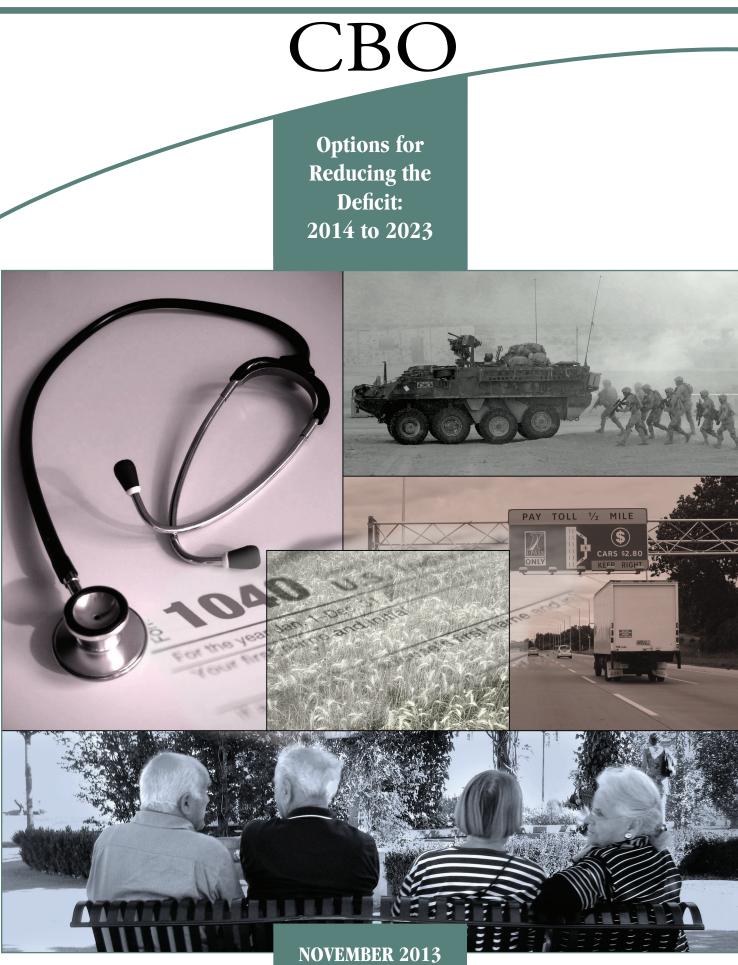
CONGRESS OF THE UNITED STATES CONGRESSIONAL BUDGET OFFICE



Notes

Unless otherwise indicated, all years referred to in this report regarding budgetary outlays and revenues are federal fiscal years, which run from October 1 to September 30.

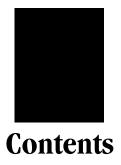
The numbers in the text and tables are in nominal (current year) dollars. Those numbers may not add up to totals because of rounding.

The baseline budget projections discussed in this report are those published in Congressional Budget Office, *Updated Budget Projections: Fiscal Years 2013 to 2023* (May 2013), www.cbo.gov/publication/44172. Such projections over the longer term are those in Congressional Budget Office, *The 2013 Long-Term Budget Outlook* (September 2013), www.cbo.gov/publication/44521.

The estimates for the various options shown in this volume may differ from any previous or subsequent cost estimates for legislative proposals that resemble the options presented here.

The Affordable Care Act comprises the Patient Protection and Affordable Care Act; the health care provisions of the Health Care and Education Reconciliation Act of 2010; and, in the case of this report, the effects of subsequent related judicial decisions, statutory changes, and administrative actions.

The photographs on the cover, which come from Flickr's Creative Commons, are attributed to Matt Morgan (soldiers with Stryker vehicle), Ken Lund (truck on highway), Neovain (people on bench), Ernstl (stethoscope), Francois (wheat field), and Philip Taylor (tax form).



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Option 9	Eliminate Concurrent Receipt of Retirement Pay and Disability Compensation for Disabled Veterans	26
Option 10	Reduce the Amounts of Federal Pensions	28
	Income Security	
Option 11	Tighten Eligibility and Determinations of Income for the Supplemental Nutrition Assistance Program	30
Option 12	Eliminate Subsidies for Certain Meals in the National School Lunch and School Breakfast Programs	32
Option 13	Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States	33
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Option 5	Cancel the Army's Ground Combat Vehicle Program	64
Option 6	Stop Building Ford Class Aircraft Carriers	66
Option 7	Reduce the Number of Ballistic Missile Submarines	68
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Introduction

he Congress faces an array of policy choices as it confronts the dramatic increase in the federal government's debt over the past several years and the prospect of large annual budget deficits and further increases in that debt that are projected to occur in coming decades under current law (see Figure 1-1). To help inform lawmakers about the budgetary implications of various approaches to changing federal policies, the Congressional Budget Office (CBO) periodically issues a compendium of policy options that would affect the federal budget as well as separate reports that include policy options in particular areas.¹

This volume presents 103 options that would decrease federal spending or increase federal revenues over the next decade (see Table 1-1 on page 5). