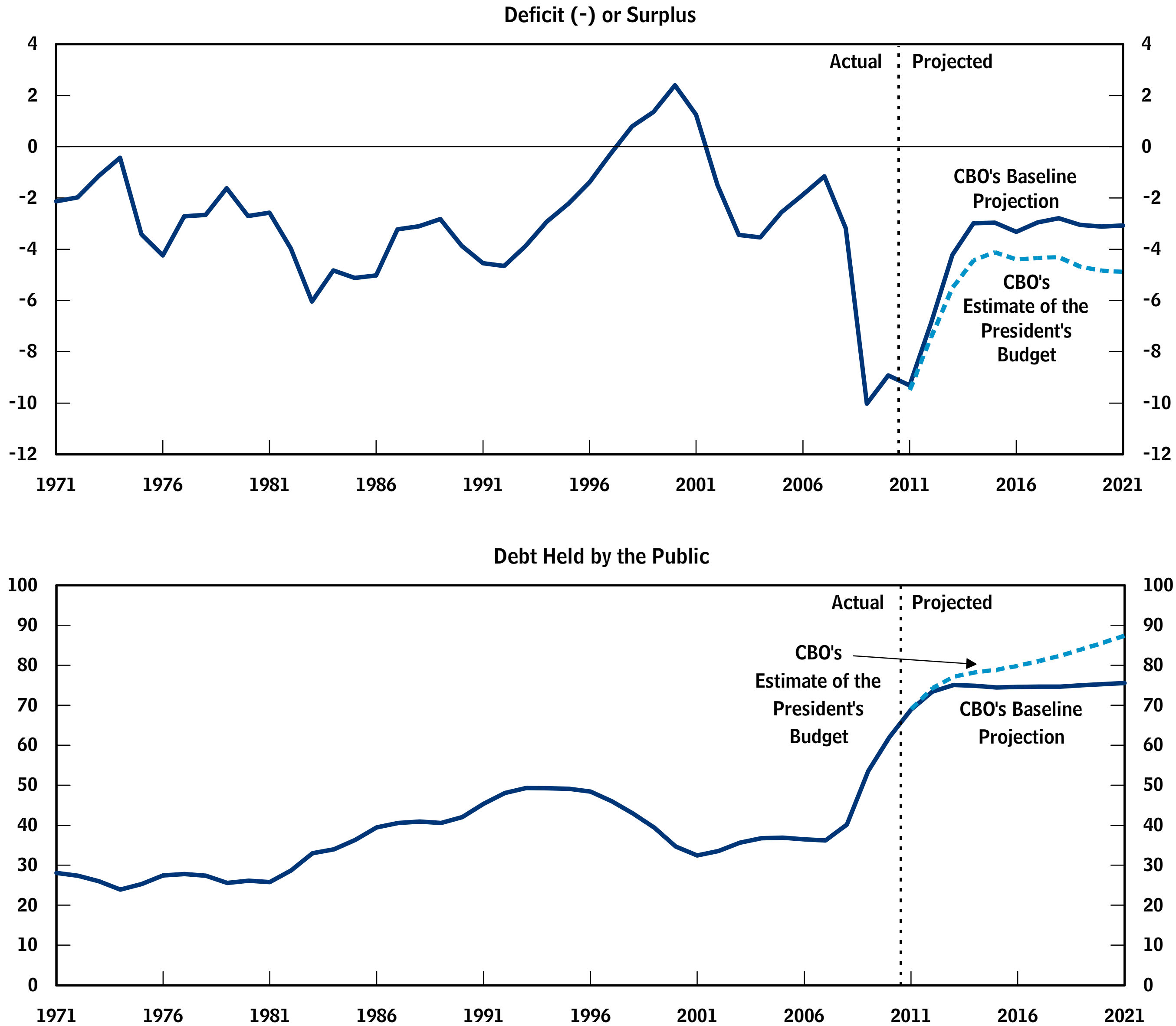
Outlays would be greater under the President's budget than in CBO's baseline in each of the next 10 years, primarily because the proposed reduction in revenues would boost deficits and thus the costs of paying interest on the additional debt that would accumulate. In particular, net interest payments would nearly quadruple in nominal dollars (without an adjustment for inflation) over the 2012–2021 period and would increase from 1.7 percent of GDP to 3.9 percent. Total outlays under the President's budget would equal 23.6 percent of GDP in 2012, decline slightly as a share of GDP over the following two years, and then rise for the rest of the 10-year projection period. They would equal 24.2 percent of GDP in 2021—about 0.3 percentage points above CBO's baseline projection for that year and well above the 40-year average for total outlays, 20.8 percent.

Of the various initiatives that the President is proposing, tax provisions would have by far the largest budgetary impact. The 2010 tax act (officially the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Public Law 111-312) extended

Figure 1-1.

Total Deficits and Debt Under CBO's March 2011 Baseline and CBO's Estimate of the President's Budget

(Percentage of gross domestic product)



Source: Congressional Budget Office.

through December 2012 many of the tax reductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA). The President proposes to extend those reductions permanently, with some modifications, and to permanently index for inflation the amounts of income exempt from the alternative minimum tax (AMT), starting at their 2011 levels. In addition, the President proposes that, beginning in January 2013, estate and gift taxes return permanently to the rates and exemption levels that were in effect in calendar year 2009. Those policies would reduce tax revenues and boost outlays for refundable tax credits by a total of more than $3.0 trillion

Table 1-2.

CBO's Estimate of the President's Budget

	Actual 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
	In Billions of Dollars													
Revenues														
On-budget	1,531	1,664	1,877	2,167	2,443	2,631	2,781	2,922	3,057	3,199	3,360	3,530	11,899	27,968
Off-budget	632	566	667	732	769	811	854	895	936	980	1,022	1,067	3,833	8,733
Total	**2,163**	**2,229**	**2,544**	**2,899**	**3,212**	**3,442**	**3,635**	**3,818**	**3,994**	**4,179**	**4,382**	**4,597**	**15,732**	**36,702**
Outlays														
Mandatory spending	1,913	2,071	2,086	2,179	2,317	2,456	2,647	2,763	2,879	3,085	3,264	3,450	11,686	27,127
Discretionary spending	1,347	1,369	1,362	1,292	1,251	1,245	1,257	1,273	1,292	1,321	1,352	1,374	6,407	13,020
Net interest	196	214	260	328	409	489	571	651	725	794	866	931	2,057	6,025
Total	**3,456**	**3,655**	**3,708**	**3,800**	**3,976**	**4,191**	**4,476**	**4,687**	**4,896**	**5,200**	**5,483**	**5,756**	**20,150**	**46,172**
On-budget	2,902	3,158	3,127	3,156	3,295	3,472	3,717	3,883	4,044	4,296	4,521	4,735	16,766	38,245
Off-budget	555	497	581	644	681	719	759	804	853	904	961	1,020	3,384	7,926
Deficit (-) or Surplus	**-1,294**	**-1,425**	**-1,164**	**-901**	**-764**	**-748**	**-841**	**-870**	**-902**	**-1,021**	**-1,101**	**-1,158**	**-4,418**	**-9,470**
On-budget	-1,371	-1,494	-1,250	-989	-852	-840	-936	-961	-986	-1,096	-1,161	-1,205	-4,867	-10,277
Off-budget	77	69	86	88	88	92	95	92	84	75	61	47	449	807
Debt Held by the Public	9,019	10,389	11,661	12,660	13,516	14,359	15,292	16,254	17,250	18,364	19,558	20,806	n.a.	n.a.
Memorandum:														
Gross Domestic Product	14,513	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	86,686	196,138
	As a Percentage of Gross Domestic Product													
Revenues														
On-budget	10.5	11.1	12.0	13.2	14.2	14.5	14.5	14.6	14.6	14.6	14.7	14.8	13.7	14.3
Off-budget	4.4	3.8	4.2	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.5
Total	**14.9**	**14.8**	**16.2**	**17.7**	**18.6**	**18.9**	**19.0**	**19.1**	**19.1**	**19.1**	**19.2**	**19.3**	**18.1**	**18.7**
Outlays														
Mandatory spending	13.2	13.8	13.3	13.3	13.4	13.5	13.8	13.8	13.8	14.1	14.3	14.5	13.5	13.8
Discretionary spending	9.3	9.1	8.7	7.9	7.2	6.8	6.6	6.4	6.2	6.0	5.9	5.8	7.4	6.6
Net interest	1.4	1.4	1.7	2.0	2.4	2.7	3.0	3.3	3.5	3.6	3.8	3.9	2.4	3.1
Total	**23.8**	**24.3**	**23.6**	**23.2**	**23.0**	**23.0**	**23.4**	**23.4**	**23.4**	**23.8**	**24.0**	**24.2**	**23.2**	**23.5**
On-budget	20.0	21.0	19.9	19.2	19.1	19.1	19.4	19.4	19.3	19.7	19.8	19.9	19.3	19.5
Off-budget	3.8	3.3	3.7	3.9	3.9	4.0	4.0	4.0	4.1	4.1	4.2	4.3	3.9	4.0
Deficit (-) or Surplus	**-8.9**	**-9.5**	**-7.4**	**-5.5**	**-4.4**	**-4.1**	**-4.4**	**-4.3**	**-4.3**	**-4.7**	**-4.8**	**-4.9**	**-5.1**	**-4.8**
On-budget	-9.4	-9.9	-8.0	-6.0	-4.9	-4.6	-4.9	-4.8	-4.7	-5.0	-5.1	-5.1	-5.6	-5.2
Off-budget	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.5	0.4
Debt Held by the Public	62.1	69.1	74.3	77.2	78.3	78.9	79.9	81.1	82.4	84.0	85.7	87.4	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

over the next decade relative to the amounts projected in CBO's baseline.[3] That total exceeds the $2.7 trillion net increase in the deficit over the next 10 years that would result from the President's budget as a whole; the President's other proposals would reduce the deficit, on balance, over 10 years.

Those other proposals include some initiatives that would widen the deficit and some that would narrow it. For example, the President's proposal to freeze Medicare's payment rates for physicians at the current level through the 2012–2021 projection period would boost outlays by $0.3 trillion relative to the amount under current law (which calls for sharp reductions in payments to physicians).[4] Higher spending on transportation programs would add another $0.2 trillion to the total deficit between 2012 and 2021. In contrast, the President's budget includes a total of $0.9 trillion less in spending for defense over that period than the amount projected in CBO's baseline. The main reason for the difference is that the baseline incorporates the assumption that funding for war-related activities will continue at $159 billion a year (the amount provided so far for 2011, annualized) with adjustments for inflation, whereas the President's budget includes a request for appropriations of $127 billion for such activities for 2012 and a placeholder of $50 billion a year thereafter. In addition, the President's proposal to cap at 28 percent the rate at which itemized deductions reduce a taxpayer's income tax liability would decrease the deficit by $0.3 trillion over the next decade.

Compared with the Administration's estimates, CBO's estimates of the deficit under the President's budget are lower for 2011 (by $220 billion) but higher for each year thereafter (by a total of $2.3 trillion over the 2012–2021 period). That disparity stems from differences in the underlying projections of what would happen under current law ($1.3 trillion) as well as from differing assessments of the effects of the President's proposals ($1.0 trillion).

3. A tax credit is refundable if the taxpayer receives a refund when the allowable credit exceeds the amount of tax owed. Such refunds are recorded in the budget as outlays.

4. The President proposes to offset the costs of maintaining the current payment rates for the first two years by making other changes to Medicare and Medicaid. However, the policies that would offset those costs after January 1, 2014, are not specified in the budget, so CBO did not include any savings for such policies in its analysis.

Impact of the President's Proposals on the Budget Outlook

If the President's policy proposals were enacted, the resulting $1.43 trillion deficit for 2011 would be slightly larger (by $26 billion) than the shortfall that CBO projects under its current-law baseline (see Table 1-3). Those policies would increase outlays by $25 billion and decrease revenues by $1 billion in 2011. In 2012, the deficit under the President's budget would be $83 billion greater than the deficit CBO projects in its March baseline, mostly because outlays would be higher.

Starting in 2013, the deficits that CBO projects under the President's budget diverge more widely from those in the baseline. For the 10-year projection period as a whole, the deficit that would result under the President's proposals—$9.5 trillion, or 4.8 percent of GDP—would be $2.7 trillion greater than the cumulative deficit projected under current law. About $2.2 trillion of that difference stems directly from proposed policy changes; the other $0.5 trillion reflects additional interest payments resulting from increased borrowing.

Revenues

The President proposes making a number of changes to tax law over the next decade. If enacted, those policies would reduce revenues by $2.3 trillion during the 2012–2021 period relative to the amounts in CBO's baseline. (They would also boost outlays by $0.4 trillion over the same period, mostly through increases in refundable tax credits and, to a lesser extent, through the spending component of a proposal to extend and modify the Build America Bonds program, which would also raise revenues by a similar amount.) The reduction in revenues from some of the President's proposals would be partly offset by increases in revenues from other proposals. As a share of GDP, revenues would average 18.7 percent over the next 10 years under the President's budget, compared with 19.9 percent in CBO's baseline projections (see Figure 1-2 on page 8).

Extending and Modifying the 2001 and 2003 Tax Reductions. The 2010 tax act extended through calendar year 2012 various income tax provisions originally enacted in EGTRRA and JGTRRA and later modified by the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5). Those provisions, which are currently scheduled to expire after 2012, include reductions

Table 1-3.

