



# Congressional Budget Office

## Testimony

**Statement of  
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### **The Long-Term Budget Outlook**

**before the  
Committee on the Budget  
United States Senate**

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Chairman Conrad, Senator Gregg, and Members of the Committee, thank you for inviting me to testify on the Congressional Budget Office's (CBO's) most recent analysis of the long-term budget outlook. My statement describes the pressures facing the federal budget over the coming decades by presenting the agency's current projections of federal spending and revenues through 2080.<sup>1</sup>

Under current law, the federal budget is on an unsustainable path—meaning that federal debt will continue to grow much faster than the economy over the long run. Although great uncertainty surrounds long-term fiscal projections, rising costs for health care and the aging of the U.S. population will cause federal spending to increase rapidly under any plausible scenario for current law. Unless revenues increase just as rapidly, the rise in spending will produce growing budget deficits and accumulating debt. Keeping deficits and debt from reaching levels that would cause substantial harm to the economy would require increasing revenues significantly as a percentage of gross domestic product (GDP), decreasing projected spending sharply, or some combination of the two.

Measured relative to GDP, almost all of the projected growth in federal spending other than interest payments on the debt comes from growth in spending on the three largest entitlement programs—Medicare, Medicaid, and Social Security. For decades, spending on the federal government's major health care programs, Medicare and Medicaid, has been growing faster than the economy (as has health care spending in the private sector). CBO projects that if current laws do not change, federal spending on Medicare and Medicaid combined will grow from roughly 5 percent of GDP today to almost 10 percent by 2035 and to more than 17 percent by 2080. That projection means that in 2080, without changes in policy, the federal government would be spending almost as much, as a share of the economy, on just its two major health care programs as it has spent on all of its programs and services in recent years.

By CBO's estimates, the increase in spending for Medicare and Medicaid as a share of GDP will account for 80 percent of spending increases for the three entitlement

programs between now and 2035 and 90 percent of spending growth between now and 2080. Thus, reducing overall government spending relative to what would occur under current fiscal policy would require fundamental changes in the trajectory of federal health spending. Slowing the growth rate of outlays for Medicare and Medicaid is the central long-term challenge for federal fiscal policy.

Under current law, spending on Social Security is also projected to rise over time as a share of GDP, albeit much less dramatically. CBO projects that Social Security spending will increase from less than 5 percent of GDP today to about 6 percent in 2035 and then roughly stabilize at that level through 2080. Under the assumptions used for CBO's long-term projections, government spending on activities other than Medicare, Medicaid, Social Security, and interest on federal debt—activities such as national defense and a wide variety of domestic programs—is projected to decline or stay roughly stable as a share of GDP in future decades.

Federal spending on Medicare, Medicaid, and Social Security will grow relative to the economy both because health care spending per beneficiary is projected to increase and because the population is aging. Spending on Medicare and Medicaid will be driven by both factors, while Social Security spending will rise because of the population's aging. Between now and 2035, aging is projected to make the larger contribution to the growth of spending for those three programs as a share of GDP. After 2035, continued increases in health care spending per beneficiary are projected to dominate the growth in spending for the three programs.

The current recession has little effect on long-term projections of noninterest spending and revenues. But CBO estimates that in fiscal years 2009 and 2010, the federal government will record its largest budget deficits as a share of GDP since shortly after World War II. As a result of those deficits, federal debt held by the public will soar from 41 percent of GDP at the end of fiscal year 2008 to 60 percent at the end of fiscal year 2010. Higher debt results in permanently higher spending to pay interest on that debt (unless the debt is later paid off). Federal interest payments already amount to more than 1 percent of GDP; unless current law changes, that share would rise to 2.5 percent by 2020.

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1. Those projections appear in Congressional Budget Office, *The Long-Term Budget Outlook* (June 2009).

CBO's long-term budget projections raise fundamental questions about economic sustainability. If outlays grew as projected and revenues did not rise at a corresponding rate, annual deficits would climb and federal debt would grow significantly. Large budget deficits would reduce national saving, leading to more borrowing from abroad and less domestic investment, which in turn would depress income growth in the United States. Over time, the accumulation of debt would seriously harm the economy. Alternatively, if spending grew as projected and taxes were raised in tandem, tax rates would have to reach levels never seen in the United States. High tax rates would slow the growth of the economy, making the spending burden harder to bear. Policymakers could mitigate the economic damage from rapidly rising debt by putting the nation on a sustainable fiscal course, which would require some combination of lower spending and higher revenues than the amounts now projected. Making such changes sooner rather than later would lessen the risks that current fiscal policy poses to the economy.

## Alternative Scenarios for the Long-Term Budget Outlook

Long-term projections rely on numerous assumptions about economic and fiscal factors, and many different assumptions are possible. In this report, CBO presents two scenarios that are based on alternative assumptions about the federal budget over the long term (see Table 1):

- The “extended-baseline scenario” adheres most closely to current law, following CBO’s 10-year baseline budget projections for the next decade and then extending the baseline concept beyond that 10-year window.<sup>2</sup> The scenario’s assumption of current law implies that

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2. CBO’s baseline is a benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. It comprises projections of budget authority, outlays, revenues, and the deficit or surplus calculated according to rules set forth in the Balanced Budget and Emergency Deficit Control Act of 1985. Those projections are not intended to be predictions of future budgetary outcomes; rather, they represent CBO’s best judgment of how economic and other factors would affect federal revenues and spending if current laws and policies did not change.

many policy adjustments that lawmakers have routinely made in the past will not occur.

- The “alternative fiscal scenario” represents one interpretation of what it would mean to continue today’s underlying fiscal policy. This scenario deviates from CBO’s baseline even during the next 10 years because it incorporates some policy changes that are widely expected to occur and that policymakers have regularly made in the past. Different analysts might perceive the underlying intention of current policy differently, however, and other interpretations are possible.

CBO projects that under both scenarios, primary spending—all spending except interest payments on federal debt—would grow sharply in coming decades relative to its historical relationship to GDP. Those projections are consistent with CBO’s 2007 long-term budget outlook. Stimulus legislation and efforts to stabilize the financial markets will push primary spending up to 26 percent of GDP this fiscal year, the highest level since World War II; primary spending is projected to decline to 20 percent of GDP by fiscal year 2012.

Under the extended-baseline scenario, primary spending would edge down further as a share of GDP for several years, to 19 percent. It would then begin a long-term upward trajectory, reaching 24 percent of GDP in 2035 and 32 percent in 2080 (see Figure 1). Under the alternative fiscal scenario, by comparison, primary spending would be about 2 percentage points higher as a share of GDP than in the extended-baseline scenario throughout the projection period (see Figure 2).

If spending policies did not change and outlays indeed grew to the projected levels relative to the size of the economy, maintaining a sustainable budget path would require a similar rise in federal taxation. The recession has temporarily depressed revenues to an estimated 16 percent of GDP in this fiscal year. But even typical revenue levels would be too low to support projected spending. Over the past half-century, total federal revenues have averaged about 18 percent of GDP—well below the level of projected spending under either scenario.

**Table 1.**

## Assumptions About Federal Spending and Revenue Sources Underlying CBO's Long-Term Budget Scenarios

	Extended-Baseline Scenario	Alternative Fiscal Scenario
<b>Assumptions About Spending</b>		
Medicare	As scheduled under current law	Physician payment rates grow with the Medicare economic index (rather than at the lower growth rates scheduled under the sustainable growth rate mechanism)
Medicaid	As scheduled under current law	As scheduled under current law
Social Security	As scheduled under current law	As scheduled under current law
Other Spending Excluding Interest <sup>a</sup>	As projected in CBO's 10-year baseline through 2019, remaining thereafter at the projected 2019 level as a share of GDP	As projected in CBO's baseline through 2011, remaining thereafter at the projected 2009 level, minus stimulus and related spending, as a share of GDP
<b>Assumptions About Revenue Sources</b>		
Individual Income Taxes	As scheduled under current law	Tax provisions in JGTRRA and EGTRRA are extended and AMT parameters are indexed for inflation after 2009
Corporate Income Taxes	As scheduled under current law	As scheduled under current law
Payroll Taxes	As scheduled under current law	As scheduled under current law
Excise Taxes and Estate and Gift Taxes	As scheduled under current law	Constant as a share of GDP over the long term
Other Revenues	As scheduled under current law through 2019, remaining constant as a share of GDP thereafter	As scheduled under current law through 2019, remaining constant as a share of GDP thereafter

Source: Congressional Budget Office.

Notes: The extended-baseline scenario adheres closely to current law, following CBO's 10-year baseline budget projections from 2009 to 2019 and then extending the baseline concept for the rest of the projection period. The alternative fiscal scenario deviates from CBO's baseline projections, beginning in 2010, by incorporating some changes in policy that are widely expected to occur and that policy-makers have regularly made in the past.

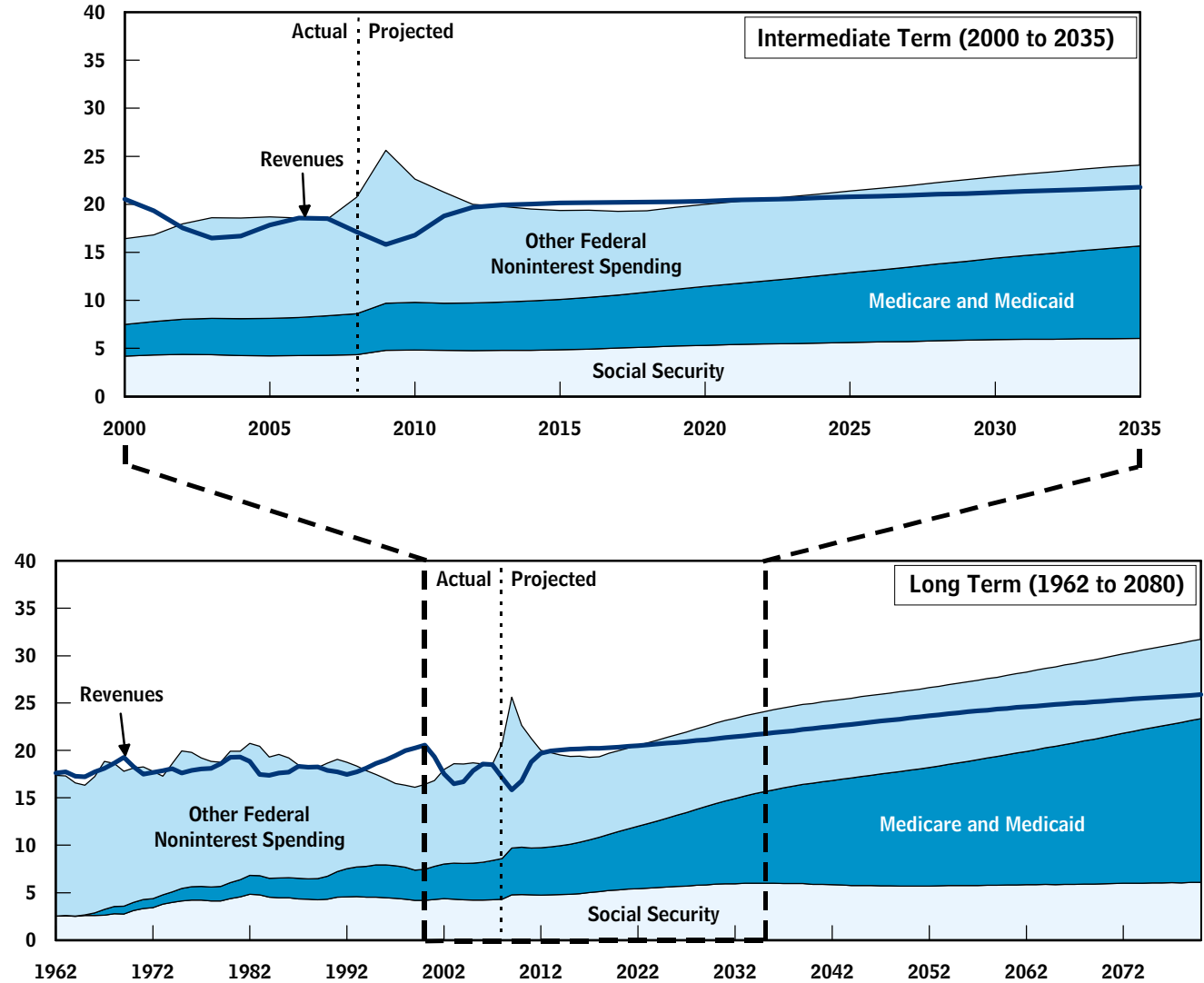
GDP = gross domestic product; JGTRRA = Jobs and Growth Tax Relief Reconciliation Act of 2003; EGTRRA = Economic Growth and Tax Relief Reconciliation Act of 2001; AMT = alternative minimum tax.

- a. Federal spending on the refundable portions of the earned income tax credit and the child tax credit is not held constant as a percentage of GDP but instead is modeled with the revenue portion of the scenarios.

**Figure 1.**

## Federal Revenues and Noninterest Spending, by Category, Under CBO's Extended-Baseline Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

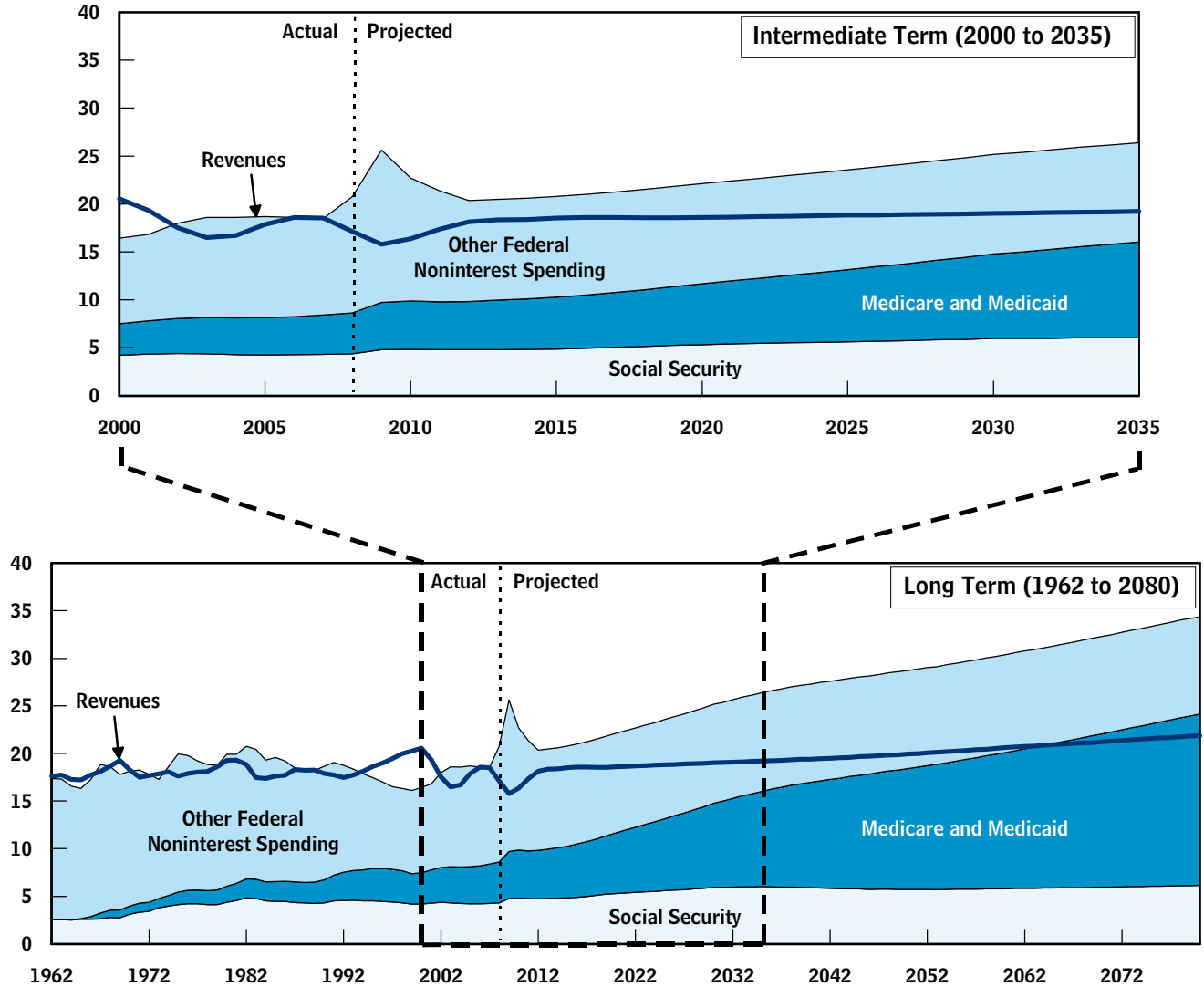
Notes: Spending in this figure excludes interest payments on the debt; hence, the gap between federal revenues and noninterest spending shown here does not equal the projected surplus or deficit.

The extended-baseline scenario adheres closely to current law, following CBO's 10-year baseline budget projections from 2009 to 2019 and then extending the baseline concept for the rest of the projection period.

**Figure 2.**

## Federal Revenues and Noninterest Spending, by Category, Under CBO's Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

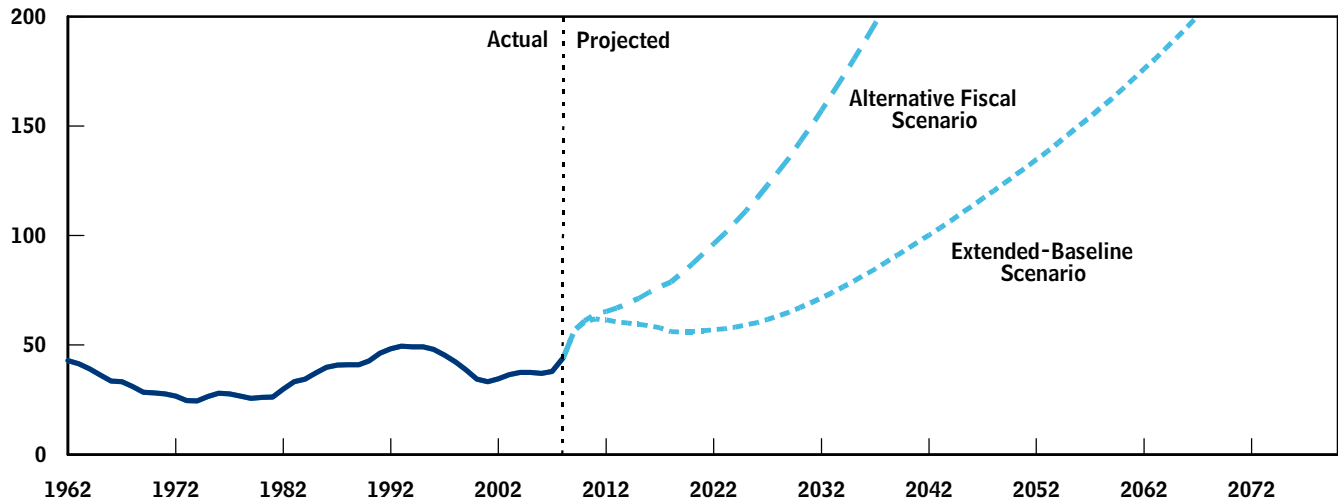
Notes: Spending in this figure excludes interest payments on the debt; hence, the gap between federal revenues and noninterest spending shown here does not equal the projected surplus or deficit.

The alternative fiscal scenario deviates from CBO's baseline projections, beginning in 2010, by incorporating some changes in policy that are widely expected to occur and that policymakers have regularly made in the past.

**Figure 3.**

## Federal Debt Held by the Public Under CBO's Long-Term Budget Scenarios

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The extended-baseline scenario adheres closely to current law, following CBO's 10-year baseline budget projections from 2009 to 2019 and then extending the baseline concept for the rest of the projection period. The alternative fiscal scenario deviates from CBO's baseline projections, beginning in 2010, by incorporating some changes in policy that are widely expected to occur and that policy-makers have regularly made in the past.

Under the extended-baseline scenario, revenues would reach higher levels relative to the economy than ever recorded in the nation's history. That scenario assumes that reductions in tax rates enacted in 2001 and 2003 will expire at the end of 2010 as scheduled under current law. It also assumes that the alternative minimum tax (AMT) will not be changed, and because its parameters are not indexed to inflation like most of the tax code, its reach would expand substantially over time.<sup>3</sup> In addition, ongoing increases in real (inflation-adjusted) income would push taxpayers into higher income tax brackets. For all of those reasons, the extended-baseline scenario implies that federal revenues will grow somewhat faster, on average, than the economy—increasing from 20 percent of GDP in fiscal year 2012 to 22 percent by 2035 and 26 percent by 2080. But even if revenues rose to those unprecedented levels, they would not be suffi-

cient to keep the budget in balance over the long term in that scenario. Federal debt held by the public would stay near 60 percent of GDP during the coming decade but then would turn upward and reach 79 percent of GDP by 2035 (see Figure 3 and Table 2). In the absence of policy changes, by 2046 the ratio of debt to GDP would be higher than the level that the United States experienced shortly after World War II.

Under the alternative fiscal scenario, by contrast, expiring tax provisions in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) would be extended, and the AMT would be indexed to inflation. As a result, revenues would grow only slightly faster than the economy, equaling 22 percent of GDP by 2080. Slowly growing revenues combined with sharply rising expenditures would create an explosive fiscal situation. Under the spending and revenue policies incorporated in this scenario, federal debt would surpass 100 percent of GDP in 2023 and exceed 200 percent of GDP by the late 2030s.

3. The AMT is a parallel income tax system with fewer exemptions, deductions, and rates than the regular income tax. Households must calculate the amount of tax they owe under both the AMT and the regular income tax and pay the larger of the two amounts.



**Table 2.**

## Projected Federal Spending and Revenues Under CBO's Long-Term Budget Scenarios

(Percentage of gross domestic product)

	2009 <sup>a</sup>	2020	2035	2050	2080
<b>Extended-Baseline Scenario</b>					
Primary Spending					
Social Security	4.8	5.3	6.0	5.7	6.1
Medicare <sup>b</sup>	3.5	4.0	6.9	9.0	13.5
Medicaid	1.8	2.1	2.8	3.2	3.7
Other noninterest spending	16.0	8.6	8.5	8.4	8.4
Subtotal, primary spending	26.2	20.0	24.1	26.3	31.7
Interest	1.2	2.6	3.3	5.4	11.9
Total Spending	27.4	22.6	27.4	31.7	43.7
Revenues	15.5	20.3	21.8	23.4	25.9
<b>Deficit (-) or Surplus</b>					
<b>Primary deficit or surplus</b>	<b>-10.7</b>	<b>0.4</b>	<b>-2.3</b>	<b>-2.9</b>	<b>-5.9</b>
<b>Total deficit</b>	<b>-11.9</b>	<b>-2.3</b>	<b>-5.6</b>	<b>-8.3</b>	<b>-17.8</b>
Debt Held by the Public	55	56	79	128 <sup>c</sup>	283 <sup>c</sup>
<b>Alternative Fiscal Scenario</b>					
Primary Spending					
Social Security	4.8	5.3	6.0	5.7	6.2
Medicare <sup>b</sup>	3.5	4.3	7.2	9.5	14.3
Medicaid	1.8	2.1	2.8	3.2	3.7
Other noninterest spending	16.0	10.5	10.4	10.3	10.3
Subtotal, primary spending	26.2	22.1	26.4	28.7	34.4
Interest	1.2	3.9	7.5	13.5	30.3
Total Spending	27.4	26.0	33.9	42.2	64.7
Revenues	15.5	18.6	19.2	19.9	21.9
<b>Deficit (-) or Surplus</b>					
<b>Primary deficit or surplus</b>	<b>-10.7</b>	<b>-3.5</b>	<b>-7.2</b>	<b>-8.8</b>	<b>-12.5</b>
<b>Total deficit</b>	<b>-11.9</b>	<b>-7.4</b>	<b>-14.6</b>	<b>-22.2</b>	<b>-42.8</b>
Debt Held by the Public	55	87	181 <sup>c</sup>	321 <sup>c</sup>	716 <sup>c</sup>

Source: Congressional Budget Office.

Note: The extended-baseline scenario adheres closely to current law, following CBO's 10-year baseline budget projections from 2009 to 2019 and then extending the baseline concept for the rest of the projection period. The alternative fiscal scenario deviates from CBO's baseline projections, beginning in 2010, by incorporating some changes in policy that are widely expected to occur and that policy-makers have regularly made in the past.

- Data for 2009 are on a fiscal year basis; all other data are on a calendar year basis.
- Spending for Medicare is net of premiums and amounts paid by states from savings on Medicaid prescription drug costs.
- Such high levels of debt to GDP would have severe effects on the economy that are not illustrated here. For further discussion, see the section "The Economic Impact of Rising Federal Debt" on page 15.

**Box 1.**

## Calculating the Fiscal Gap

One way to gauge the federal government’s financial status is to examine projections of annual revenues and spending. Another way is to look at present-value measures that summarize the government’s expected long-term flows of revenues and spending in a single number. (A present-value calculation adjusts future payments for the time value of money to make them comparable with payments today.) The fiscal gap is a present-value measure of the nation’s fiscal imbalance.

That imbalance reflects federal shortfalls over a given period. It represents the extent to which the government would need to immediately and permanently raise tax revenues, cut spending, or use some mix of both to make the government’s debt the same size (relative to the size of the economy) at the end of that period as it was at the beginning.

The Congressional Budget Office (CBO) calculates the present value of a stream of future revenues by taking the revenues for each year, discounting each value to 2009 dollars, and then summing the resulting series. (CBO used a real [inflation-adjusted] discount rate based on the interest rate on debt held by the public, assumed to be 3.0 percent in the long term.) The same method is applied to the projected stream of outlays.<sup>1</sup> CBO also computes a present value for future gross domestic product (GDP) so it can calculate the present value of outlays and revenues as a share of the present value of GDP (see the table at the right).

### Federal Fiscal Imbalance Under CBO’s Long-Term Budget Scenarios

(Percentage of gross domestic product)

Projection Period	Revenues	Outlays	Fiscal Gap
<b>Extended-Baseline Scenario</b>			
25 Years (2009–2033)	21.6	23.7	2.1
50 Years (2009–2058)	22.0	24.6	2.6
75 Years (2009–2083)	22.7	25.9	3.2
<b>Alternative Fiscal Scenario</b>			
25 Years (2009–2033)	19.9	25.3	5.4
50 Years (2009–2058)	19.6	26.5	6.9
75 Years (2009–2083)	19.9	28.0	8.1

Source: Congressional Budget Office.

1. To allow for the increase in the nominal value of the debt that would occur even if that debt was maintained at its current share of gross domestic product (GDP), the present value of outlays is adjusted to account for that change in the debt. Specifically, the current debt is added to the outlay measure, and the present value of the target end-of-period debt is subtracted. (The end-of-period debt is equal to GDP in the last year of the period multiplied by the 2008 ratio of debt to GDP.)