CBO's Estimate of the Effect of the President's Budget on Baseline Deficits

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
Total Deficit as Projected in CBO's March 2011 Baseline	-1,399	-1,081	-692	-513	-538	-635	-590	-585	-665	-710	-729	-3,459	-6,737
Effect of the President's Proposals													
Revenues													
Provisions related to EGTRRA and JGTRRA[a]													
Modify individual income tax rates[b]	0	0	-78	-114	-120	-127	-134	-141	-149	-157	-165	-440	-1,187
Provide relief from the marriage penalty	0	0	-21	-32	-33	-35	-38	-39	-40	-42	-43	-120	-321
Extend child tax credit provisions[c]	0	0	-3	-13	-13	-13	-13	-13	-13	-13	-13	-43	-110
Modify tax rates on capital gains and dividends[d]	0	-1	-5	-10	-14	-14	-14	-15	-15	-16	-16	-44	-121
Other provisions	0	*	-6	-12	-10	-10	-9	-9	-9	-9	-10	-38	-84
Subtotal	0	-1	-113	-182	-191	-199	-209	-217	-226	-237	-248	-685	-1,823
Index the AMT starting from 2011 levels[a]	0	-9	-93	-39	-45	-53	-62	-73	-87	-102	-119	-240	-683
Modify estate and gift tax rates	*	*	-1	-21	-25	-27	-29	-31	-33	-35	-37	-75	-239
Limit the tax rate at which itemized deductions reduce tax liability	0	4	20	25	28	30	33	35	37	39	41	107	293
Reform the U.S. international tax system	0	6	13	12	13	13	14	15	16	17	15	57	133
Tax most dividends at 20 percent for higher-income taxpayers	0	*	-3	-8	-9	-10	-11	-13	-13	-14	-14	-30	-96
Extend the research and experimentation tax credit	0	-3	-6	-7	-8	-9	-9	-10	-11	-12	-13	-31	-88
Extend the American Opportunity Credit	0	0	-2	-8	-8	-8	-9	-9	-9	-10	-10	-27	-74
Modify and extend the Build America Bonds program[e]	*	1	2	3	5	6	8	9	11	12	14	16	70
Other proposals	-1	-11	-6	-3	42	66	21	17	13	20	17	87	174
Total Effect on Revenues	**-1**	**-14**	**-188**	**-228**	**-200**	**-191**	**-254**	**-277**	**-304**	**-321**	**-354**	**-822**	**-2,331**
Outlays													
Mandatory													
Reclassify surface transportation spending as mandatory	0	15	36	45	50	54	57	59	61	62	64	200	504
Increase transportation funding	0	6	13	15	18	21	25	28	29	30	29	72	213
Freeze Medicare's physician payment rates at 2011 levels	0	12	19	23	26	29	31	34	37	41	45	109	298
Offset cost of freezing Medicare's physician payment rates through 2013	0	*	-1	-1	-3	-4	-6	-6	-7	-8	-13	-9	-48
Extend or expand certain refundable tax credits	*	*	1	36	36	37	37	38	38	38	38	111	300
Modify and extend the Build America Bonds program[e]	*	1	2	3	5	7	8	10	12	13	15	18	76
Other proposals	16	16	8	6	-2	-3	-5	-6	-7	-7	-8	25	-7
Subtotal	16	49	78	128	131	141	148	156	164	170	171	525	1,335

Continued

Table 1-3. **Continued**

CBO's Estimate of the Effect of the President's Budget on Baseline Deficits

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
Outlays (Continued)													
Discretionary													
Defense	4	13	-36	-71	-85	-95	-100	-107	-115	-124	-133	-273	-853
Nondefense[f]	4	4	-28	-49	-61	-68	-73	-76	-81	-79	-87	-202	-599
Subtotal	8	17	-64	-120	-146	-162	-174	-183	-196	-203	-220	-475	-1,452
Net interest	2	3	7	15	26	37	51	67	85	104	125	88	519
Total Effect on Outlays	**25**	**69**	**21**	**22**	**11**	**15**	**26**	**40**	**53**	**70**	**76**	**138**	**402**
Total Effect on the Deficit[g]	**-26**	**-83**	**-209**	**-251**	**-210**	**-206**	**-279**	**-318**	**-356**	**-391**	**-429**	**-959**	**-2,733**
Total Deficit Under the President's Budget as Estimated by CBO	-1,425	-1,164	-901	-764	-748	-841	-870	-902	-1,021	-1,101	-1,158	-4,418	-9,470
Memorandum:													
Total Deficit Under the President's Budget as Estimated by the Administration	-1,645	-1,101	-768	-645	-607	-649	-627	-619	-681	-735	-774	-3,769	-7,205

Sources: Congressional Budget Office; Joint Committee on Taxation.

Note: * = between -$500 million and $500 million; EGTRRA = Economic Growth and Tax Relief Reconciliation Act of 2001; JGTRRA = Jobs and Growth Tax Relief Reconciliation Act of 2003; AMT = alternative minimum tax.

a. The estimated effects of the President's proposals related to EGTRRA and JGTRRA interact with the effects of the proposal to index the AMT. This analysis first estimated the revenue effects of the proposal for the AMT relative to projections under current law, and then it estimated the effects of the proposals related to EGTRRA and JGTRRA relative to projections under current law modified for the proposed changes to the AMT. Thus, the estimates for the proposals related to EGTRRA and JGTRRA include estimated losses in revenues that would result from interactions with the AMT proposal.

b. The estimates include the effects of maintaining, for taxpayers with income above certain levels, the income tax rates of 36 percent and 39.6 percent scheduled to go into effect in calendar year 2013 under current law. For other taxpayers, tax rates would be at the levels originally specified in EGTRRA and extended through calendar year 2012 in the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.

c. Includes extension of the $1,000 child tax credit and use of that credit to reduce AMT liability.

d. The estimate includes the effect of maintaining the capital gains and dividend tax rates of zero and 15 percent for taxpayers filing joint returns who have income below $250,000 or single filers who have income below $200,000.

e. This proposal affects both revenues and outlays. The Joint Committee on Taxation estimates that the net effect of the Build America Bonds program is to increase the deficit by $6 billion.

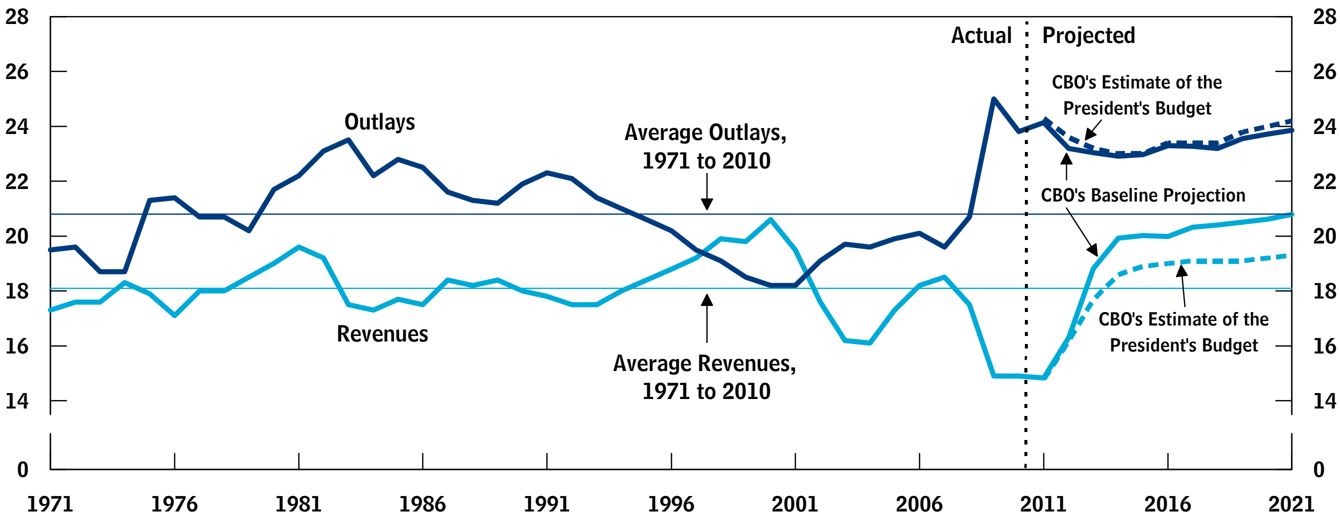
f. The changes to nondefense discretionary outlays include the effects of the President's proposal to reclassify spending for certain surface transportation programs as mandatory. That proposed reclassification accounts for about $500 billion of the 2012–2021 total shown here.

g. Negative numbers indicate an increase relative to the deficit in CBO's baseline.

Figure 1-2.

Total Revenues and Outlays Under CBO's March 2011 Baseline and CBO's Estimate of the President's Budget

(Percentage of gross domestic product)



Source: Congressional Budget Office.

in some individual income tax rates, cuts in tax rates on capital gains and dividends, elimination of the phaseout of personal exemptions and the limit on itemized deductions for certain taxpayers, an increase in the child tax credit, relief from the so-called marriage penalty, and changes in the tax treatment of certain investments in equipment by small businesses.

As estimated by JCT, the President's proposal to make those provisions permanent (with some modifications) would reduce revenues by $1.8 trillion (0.9 percent of GDP) over the next 10 years and increase outlays by $262 billion (0.1 percent of GDP) relative to the amounts in CBO's baseline.[5] Specifically, the President has called for permanently extending, at 2012 levels, the tax rates on income, capital gains, and dividends for couples who file joint tax returns and who have income under $250,000 (with an adjustment for inflation since 2009) and for single filers who have income under $200,000 (also adjusted for inflation since 2009). For taxpayers with income above those amounts, the President proposes to maintain the income tax rates, the phaseout of the personal exemption, and the limit on itemized deductions that are scheduled to take effect in January 2013 under current law and to tax capital gains at a rate of 20 percent.[6] In addition, the President proposes continuing the $1,000 child tax credit, which was enacted in EGTRRA, as well as the reduced earnings threshold at which families can qualify for at least a partial credit, which was enacted in ARRA. Some of those proposals would also affect outlays by increasing refundable credits (as discussed in more detail below in the section on outlays).

Providing Relief from the Alternative Minimum Tax. Besides extending those tax provisions, the President proposes to reduce the number of taxpayers who would be subject to the AMT by permanently setting various parameters of the tax at the levels that were in effect in calendar year 2011 and indexing those amounts for inflation in later years. Those parameters include the AMT exemption amount, the income threshold for the 28 percent tax rate, and the income threshold for the phaseout of the exemption amount. The Administration also

5. That revenue estimate incorporates the effects of interactions between those provisions and the proposal for the AMT discussed below. Such interactions increase the projected revenue loss relative to what it would be without the AMT proposal.

6. Those higher-income taxpayers would also have a lower tax rate on dividends under the President's budget than under current law; that proposal is discussed separately below, and the revenue estimates in this section do not include its effects.

proposes to permanently extend the unrestricted use of certain personal tax credits under the AMT. Relative to current law, those changes would reduce revenues by $683 billion between 2012 and 2021, JCT estimates.[7]

Modifying Estate and Gift Taxes. The President proposes to set the parameters of the estate, gift, and generation-skipping transfer taxes at the levels that were in effect during calendar year 2009, once the current levels expire at the end of December 2012. Under that proposal, the amount of an estate that would effectively be exempt from the estate tax would be set permanently at $3.5 million; any amount above $3.5 million would be taxed at a rate of 45 percent. The exemption amount for gift taxes would be set at $1 million, with a top tax rate of 45 percent. In addition, a tax rate of 45 percent would apply to transfers in which an heir (for instance, a grandchild) was more than one generation younger than the decedent. JCT estimates that those proposals would lower revenues by $239 billion between 2012 and 2021.

Other Revenue Proposals. The President proposes to limit the extent to which taxpayers can reduce their tax liability through itemized deductions to 28 percent of those deductions. That change would boost revenues by $293 billion over the 2012–2021 period, according to JCT.

The President's budget also contains a set of changes to the U.S. system for taxing international income, which would raise revenues by $133 billion over 10 years, JCT estimates. Those changes include targeting specific sources of tax avoidance associated with intangible assets (such as patents and trademarks) and modifying tax rules for calculating foreign tax credits and expenses related to foreign operations.

In addition, the President proposes to apply a 20 percent tax rate to most dividends for joint filers with income over $250,000 (adjusted for inflation since 2009) and for single filers with income over $200,000. Under current law, dividends are scheduled to be taxed at a taxpayer's regular individual income tax rate beginning in January 2013. JCT estimates that the proposal for a 20 percent rate would reduce revenues by $96 billion through 2021.

7. This estimate does not reflect the interactions between the AMT provisions and the proposal to extend and modify the tax provisions in the 2010 tax act. As mentioned in footnote 6, the effects of the interactions are included in the estimate for that proposal.

The tax credit for research and experimentation is scheduled to expire at the end of calendar year 2011. The Administration proposes to make the credit permanent, in modified form, which would lessen revenues by $88 billion over the 2012–2021 period, according to JCT.

The American Opportunity Credit, which was created by ARRA and extended through December 2012 by the 2010 tax act, provides an annual tax credit of up to $2,500 per student for qualified postsecondary education expenses. The President proposes to extend the credit permanently and to index for inflation the amount of qualified expenses and the phaseout limits. JCT estimates that those changes would decrease revenues by $74 billion and increase outlays by $16 billion over 10 years.

The Build America Bonds program, which was also created by ARRA, provides subsidy payments to state and local governments equal to 35 percent of their interest costs on taxable bonds issued through December 2010 to finance capital expenditures. The President proposes to expand and permanently extend the program but to lower the subsidy rate to 28 percent. By substituting taxable for tax-exempt bonds, the program would increase taxable interest income. According to JCT, the proposal would raise revenues by $70 billion between 2012 and 2021. The payments to state and local governments are recorded in the federal budget as outlays. The proposed changes would boost outlays by an estimated $76 billion over 10 years, with the net effect of increasing the cumulative deficit by $6 billion.

Taken together, the other revenue proposals in the President's budget whose effects are included in this analysis would raise revenues by $174 billion, on net, over the next 10 years. Proposals that CBO and JCT estimate would increase revenues include repealing the "last-in, first-out" method of accounting for inventories ($70 billion), reducing tax preferences for the production of fossil fuels ($41 billion), providing short-term tax relief to employers and expanding the base for the payroll tax for unemployment compensation ($36 billion), imposing a "financial crisis responsibility fee" ($30 billion), and taxing carried interest ($20 billion).[8] Partly offsetting those increases would be revenue reductions from decreasing

8. Carried interest typically forms part of the compensation received by a general partner of a private equity or hedge fund. It is generally a share of the profits on the assets under management.

the amount of information that businesses are required to report to the Internal Revenue Service about certain payments, starting in January 2012, and from extending the expanded earned income tax credit for larger families.

In a few cases, the Administration did not provide sufficient details about the President's proposals to allow for a full assessment of their effects on revenues. For example, the budget provides enough information about the tax base and rate of the financial crisis responsibility fee to indicate that such collections are possible, but the proposal would require additional specifications for JCT to produce a revenue estimate. In that case, CBO incorporated the Administration's estimate—that the fee would raise $30 billion over 10 years—as a placeholder because the proposal was specific enough to determine that the revenues estimated by the Administration could feasibly be raised in the manner described.

However, in the case of a proposal to raise new revenues to support the reauthorization of surface transportation programs, the absence of any information about the nature of the taxes or fees that might be used to produce revenues did not allow an assessment of the potential budgetary effects. As a result, CBO did not include any revenues for that proposal, which the Administration projected would raise revenues by $328 billion over the 2012–2021 period.

Outlays

On the spending side of the budget, the President's policies would increase outlays (relative to CBO's baseline projections) by $25 billion in 2011 and by $402 billion between 2012 and 2021 (see Table 1-3 on page 6). That 10-year total can be more than explained by an increase of $519 billion in interest costs, largely stemming from the additional borrowing that would result from the President's revenue proposals.

The President's policies would keep total noninterest outlays close to the levels projected in CBO's baseline—with a net reduction of $117 billion, or 0.3 percent, over the next decade. Those outlays would be above the amounts in the baseline through 2014 and below them between 2015 and 2021. Outlays for mandatory programs would be $1.34 trillion higher through 2021 under the President's budget, mainly because of a reclassification of outlays for most surface transportation that are currently categorized as discretionary spending, an increase in overall transportation spending, a greater amount of refundable tax credits, and an increase in Medicare's payment rates for physicians relative to those under current law. The increase in mandatory spending would be slightly more than offset by a decrease of $1.45 trillion in discretionary spending over 10 years. The bulk of that decrease comes from the lower spending assumed for war-related activities, the reclassification of certain transportation outlays as mandatory, and a five-year freeze on spending for many nondefense discretionary programs.

As a percentage of GDP, outlays would average 23.5 percent over the next decade under the President's budget—well above the average of 20.8 percent seen over the past 40 years. Mandatory outlays would equal 13.3 percent of GDP in 2012 and generally rise throughout the projection period, reaching 14.5 percent of GDP in 2021, compared with 13.8 percent in CBO's baseline. Discretionary outlays, by contrast, would drop significantly relative to GDP throughout the period, from 8.7 percent in 2012 to 5.8 percent in 2021, 0.9 percentage points below the 2021 figure in CBO's baseline.