## Returning the Budget to a Sustainable Path

How much would policies have to change to avoid unsustainable increases in government debt? A useful answer comes from looking at the so-called fiscal gap. The gap measures the immediate change in spending or revenues that would be necessary to produce the same debt-to-GDP ratio at the end of a given period as prevailed at the beginning of the period. Under the extended-baseline scenario, the fiscal gap would amount to 2.1 percent of GDP over the next 25 years and 3.2 percent of GDP over the next 75 years. In other words, under that scenario (ignoring the effects of debt on economic growth), an immediate and permanent reduction in spending or an immediate and permanent increase in revenues equal to 3.2 percent of GDP would be needed to create a sustainable fiscal path for the next three-quarters of a century. If the policy change was not immediate, the required percentage would be greater. The fiscal gap is much larger under the alternative fiscal scenario: 5.4 percent of GDP over the next 25 years and 8.1 percent over the next 75 years. (For information about how CBO makes those estimates, see Box 1.)

Long-term budget projections require a stable economic backdrop. For these projections, CBO assumed that even a large increase in federal debt would not affect economic growth or real rates of interest after the first 10 years.<sup>4</sup> However, if debt actually increased as projected under either scenario, interest rates would be higher than otherwise and economic growth would be slower. The rising debt would reduce the size of the domestic capital stock (businesses' equipment and structures as well as housing) and decrease U.S. ownership of assets in other countries while increasing foreign ownership of assets in the United States. Those changes would slow the growth of gross national product (GNP) and, as the debt burden rose, could eventually lead to a decline in economic output.<sup>5</sup> The effects would be most striking under the alternative fiscal scenario. In CBO's estimation, the increase in debt under that scenario would reduce the capital stock by more than 20 percent and real GNP by 9 percent in 2035, compared with the levels that would occur if the

debt remained roughly at its current size relative to the economy. Under the extended-baseline scenario, federal debt would be less threatening in the near term but would lead to significant economic harm in the long run. Those economic effects mean that actual fiscal pressures under current laws and policies would be even greater than CBO's long-term budget projections suggest, because slower growth would limit revenues and a smaller capital stock would imply higher interest rates on government debt and other financial instruments.

Holding down the spiraling levels of debt projected under either scenario could therefore result in significant economic benefits. However, accomplishing that goal would require some combination of substantial revenue increases and substantial spending decreases relative to current law. Those changes would have their own economic and social costs.

One policy that would prevent the increase in debt would be to raise revenues in line with the projected rise in spending. As evidenced by the estimated fiscal gap, the required increase in revenues under that approach would be large. If the increase occurred through higher marginal tax rates, incentives to work and save would be reduced and economic growth would slow.

An alternative policy would be to hold the growth of spending in line with the growth of the economy. That approach would require significant changes in the Medicare and Medicaid programs. Many experts believe that a substantial share of spending on health care contributes little, if anything, to the overall health of the nation, so changes in government policy have the potential to yield large reductions in federal spending without harming health. However, translating that potential into reality would require tough choices. It would ultimately depend on policymakers' willingness to put ongoing pressure on the health sector to achieve efficiencies in the delivery of health care.

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4. For a description of the model underlying CBO's projections, see the June 2009 background paper *CBO's Long-Term Model: An Overview*.

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5. Gross national product measures the income of residents in the United States after deducting net payments to foreigners. Gross domestic product, by contrast, measures the income that is generated by the production of goods and services on U.S. soil, including production financed by foreign investors. Because rising deficits generally increase borrowing from foreigners, GNP is a better measure of the economic effects of deficits than is GDP.

**Table 3.**

### Shares of the Growth in Spending for the Three Largest Entitlement Programs

	Percentage of Growth
For the 2009–2035 Period	
Medicare and Medicaid	80
Social Security	20
For the 2009–2080 Period	
Medicare and Medicaid	90
Social Security	10

Source: Congressional Budget Office.

Reducing other federal spending significantly below the baseline levels would be difficult as well. Spending on Social Security has risen from almost 4 percent of GDP in the 1970s to almost 5 percent today and will increase to 6 percent in 2035 as the baby boomers retire. Other nonhealth, noninterest spending averaged almost 14 percent of GDP in the 1970s but has shrunk to about 10 percent of GDP over the past 15 years—aside from the current burst of spending in response to the recession and the financial crisis. Such spending is projected to decline further over time in CBO’s 10-year baseline.

From a purely economic perspective, slowing the growth of spending would generally impose smaller costs than boosting tax rates, although that conclusion is somewhat sensitive to the specific measures that would be adopted. From a broader social perspective, citizens and policymakers need to judge the importance of various government programs and the costs of restraining spending on health care, retirement benefits, defense, and so on. That is, lower levels of spending would help address the fiscal sustainability problem, but society would have to make difficult choices about which programs to scale back. The difficulty of the choices notwithstanding, CBO’s long-term budget projections make clear that doing nothing is not an option: Legislation must ultimately be adopted that raises revenue or reduces spending or both. Moreover, delaying action simply exacerbates the challenge, as is discussed below.

### The Outlook for Federal Spending

For much of its history, the United States devoted only a small fraction of its resources to the activities of the federal government, apart from fighting wars. But the second half of the 20th century was a period of sustained higher federal spending during peacetime. Over the past 50 years, primary federal outlays (which exclude interest spending) have averaged 18 percent of GDP. In fiscal years 2009 and 2010, spending on stimulus legislation and on efforts to stabilize the financial markets will result in unusually high outlays (primary spending will account for 26 percent of GDP in fiscal year 2009), but outlays are projected to fall back near their historical average after a few years.

In later years, primary spending rises again in both of CBO’s long-term budget scenarios. Under the extended-baseline scenario, primary spending would increase from 20 percent of GDP in fiscal year 2012 to 24 percent by 2035 and 32 percent by 2080. Primary spending would be even higher under the alternative fiscal scenario, reaching 26 percent of GDP by 2035 and 34 percent by 2080. Those higher levels occur largely because the alternative fiscal scenario assumes greater spending on federal programs other than Medicare, Medicaid, and Social Security than the extended-baseline scenario does.

#### Outlays for Medicare, Medicaid, and Social Security

Over the past 50 years, federal spending has increased as a percentage of GDP, and its composition has changed dramatically. Spending for mandatory programs has grown from about 30 percent of noninterest outlays in the early 1960s to about 60 percent in recent years. Most of that growth has been concentrated in the three largest entitlement programs: Medicare, Medicaid, and Social Security. Together, federal outlays for those three programs have accounted for roughly 45 percent of primary federal spending over the past 10 years, up from 25 percent in 1975.

In the future, projected growth in entitlement spending explains almost all of the projected growth in total non-interest spending—and the two big government health care programs largely drive that increase. Medicare and Medicaid are responsible for 80 percent of the growth in spending on the three largest entitlements over the next 25 years and for 90 percent of that growth by 2080 (see Table 3). CBO projects that net federal spending on

Medicare and Medicaid will rise from about 5 percent of GDP in fiscal year 2009 to about 10 percent in 2035 and over 17 percent in 2080.<sup>6</sup> Spending on Social Security is projected to rise at a much slower pace, from almost 5 percent of GDP in 2009 to about 6 percent in later years.

Two factors account for the projected growth in the government's three largest entitlement programs: the aging of the population and the rapid growth of per capita health care costs. The retirement of the baby-boom generation (the large group of people born between 1946 and 1964) portends a long-lasting shift in the age profile of the U.S. population. That shift will substantially alter the balance between the population's working-age and retirement-age segments. The share of people age 65 or older is projected to grow from 13 percent in 2008 to 20 percent in 2035, while the share of people ages 20 to 64 is expected to fall from 60 percent to 55 percent. In later decades, the aging of the population will continue—but at a slower rate—because of increasing life expectancy.

For Social Security, aging of the population will drive the growth of spending as a share of GDP. Benefits are based on an individual's earnings and are indexed to wage growth, implying that program spending as a share of GDP is not very sensitive to overall economic growth. CBO projects that the number of workers per Social Security beneficiary will decline significantly over the next three decades: from about 3.1 in 2008 to 2.0 in 2035. Unless immigration, fertility, or mortality rates are markedly different than assumed in these projections, that number will continue to drift downward slightly after 2035.

Both aging and excess cost growth will push up federal spending for Medicare and Medicaid as a share of GDP because growing numbers of elderly people will need increasingly expensive health care. The rapid growth of health care costs in the past few decades is the starting point for projections of health care costs in the future. Since 1975, policy changes and other factors have caused annual costs per Medicare enrollee to grow an average of

2.3 percentage points faster than per capita GDP—a difference referred to as excess cost growth. Over the same period, excess cost growth for Medicaid has averaged 1.9 percent. (Those numbers reflect adjustments for changes in the age distribution of the beneficiary population.) In its long-term projections, CBO assumes that rates of spending growth for Medicare and Medicaid will moderate to some degree even if federal laws are not changed.<sup>7</sup>

Between now and 2035, an aging population—driven by both the retirement of the baby-boom generation and increases in life expectancy—explains 64 percent of spending growth in Medicare, Medicaid, and Social Security. It explains all of the growth in Social Security spending and 44 percent of the growth in spending on Medicare and Medicaid over that period.

In the long term, by contrast, growth in health care spending per beneficiary is a more important factor than population aging. Excess cost growth explains 56 percent of the projected growth in spending, as a percentage of GDP, on the three largest entitlement programs between now and 2080. It explains none of the projected growth in Social Security but 70 percent of that in Medicare and Medicaid. (For further discussion of the relationship between the aging of the population, rising health care spending, and federal outlays on Medicare, Medicaid, and Social Security, see Box 2.)