Proposals That Would Affect Mandatory Spending. The potential change with the largest impact on mandatory spending is a proposal to reclassify outlays for surface transportation programs funded through the Highway Trust Fund from discretionary to mandatory. The President would also replace most other existing discretionary funding for surface transportation programs with new mandatory funding. Further, the President proposes to increase the resources available for such programs by about $50 billion in 2012 and by smaller amounts through 2017. Beginning in 2018, total funding would be indexed to inflation. Those changes would boost mandatory outlays by $716 billion over the 2012–2021 period, of which $504 billion would replace discretionary spending contained in CBO's baseline.[9]

9. For programs funded through the Highway Trust Fund, budget authority is classified as mandatory under current law, but outlays are considered discretionary because they are controlled by obligation limitations set in appropriation acts. Reclassifying those programs—which could be done without legislation if agreed to by the House and Senate budget committees, the Administration, and CBO—would shift $430 billion from the discretionary to the mandatory category. However, some surface transportation programs are currently funded through discretionary budget authority and would require legislation to reclassify; CBO estimates that outlays for those programs will total $74 billion between 2012 and 2021.

Under current law, payment rates for physicians' services under Part B of Medicare are slated to decline by 29 percent in January 2012 and by additional amounts in later years. The President proposes to avoid those reductions by freezing payment rates at their 2011 levels for the next 10 years. That policy would increase net outlays by $298 billion over the 2012–2021 period, CBO estimates. Under the President's budget, the costs of the freeze for the first two years would be offset by various proposals involving Medicare, Medicaid, and the regulation of prescription drugs, which CBO estimates would reduce mandatory spending by a total of $48 billion over the coming decade.[10] The President's budget also calls for offsetting the costs of the payment freeze in later years, but it does not provide any policy details about future spending cuts for that purpose. Consequently, CBO did not estimate any savings for such future cuts.

The Administration proposes to extend or expand various refundable tax credits, including the earned income tax credit, the child tax credit, and certain education credits. In addition, other tax proposals, primarily extending certain provisions originally enacted in EGTRRA and JGTRRA, would affect the refundable portion of such credits. All told, the President's policy changes would increase outlays for refundable tax credits by an estimated $300 billion over the 2012–2021 period.

The President's proposal to extend and expand the Build America Bonds program and lower its subsidy rate would boost outlays by $76 billion through 2021, JCT estimates. Combined with its revenue increase of $70 billion, that proposal would result in a net increase of $6 billion in the 10-year deficit.

The President is proposing to eliminate interest subsidies on loans for graduate and professional students while they are in school or in a grace or deferment period, saving $18 billion over the 2012–2021 period. In addition, the Administration seeks to prevent students from receiving multiple Pell grants in the same award year and to modify the calculations that determine eligibility for those grants, saving $7 billion over the next 10 years. Most of the savings would be used to help maintain a discretionary maximum award level of $4,860 for the Pell Grant program.[11]

10. CBO estimates that the cost of freezing Medicare's payment rates for physicians' services for the first two years would be $38 billion.

The President's budget also includes one-time payments of $250 in 2011 for Social Security beneficiaries, who did not receive a cost-of-living adjustment again this year because of recent low inflation. CBO estimates that those payments would cost $14 billion, most of which would be disbursed in 2011.

Proposals That Would Affect Discretionary Spending. Discretionary outlays under the President's budget would total $1.4 trillion in 2011 and $13.0 trillion over the 2012–2021 period, CBO estimates. That cumulative amount is nearly $1.5 trillion below CBO's baseline projection, largely because of a reduction in funding for activities related to the wars in Afghanistan and Iraq and the proposed reclassification of spending for most surface transportation programs as mandatory.

For 2011, the President's request for discretionary budget authority is $45 billion greater than the amount in CBO's baseline (which reflects the funding provided by the continuing resolution through March 18, extrapolated for the full year). Among the largest differences are $24 billion in additional funding for defense, $6 billion for international affairs, and $5 billion for education, training, employment, and social services.

For 2012, the President has requested $1.25 trillion in discretionary budget authority, $45 billion (or 3.5 percent) less than the total requested for 2011 (see Table 1-4) and $17 billion less than the amount in CBO's baseline. Total discretionary funding under the President's budget would drop by another 4 percent the following year, to $1.20 trillion, but would grow thereafter, reaching $1.39 trillion by 2021.

For defense discretionary programs, budget authority would decrease by $37 billion, or 5.0 percent, from 2011

11. The maximum Pell award is $5,550, which is funded from both mandatory and discretionary resources. Under the President's budget, the discretionary amount of the award would be $4,860 in 2012, and a mandatory add-on would provide the other $690. CBO estimates that discretionary appropriations would need to increase significantly above baseline projections to provide awards at that level. To help offset the additional appropriations, the President proposes to allocate $25 billion in mandatory funding to the portion of Pell grants that traditionally has been funded through discretionary appropriations. In addition to that increase, CBO estimates that discretionary funding for Pell grants would rise by $57 billion over the 2012–2021 period under the President's budget, compared with CBO's baseline projections.

Table 1-4.

Proposed Changes in Discretionary Budget Authority in the President's Budget, 2010 to 2012

(Billions of dollars)

	Actual	Administration's Request		Percentage Change	
	2010	2011	2012	2010–2011	2011–2012
Discretionary Budget Authority					
Defense					
War-related	160	159	118	-0.3	-26.1
Other	554	574	578	3.5	0.8
Subtotal	714	733	696	2.6	-5.0
Nondefense					
War-related	4	0	9	n.a.	n.a.
Other	546	561	544	2.8	-3.1
Subtotal	550	561	553	2.1	-1.6
Total	**1,264**	**1,294**	**1,249**	**2.4**	**-3.5**

Source: Congressional Budget Office.

Notes: The numbers shown here for nondefense discretionary budget authority in 2010 have been corrected from the ones that appeared in Congressional Budget Office, "Preliminary Analysis of the President's Budget for 2012," attachment to a letter to the Honorable Daniel K. Inouye (March 18, 2011).

n.a. = not applicable.

to 2012 under the President's budget. Most of that decrease stems from a reduction in funding for war-related activities in Afghanistan and Iraq, which would decline from $159 billion this year to $118 billion in 2012.[12] Appropriations for other defense activities would increase by $5 billion (or 0.8 percent) in 2012. After that, the Administration's budget includes a placeholder of $50 billion a year for war-related activities, while proposed funding for other defense programs grows by an average of 2 percent a year through 2021. As a result, the total budget authority for defense proposed in the President's budget drops from $696 billion in 2012 to $646 billion in 2013 and remains below the 2012 amount until 2017. Outlays for defense would decline from 4.7 percent of GDP last year to 3.1 percent in 2021, CBO estimates.

For nondefense discretionary programs, the total budget authority requested by the President falls by 1.6 percent between 2011 and 2012—from $561 billion to $553 billion. Nearly all of that drop results from the proposal to reclassify most surface transportation programs from discretionary to mandatory, which would reduce budget authority by $8 billion in 2012 and by additional amounts in subsequent years. Most nondefense discretionary programs would receive the same amount of funding in 2012 as requested by the President for the current year. However, a few programs that the Administration classifies as security-related would see small increases. In addition, the Department of Education would receive an increase of $9 billion, mostly because of the proposal to maintain the current maximum award level of $4,860 for the discretionary portion of the Pell Grant program.[13] Partially offsetting such increases is a $6 billion shift in discretionary funding for the Department of Justice's Crime Victims Fund from 2012 to 2013.[14] As a whole, budget authority for nondefense programs would remain

12. The President has also requested $9 billion in 2012 for nondefense activities related to the wars.

13. In CBO's baseline, projected outlays for the Pell Grant program are based on inflation of the budget authority provided for the current fiscal year ($23.2 billion). However, the cost to maintain a maximum award level of $4,860 for the discretionary portion of the program exceeds the amount assumed in the baseline and would require additional funding.

14. The Crime Victims Fund supports programs that compensate and assist victims of crime and their survivors; it is financed through collections of criminal fines, penalty assessments, and bond forfeitures from people convicted of federal offenses.

relatively flat through 2015 but would then rise to $646 billion by 2021. Under the President's proposals, nondefense discretionary outlays would decline from 4.5 percent of GDP last year to 2.7 percent in 2021.[15]

Effect of the President's Proposals on Net Interest. The policy changes in the President's budget would increase the government's net outlays for interest by $2 billion in 2011 and by $519 billion between 2012 and 2021. Those increased outlays would result almost entirely from additional borrowing by the Treasury from the public to cover deficits greater than the amounts projected in the baseline. Net interest payments would nearly quadruple over the 2012–2021 period (in nominal dollars, without adjusting for inflation), rising from $260 billion in 2012 to $931 billion in 2021. Relative to the size of the economy, net interest payments would amount to 3.9 percent of GDP in 2021 under the President's budget, about 0.5 percentage points more than in the baseline and 2.6 percentage points more than recorded in 2010.

Recent Changes in CBO's Baseline Projections

In conjunction with its analysis of the President's budget, CBO routinely updates its baseline budget projections, which show the paths that revenues and outlays would take over the next 10 years without changes in law (see Table 1-5). The updates to CBO's baseline take into account new information gleaned from the President's budget and other sources, as well as any legislation enacted since January, when CBO completed its previous baseline.

CBO now projects that under current law, the deficit for this year will amount to $1.40 trillion, $81 billion lower than CBO projected in January (see Table 1-6). The cumulative deficit for the 2012–2021 period is now projected to total $6.7 trillion, down by $234 billion from the nearly $7.0 trillion projected in January. CBO's baseline projection of the 10-year deficit has dropped from 3.6 percent of GDP to 3.4 percent.

Changes in Projections of Outlays

CBO has reduced its spending projections by $79 billion for 2011 and by $285 billion for the 2012–2021 period, in large part because of new information about various programs (so-called technical factors). The only recently enacted legislation that affects projected outlays is the Further Continuing Appropriations Amendments, 2011 (P.L. 112-4), which was signed into law on March 2 and funded the government's operations through March 18. That law prompted CBO to reduce its estimate of outlays by $1 billion for 2011 and its baseline projection of outlays over the 2012–2021 period by $40 billion (excluding net interest costs). (CBO projects discretionary spending in the baseline by extrapolating current appropriations—in this case, the annualized levels provided by P.L. 112-4—through the projection period.)

Mandatory Spending. Most of the technical changes to CBO's estimate of outlays for 2011 result from projections of lower spending for mandatory programs. Largely because of changes in the estimated costs of past activities, CBO revised its estimate of outlays for the Troubled Asset Relief Program (TARP) this year from negative outlays of $25 billion to negative outlays of $39 billion.[16] Changes to the estimated subsidy costs of loans or loan guarantees previously made by other credit programs have lowered CBO's projection of 2011 outlays by another $12 billion.[17] That total is the net result of revisions to estimates for student loan programs (a drop of $30 billion), the Federal Housing Administration (an increase of nearly $10 billion), the Small Business Administration (an increase of $5 billion), and a number of other programs.

Among other technical changes for 2011, CBO now expects outlays for deposit insurance to be $8 billion lower this year than it estimated in January. That decrease stems mainly from changes in the estimated number and size of bank and credit union failures over the remainder of the year. In addition, CBO has reduced its estimate of Medicare outlays in 2011 by $6 billion because data on spending for the program through February indicate that the slower growth in outlays that Medicare experienced last year is continuing. (In its January baseline, CBO had anticipated that Medicare spending would return to

15. The decline in nondefense discretionary outlays includes the effects of the President's proposal to reclassify about $500 billion for surface transportation programs as mandatory.

16. CBO now estimates that the net lifetime cost of the TARP will be $19 billion. For details of that estimate, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—March 2011* (March 2011).

17. Such revisions to estimated subsidies for credit programs are published annually with the President's budget, and CBO incorporates them into its March baseline.

Table 1-5.

CBO's March 2011 Baseline Budget Projections

	Actual 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
								In Billions of Dollars						
Revenues														
Individual income taxes	899	998	1,128	1,517	1,669	1,822	1,957	2,097	2,223	2,355	2,497	2,650	8,093	19,916
Corporate income taxes	191	201	279	343	427	395	369	413	417	420	420	437	1,813	3,920
Social insurance taxes	865	818	942	1,027	1,090	1,147	1,202	1,254	1,306	1,362	1,420	1,480	5,408	12,231
Other revenues	208	213	210	200	254	278	297	306	325	346	366	384	1,239	2,966
Total Revenues	**2,163**	**2,230**	**2,558**	**3,087**	**3,440**	**3,642**	**3,826**	**4,071**	**4,271**	**4,483**	**4,703**	**4,951**	**16,554**	**39,032**
On-budget	1,531	1,665	1,891	2,355	2,671	2,831	2,971	3,175	3,334	3,503	3,681	3,884	12,719	30,296
Off-budget	632	566	667	732	769	811	854	896	937	980	1,022	1,067	3,834	8,736
Outlays														
Mandatory spending	1,913	2,055	2,038	2,102	2,189	2,326	2,506	2,615	2,723	2,921	3,094	3,279	11,160	25,792
Discretionary spending	1,347	1,361	1,344	1,356	1,371	1,391	1,420	1,446	1,475	1,517	1,556	1,594	6,883	14,472
Net interest	196	213	257	321	394	463	534	600	658	710	762	807	1,969	5,506
Total Outlays	**3,456**	**3,629**	**3,639**	**3,779**	**3,954**	**4,180**	**4,460**	**4,661**	**4,856**	**5,148**	**5,412**	**5,680**	**20,012**	**45,770**
On-budget	2,902	3,132	3,058	3,135	3,273	3,461	3,700	3,856	4,002	4,241	4,449	4,658	16,627	37,834
Off-budget	555	497	581	644	681	720	760	805	854	906	963	1,022	3,385	7,936
Deficit (-) or Surplus	**-1,294**	**-1,399**	**-1,081**	**-692**	**-513**	**-538**	**-635**	**-590**	**-585**	**-665**	**-710**	**-729**	**-3,459**	**-6,737**
On-budget	-1,371	-1,468	-1,167	-780	-602	-630	-729	-681	-667	-739	-769	-774	-3,908	-7,538
Off-budget	77	69	86	89	88	92	94	91	83	74	59	45	449	800
Debt Held by the Public	9,019	10,363	11,516	12,311	12,919	13,554	14,282	14,964	15,640	16,393	17,192	18,008	n.a.	n.a.
Memorandum:														
Gross Domestic Product	14,513	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	86,686	196,138
								As a Percentage of Gross Domestic Product						
Revenues														
Individual income taxes	6.2	6.6	7.2	9.3	9.7	10.0	10.2	10.5	10.6	10.8	10.9	11.1	9.3	10.2
Corporate income taxes	1.3	1.3	1.8	2.1	2.5	2.2	1.9	2.1	2.0	1.9	1.8	1.8	2.1	2.0
Social insurance taxes	6.0	5.4	6.0	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2
Other revenues	1.4	1.4	1.3	1.2	1.5	1.5	1.6	1.5	1.6	1.6	1.6	1.6	1.4	1.5
Total Revenues	**14.9**	**14.8**	**16.3**	**18.8**	**19.9**	**20.0**	**20.0**	**20.3**	**20.4**	**20.5**	**20.6**	**20.8**	**19.1**	**19.9**
On-budget	10.5	11.1	12.1	14.4	15.5	15.6	15.5	15.9	15.9	16.0	16.1	16.3	14.7	15.4
Off-budget	4.4	3.8	4.2	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.5
Outlays														
Mandatory spending	13.2	13.7	13.0	12.8	12.7	12.8	13.1	13.1	13.0	13.4	13.6	13.8	12.9	13.1
Discretionary spending	9.3	9.1	8.6	8.3	7.9	7.6	7.4	7.2	7.0	6.9	6.8	6.7	7.9	7.4
Net interest	1.4	1.4	1.6	2.0	2.3	2.5	2.8	3.0	3.1	3.2	3.3	3.4	2.3	2.8
Total Outlays	**23.8**	**24.1**	**23.2**	**23.0**	**22.9**	**23.0**	**23.3**	**23.3**	**23.2**	**23.6**	**23.7**	**23.9**	**23.1**	**23.3**
On-budget	20.0	20.8	19.5	19.1	19.0	19.0	19.3	19.2	19.1	19.4	19.5	19.6	19.2	19.3
Off-budget	3.8	3.3	3.7	3.9	3.9	4.0	4.0	4.0	4.1	4.1	4.2	4.3	3.9	4.0
Deficit (-) or Surplus	**-8.9**	**-9.3**	**-6.9**	**-4.2**	**-3.0**	**-3.0**	**-3.3**	**-2.9**	**-2.8**	**-3.0**	**-3.1**	**-3.1**	**-4.0**	**-3.4**
On-budget	-9.4	-9.8	-7.4	-4.8	-3.5	-3.5	-3.8	-3.4	-3.2	-3.4	-3.4	-3.3	-4.5	-3.8
Off-budget	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.5	0.4
Debt Held by the Public	62.1	68.9	73.4	75.1	74.9	74.5	74.6	74.7	74.7	75.0	75.3	75.6	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

Table 1-6.