Spending for Social Security is identical under the assumptions of the extended-baseline and alternative fiscal scenarios, and spending for Medicaid is nearly identical. In the case of Medicare, however, the different assumptions underlying the scenarios lead to different views of the future path of spending. Because the extended-baseline scenario assumes that current law prevails, it anticipates that Medicare's sustainable growth rate mechanism will reduce payment rates for physicians by 21 percent in 2010 and then by a further 4 percent or 5 percent annually for at least the next few years. However, since 2003, the Congress has acted to prevent such reductions. Therefore, under the alternative fiscal

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6. Those figures are net of premiums paid by Medicare beneficiaries and amounts paid by the states representing part of their share of the savings from shifting some Medicaid spending for prescription drugs to Part D of Medicare.

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7. See "Underlying Assumptions for CBO's Projections of Health Care Spending" in Congressional Budget Office, *The Long-Term Budget Outlook* (June 2009), p. 28.

**Box 2.**

## How the Aging of the Population and Excess Cost Growth Affect Federal Spending on Medicare, Medicaid, and Social Security

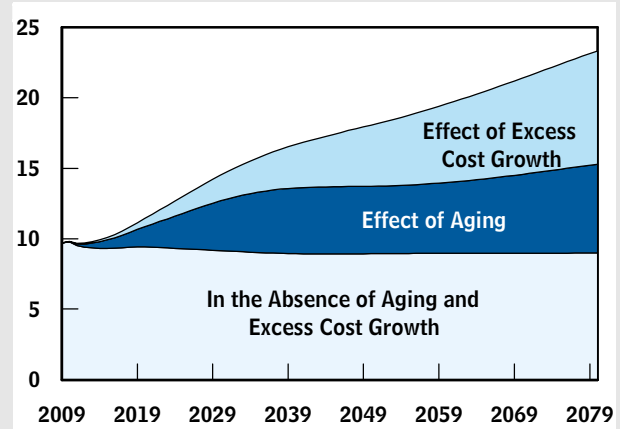
Two factors underlie the projected increase in federal spending on Medicare, Medicaid, and Social Security as a share of gross domestic product (GDP): rapid growth in health care costs per beneficiary and an aging population. Either of those factors alone would boost spending, but the two effects also compound, causing outlays to rise even faster.

To illustrate, the Congressional Budget Office (CBO) calculated how much of the projected increase in federal spending for Medicare, Medicaid, and Social Security would be attributable to aging and how much to “excess cost growth” (growth in age-adjusted health care costs per person that exceeds the growth of per capita GDP) under the extended-baseline scenario. CBO did so by comparing the outlays projected under that scenario with the outlays that would occur under two alternative paths: one with an aging population but no excess cost growth for health programs and one with no aging but with excess cost growth.<sup>1</sup>

The interaction between the aging of the population and excess cost growth accentuates their individual effects. Higher spending per person has a larger

### Factors Explaining Future Federal Spending on Medicare, Medicaid, and Social Security

(Percentage of gross domestic product)



Source: Congressional Budget Office.

influence as the number of beneficiaries in Medicare and Medicaid rises. Conversely, having more beneficiaries in those programs imposes a larger budgetary cost when health care costs are growing. That interaction can be identified separately, or it can be allocated according to the shares attributable to aging and excess cost growth.

Aging is the more important factor over the next 25 years or so. If the interaction is allocated between the two factors, aging accounts for about 64 percent of the projected growth in spending on the major entitlements by 2035 (see the figure above and the table on the facing page). That result is not surprising because the aging of the baby-boom generation significantly expands the number of Medicare, Medicaid, and Social Security beneficiaries. Over the longer term, however, the situation reverses: 56 percent of the growth in total federal spending for those three programs by 2080 is attributable to health care costs per person rising more rapidly than per capita GDP. (Of course, the growth of health care costs has no direct effect on spending for Social Security.)

1. Several different approaches can be used to make those calculations. Two issues in particular arise in selecting the appropriate analytic method: what value of GDP to use when computing spending as a share of GDP, and how to construct spending under the base-case scenario. For a fuller discussion of those issues' importance in the context of spending for Medicare and Medicaid, see Congressional Budget Office, *Accounting for Sources of Projected Growth in Federal Spending on Medicare and Medicaid*, Issue Brief (May 28, 2008). The results shown here are based on approach 2 in that report. The current methodology allows GDP to vary with demographic changes in the population and attributes somewhat less of the spending growth to excess cost growth than would the methodology used in CBO's previous report, *The Long-Term Budget Outlook* (December 2007). In addition, more recent data on health care spending and other factors make excess cost growth slightly less important relative to the aging of the population than in CBO's earlier analysis.

Continued

## How the Aging of the Population and Excess Cost Growth Affect Federal Spending on Medicare, Medicaid, and Social Security

Identifying the interaction separately from the direct effects of aging and excess cost growth gives a slightly different perspective. By 2035, aging alone accounts for 56 percent of the projected growth in spending for the three entitlement programs. Excess cost growth accounts for another 32 percent, and the interaction between the two factors causes the remaining 11 percent. For the period through 2080, the picture changes, as aging accounts for 32 percent of the increase in spending, excess cost growth accounts for 41 percent, and the interaction effect contributes 26 percent.

Excess cost growth is the primary factor driving the growth of federal spending on Medicare and Medicaid, even over the intermediate term. By 2035, excess cost growth by itself accounts for 46 percent of projected growth in federal spending on those two programs. Adding in that factor's share of the interaction raises the contribution of excess cost growth to 56 percent. The figure for excess cost growth alone is similar in the long term and in the intermediate term (49 percent by 2080 and 46 percent by 2035). But with its share of the interaction included, excess cost growth is responsible for 70 percent of the projected growth in federal health care spending by 2080.

### Explaining Projected Growth in Federal Spending on Medicare, Medicaid, and Social Security by 2035 and 2080, by Source

(Percent)

	Aging	Interaction	Excess Cost Growth
<b>Separating the Interaction</b>			
<i>Medicare, Medicaid, Social Security</i>			
2035	56	11	32
2080	32	26	41
<i>Medicare and Medicaid</i>			
2035	37	16	46
2080	21	31	49
<b>Allocating the Interaction</b>			
<i>Medicare, Medicaid, Social Security</i>			
2035	64	n.a.	36
2080	44	n.a.	56
<i>Medicare and Medicaid</i>			
2035	44	n.a.	56
2080	30	n.a.	70

Source: Congressional Budget Office.

Notes: Social Security has a larger effect on the share of spending growth attributable to aging than might be expected given the size of the program's spending relative to that of Medicare and Medicaid. Social Security spending as a share of GDP would decline relative to current levels if the 2010 age distribution of the population were to persist, because that distribution would imply a larger labor force and a smaller retiree population in the future.

n.a. = not applicable.

scenario, Medicare's physician payment rates are assumed to grow at the same rate as the Medicare economic index (which measures inflation in the inputs used for physicians' services). The difference in spending for Medicare under the two scenarios amounts to less than 1 percent of GDP throughout the projection period.

Although the trust funds for Medicare and Social Security would become insolvent under the extended-baseline and alternative fiscal scenarios, both scenarios assume that those two programs will continue to pay benefits as currently scheduled.<sup>8</sup> (Spending for some parts of Medicare comes from general funds with no connection to the trust funds, and Medicaid has no underlying trust fund.)

### Other Federal Spending

A larger difference between the scenarios involves the assumption about federal spending for everything other than Medicare, Medicaid, Social Security, and interest on the public debt. In CBO's baseline, spending associated with stimulus legislation and efforts to stabilize the financial markets either expires under law or is explicitly assumed to be temporary and not to recur; most of the rest of the spending in this category increases roughly with inflation and thus shrinks as a share of GDP over the 10-year budget window. Therefore, in the baseline, such "other federal spending" (apart from the stimulus and related legislation) is 10.5 percent of GDP in fiscal year 2009 and 8.6 percent in fiscal year 2019.

Under the extended-baseline scenario, other federal spending remains at about 8.6 percent of GDP from 2020 onward—except for the declining impact of refundable tax credits. Under the alternative fiscal scenario, other federal spending follows the baseline through 2011 and remains close to 10.5 percent of GDP throughout the remainder of the projection period. That level roughly equals such spending in fiscal year 2009 minus spending associated with stimulus legislation and efforts to stabilize the financial system, which are assumed to be unusual, short-term undertakings.

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8. The balances of those trust funds represent the total amount that the government is legally authorized to spend on each program. For a fuller discussion of the legal issues related to trust fund insolvency, see Congressional Research Service, *Social Security: What Would Happen If the Trust Funds Ran Out?* RL33514 (updated April 25, 2008).

## The Outlook for Revenues

Like federal spending, revenues have been significantly higher in the past half-century than in previous eras. Since 1959, they have fluctuated between 16 percent and 21 percent of GDP, averaging about 18 percent. And just as spending priorities have changed during that period, the composition of revenues has shifted. Receipts from social insurance payroll taxes (for Social Security, Medicare, unemployment insurance, and retirement programs for federal civilian employees) have grown along with the size of the underlying programs, producing a larger share of total revenue. At the same time, the shares of revenue contributed by corporate income taxes and excise taxes have declined.