Changes in CBO's Baseline Projections of the Deficit Since January 2011

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
Total Deficit as Projected in January 2011	-1,480	-1,100	-704	-533	-551	-659	-617	-610	-696	-739	-763	-3,547	-6,971
Changes to Revenue Projections[a]	**2**	**3**	**-3**	**-2**	**-9**	**-7**	**-4**	**-3**	**-6**	**-9**	**-12**	**-17**	**-51**
Changes to Outlay Projections													
Legislative changes													
Discretionary outlays													
Defense	*	*	*	*	*	*	-1	-1	-1	-1	-1	-2	-5
Nondefense	-1	-2	-3	-3	-3	-4	-4	-4	-4	-4	-4	-15	-35
Subtotal, discretionary	-1	-2	-3	-4	-4	-4	-4	-4	-4	-5	-5	-17	-40
Net interest	*	*	*	*	*	-1	-1	-1	-2	-2	-2	-2	-10
Subtotal, legislative changes	-1	-2	-3	-4	-4	-5	-5	-6	-6	-6	-7	-19	-49
Technical changes													
Mandatory outlays													
Medicare	-6	-1	-3	-7	-14	-21	-21	-23	-31	-31	-34	-47	-186
Medicaid	1	-5	-3	-7	-10	-15	-19	-20	-22	-25	-27	-39	-153
Exchange subsidies	0	0	0	4	7	6	5	6	7	9	9	17	54
Other	-47	5	3	-4	-4	-1	2	3	2	3	-2	-1	7
Subtotal, mandatory	-53	*	-4	-14	-20	-32	-32	-34	-44	-44	-54	-70	-277
Discretionary outlays	-13	-6	-4	-4	-2	-2	-2	-2	-2	-2	-1	-17	-27
Net interest													
Debt service	-2	-1	-1	-1	-1	-1	-3	-3	-5	-6	-8	-7	-32
Other	-10	-6	-2	1	6	9	13	16	19	19	24	8	100
Subtotal, net interest	-12	-7	-3	*	4	8	9	13	15	13	16	1	68
Subtotal, technical changes	-78	-13	-12	-18	-17	-26	-25	-23	-31	-32	-39	-85	-236
Total Changes to Outlays	**-79**	**-15**	**-15**	**-22**	**-22**	**-31**	**-30**	**-29**	**-37**	**-39**	**-46**	**-105**	**-285**
Total Effect on the Deficit[b]	**81**	**19**	**12**	**20**	**13**	**24**	**26**	**26**	**31**	**29**	**34**	**88**	**234**
Total Deficit as Projected in March 2011	-1,399	-1,081	-692	-513	-538	-635	-590	-585	-665	-710	-729	-3,459	-6,737
Memorandum:													
Total Legislative Changes[b]	1	2	3	4	4	5	5	6	6	6	7	19	49
Total Technical Changes[b]	80	16	9	16	9	19	21	20	25	23	27	69	185

Source: Congressional Budget Office.

Note: * = between -$500 million and $500 million.

a. All of the changes to revenue projections are technical.

b. Positive numbers indicate a decrease in the projected deficit.

more-typical growth rates more rapidly.) CBO is also expecting $6 billion less in spending for unemployment compensation this year because of fewer claims and lower average benefits than previously anticipated.

For the 2012–2021 period, CBO has reduced its projections of mandatory outlays by $277 billion as a result of technical factors. Most of that reduction involves spending for Medicare and Medicaid.

CBO now projects that Medicare outlays will be $186 billion (about 3 percent) lower between 2012 and 2021 than it projected in January. Approximately two-thirds of the change comes from reducing the projected growth rate for Part D (prescription drug) spending per enrollee on the basis of an updated analysis of national trends in spending for prescription drugs. The other one-third of the change mainly reflects an extrapolation of the slower-than-expected growth rate of Medicare spending seen this year.

For Medicaid, CBO has trimmed its projection of outlays over the 2012–2021 period by $153 billion (about 3 percent). Almost two-thirds of that change comes from reducing the projected growth rate for spending per Medicaid enrollee on long-term care and from adjusting projections of the number of elderly people enrolled in the program, on the basis of an analysis of historical trends in spending and enrollment. Another one-quarter of the change reflects a reduction in CBO's estimate of the increase in Medicaid enrollment that will result from the major health care legislation enacted in 2010. CBO has made a number of technical modifications to its models for health insurance coverage; as a result of those modifications, slightly fewer low-income people are projected to be eligible for Medicaid and slightly more are expected to be eligible for subsidies through the newly established health insurance exchanges. Consequently, the reduction in projected Medicaid spending for those people is accompanied by an increase in CBO's projection of exchange subsidies.

Outlays for health insurance tax credits and cost-sharing subsidies for people who purchase coverage through exchanges are now projected to be about $54 billion higher over the 2012–2021 period than CBO projected in January. (In addition, CBO and JCT now estimate that the loss of revenues attributable to tax credits for insurance premiums will be about $45 billion larger than previously estimated.)

Although CBO has updated its baseline projections of federal spending on health care programs, that update does not automatically result in a complete reestimate of the budgetary impact of last year's major health care legislation under the assumptions of the new baseline. Nevertheless, the costs or savings from some aspects of that legislation can be separately identified in the baseline projections. In particular, the provisions related to expanding health insurance coverage were projected to increase the deficit between 2012 and 2021 by $1.04 trillion, on net, in CBO's January baseline; they are now projected to increase the deficit by $1.13 trillion over that period. Those effects are only a part of the total budgetary impact of the legislation, however. CBO's previous estimate showed that the effects of the other provisions on mandatory spending and revenues, taken together, would reduce the deficit by roughly $1.25 trillion over the 2012–2021 period—meaning that the legislation, as a whole, was projected to reduce the deficit over 10 years. The budgetary effects of all of those other provisions cannot be separately identified in the new baseline.

Discretionary Spending. Overall, CBO has made technical changes to projections for discretionary programs that decrease estimated outlays by $13 billion for 2011 and by $27 billion for the following 10 years. Reductions in outlays for both the current year and 2012 are dominated by lower estimates of defense spending, driven by the slow pace at which the Department of Defense is spending funds provided in the recent short-term continuing resolutions. For 2013 and beyond, CBO has lowered its estimate of discretionary spending by an average of $2 billion (or 0.1 percent) a year.

Net Interest. Because various technical and legislative changes have reduced CBO's estimate of the cumulative deficit over the 2012–2021 period, projected debt-service costs have also declined, by a total of $42 billion (attributable both to legislation and to technical revisions). At the same time, CBO's estimate of other net interest costs over that period has increased by $100 billion since January. About three-quarters of that increase results from a shift in the mix of securities that the Treasury is expected to issue (from short-term securities to longer-term securities) as well as to some enhancements to CBO's models. The other one-quarter stems from projections of lower interest receipts from nonbudgetary credit financing accounts and from small changes to a number of other net interest accounts.

Changes in Projections of Revenues

Since January, CBO has increased its revenue projections by $2 billion for 2011 and $3 billion for 2012 and reduced them by a total of $55 billion for the following nine years. The most significant changes are an increase in the projected amount of tax credits for health insurance that will be purchased through exchanges and other revisions related to health insurance coverage. (As discussed above, projected outlays for exchange subsidies have changed as well.) In the other direction, CBO has raised its estimates of remittances by the Federal Reserve System for most of the projection period to reflect changes in the composition of the system's portfolio (more mortgage-backed securities issued by Fannie Mae and Freddie Mac and fewer lower-yielding Treasury securities).

Differences Between CBO's and the Administration's Estimates of the President's Budget

CBO's estimate of the deficit for 2011 under the President's policies is $220 billion smaller than the Administration's estimate. For the 2012–2021 period, however, CBO's estimate of the cumulative deficit under the President's budget exceeds the Administration's projection by a total of $2.3 trillion (see Table 1-7). Those differences stem from variations in baseline projections of what would happen under current law ($1.3 trillion over the next 10 years) as well as from differing assessments of the effects of the President's proposals ($1.0 trillion).

The bulk of the estimating differences over the 2012–2021 period are related to revenues. Overall, CBO's estimate of the total revenues that would be collected during that period under the President's budget is lower than the Administration's estimate by $2.0 trillion, mostly because of differing baseline projections. At the same time, CBO's estimate of outlays over the next 10 years under the President's budget exceeds the Administration's estimate by a net amount of $220 billion. That difference reflects a combination of CBO's lower estimates of spending under current law and CBO's higher estimates of the costs of the President's proposals (including higher net interest expenses associated with CBO's lower estimates of revenues).

Differences for 2011

Outlays for the current year are likely to be substantially less than the Administration anticipates: CBO's estimate of total outlays for 2011 is $164 billion lower than that of the Administration, largely because of differing estimates of what will occur under current law. Including the President's proposals, CBO's projection of 2011 outlays is $125 billion lower than the Administration's for mandatory programs and $46 billion lower for discretionary programs. In the other direction, CBO's estimate of net interest outlays is $7 billion higher.

CBO's estimate of revenues for the current year is $56 billion higher than the Administration's—$55 billion of which results from differing baseline estimates and $1 billion of which is attributable to differing estimates of the effect of the President's policy proposals. Nearly all of that total discrepancy arises from technical differences and may reflect varying expectations of the speed at which tax collections—particularly individual income tax receipts—will rebound from their recent historically low levels relative to GDP.

Mandatory Spending. Different expectations about how much the government will spend for certain mandatory programs this year under current law dominate the differences for mandatory outlays. For example, CBO's estimate of 2011 outlays for Fannie Mae and Freddie Mac is $19 billion below that of the Administration, mostly because of differences between CBO and the Administration in their budgetary treatment of those institutions' activities. CBO's estimate follows the budgetary practices used for federal credit programs and reflects the anticipated subsidy cost, including an adjustment for market risk, of mortgage guarantees issued by Fannie Mae and Freddie Mac in 2011. The Administration's estimate, in contrast, is based on the net cash payments that the Treasury Department is expected to make to Fannie Mae and Freddie Mac this year to cover those entities' reported costs of mortgage guarantees issued before 2011.[18]

In addition, estimates of outlays for housing assistance (primarily for the refundable tax credit for first-time

18. For a discussion of those differing budgetary approaches, see Congressional Budget Office, *CBO's Budgetary Treatment of Fannie Mae and Freddie Mac,* Background Paper (January 2010).

Table 1-7.

Sources of Differences Between CBO's and the Administration's Estimates of the President's Budget

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total 2012-2016	Total 2012-2021
							Administration's Estimate						
Deficit Under the President's Budget	-1,645	-1,101	-768	-645	-607	-649	-627	-619	-681	-735	-774	-3,769	-7,205
							Sources of Differences Between CBO and the Administration						
Revenue Differences													
Baseline	55	-86	-51	-109	-111	-143	-185	-226	-268	-273	-290	-500	-1,741
Policy	1	3	-54	-12	-30	-41	-40	-37	-26	-32	-36	-134	-305
Subtotal, revenues	56	-84	-104	-121	-141	-184	-225	-263	-294	-305	-326	-634	-2,045
Outlay Differences													
Mandatory													
Baseline	-75	-17	4	-30	-40	-45	-43	-49	-44	-52	-72	-127	-388
Policy	-50	-44	-32	7	21	23	22	25	29	34	37	-26	122
Subtotal, mandatory	-125	-60	-28	-23	-20	-22	-21	-23	-15	-19	-35	-153	-266
Discretionary													
Baseline	-72	-42	-9	-17	-17	-13	-16	-23	-16	-13	-12	-97	-177
Policy	25	63	59	47	43	33	31	26	23	20	19	245	364
Subtotal, discretionary	-46	21	50	31	26	21	15	3	7	6	7	148	187
Net Interest													
Baseline	7	17	4	-12	-12	-3	5	13	19	31	36	-6	97
Policy	*	1	3	3	6	12	20	27	35	43	52	26	202
Subtotal, net interest	7	18	7	-9	-5	9	24	41	54	73	87	20	299
Subtotal, outlays	-164	-21	29	-1	1	8	18	20	46	61	59	16	220
Total Differences[a]	**220**	**-63**	**-133**	**-120**	**-142**	**-192**	**-243**	**-283**	**-340**	**-365**	**-384**	**-649**	**-2,265**
							CBO's Estimate						
Deficit Under the President's Budget	-1,425	-1,164	-901	-764	-748	-841	-870	-902	-1,021	-1,101	-1,158	-4,418	-9,470
Memorandum:													
Total Baseline Differences[a]	194	-45	-49	-51	-42	-83	-130	-167	-227	-238	-241	-269	-1,272
Total Policy Differences[a]	26	-18	-84	-69	-100	-109	-113	-116	-113	-128	-144	-380	-993
Total Economic Differences[a]	-6	-15	-43	-66	-88	-117	-157	-171	-178	-193	-204	-329	-1,233
Total Technical Differences[a]	226	-48	-90	-54	-54	-75	-86	-112	-162	-172	-180	-321	-1,033

Sources: Congressional Budget Office; Joint Committee on Taxation.

Note: * = between zero and $500 million.

a. Positive numbers denote that such differences cause CBO's estimate of the deficit to be lower than the Administration's estimate.

home buyers and various mortgage-relief programs funded through the TARP) are $12 billion lower in CBO's baseline than in the Administration's, largely because of different judgments about the timing of spending and the number of program participants. CBO's estimate of mandatory spending for veterans' benefits in 2011 is $11 billion lower than the Administration's, mostly because of differing expectations about how quickly disability compensation claims will be paid for veterans suffering from conditions that were recently determined to be related to Agent Orange exposure. Also, CBO's estimate of spending for unemployment benefits this year is $9 billion lower than the Administration's, mostly because CBO anticipates a smaller average benefit and fewer recipients. In the other direction, estimated outlays for the earned income tax credit are about $10 billion higher in CBO's baseline. The remaining differences in estimates of mandatory spending—which cause outlays to be $33 billion lower in CBO's baseline—are spread among many other programs.

Differing estimates of the effects of the President's proposals account for another $50 billion of the gap between CBO's and the Administration's estimates of mandatory outlays for 2011. Nearly all of that difference results from the President's proposal to reclassify surface transportation programs from the discretionary side of the budget to the mandatory side. The President's budget reflects the assumption that the reclassification will occur this year, and therefore it shows those outlays as mandatory in 2011; CBO assumes that the policy, if enacted, would not take effect until 2012. That difference is offset on the discretionary side of the ledger (as discussed below).

Discretionary Spending. CBO's estimate of 2011 spending from appropriations is also lower than the Administration's, by $46 billion. Defense spending (virtually all of which is discretionary) is estimated to be $54 billion lower than the Administration projects, partly because of slower spending for the operation and maintenance expenses of the armed forces. CBO also anticipates a slower rate of spending than the Administration does for several other categories of discretionary spending, including education spending (primarily for the State Fiscal Stabilization Fund and education programs for disadvantaged students), which is nearly $12 billion below the Administration's estimate, and outlays for energy programs, which are almost $10 billion lower. In the other direction, the differing classifications of transportation spending in 2011 offset $48 billion of those differences.

The remaining differences in estimates of discretionary spending, which cause outlays to be $18 billion lower in CBO's baseline, are spread among many other programs.

Differences for the 2012–2021 Period

For the coming 10 years, CBO estimates larger annual deficits under the President's budget than the Administration does. The gap amounts to $63 billion in 2012 and grows nearly every year thereafter, reaching $384 billion in 2021. Those gaps stem both from underlying differences in baseline projections (primarily on the revenue side) and from differences in estimates of the effects of the President's proposals.

Revenues. Differing revenue projections explain most of the deviation between CBO's and the Administration's estimates of deficits under the President's budget for the 2012–2021 period. CBO projects $2.0 trillion (or 5.3 percent) less in revenues under the President's proposals than the Administration does—about $1.7 trillion of which reflects differing baseline projections. CBO attributes about half of that baseline difference to economic assumptions, particularly to its projection that nominal GDP and wages and salaries will be 3.2 percent lower over the 2012–2021 period than the Administration projects. Lower wages and salaries would result in lower collections of individual income taxes and social insurance taxes.

The other half of the baseline difference results from technical estimating judgments about the amount of revenue that would be generated from a given set of economic conditions. The most significant of those technical differences involves receipts from corporate income taxes: CBO projects a lower effective tax rate than the Administration does on domestic corporate profits, the main component of the tax base for corporate income taxes that both CBO and the Administration project as a part of their respective economic outlooks. Those differences are larger in the second half of the 10-year projection period than in the first half. Such technical differences cause CBO's current-law projection of corporate tax receipts over the 2012–2021 period to be about $0.5 trillion lower than the Administration's.

In addition, CBO and JCT estimate that the President's proposals would reduce revenues by about $0.3 trillion more, on net, than the Administration estimates. The most significant difference concerns the President's unspecified proposal to raise new revenues to support the reauthorization of surface transportation programs. The Administration attributes $328 billion in revenues over the 2012–2021 period to that proposal, but the budget does not offer any information about the nature of the taxes or fees that might be used to generate those revenues. As a result, CBO's estimates do not include any budgetary impact for that proposal.

Outlays. CBO estimates more spending between 2012 and 2021 under the President's budget than the Administration does, although the difference is much smaller than for revenues. For the first several years of the projection period, CBO's spending estimates are similar to the Administration's; they are slightly higher in some years and slightly lower in others. For the latter part of the decade, however, CBO projects consistently higher outlays than the Administration does, with the gap widening to about $60 billion by 2020. Over the 10-year period, the difference amounts to $220 billion (or 0.5 percent). CBO's estimates of discretionary spending and net interest outlays are higher than the Administration's—by $187 billion and $299 billion, respectively—whereas its projection of mandatory spending is $266 billion lower.

More than 60 percent of the difference in estimated discretionary spending is related to transportation programs, with most of that variation stemming from differing classifications of transportation funding provided before 2012. CBO's estimate of the President's budget reflects the assumption that the proposed reclassification would not occur until 2012 and that future outlays from funding provided before that year would continue to be classified as discretionary. The Administration, by contrast, considers outlays in 2011 and beyond as mandatory, regardless of when the original funding was provided. That difference in estimates of discretionary spending has the opposite effect on estimates of mandatory spending.

Another area where CBO's estimate of discretionary outlays over the next 10 years is significantly higher than the Administration's is education spending, which is $22 billion higher under CBO's calculations, largely because of differing estimates related to the Pell Grant program. In addition, CBO estimates that the Federal Housing Administration's single-family mortgage program will collect $23 billion less in receipts than the Administration estimates.

For mandatory programs, CBO projects $388 billion less in spending under current law—but $122 billion more in outlays from the President's proposals—between 2012 and 2021 than the Administration does. Medicaid accounts for more than 80 percent of the baseline difference, primarily because of technical factors, such as differing projections of enrollment. The largest difference in estimates of policy proposals involves the President's proposal to offset the cost of freezing Medicare's payment rates for physicians at the 2011 levels (rather than letting them decline, as specified under current law). Although the budget included proposed offsets for a two-year freeze of those payment rates, it did not include any specific proposals to offset the costs of continuing the freeze after 2013. Thus, CBO did not incorporate any savings from such offsets after the first two years, whereas the Administration assumes unspecified savings totaling $315 billion from 2014 through 2021.

With regard to net interest outlays under the President's budget, CBO's estimates exceed the Administration's by a total of $299 billion for the 2012–2021 period. That gap stems mainly from CBO's estimate of higher deficits under the President's budget, which would require more borrowing than the Administration anticipates.

CHAPTER

2

The Economy Under the President's Budget and Under Current Law

In addition to estimating the direct budgetary impact of the President's proposals, the Congressional Budget Office (CBO) has analyzed how those policies would affect the nation's economy (relative to what the agency projects will occur under current law) and, in turn, how those economic effects would influence the budget. Estimates of economic effects depend on many specific assumptions and judgments, so CBO used several different approaches to estimating those effects. The estimates cover the periods 2012 to 2016 and 2017 to 2021, as well as the long term beyond 2021.

For the 2012–2016 period, CBO estimates that the President's budgetary proposals would boost output (relative to that under current law) primarily because tax reductions would increase people's disposable income. Under the President's proposals, the nation's real (inflation-adjusted) output would be, on average, between 0.2 percent and 0.7 percent higher than the amount under current law.[1]

Over time, however, the proposals would reduce real output because the effects of increasing government debt would more than offset the stimulative effects of lower marginal tax rates. For years after 2016, CBO estimates that the President's proposals would reduce real output compared with what would occur under current law—by between 0.1 percent and 1.2 percent, on average, from 2017 through 2021, and by between 0.7 percent and 3.8 percent in the long term.

Those economic effects would in turn influence the budget through changes in taxable income, in outlays for unemployment insurance and other programs, and in interest payments on government debt, among other changes. Before accounting for the economic effects, CBO estimates that the President's proposals would add a total of $1.0 trillion to deficits over the 2012–2016 period and $1.8 trillion over the 2017–2021 period (see Chapter 1). According to CBO's estimates, the economic feedback from the President's proposals would increase their cumulative cost by between $10 billion and $30 billion from 2012 to 2016 and would increase their cumulative cost by as much as $217 billion or reduce it by as much as $8 billion from 2017 to 2021. (CBO did not estimate the budgetary effects of the President's proposals beyond 2021.)

How the Government's Fiscal Policies Can Affect the Economy

The government's fiscal policies (that is, taxes and spending) can affect both the economy's potential output and the difference between its actual output and its potential. Therefore, fiscal policies can have both temporary and long-run consequences.

Fiscal Policies and Output in the Short Run

As the recent severe recession has shown, the nation's actual economic activity can deviate for substantial periods from its potential level in response to changes in demand for goods and services by consumers, businesses,

1. For this analysis, CBO uses gross national product (GNP) (the total market value of goods and services produced in a given period by the labor and capital supplied by the country's residents, regardless of where the labor and capital are located) as its measure of output instead of the more commonly cited gross domestic product. Changes in GNP exclude foreigners' earnings on investments in the domestic economy but include domestic residents' earnings overseas and are therefore a better measure of the proposals' effects on domestic residents' income than are changes in gross domestic product in an open economy like that of the United States. CBO's budget calculations for this analysis reflect the fact that features of U.S. tax laws result in some foreign income effectively being untaxed.

governments, and foreigners. Although the nation's real economic output has recently surpassed its prerecession level, output remains well below its potential, and unemployment remains high. During the recession, housing investment plummeted. Consumer demand fell because declines in the value of housing and the stock market reduced households' wealth, personal income dropped, and financial institutions reduced some households' access to credit. Demand stemming from business investment also fell because there was less need to add capacity and because uncertainty about future developments in financial markets and future demand for goods and services made businesses reluctant to make commitments.

When output is low relative to its potential for an extended period, as it has been since the start of the recent recession, tax cuts and increases in government spending can boost demand and thereby hasten a return to the potential level of output. In general, increases in demand encourage businesses to gear up production and hire more workers than they otherwise would; decreases in demand have the opposite effect. Thus, budgetary policies that raise private and public consumption tend to boost output toward its potential level.

Even without such policies, stabilizing economic forces tend to move output back toward its potential after a while. Moreover, policies that aim to increase demand, such as increases in government purchases or reductions in taxes, are likely to decrease national income in the long run because such policies tend to increase government borrowing and eventually reduce the nation's saving and capital stock. Therefore, policies that increase demand often involve a trade-off between boosting economic output in the short run and reducing output in the long run.

Fiscal Policies and Output in the Long Run

The nation's potential to produce goods and services depends on the size and quality of its labor force, on the stock of productive capital (such as factories, vehicles, and computers), and on the efficiency with which labor and capital are used to produce goods and services.[2] Lasting changes in those factors can have a lasting influence on the economy's ability to supply goods and services.

The government's budgetary policies affect potential output primarily by affecting the amount of national saving and the incentives for individuals and businesses to work, save, and invest. The nation's capital stock, which helps to determine how much output can be produced, depends both on public saving (the surpluses, if any, of state and local governments and the federal government) and on private saving (by households and businesses). A federal deficit represents a reduction in public saving and, therefore, in national saving. Federal policies also can influence national saving by affecting private saving. An overall decline in national saving reduces the capital stock owned by U.S. citizens over time through a decrease in domestic investment, an increase in net borrowing from abroad, or both.

Specific tax and spending policies also can affect the economy's potential output. Changes in tax rates affect people's willingness to work and to save, possibly influencing short-run demand but also affecting long-run supplies of labor and capital. Similarly, changes in government spending for goods and services or in government transfer payments (such as unemployment insurance or Social Security benefits) can affect demand in the short run but also can increase or decrease people's willingness to work and to save, which affects the size of the labor force and the capital stock in the long run.[3] In addition, changes in government spending on goods and services can alter the amount of public investment, which affects potential output as well.

Unlike most movements of potential output, changes in the demand for goods and services resulting from fluctuations in the business cycle—which push output away from its potential—tend to be temporary. CBO currently projects that, under current law, economic output will return to its potential by late 2016. Additional fluctuations will occur in the future, but it is impossible to know when they will occur or whether they will be positive or negative. For that reason, CBO's projections beyond a few years generally assume that the economy will average close to its long-run potential output.

2. Efficiency in turn depends on such factors as production technology, the way businesses are organized, and the regulatory environment.

3. Transfer payments are payments made to a person or organization for which no current or future goods or services are required in return.

How the President's Budgetary Proposals Would Affect the Economy

The President's budgetary proposals would influence the economy in different ways in the short run and the long run, boosting output in the next few years but diminishing it later on.

Effects on the Economy Through 2016

Over the 2012–2016 period, the President's proposals would decrease revenues, increase mandatory spending, and decrease discretionary spending relative to CBO's baseline projections (see Chapter 1). In economic terms, the changes in spending translate into an increase in transfer payments and reductions in purchases of goods and services.[4] For example, the President's proposal to freeze Medicare's payments to physicians at 2011 levels (rather than cut them, as scheduled under current law) would increase transfer payments, and much of the reduction in defense discretionary spending under the President's budget represents smaller purchases of equipment and supplies as well as reduced costs for military personnel. The reductions in taxes and increases in transfers would boost people's disposable income, increasing consumer demand for goods and services.[5] The boost to consumer demand would outweigh the reduction in government purchases, CBO estimates, leading to a net increase in overall demand, which would stimulate output over the period.

Effects on the Economy After 2016

The President's policies would lower output between 2017 and 2021 and over the long term as well, primarily because of their impact on the capital stock and labor supply. Those policies would result in a smaller stock of domestically owned capital, mainly because deficits would be larger than those projected under current law.[6] That effect would become stronger over time as budget deficits accumulated. Various policies in the President's budget would have differing effects on the size of the labor force: Proposed reductions in the effective marginal tax rates on labor would tend to increase the labor supply, while proposed increases in transfers would tend to decrease labor supply.

Effects on the Nation's Capital Stock. The President's budgetary policies would influence the size of the nation's capital stock primarily by lowering national saving through higher federal budget deficits. Each year between 2012 and 2021, the proposals would expand the federal deficit relative to that in CBO's baseline, which would reduce national saving, other things being equal. (Some—but not all—of the reduction in national saving would be offset by an increase in private saving, in part because larger deficits would cause interest rates to be higher.) The President's tax proposals would also affect private saving by altering effective marginal tax rates on capital income (income derived from wealth, such as stock dividends, realized capital gains, or the owner's profits from a business) and thus the after-tax rate of return on saving.

Under current law, CBO estimates, the effective marginal tax rate on capital will fall to 11.6 percent in 2011 from the estimated 13.9 percent rate in 2010 as a result of investment incentives enacted in the 2010 tax act (officially, the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Public Law 111-312). CBO projects that the rate will then rise in 2012 and 2013, as certain provisions of the 2010 tax act expire and as a surtax on investment income enacted in the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152) becomes effective.

The President's tax proposals would alter those marginal tax rates through changes in both individual and

4. In the national income and product accounts (maintained by the Department of Commerce's Bureau of Economic Analysis), the government's expenditures are classified into major groups: consumption expenditures, or spending on goods and services, including costs of capital depreciation (with separate estimates for defense and nondefense spending); transfer payments (to individuals, state and local governments, and the rest of the world); interest payments; and subsidies to businesses and to government enterprises.

5. The reduction in tax rates would also increase potential output. However, actual output adjusts only slowly to changes in potential, and under current conditions that adjustment would be slower than usual. Ordinarily, an increase in potential output relative to actual output would lead the Federal Reserve to reduce interest rates, boosting output. However, because interest rates are already about as low as they can be, that effect would be muted over the next several years.

6. The impact of the larger deficits would be offset, slightly, by a lower effective marginal tax rate on capital income, which is the rate that applies to the return on additional investment. The effective marginal tax rate is calculated by averaging effective marginal tax rates across all the businesses, people, and institutions that would receive that investment income (and that could face different tax rates), with the weights depending on the entities' amounts of investment income.

Table 2-1.

CBO's Estimates of Effective Federal Marginal Tax Rates on Capital Income

(Percent)

Calendar Year	Effective Marginal Tax Rate Under Current Law	Effective Marginal Tax Rate Under the President's Budget	Difference	
			Percentage Points	Percent
2010	13.9	13.9	0	0
2011	11.6	11.6	*	*
2012	13.7	14.2	0.4	3.2
2013	19.7	19.4	-0.2	-1.2
2014	20.0	19.7	-0.3	-1.7
2015	20.2	19.9	-0.3	-1.5
2016	20.4	20.1	-0.3	-1.4
2017	20.4	20.2	-0.2	-1.1
2018	20.4	20.2	-0.2	-1.0
2019	20.4	20.2	-0.2	-0.9
2020	20.4	20.2	-0.2	-0.8
2021	20.4	20.2	-0.2	-0.8

Source: Congressional Budget Office.