Federal revenues totaled 17.7 percent of GDP in fiscal year 2008. Because of the recession and the tax reductions provided in stimulus legislation, CBO expects revenues to decline sharply in fiscal year 2009, to 15.5 percent of GDP. However, under CBO's 10-year baseline, revenues are projected to rebound over the next decade as the economy improves, the tax cuts in EGTRRA and JGTRRA expire as scheduled, and a growing number of taxpayers become subject to the alternative minimum tax. As a result, revenues are projected to equal 19.6 percent of GDP in fiscal year 2012 and 20.1 percent in fiscal year 2015.

Under the extended-baseline scenario, revenues would continue to rise gradually thereafter, reaching 22 percent of GDP by 2035 and 26 percent by 2080. That increase occurs because real growth in income pushes people into higher income tax brackets over time. Moreover, inflation-related increases in income make more income subject to the AMT over time. As a result, the effective marginal tax rate on labor income would rise from 29 percent today to about 34 percent by 2035 and 35 percent by 2080. Average tax rates—that is, taxes as a share of income—would rise as well, and there would be a significant change in the way the overall tax burden was distributed among households. Under the extended-baseline scenario, the cumulative effects of inflation would make almost half of all households subject to the AMT by 2035 and nearly three-quarters subject to it by 2080. Currently, only 3 percent of households are subject to the AMT.



Under the alternative fiscal scenario, the expiring tax provisions in EGTRRA and JGTRRA would be extended, and the parameters of the AMT would be indexed to inflation after 2009. Consequently, revenues would grow more slowly over the long term than in the other scenario, but they would still increase gradually relative to GDP because of the effects of real income growth. The effective marginal tax rate on labor income would rise to about 30 percent in 2035 and to 33 percent in 2080. Tax receipts would reach only 18 percent of GDP in 2012 and then gradually rise to 22 percent of GDP by 2080, 4 percentage points lower than in the extended-baseline scenario.

## **The Accumulation of Federal Debt**

For a path of spending and revenues to be sustainable, debt must eventually grow no faster than the economy. Persistent annual deficits lead to larger and larger amounts of debt, which in turn require more spending for interest payments on that debt. Thus, even moderate primary deficits (deficits excluding interest costs) can lead to unsustainable growth in federal debt.

A useful barometer of fiscal policy is the amount of government debt held by the public as a percentage of GDP. (For a discussion of why such debt is important, see Box 3.) That debt stood at 41 percent of GDP at the end of fiscal year 2008, a little above the 40-year average of 36 percent. CBO projects that in the next few years, deficits will be extraordinarily high by historical standards—almost 12 percent of GDP in fiscal year 2009 and almost 8 percent in fiscal year 2010. As a result, debt will grow to 60 percent of GDP by the end of fiscal year 2010.

Under the assumptions of the extended-baseline scenario, annual deficits would fall below 2 percent of GDP by fiscal year 2013. Debt would remain roughly stable as a share of GDP for the next decade. After that, however, growing spending on Medicare, Medicaid, and Social Security would lead to higher deficits, and debt would once again increase faster than the economy. By 2035, it would equal 79 percent of GDP. Federal debt peaked at 113 percent of GDP shortly after the end of World War II, a mark that would be passed in 2046 under the extended-baseline scenario.

Under the alternative fiscal scenario, deficits would decline for a few years after 2009 but then grow quickly again. By 2019, debt would reach 83 percent of GDP. After that, the spiraling costs of interest payments would swiftly push debt to unsustainable levels. Debt would exceed its historical peak of 113 percent of GDP by 2026 and would reach 200 percent of GDP in 2038.

Many budget analysts believe that the alternative fiscal scenario presents a more realistic picture of the nation's underlying fiscal policy than the extended-baseline scenario does—because, for example, it does not allow the impact of the AMT to expand substantially. To the extent that such a belief is valid, the explosive path of federal debt under the alternative fiscal scenario underscores the need for large and rapid corrective steps to put the nation on a sustainable fiscal course.

Moreover, CBO's projections understate the debt that would accumulate under the two scenarios. Long-term budget projections require a stable economic backdrop; thus, for the purpose of the projections, CBO made assumptions that generated a stable real interest rate and stable growth in real wages and output. In effect, the analysis omitted the pressures that a rising ratio of debt to GDP would have on real interest rates and economic growth. Changes in the demographic structure of the population are likely to offset somewhat the effects of high debt levels on real interest rates. In the end, however, ever-growing deficits and debt would lead to higher interest rates and slower economic growth.

## **The Economic Impact of Rising Federal Debt**

The large amounts of federal debt that would accumulate under each of CBO's long-term budget scenarios imply that the government would have to spend increasing amounts to pay interest on that debt. The growth of debt would lead to a vicious cycle in which the government had to issue ever-larger amounts of debt in order to pay ever-higher interest charges. Eventually, the government would need to adopt some offsetting measures—such as

**Box 3.****Why Is Federal Debt Held by the Public Important?**

The federal government runs a budget deficit when its annual spending exceeds its annual revenues. To finance the shortfall, the government generally has to borrow funds from the public by selling Treasury securities (bonds, notes, and bills).<sup>1</sup> That additional borrowing increases the total amount of federal debt held by the public, which for the most part reflects the accumulation of past budget deficits offset by past budget surpluses.

**Effects of Rising Debt Over Time**

Debt held by the public can grow faster than gross domestic product (GDP) for a limited time, but it cannot do so indefinitely. If the ratio of debt to GDP continues to rise, lenders may become concerned about the financial solvency of the government and demand higher interest rates to compensate for the increasing riskiness of holding government debt. Eventually, if the debt-to-GDP ratio keeps increasing and the budget outlook does not improve, both foreign and domestic lenders may not provide enough funds for the government to meet its obligations. By then, whether the government resolves the fiscal crisis by printing money, raising taxes, cutting spending, or going into default, economic growth will be seriously disrupted.

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1. In most years, the amount of debt that the Department of the Treasury borrows or redeems roughly equals the annual budget deficit or surplus. However, the correspondence is not exact because a small amount of the deficit can also be financed by changes in other means of financing (such as reductions or increases in the government's cash balance, costs included in the budget but not yet paid, and cash flows reflected in credit financing accounts). In addition, transactions involving the Troubled Asset Relief Program, assistance for Fannie Mae and Freddie Mac, and purchases by the Treasury of mortgage-backed securities will have a significant effect on the federal government's cash flows in 2009 and for many years to come. However, because the transactions are generally assumed to be completed by 2019, they play no significant role in the Congressional Budget Office's long-term projections of the deficit.

Another measure of federal indebtedness that often receives attention is gross debt, but it is not useful for assessing how the Treasury's operations affect the economy. Gross federal debt comprises both debt held by the public and debt issued to various accounts of the federal government, including the major trust funds in the budget (such as those for Social Security). Because the debt issued to those accounts is intragovernmental, it has no direct, immediate impact on the economy. Instead, it simply represents credits to the various government accounts that can be redeemed as necessary to authorize payments for benefits or other expenses. Although the Treasury assigns earnings in the form of interest to the trust funds that hold the securities, such payments have no net effect on the budget.

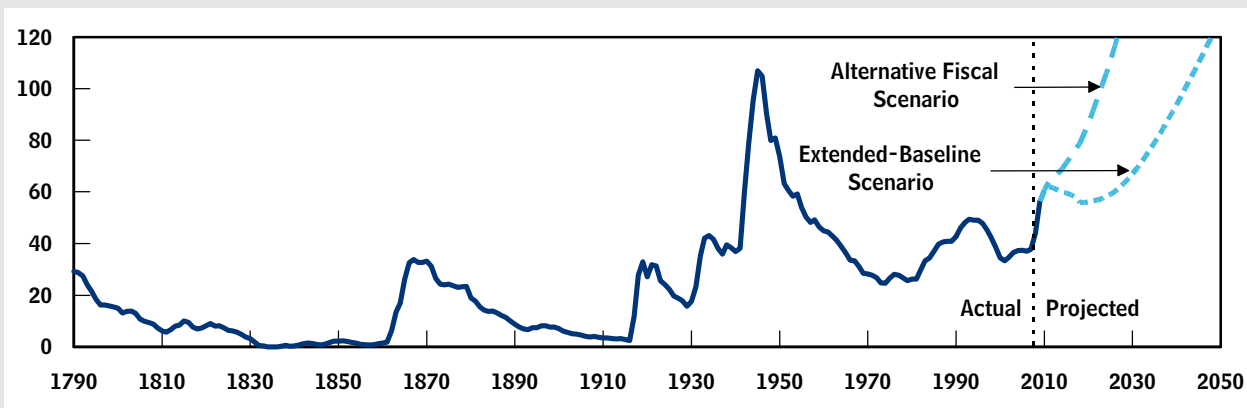
Long-term projections of federal debt held by the public, measured relative to the size of the economy, provide useful yardsticks for assessing the sustainability of fiscal policies. If budget projections are carried out far enough into the future, they can show whether current commitments imply that spending will consistently exceed revenues and produce debt that grows faster than the economy. Projections of the debt-to-GDP ratio can thus indicate that changes in current policies will be necessary at some point to bring the federal budget back to a sustainable path.