Notes: The effective marginal tax rate on income from capital is the share of the last dollar of such income taken by individual and corporate taxes.

* = between -0.05 percent and 0.05 percent.

corporate tax provisions. Some of the President's proposals would increase the marginal tax rate on capital income, whereas others would decrease that rate. On net, CBO estimates, the President's proposals would increase the effective marginal tax rate on capital income in 2012 relative to the rate under current law by 0.4 percentage points. After 2012, the impact of the President's proposals that reduce the marginal tax rate on capital would slightly outweigh the impact of proposals that increase the marginal rate, yielding a net reduction ranging from 0.2 to 0.3 percentage points (see Table 2-1).[7]

Several proposals would decrease the marginal rate on capital income, relative to that under current law, by fully or partially extending provisions that are scheduled to expire in the next few years. Some of the proposals would take effect starting in 2012. Under current law, the amounts of income exempt from the individual alternative minimum tax (AMT) are scheduled to fall in 2012. The President proposes to keep the AMT exemption amounts at their higher 2011 levels and index all of the parameters of the AMT for inflation after 2011, which, beginning in 2012, would reduce the marginal rate on capital income relative to that under current law. A proposal to permanently extend the tax credit for research and experimentation (which is scheduled to expire at the end of this year) would also reduce that marginal rate beginning in 2012.

Other provisions would take effect starting in 2013. Among the President's proposals, one to extend the lower tax rate on dividend income would generate the largest decrease in the marginal tax rate on capital income. Proposals to lower tax rates (relative to current law) for individuals with taxable income below $200,000 and married couples with taxable income below $250,000 and a proposal to extend changes in the tax treatment of certain investments in equipment by small businesses would also decrease the marginal tax rate on capital income.

The President's proposal to cap at 28 percent the rate at which itemized deductions reduce a taxpayer's income tax liability would generate the largest increase in the marginal rate on capital income. Most of that increase would be caused by a reduction in the tax benefits from deducting mortgage interest and property taxes, which would

7. For a description of CBO's method for estimating effective marginal tax rates, see Congressional Budget Office, *Computing Effective Tax Rates on Capital Income*, Background Paper (December 2006).

raise the very low tax rate on income from an investment in owner-occupied housing. Tax rates on income from investments in corporate stock, noncorporate businesses, or debt instruments would increase little. Proposals to eliminate tax preferences for fossil fuels, to tax carried interest as ordinary income rather than at the lower rate for capital gains, and to reinstate the corporate income tax that helps to finance the Superfund program would also raise the marginal rate on capital income beginning in 2012.[8] Other proposals, including a change to inventory accounting rules and the establishment of a financial crisis responsibility fee beginning in 2013, would also increase that marginal tax rate.

Effects on the Labor Force. Potential output is strongly tied to the amount and quality of labor supplied in the economy. A sustained increase in total hours worked or in the capability of the labor force improves the economy's potential to generate output. The President's proposals would affect the number of hours worked and might also affect the quality of labor. CBO's analysis focused on channels through which the proposals could affect the number of hours of labor supplied because the evidence about those channels is stronger than is the evidence about channels through which government policies can affect the quality of labor.

The President's proposals would affect the quantity of labor in two main ways. Several of the policies would increase people's total after-tax income but would not change their after-tax compensation for each additional hour of work. For example, increases in transfer payments, such as Pell grants, would raise the disposable income of some people but would not affect their marginal tax rates. In the absence of a change in marginal rates, that increase in after-tax income would reduce the number of hours of labor supplied because people would be able to maintain their standard of living with less work. (Some policies in the President's budget would reduce disposable income, but the net effect of all of the proposals would be to increase such income.)

Other proposals would have a different effect. For example, the extension of the lower marginal tax rates on income that were enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 for lower- and middle-income taxpayers would increase both after-tax income and after-tax compensation for each additional hour of work. Taking those and other policies together, CBO estimates that the President's policies would reduce the effective marginal tax rate on labor by 1.1 percentage points in 2012 and by 1.7 to 2.1 percentage points over the 2013–2021 period (see Table 2-2).[9]

Provisions that raise both after-tax income and incremental after-tax compensation would have opposing effects on people's incentives. In the case of extending lower tax rates for lower- and middle-income workers, for example, the affected workers would be encouraged to work longer hours because they would earn more for each extra hour of labor they supplied. But a disincentive also exists: Those same workers would earn more after-tax income at their current working hours, which would encourage them to decrease their work hours. The incentive from reducing marginal tax rates is generally larger, so these proposals would increase modestly the hours of labor that workers supply.[10]

The President's proposals would reduce the effective marginal tax rate on labor primarily by eliminating some of the currently scheduled increases in individual income tax rates. Under current law, those rates will rise in 2012 with

8. Carried interest typically forms part of the compensation received by a general partner of a private equity or hedge fund. It is generally a share of the profits on the assets under management.

9. The effective marginal tax rate on labor income is the rate that would apply to the return on working. It reflects the additional income and payroll taxes that would be paid on the income earned from additional work. The effective marginal tax rate is the weighted average of the effective marginal tax rates across all workers, with the weights depending on workers' earnings.

10. Responses to decreases in tax rates tend to vary among family members: Secondary earners (for example, the spouse of a household's primary breadwinner) generally increase their labor supply (work hours) to a greater extent than do primary earners. For details of CBO's approach to estimating tax changes, see Congressional Budget Office, *The Effect of Tax Changes on Labor Supply in CBO's Microsimulation Tax Model*, Background Paper (April 2007); and *Labor Supply and Taxes*, CBO Memorandum (January 1996). Since that memorandum was published, CBO has revised downward its estimates of total wage elasticity and substitution elasticity for secondary earners (respectively, the change in total hours of work and the tendency to work more or less depending on a change in the after-tax marginal wage rate) because of evidence that their responsiveness has declined over time as their participation in the labor force has grown. See also Francine D. Blau and Lawrence M. Kahn, "Changes in the Labor Supply Behavior of Married Women: 1980–2000," *Journal of Labor Economics*, vol. 25, no. 3 (2007), pp. 393–438.

Table 2-2.

CBO's Estimates of Effective Federal Marginal Tax Rates on Labor Income

(Percent)

Calendar Year	Effective Marginal Tax Rate Under Current Law	Effective Marginal Tax Rate Under the President's Budget	Difference: Percentage Points	Difference: Percent
2010	26.4	26.4	0	0
2011	25.4	25.4	*	*
2012	27.9	26.8	-1.1	-4.1
2013	29.4	27.7	-1.7	-5.8
2014	30.1	28.4	-1.7	-5.7
2015	30.5	28.8	-1.7	-5.6
2016	31.0	29.3	-1.7	-5.5
2017	31.2	29.5	-1.7	-5.5
2018	31.6	29.8	-1.9	-5.9
2019	31.8	29.9	-1.9	-6.1
2020	32.1	30.1	-2.0	-6.2
2021	32.3	30.2	-2.1	-6.5

Source: Congressional Budget Office.

Notes: The effective marginal tax rate on income from labor is the share of the last dollar of such income taken by federal individual income and payroll taxes.

* = between -0.05 percent and 0.05 percent.

the decrease in the AMT exemption. They will rise again in 2013 when lower individual income tax rates that were extended by the 2010 tax act expire and provisions of the Patient Protection and Affordable Care Act of 2010 (P.L. 111-148) and the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152) begin to take effect.[11] Under the President's proposals, changes to the AMT would lower the marginal tax rates on labor beginning in 2012, and the proposal to permanently extend lower income tax rates for incomes below $200,000 for individuals and for incomes below $250,000 for married couples would lower marginal tax rates on labor in 2013 and beyond.

Although the President's proposals would generally reduce the effective marginal tax rate on labor, the effect of the proposals would vary across income levels. Lower- and middle-income taxpayers would see their marginal tax rate fall, relative to that under current law, because of the higher AMT exemption and lower income tax rates. In contrast, higher-income taxpayers would not be affected by those provisions and could see their marginal rate rise because of the proposal to limit the tax savings from itemized deductions. CBO's analysis therefore incorporated different changes in effective marginal tax rates on labor income for people with different amounts of income.

In addition to affecting tax rates on labor income, the proposals' impact on the capital stock also could affect the supply of labor. Because higher deficits under the proposals would result in a smaller capital stock, and thereby also reduce labor productivity, pretax wage rates would be lower than those under current law (all else being equal), slightly weakening people's incentives to work.[12]

Effects on Technological Progress. New and improved processes and products are the source of most long-term growth in productivity, and some of the President's budgetary proposals (such as the extension of tax credits for

11. For a description of the impact of those laws on labor markets, see Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010), Box 2-1.

12. Changes in the amount of education, training, and experience that workers have and in how hard they work—all of which affect the productivity of each hour worked—can also result in changes in potential output. CBO did not incorporate such effects into its analysis because they are quite difficult to quantify.

Table 2-3.

CBO's Estimates of How the President's Budget Would Affect Inflation-Adjusted Gross National Product Through 2016

(Average percentage difference from CBO's baseline, by calendar year)

	2012		2012–2016	
	Small Effect	Large Effect	Small Effect	Large Effect
Change in Real GNP	0.2	0.7	0.2	0.7

Source: Congressional Budget Office.

Notes: For details about the analysis, see Appendix A.

GNP = gross national product.

research and development) could affect the economy by influencing the rate at which technological progress is made. But economic researchers understand little about how tax and spending policies affect such innovation, so for the most part, CBO has not incorporated into its analysis effects on technological progress that might arise from the President's proposals.[13]

Economic Models and Results

CBO used several economic models to estimate the effects of the President's budgetary proposals on the economy relative to the current-law assumptions that underlie CBO's baseline projections. The models focus on somewhat different aspects of the economy and reflect distinct ways of thinking about it. One set of models is used to estimate short-term effects only; the other models emphasize medium-term and long-term effects. Each model represents people's economic decisions in a simplified way while capturing some important aspects of actual behavior.

Estimated Economic Effects and Their Budgetary Implications Through 2016

CBO analyzed effects of the President's budgetary proposals through 2016 using a combination of macroeconomic forecasting models and historical relationships (see Appendix A for a further description of the analysis).[14] CBO's estimates encompass a broad range of economists' views about the relevant economic relationships. On that basis, CBO estimates that the President's proposed policies would raise real gross national product (GNP) by between 0.2 percent and 0.7 percent in 2012 and by about the same percentages, on average, between 2012 and 2016 (see Table 2-3).

Although the effects on GNP in 2012 and over the five-year period are similar, they stem from different policy changes. The effects on GNP in 2012 are driven primarily by a proposed increase in government spending, totaling $69 billion, by CBO's estimate. Over the 2013–2016 period, however, the effects stem primarily from decreases in tax revenues, averaging about $200 billion a year. The effects on GNP would diminish over the 2012–2016 period because the Federal Reserve's monetary policies would probably become increasingly responsive to expansionary fiscal policy.

Those overall economic effects would feed back to the budget and affect the size of deficits. CBO estimates the budgetary effects through a simplified analysis that takes account of changes in taxable incomes, interest rates, and prices, among other things, but does not incorporate a detailed, program-by-program analysis, as it does in its regular budget estimates, including those in Chapter 1. CBO projects that the budgetary feedback from the economic effects of the President's proposals would *reduce* the budgetary cost of those proposals, estimated at about $83 billion (before considering the economic effects), by between $5 billion and $13 billion in 2012, depending on the assumptions used in the analysis. For the 2012–2016 period, CBO projects that the budgetary feedback would *increase* the cumulative cost of the proposals, projected to total $1.0 trillion, by between $10 billion and $30 billion (see Table 2-4).

13. CBO did, however, project that the President's proposal to enhance and make permanent the research and experimentation tax credit would increase potential gross domestic product by about 0.01 percent by 2016. For a discussion of how government policies can influence technological progress, see Congressional Budget Office, *R&D and Productivity Growth*, Background Paper (June 2005); and Robert W. Arnold, *Modeling Long-Run Economic Growth*, Congressional Budget Office Technical Paper 2003-4 (June 2003).

14. For an example of recent CBO work using the same method of analysis, see Statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *The Economic Outlook and Fiscal Policy Choices* (September 28, 2010).

Table 2-4.

The Budgetary Implications of the Macroeconomic Effects Through 2016

(Cumulative change from CBO's estimate of the President's budget, in billions of dollars)

	2012		2012–2016	
	Small Effect on GNP	Large Effect on GNP	Small Effect on GNP	Large Effect on GNP
Change in Projected Deficits	5	13	-10	-30

Source: Congressional Budget Office.

Notes: For details about the analysis, see Appendix A.

Numbers in this table reflect the effects on the cumulative deficit resulting from the economic effects shown in Table 2-3. They do not include CBO's estimate of the budgetary impact of the President's proposals in the absence of those economic effects (shown in Table 1-3 on page 6).

Positive numbers indicate a reduction in projected deficits; negative numbers indicate an increase.

The estimated effects apply to fiscal years.

GNP = gross national product.

The economic effects of the proposals would reduce the deficit in 2012 primarily because increased output would lead to higher taxable incomes, boosting revenues. The higher output would also lead to higher interest rates, however, which over time would raise interest payments on the national debt, tending to increase the deficit. Over the 2012–2016 period, the effect of higher revenues would be more than offset by increased interest payments, boosting cumulative deficits.

Estimated Economic Effects and Their Budgetary Implications After 2016

CBO used two models to analyze the effects of the President's proposals after 2016, a Solow-type model and a life-cycle model. CBO's Solow-type model is an enhanced version of a widely used model originally developed by Robert Solow.[15] CBO's life-cycle model is an overlapping-generations general-equilibrium model that is based on another standard model of the economy. Using each model, CBO produced a range of estimates by applying alternative assumptions about the degree to which economic variables influence households' decisions about how much to work and save, the importance of international flows of capital, and the extent to which U.S. interest rates are determined by the world economy. (See Appendix A for a further description of the models and assumptions, as well as estimates derived under the full range of assumptions.)

Under the President's proposals, federal debt would rise from about 62 percent of GDP in 2010 to over 87 percent of GDP in 2021, and the total deficit would be rising steadily as a percentage of GDP by the end of the period. If those trends were continued beyond 2021 (without any other policy changes), the resulting path of federal debt would be unsustainable. To analyze the long-run economic effects, CBO made two illustrative alternative assumptions about how fiscal imbalances would ultimately be financed. Under one alternative, fiscal

Table 2-5.

CBO's Estimates of How the President's Budget Would Affect Inflation-Adjusted Gross National Product After 2016

(Average percentage difference from CBO's baseline, by calendar year)

	2017–2021	Long Term[a]
	Government Spending Reduced After 2025	
Solow-Type Growth Model	-1.2 to -0.1	-3.0 to -0.7
Life-Cycle Growth Model	-1.2 to -0.3	-2.9 to -1.1
	Tax Revenues Increased After 2025	
Solow-Type Growth Model	-1.2 to -0.1	-3.0 to -0.9
Life-Cycle Growth Model	-1.0 to -0.2	-3.8 to -1.6

Source: Congressional Budget Office.

Notes: CBO's Solow-type growth model is an enhanced version of a model developed by Robert Solow. CBO's life-cycle growth model is an overlapping-generations general-equilibrium model that is based on another standard model of the economy. For detailed descriptions, see Appendix A.

In the 2017–2021 period, estimates derived from the Solow-type model are not affected by whether government spending is reduced or tax revenues are increased after 2025.

a. Estimates of changes that would occur after 2040.

15. The Solow-type model is what CBO has previously called a "textbook" growth model.

Table 2-6.

The Budgetary Implications of the Macroeconomic Effects from 2017 to 2021

(Cumulative change from CBO's estimate of the President's budget, in billions of dollars)

	Government Spending Reduced After 2025
Solow-Type Growth Model	-217 to 8
Life-Cycle Growth Model	-127 to -49
	Tax Revenues Increased After 2025
Solow-Type Growth Model	-217 to 8
Life-Cycle Growth Model	-106 to -24

Source: Congressional Budget Office.

Notes: Numbers in this table reflect the effects on the cumulative deficit resulting from the economic effects shown in Table 2-5. They do not include CBO's estimate of the budgetary impact of the President's proposals in the absence of those economic effects (shown in Table 1-3 on page 6).

Negative numbers indicate an increase in projected deficits; positive numbers indicate a reduction.

CBO's Solow-type growth model is an enhanced version of a model developed by Robert Solow. CBO's life-cycle growth model is an overlapping-generations general-equilibrium model that is based on another standard model of the economy. For detailed descriptions, see Appendix A.

In the 2017–2021 period, estimates derived from the Solow-type model are not affected by whether government spending is reduced or tax revenues are increased after 2025.

The estimated effects apply to fiscal years.

imbalances would be resolved by gradually reducing government spending (as a share of GNP) for goods and services and for transfer payments—to an equal extent—over the period from 2026 to 2035. Under the other alternative, imbalances would be resolved by gradually increasing tax revenues over the same period—through (in equal measure) increases in effective marginal tax rates and increases in revenues that did not arise from increasing marginal tax rates (but from broadening the tax base, for instance). The nature and magnitude of those offsetting future changes in policy can influence the long-term economic effects of the initial change in spending or revenues and, through people's expectations, can influence the near-term effects as well.

Applying those assumptions to the Solow-type and life-cycle models, CBO estimates that the President's proposals would reduce real GNP over the 2017–2021 period by between 0.1 percent and 1.2 percent, on average (see Table 2-5). In the long run, the proposals would decrease GNP by between 0.7 percent and 3.8 percent. Both models predict a negative effect on GNP, primarily because the negative effects that higher deficits have on investment by U.S. residents would outweigh the positive effects of lower effective marginal tax rates on labor and capital.

For the period from 2017 to 2021, CBO projects that the President's proposals would add $1.8 trillion to budget deficits, before taking into account their overall economic effects. Those effects would add as much as $217 billion to the additional deficits or subtract as much as $8 billion from them, depending on which model and which assumptions are used in the analysis (see Table 2-6).[16] Because of the substantial uncertainty that surrounds the results of such models, the effects of economic feedback are difficult to pinpoint. The numbers presented here illustrate the range of probable magnitudes.

16. Under some assumptions about the effect of the President's proposals on the economy, projected deficits fall slightly because the tax base can increase even when GNP decreases.

APPENDIX

A

The Methodology That CBO Used to Analyze the Economic Effects of the President's Budgetary Proposals

The Congressional Budget Office (CBO) used several approaches to estimate the economic effects of the President's budgetary proposals from 2012 to 2021, the period covered by the agency's current 10-year baseline projections, as well as to produce estimates for the long term. (Ranges of estimates generated by those approaches are presented in Chapter 2.)

Analyzing Economic Effects Through 2016

CBO analyzed effects of the President's budgetary proposals through 2016 using historical evidence about the direct effects of certain kinds of policies and the results of macroeconomic forecasting models regarding the way that direct effects propagate through the economy. That approach produced estimated "multipliers" for each of several categories of budgetary provisions, with each multiplier representing the effects that a dollar's worth of a budgetary change in a given category would have on the nation's output. The categories include, for example, tax cuts primarily affecting higher-income taxpayers, and purchases of goods and services by the federal government. A category's multiplier was applied to the total budgetary change in that category to estimate its overall impact on output.

CBO's estimates of economic effects through 2016 focus on the impact of the President's proposals on the demand for goods and services, because economic output in the short run is largely determined by such demand. Therefore, those estimates primarily reflect temporary changes in actual output relative to potential output. However, the estimates also incorporate some influences of the proposals on the economy's potential output; for example, additional investment raises potential output by increasing the capital stock.

The analysis incorporates both direct and indirect effects of the President's proposals on economic output. A provision's direct effect consists of its immediate (or first-round) effect on economic activity. The size of a direct effect depends on a 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, then the direct impact on output is 80 cents.

To estimate the size of the provisions' direct effects on output, CBO reviewed evidence on the responses of households and businesses to various types of fiscal policies, gleaning various conclusions. For example, temporary tax cuts will generally have less impact on a household's purchases than permanent cuts because a temporary cut has a smaller effect on total lifetime disposable income. As another example, increases in disposable income are likely to boost purchases more for lower-income than for higher-income households. That difference arises, at least in part, because a larger share of people in lower-income households cannot borrow as much money as they wish in order to spend more than they do currently.

Budgetary proposals also can have indirect effects that enhance or offset the direct effects. For example, direct effects are enhanced when greater demand for goods and services prompts companies to increase investment. In the other direction, direct effects are muted if greater government borrowing caused by tax cuts or spending increases leads to higher interest rates that discourage spending by households and businesses. In estimating the magnitude of indirect effects, CBO relied heavily on estimates from macroeconomic forecasting models, informed by evidence from other types of models and from direct estimation using historical data.[1]

In CBO's analysis, people base their decisions about working and saving primarily on current economic conditions—especially wage levels, interest rates, and government policies. The analysis assumes that people respond to those current developments as they typically have in the past. Those past responses have reflected, in part, an anticipation of other policies that might follow; for example, the degree to which people have increased their consumption in response to tax cuts has depended partly on their anticipation of future tax policy. Therefore, the analysis reflects people's anticipation of future policies in a general way, but it does not incorporate an assumption that people anticipate the exact nature of future policies in detail.

CBO provides a range of estimates of the effects of the President's budgetary proposals on gross national product through 2016. There is considerable uncertainty about many of the economic relationships that are important in the modeling. Therefore, in estimating the economic effects of the President's proposals, CBO's estimates encompass a broad range of economists' views about the relevant economic relationships (see Table 2-3 on page 27).

In past years, CBO has analyzed the short-run economic effects of the President's budget using macroeconometric forecasting models created by two private forecasting companies—Macroeconomic Advisers and IHS Global Insight.[2] The analysis used for the current report incorporates simplified versions of some of the basic economic relationships embodied in those models (as well as one other, the FRB-US model developed by the Federal Reserve) but also enables a more differentiated analysis of particular provisions of the President's budgetary proposals. For example, the analysis incorporates the empirical finding that changes in taxes that disproportionately affect lower-income households tend to have a greater effect on private spending than do changes that disproportionately affect higher-income households. CBO has used this approach in estimating the effects of the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), of extensions of expiring tax provisions, and of alternative policies for fiscal stimulus.[3]

Analyzing Economic Effects After 2016

CBO used two models to analyze the effects of the President's budgetary proposals after 2016. In both models—a Solow-type growth model and a life-cycle growth model—potential output depends on the level of the capital stock, the supply of labor, and the productivity of combined labor and capital. Those factors in turn are determined by people's decisions regarding work and saving. CBO's estimates of economic effects after 2016 focus on the impact of the President's proposals on the supply of labor and capital because CBO expects that economic output then will be determined by supply factors. In particular, this analysis does not reflect any changes in actual output relative to potential output, because such variation is expected to be temporary and, though certain to play some role in the future, is difficult to predict over long horizons. As a result, in analyzing the proposals' effects after 2016, CBO assumed that output is always at its potential level (the level of output consistent with a high rate of resource use).

The Solow-type growth model and life-cycle growth model differ somewhat in the extent to which people are expected to look to the future when making plans. For each model, CBO applied alternative assumptions about economic behavior. Those assumptions involve the degree to which economic variables influence households' decisions about how much to work and save and the extent to which real (inflation-adjusted) U.S. interest

1. For more details about those sources of information, see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From October 2010 Through December 2010* (February 2011), Appendix.

2. See Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2011* (March 2010).

3. See Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From October 2010 Through December 2010*; Statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *The Economic Outlook and Fiscal Policy Choices* (September 28, 2010); and Congressional Budget Office, *Policies for Increasing Economic Growth and Employment in 2010 and 2011* (January 2010).

rates are determined by the domestic economy or the world economy.

Under the President's proposals, debt would rise from about 62 percent of GDP in 2010 to more than 87 percent of GDP in 2021, and the total deficit would be rising as a percentage of GDP by the end of the period. If that trend continued beyond 2021 (without any other policy changes), the resulting path of federal debt would be unsustainable. To analyze the long-run economic effects, CBO made assumptions about how fiscal imbalances would ultimately be financed. CBO chose two illustrative alternatives for the period beyond 2025: reducing government transfer payments and purchases of goods and services or increasing tax revenues.

Solow-Type Growth Model

CBO's Solow-type growth model (formerly called a "textbook" growth model by CBO) is an enhanced version of a widely known model developed by Robert Solow.[4] It incorporates the assumption that economic output is determined by the number of hours of labor that workers supply, the size and composition of the capital stock (for example, factories and computers), and total factor productivity—which represents the combined productivity of labor and capital. According to the Solow-type model, people base their decisions about working and saving primarily on current economic conditions—especially wage levels, interest rates, and government policies. The model incorporates the assumption that people respond to current developments as they have, on average, in the past; as a result, the estimated responses reflect people's past anticipation of policies in a general way but not responses to specific future developments. For example, according to the model, people increase their saving somewhat in response to an increase in deficits (in part, in anticipation of possible future tax increases or spending cuts that typically follow an increase in deficits), but they do not behave as if they anticipate the details of future changes in government policies.

Channels Through Which the President's Proposals Would Affect the Economy. The estimates that CBO developed using the Solow-type model incorporate the effects that the President's budgetary proposals would have on marginal tax rates on labor and, in turn, on the number of hours worked. The estimates also incorporate the effects that the President's budgetary proposals would have on marginal tax rates on capital and thereby on private saving.

The President's proposals would also increase budget deficits, which would have a negative effect on the capital stock. Specifically, the larger deficits would imply less public saving, and private saving would rise by an amount that would only partially offset the decline in public saving. (Bigger deficits can lead to higher private saving for several reasons, including responses to higher interest rates and increases in disposable income, which can boost both spending and saving.) Therefore, national saving would be lower, and less domestic funding would be available to finance investment. However, the net reduction in national saving caused by higher deficits would not entirely translate into lower domestic investment. Instead, part of the reduction would be reflected in increased borrowing from abroad to finance investment in this country, which also means that a smaller portion of the returns from the domestic capital stock would be received domestically.

Alternative Assumptions. CBO used the Solow-type model to estimate the effects of the President's proposals under three alternative assumptions about how people would adjust their work hours in response to changes in marginal tax rates on labor income: a "strong labor supply response," under which workers' response is on the high side of the consensus range of empirical estimates from studies based on one-year changes in labor supply; a "weak labor supply response," under which workers respond very little; and a "medium labor supply response," under which workers' response is between strong and weak.[5]

CBO also analyzed the President's budget with the Solow-type model under three sets of assumptions about the effect of deficits on investment. In the first case ("small effect of deficits on investment"), each dollar of additional deficit leads to a 20-cent decline in domestic

4. For a detailed description of the Solow-type growth model, see Congressional Budget Office, *CBO's Method for Estimating Potential Output: An Update* (August 2001).

5. CBO's estimates used data from a large sample of taxpayers to account for the effects on labor supply of changes in marginal tax rates and in after-tax income under the President's proposals. The estimates incorporated a larger response to changes in marginal tax rates among secondary earners than among primary earners, as described in Chapter 2.

investment, owing to a combination of reduced national saving and a partially offsetting increase in foreign capital invested in the United States. In particular, every $1 of additional deficit is assumed to lead people to increase their private saving by about 55 cents and thus to reduce national saving by 45 cents, and every $1 decline in national saving is assumed to lead to a 55-cent increase in the amount of foreign capital invested in the United States. Together, those assumptions imply that a $1 increase in the budget deficit results in a 55-cent increase in private saving, a 25-cent increase in capital inflows (25 cents equals 45 cents times 0.55), and a 20-cent decline in domestic investment.

In the second case ("medium effect of deficits on investment"), each dollar of additional deficit leads to a 36-cent decline in domestic investment. In particular, every $1 of additional deficit is assumed to lead people to increase their private saving by about 40 cents and thus to reduce national saving by 60 cents, and every $1 decline in national saving is assumed to lead to a 40-cent increase in the amount of foreign capital invested in the United States. Together, those assumptions imply that a $1 increase in the budget deficit results in a 40-cent increase in private saving, a 24-cent increase in capital inflows (24 cents equals 60 cents times 0.40), and a 36-cent decline in domestic investment.

In the third case ("large effect of deficits on investment"), each dollar of additional deficit leads to a 50-cent decline in domestic investment. In particular, every $1 of additional deficit is assumed to lead people to increase their private saving by about 29 cents and thus to reduce national saving by 71 cents, and every $1 decline in national saving is assumed to lead to a 29-cent increase in the amount of foreign capital invested in the United States. Together, those assumptions imply that a $1 increase in the budget deficit results in a 29-cent increase in private saving, a 21-cent increase in capital inflows (21 cents equals 71 cents times 0.29), and a 50-cent decline in domestic investment.

Furthermore, CBO analyzed the President's budget with the Solow-type model under two alternative assumptions about how fiscal policy would be placed on a sustainable trajectory beyond CBO's traditional 10-year projection period. Because CBO cannot predict what long-term policy changes might be made, the agency chose two illustrative alternatives for the period beyond 2025. Under the first alternative, government transfer payments and government purchases of goods and services would be reduced by equal amounts. (The model incorporates the assumption that government purchases of goods and services do not directly influence people's private decisions about how much to work and save.) Under the second alternative, government revenues would be raised by (in equal measure) increases in effective marginal tax rates and increases in revenues that did not arise from increasing marginal tax rates (but from broadening the tax base, for instance). Under either alternative, changes in policy were assumed to be phased in gradually over 10 years, starting in 2026.

Applying the model under those various alternative assumptions produced 18 different possible outcomes for the 2017–2021 period, with estimated reductions in real output over that period ranging from 0.1 percent to 1.2 percent (see Table A-1). For the long term (after 2040), the projected reductions in output using that model range from 0.7 percent to 3.0 percent.

Life-Cycle Growth Model

In CBO's life-cycle growth model, people make decisions in response to prices in the economy (such as wages and rates of return on saving), and prices are determined by their choices (that is, the model is a "general-equilibrium" model). In the model, the economy consists of different cohorts of households (also known as overlapping generations) that are forward-looking in their behavior.[6] Moreover, according to the model, households know precisely how the government will resolve its long-term budget imbalance, whether by raising taxes in certain ways, cutting spending in certain ways, or implementing some combination of the two. Those households also face uncertainty about future wages and could become "credit-constrained" (that is, unable to borrow to maintain their spending) if their income declined significantly.

Fully Forward-Looking Behavior and Uncertainty. In contrast to the Solow-type model, the life-cycle model is

6. For a detailed description of the life-cycle model, see Shinichi Nishiyama, *Analyzing Tax Policy Changes Using a Stochastic OLG Model with Heterogeneous Households*, Congressional Budget Office Technical Paper 2003-12 (December 2003).