**Historical and International Comparisons of Debt**

The deficits and debt projected under the Congressional Budget Office's (CBO's) two long-term budget scenarios are large, whether compared with those in U.S. history or in other countries. Under the extended-baseline scenario, federal debt held by the public would reach 79 percent of GDP in 2035, and the annual deficit would exceed 10 percent of GDP starting in 2058. Under the alternative fiscal scenario, federal debt held by the public would rise even faster, to 181 percent of GDP in 2035, and annual deficits

## Why Is Federal Debt Held by the Public Important?

### Federal Debt Held by the Public as a Percentage of Gross Domestic Product



Source: Congressional Budget Office.

would exceed 10 percent of GDP beginning in 2027. (For deficit and debt comparisons under the two scenarios, see Figure 1-2 and Table 1-2.)

Since the founding of the United States, the budget deficit has exceeded 10 percent of GDP in only a few instances, usually during or following major wars. (CBO anticipates that this year's deficit will also exceed 10 percent of GDP.) Moreover, federal debt held by the public has surpassed 100 percent of GDP only for a brief period during and just after World War II (see the figure above). That budgetary situation was temporary, however. After peaking at 113 percent in 1945, federal debt held by the public declined as a percentage of GDP to its lowest level in the post-World War II era, 24 percent in 1974. Similarly, when federal debt increased in the 1980s, its rise was followed by declining deficits from 1993 to 1997 and surpluses from 1998 through 2001. The systematic widening of budget shortfalls projected under CBO's long-term scenarios has never been observed in U.S. history.

International comparisons show that the debt projected for the United States under CBO's two scenarios would also be greater than the amounts that other industrialized nations have accumulated in the post-World War II period. Among developed countries, Belgium and Italy carried net debt amounting to

more than 100 percent of their GDP in the 1990s. Net public debt averaged about 103 percent of GDP in Italy and 110 percent in Belgium during the second half of the 1990s.<sup>1</sup> However, those two countries' experience involved debt that, relative to GDP, later fell modestly in the case of Italy (to 88 percent in 2007) and dropped significantly in the case of Belgium (to 73 percent in 2007). In both countries, debt did not grow continually faster, as is projected under CBO's long-term scenarios. Even so, to keep their debt under control, those governments had to make significant changes in fiscal policy to stop the upward trend in the growth of debt relative to GDP. Japan saw its net public debt steadily increase during the past two decades, from 13 percent in 1991 to 86 percent in 2007. To slow that increase, the government managed to reduce annual budget deficits from 8 percent of GDP in 2002 to 4 percent in 2007. Even so, the Organisation for Economic Co-operation and Development has urged Japan to go further to promote fiscal sustainability by cutting government spending and raising revenues.<sup>2</sup>

1. Organisation for Economic Co-operation and Development, *Economic Outlook* (Paris: OECD, December 2008).

2. Organisation for Economic Co-operation and Development, *Economic Survey of Japan, 2008* (Paris: OECD, April 2008).

cutting spending or increasing taxes—to break the cycle and put the federal budget on a sustainable path.<sup>9</sup>

If the long-term outlook for the budget appears sustainable, temporary deficits for a few years do not create large economic problems and can have significant benefits in some circumstances. For example, a deficit that results from automatic declines in tax revenues or increases in government spending in a recession (due to reductions in economic activity and more people losing jobs) helps reduce the severity of the downturn, and such a short-term budgetary imbalance will be reversed when the economy recovers. In addition to automatic changes, deficit-financed fiscal stimulus—such as the tax rebates in the Economic Stimulus Act of 2008 (Public Law 110-185) and the spending increases and tax cuts in the American Recovery and Reinvestment Act of 2009 (P.L. 111-5)—can also help the economy return to full employment.<sup>10</sup> Thus, the ability of the federal government to run budget deficits enables fiscal policy to offset some of the negative impact of a recession. However, even temporary deficits cause an increase in debt that crowds out productive capital and reduces output in the long run (assuming that the government does not run budget surpluses later to retire the additional debt).

Moreover, the fundamental cause of the rapidly rising debt in CBO's long-term scenarios is not economic fluctuations resulting from business cycles. Instead, debt soars because of unrelenting growth in federal spending on health care programs and a rise in Social Security spending as a share of GDP, combined with a much smaller increase in tax revenues. The ever-greater budget

deficits projected under those scenarios would negatively affect the economy through several channels. More government borrowing would drain the nation's pool of savings, reducing investment in the domestic capital stock and in foreign assets. In addition, a worsening fiscal situation might put pressure on monetary policy, potentially endangering the Federal Reserve's ability to keep inflation low and stable. If the budget continued along the path of rising debt, serious concerns about fiscal solvency would arise. Investors would require the government to pay an interest premium on its securities to compensate for the risk that they might not be repaid or that the value of their securities would be eroded by inflation. Such a premium would drive up the cost of borrowing. Finally, the longer the growth of debt persisted, the larger and more costly would be the policy changes needed to control debt, which could further increase the burden of fiscal tightening on future generations.

Most economists agree that greater government borrowing would raise interest rates and lead to greater private saving. But the offset would be far from complete, so national saving would decline.<sup>11</sup> That decline would in turn reduce investment in the United States but not on a one-for-one basis (at least initially), because higher interest rates would attract foreign capital to the United States and perhaps induce U.S. investors to keep more of their money at home. As investment was displaced by government debt, GDP would grow more slowly and eventually decline. In the longer run, as the debt continued to grow and unless the interest premium was very large, capital would probably flee the United States, further reducing investment.

To quantify the effect of rising federal debt projected under the two long-term scenarios, CBO applied a "textbook" growth model.<sup>12</sup> The textbook growth model assumes that part of the deficit is financed from abroad (and ignores the likelihood of capital flight). Therefore, some portion of GDP would have to be sent abroad to

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9. The government would have trouble issuing ever-increasing amounts of debt relative to GDP forever because there is a limit to the amount that savers want to save. If federal debt grew faster than the maximum rate at which savers were willing to acquire that debt (in the form of Treasury securities), government policies would be unsustainable. To regain sustainability, the growth rate of the market value of debt would have to decline enough that savers or investors would be willing to acquire more Treasury securities. That growth rate could be reduced in a number of ways: Debt could lose its market value through increases in the general price level or decreases in the prices of long-term bonds, or the government could reduce budget deficits.

10. See Congressional Budget Office, "Estimated Macroeconomic Impacts of the American Recovery and Reinvestment Act of 2009," letter to the Honorable Charles E. Grassley (March 2, 2009).

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11. National saving is private saving plus public saving by state, local, and federal governments. (Public saving equals surpluses minus deficits; therefore, surpluses add to public saving and deficits subtract from it.)

12. For a description of the textbook growth model, see Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2010* (June 2009), Appendix B.

service or repay that debt and thus would not be available to U.S. consumers. For that reason, the economic analysis that follows focuses on what happens to gross national product—which measures the income of U.S. residents after deducting net payments to foreigners—rather than the more familiar GDP. (The level of GNP is currently not much different from that of GDP.)

### **Effects Under the Extended-Baseline Scenario**

Under the extended-baseline scenario, federal debt would rise substantially after the 2020s. According to the textbook growth model, the debt projected under that scenario would reduce the capital stock by about 5 percent in 2035 and shrink real GNP by about 2 percent, compared with what they would be if debt remained roughly at its 2008 share of GNP (by keeping the spending and revenue shares of GNP at roughly their 2008 levels). By 2080, federal debt would approach 300 percent of GNP, and the capital stock would be reduced by nearly 40 percent and real GNP by almost 20 percent.

Such estimates are based on the assumption that the government would continue on the unsustainable budget path as projected under the extended-baseline scenario. The analysis mainly focuses on the effect of soaring federal deficits and debt. It does not incorporate the financial markets' reactions to a fiscal crisis and the actions that the government would adopt to resolve such a crisis. Because the textbook growth model is not forward-looking, the analysis assumes that people will not anticipate the sustainability issues facing the federal budget; as a result, the model predicts only a gradual change in the economy as federal debt rises.

In actuality, the economic effects of rapidly growing debt would probably be much more disorderly as investors' confidence in the nation's fiscal solvency began to erode. If foreign investors anticipated an economic crisis, they might significantly reduce their purchases of U.S. securities, causing the exchange value of the dollar to plunge, interest rates to climb, and consumer prices to shoot up. Amid the anticipation of declining profits and of rising inflation and interest rates, stock prices might fall, and consumers might sharply curtail their purchases. In such circumstances, the economic problems in the United States would probably spill over to the rest of the world, seriously weakening the economies of U.S. trading part-

ners. All in all, the U.S. economy could contract sharply for a long period.

Theoretically, one way to reduce government indebtedness would be to adopt a policy of higher inflation. That approach would lower the real value of the government's debt and provide relief in the short run. But printing money is not a feasible long-term strategy for dealing with persistent and rising debt. Although an unexpected increase in inflation would let the government repay its debt in cheaper dollars for a short time, financial markets would not be fooled for long, and investors would demand higher interest rates going forward. If the government continued to print money to reduce the value of the debt, the policy would eventually lead to hyperinflation (as occurred in Germany in the 1920s, Hungary in the 1940s, Argentina in the 1980s, Yugoslavia in the 1990s, and Zimbabwe today). Such hyperinflation would severely reduce economic efficiency as people moved away from monetary transactions.

Moreover, even if inflation was eventually brought back under control, the resulting loss of confidence would keep interest rates elevated for some time. High inflation causes governments to lose credibility in financial markets; once that credibility has been lost, lowering expectations about inflation can be difficult. In the end, printing money to finance deficits cannot address the fundamental problem that spending exceeds revenues.