Table A-1.

CBO's Estimates of How the President's Budget Would Affect Inflation-Adjusted Gross National Product After 2016, Using a Solow-Type Model

(Average percentage difference from CBO's baseline, by calendar year)

	2017-2021	Long Term[a]
	Government Spending Reduced After 2025	
Small Effect of Deficits on Investment		
Weak labor supply response	-0.5	-1.2
Medium labor supply response	-0.3	-0.9
Strong labor supply response	-0.1	-0.7
Medium Effect of Deficits on Investment		
Weak labor supply response	-0.8	-2.1
Medium labor supply response	-0.6	-1.9
Strong labor supply response	-0.5	-1.6
Large Effect of Deficits on Investment		
Weak labor supply response	-1.2	-3.0
Medium labor supply response	-1.0	-2.8
Strong labor supply response	-0.8	-2.6
	Tax Revenues Increased After 2025	
Small Effect of Deficits on Investment		
Weak labor supply response	-0.5	-1.2
Medium labor supply response	-0.3	-1.0
Strong labor supply response	-0.1	-0.9
Medium Effect of Deficits on Investment		
Weak labor supply response	-0.8	-2.1
Medium labor supply response	-0.6	-2.0
Strong labor supply response	-0.5	-1.9
Large Effect of Deficits on Investment		
Weak labor supply response	-1.2	-3.0
Medium labor supply response	-1.0	-2.9
Strong labor supply response	-0.8	-2.8

Source: Congressional Budget Office.

Notes: CBO's Solow-type growth model is an enhanced version of a model developed by Robert Solow.

In the 2017–2021 period, estimates derived from the Solow-type model are not affected by whether government spending is reduced or tax revenues are increased after 2025.

a. Estimates of changes that would occur after 2040.

built on the assumption that people make choices about working and saving both in response to current changes in government transfer payments, after-tax wages, and after-tax rates of return and in anticipation of changes in those factors. The model incorporates the assumption that people decide how much to work and save to make themselves as well off as possible over a lifetime. Such behavior is calibrated so that macroeconomic variables such as the total amount of labor supplied and the size of the capital stock match the amounts in the U.S. economy.

Households are assumed to have perfect foresight about the future of the economy as a whole and about government policies. This assumption differs from the assumption made in the Solow-type model, in which people respond to current developments in the way they have, on average, in the past. Using the two alternative approaches allows CBO's estimates to encompass a range of possible responses to the President's budgetary proposals.

CBO's life-cycle model incorporates the assumption that people consider the effects of future economic or policy changes on themselves but not on their children. Therefore, according to this model, older generations know that they could retire or die before a policy change occurs and tend to be less responsive to a future policy change than younger generations are.

Although CBO's life-cycle model does not reflect unpredictable fluctuations in aggregate output, it incorporates an assumption that individual households face unforeseeable fluctuations in their income for which they cannot buy insurance. Faced with that uncertainty, households take the precaution of holding additional savings as a buffer against potential drops in income. In this model, the precautionary motive to save is not strongly affected by changes in the after-tax rate of return on savings; as a result, households' savings do not respond as much to changes in marginal tax rates on capital income as they would respond in models without a precautionary motive of this sort.[7]

Channels Through Which the President's Proposals Would Affect the Economy. The estimates that CBO developed using the life-cycle model incorporate the

7. In the presence of uncertainty, households' responses to fiscal policies are strongly influenced by their aversion to risk. The degree of risk aversion assumed in CBO's model is consistent with existing estimates, although such estimates vary widely; see Raj Chetty, "A New Method of Estimating Risk Aversion," *American Economic Review*, vol. 96, no. 5 (December 2006), pp. 1821–1834.

Table A-2.

CBO's Estimates of How the President's Budget Would Affect Inflation-Adjusted Gross National Product After 2016, Using a Life-Cycle Model

(Average percentage difference from CBO's baseline, by calendar year)

	2017-2021	Long Term[a]
	Government Spending Reduced After 2025	
Real U.S. Interest Rates Determined Entirely by the Domestic Economy[b]		
Weak labor supply response	-0.5	-1.2
Medium labor supply response	-0.4	-1.2
Strong labor supply response	-0.3	-1.1
Real U.S. Interest Rates Determined Entirely by the World Economy[c]		
Weak labor supply response	-1.0	-2.7
Medium labor supply response	-1.0	-2.8
Strong labor supply response	-1.2	-2.9
	Tax Revenues Increased After 2025	
Real U.S. Interest Rates Determined Entirely by the Domestic Economy[b]		
Weak labor supply response	-0.4	-1.8
Medium labor supply response	-0.3	-1.8
Strong labor supply response	-0.2	-1.6
Real U.S. Interest Rates Determined Entirely by the World Economy[c]		
Weak labor supply response	-0.8	-3.4
Medium labor supply response	-0.9	-3.6
Strong labor supply response	-1.0	-3.8

Source: Congressional Budget Office.

Note: CBO's life-cycle growth model is an overlapping-generations general-equilibrium model that is based on a standard model of the economy in which people are forward-looking in their behavior.

a. Estimates of changes that would occur after 2040.

b. Referred to as a "closed economy."

c. Referred to as a "small open economy."

effects that the President's budgetary proposals would have on after-tax wages and, in turn, on the number of hours worked. The estimates also incorporate the effects that the President's budgetary proposals would have on the after-tax rate of return and thereby on private saving.

The President's proposals would also increase people's disposable income through both lower taxes and higher transfer payments. Other things being equal, those changes would lead people to work less and consume more. The resulting increase in private consumption would be only partially offset by decreased government purchases under the President's proposals. The net increase in purchases would tend to crowd out investment. The ultimate impact on investment would depend on the degree to which interest rates are determined by the domestic, rather than the world, economy.

Alternative Assumptions. Although the world economy plays some role in determining interest rates in the United States, the extent of that influence is uncertain. To consider a broad range of possibilities, CBO analyzed the effects of the President's proposals with the life-cycle model under two alternative assumptions: Interest rates in the United States are determined entirely by the domestic economy (equivalently, that the country has a so-called closed economy); and interest rates are determined entirely by the world economy (equivalently, that the country has a so-called small open economy).[8] In addition, as in the case of the Solow-type model, CBO used the life-cycle model to estimate the effects of the President's proposals under three alternative assumptions about the responsiveness of labor supply to changes in after-tax wages ("weak," "medium," and "strong").

Given the fully forward-looking behavior of households in the life-cycle model, producing estimates of the current effects of policies required CBO to make assumptions about future policies—not only during the 10-year period of the agency's regular baseline projections but into the indefinite future as well. For its analysis, CBO assumed that people anticipated that the policies in the President's budget would be maintained through 2021. (In reality, people might well believe that the policies would change at some point during the next decade.) For the period beyond 2021, CBO assumed that people expected that fiscal policy would be placed on a sustainable trajectory using one of the two alternative assumptions used with the Solow-type model.

Applying the life-cycle model under those various alternative assumptions produced 12 different possible outcomes for the 2017–2021 period, with estimated reductions in real output over that period ranging from 0.2 percent to 1.2 percent (see Table A-2). Those results

8. Although neither of those assumptions about interest rates corresponds fully to the U.S. economy, they encompass a broad range of possible assumptions about the degree to which interest rates are determined by the domestic economy.

are very similar to the range produced by the Solow-type model. For the long term (after 2040), the projected reductions in output using the life-cycle model range from 1.1 percent to 3.8 percent, somewhat greater than the low and high estimates generated by the Solow-type model.

APPENDIX

B

Contributors to This Report

The economic projections and analysis that appear in this report were prepared by the Congressional Budget Office's (CBO's) Macroeconomic Analysis Division, supervised by Wendy Edelberg, Robert Dennis (formerly of CBO), Kim Kowalewski, Robert Arnold, and William Randolph. The revenue projections were by prepared the agency's Tax Analysis Division, supervised by Frank Sammartino, David Weiner, Mark Booth, and Janet Holtzblatt. The spending estimates were prepared by the Budget Analysis Division, supervised by Peter Fontaine, Theresa Gullo, Holly Harvey, Janet Airis, Tom Bradley, Kim Cawley, Jean Hearne, Jeffrey Holland, Sarah Jennings, and Sam Papenfuss.

The following CBO staff members prepared the economic, revenue, and spending projections; wrote the report; and edited it and produced it:

Economic Modeling

Jonathan Huntley	Solow-type growth model
Mark Lasky	Short-term analysis
Valentina Michelangeli	Life-cycle growth model
Benjamin Page	Short-term analysis
Frank Russek	Budgetary implications of the economic effects
Marika Santoro	Life-cycle growth model

Economic Projections

Robert Arnold	Potential output, productivity
Holly Battelle	Housing
David Brauer	Inflation, labor markets
Stephanie Burns	Housing, research assistance
Juan Contreras	Consumer spending
Ronald Gecan	Energy prices
Naomi Griffin	Incomes, labor markets
Priscila Hammett	Model and data management
Juann Hung	Net exports, exchange rates
Mark Lasky	Business investment, housing, economic impact of fiscal policy
Benjamin Page	Economic impact of fiscal policy
Frank Russek	Federal, state, and local policy
Steven Weinberg	Interest rates, monetary policy, energy prices, house prices
Christopher Williams	Forecast coordination

Revenue Projections

Pamela Greene	Coordinator of analysis of revenue proposals; corporate income taxes, estate and gift taxes
Paul Burnham	Retirement income, capital tax rates
Grant Driessen	Excise taxes
Barbara Edwards	Social insurance taxes, Federal Reserve System earnings
Jennifer Gravelle	Depreciation, international taxation
Ed Harris	Individual income taxes, social insurance taxes, tax modeling
Elias Leight	Tax modeling
Robert McClelland	Business taxation
Shannon Mok	Refundable tax credits
Athiphat Muthitacharoen	Estate tax modeling
Larry Ozanne	Capital gains realizations, labor tax rates
Kalyani Parthasarathy	Customs duties, miscellaneous receipts
Kevin Perese	Tax modeling
Kurt Seibert	Refundable tax credits, depreciation, tax modeling
Joshua Shakin	Individual income taxes

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Kent Christensen	Defense (projections, working capital funds, procurement, scorekeeping)
Sunita D'Monte	International affairs
Ann Futrell	Veterans' health care
Raymond Hall	Defense (research and development, stockpile sales, atomic energy)
William Ma	Veterans' readjustment benefits, reservists' educational benefits, military retirement
David Newman	Defense (military construction and family housing, military activities in Afghanistan and Iraq), veterans' housing
Dawn Sauter Regan	Defense (military personnel)
Matthew Schmit	Military retirement, military health care
Jason Wheelock	Defense (other programs, operation and maintenance, compensation for radiation exposure, compensation for energy employees' occupational illness)
Dwayne Wright	Veterans' compensation and pensions

Health

Stephanie Cameron	Medicare, Public Health Service
Julia Christensen	Food and Drug Administration, prescription drugs
Anna Cook	Prescription drugs
Sean Dunbar	Children's Health Insurance Program, Medicaid, Public Health Service
Stuart Hagen	Health insurance coverage
Lori Housman	Medicare
Paul Jacobs	Health insurance coverage
Jamease Miles	Medicare, Public Health Service
Alexandra Minicozzi	Health insurance coverage
Kirstin Nelson	Medicaid, Federal Employees Health Benefits program
Andrea Noda	Medicaid prescription drugs, Medicare Part D, long-term care, Public Health Service
Romain Parsad	Health insurance coverage
Lisa Ramirez-Branum	Medicaid, health insurance coverage, Public Health Service
Lara Robillard	Medicare
Robert Stewart	Medicaid, Children's Health Insurance Program, Indian Health Service
Ellen Werble	Food and Drug Administration, prescription drugs, Public Health Service
Rebecca Yip	Medicare Part D, Medicaid prescription drugs
Christopher Zogby	Health insurance coverage

Income Security and Education

Christina Hawley Anthony	Unemployment insurance, training programs, Administration on Aging, Smithsonian, arts and humanities, report coordinator
Chad Chirico	Housing assistance, Fannie Mae and Freddie Mac, Troubled Asset Relief Program
Sheila Dacey	Old-Age and Survivors Insurance, Social Security trust funds, Pension Benefit Guaranty Corporation
Kathleen FitzGerald	Supplemental Nutrition Assistance Program and other nutrition programs
Emily Holcombe	Child nutrition and other nutrition programs
Justin Humphrey	Elementary and secondary education, Pell grants, student loans
Deborah Kalcevic	Student loans, higher education
Jonathan Morancy	Temporary Assistance for Needy Families, Child Support Enforcement, foster care, Social Services Block Grant program, child care programs, Children and Family Services
David Rafferty	Disability Insurance, Supplemental Security Income
Alan Stoffer	Low Income Home Energy Assistance Program, refugee assistance, Pension Benefit Guaranty Corporation

Natural and Physical Resources

Megan Carroll	Energy, air transportation
Mark Grabowicz	Justice, Postal Service
Kathleen Gramp	Energy, Outer Continental Shelf receipts, spectrum auction receipts
Gregory Hitz	Agriculture
Daniel Hoople	Community and regional development, Federal Emergency Management Agency, deposit insurance
David Hull	Agriculture
Jeff LaFave	Conservation and land management, other natural resources
James Langley	Agriculture
Susanne Mehlman	Pollution control and abatement, Federal Housing Administration and other housing credit programs
Matthew Pickford	General government, legislative branch
Sarah Puro	Highways, Amtrak, water transportation
Aurora Swanson	Water resources, Fannie Mae and Freddie Mac
Martin von Gnechten	Justice, science and space exploration, Bureau of Indian Affairs, recreation
Susan Willie	Mass transit, commerce, Small Business Administration, Universal Service Fund

Other

Janet Airis	Legislative branch appropriation bills
Shane Beaulieu	Computer support
Edward Blau	Authorization bills
Barry Blom	Federal pay, monthly Treasury data
Jared Brewster	Interest on the public debt, national income and product accounts
Joanna Capps	Appropriation bills (Interior and the environment, Labor–Health and Human Services)
Francesca Castelli	Troubled Asset Relief Program
Mary Froehlich	Computer support
Wendy Kiska	Troubled Asset Relief Program
Avi Lerner	Troubled Asset Relief Program, other interest
Amber Marcellino	Federal civilian retirement, other interest
Damien Moore	Fannie Mae and Freddie Mac
Virginia Myers	Appropriation bills (Commerce–Justice, financial services, general government)
Jennifer Reynolds	Appropriation bills (Agriculture, foreign relations)
Mark Sanford	Appropriation bills (Defense, Homeland Security)
Esther Steinbock	Appropriation bills (Transportation–Housing and Urban Development, military construction and veterans' affairs, energy and water development)
Santiago Vallinas	Other retirement, national income and product accounts
Patrice Watson	Database system administrator

Summary, Chapters, and Appendix A

Jeffrey Holland wrote the summary. He and Barry Blom wrote Chapter 1, with assistance from Christina Hawley Anthony, Pamela Greene, Amber Marcellino, and Santiago Vallinas. Charles Whalen wrote Chapter 2 and Appendix A, with assistance from Ed Harris, Larry Ozanne, Benjamin Page, and David Weiner.

Editing and Production

Chris Howlett and John Skeen edited the report, with assistance from Kate Kelly. Maureen Costantino designed the cover, and she and Jeanine Rees produced the report. Monte Ruffin printed the initial copies, Linda Schimmel handled the print distribution, and Simone Thomas prepared the presentation for CBO's Web site (www.cbo.gov).