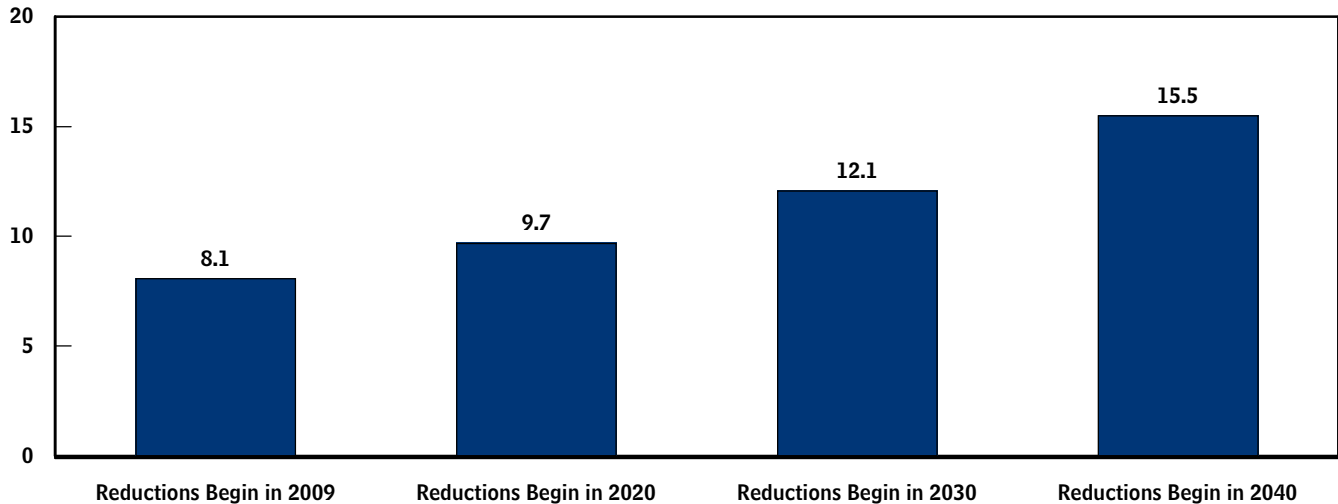
### **Effects Under the Alternative Fiscal Scenario**

In CBO's analysis, federal debt would rise much more steeply under the alternative fiscal scenario, reducing the capital stock in 2035 by more than 20 percent compared with what it would be if the deficit stayed at roughly its 2008 level as a share of GNP. According to the estimates of the textbook growth model, that reduction in the capital stock and increased indebtedness to foreigners would in turn lower real GNP in 2035 by about 9 percent. Losses to the U.S. economy would grow rapidly thereafter. By 2045, rising federal debt would reduce the capital stock by more than 35 percent and real GNP by about 16 percent. (Starting in the 2060s, projected deficits become so large and unsustainable that CBO's textbook growth model cannot calculate their effects.) Even more than in the extended-baseline scenario, economic disruption could occur much sooner than

**Figure 4.**

## Reductions in Noninterest Spending Needed to Close the Fiscal Gap in Various Years Under CBO’s Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Notes: The fiscal gap is a measure of federal shortfalls over a given period. It represents the extent to which the government would need to immediately and permanently either raise tax revenues or cut spending—or do both, to some degree—to make the government’s debt the same size (in relation to the economy) at the end of that period as it was at the beginning.

The alternative fiscal scenario deviates from CBO’s baseline projections, beginning in 2010, by incorporating some changes in policy that are widely expected to occur and that policymakers have regularly made in the past.

projected by the textbook growth model if investors and others came to expect future budgetary deterioration.

### What Are the Costs of Delaying Action on the Budget?

The choice facing policymakers is not whether to address rising deficits and debt but when and how to do so. Debt is projected to soon grow to unsustainable levels even under the extended-baseline scenario, which assumes that spending on programs other than Medicare, Medicaid, and Social Security will decline substantially (relative to GDP) over the next 10 years and that revenues will increase as a percentage of GDP over the long term from their average historical levels. Under the alternative fiscal scenario, debt is projected to soar almost immediately.

Reducing the growth of the major entitlement programs—Social Security, Medicare, and Medicaid—would

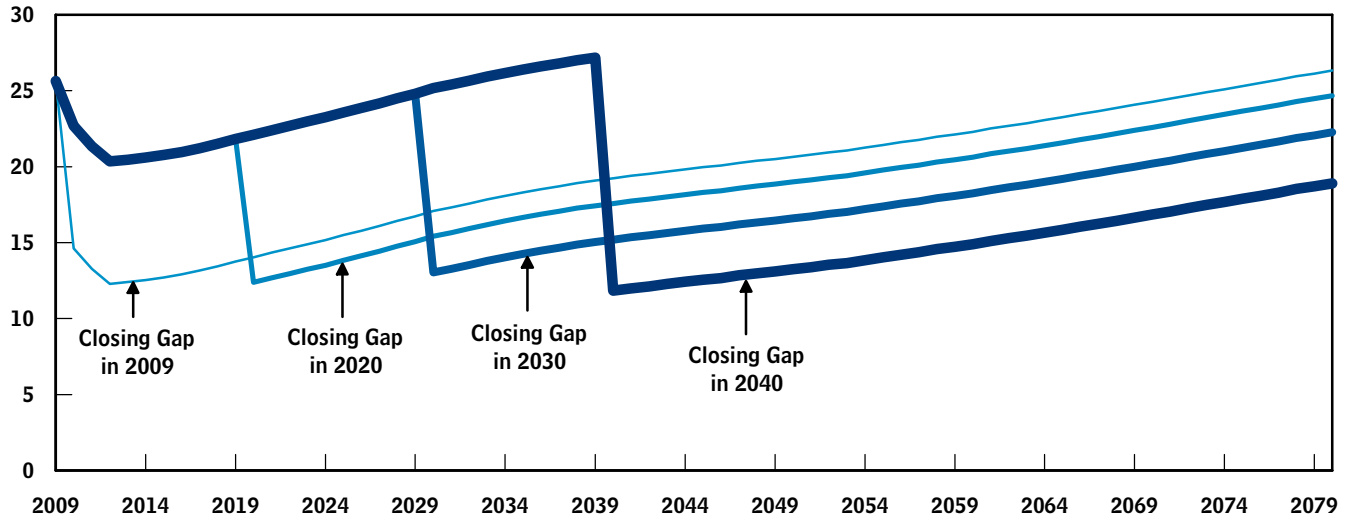
go a long way toward lowering the projected levels of debt relative to GDP. The aging of the population has the most significant impact on entitlement costs over the intermediate term, but policymakers have little control over such demographic changes. However, policy changes that altered the eligibility age for programs or modified benefits for the elderly could help offset some of the effects of aging on federal spending. In the long run, the growth of health care spending per beneficiary will drive federal entitlement spending. It would be difficult to produce a sustainable fiscal policy without reducing such spending growth.<sup>13</sup>

13. In December 2008, CBO released two reports that are intended to help the Congress as it contemplates possible changes—both large and small—to federal health programs and the nation’s health insurance and health care systems: *Key Issues in Analyzing Major Health Insurance Proposals* and *Budget Options, Volume 1: Health Care*.

**Figure 5.**

## Noninterest Spending Under Various Assumptions About Closing the Fiscal Gap in CBO's Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Notes: The fiscal gap is a measure of federal shortfalls over a given period. It represents the extent to which the government would need to immediately and permanently either raise tax revenues or cut spending—or do both, to some degree—to make the government's debt the same size (in relation to the economy) at the end of that period as it was at the beginning.

The alternative fiscal scenario deviates from CBO's baseline projections, beginning in 2010, by incorporating some changes in policy that are widely expected to occur and that policymakers have regularly made in the past.

The longer that policy action on the budget is put off, the more costly and difficult it will be to resolve the long-term budgetary imbalance. Delays in taking action would create three major problems:

- The amount of government debt would rise, which would displace private capital—reducing the total resources available to the economy—and increase borrowing from abroad.
- The share of federal outlays devoted to paying interest on the federal debt would grow, so lawmakers would have to make ever-larger policy changes to achieve balance. As interest costs rose, policymakers would be less able to pay for other national spending priorities and would have less flexibility to deal with unexpected developments (such as a war or recession). Moreover, rising interest costs would make the economy more vulnerable to a meltdown in financial markets.
- Uncertainty about the economy would increase. The longer that action was put off, the greater the chance that policy changes would ultimately occur suddenly,

possibly creating difficulties for some individuals and families, especially those in or near retirement. Announcing changes to entitlement programs or to the tax structure well in advance would give people time to adjust their plans for saving and retirement. Those adjustments could significantly reduce the impact of such policy changes on people's standard of living.

CBO's simulations indicate that under the alternative fiscal scenario, postponing action could substantially increase the size of the policy adjustments needed to put the budget on a sustainable course. If policymakers wanted to close the fiscal gap in 2020 by altering spending (and economic effects were ignored in the calculation), they would have to reduce noninterest outlays permanently by 10 percent of GDP (see Figure 4). If they waited until 2040 to close the fiscal gap, they would have to reduce noninterest outlays permanently by almost 16 percent of GDP (see Figure 5). Incorporating the effects of deficits and debt on economic growth (which are excluded from these simulations) would make the impact of delaying policy changes even more severe.

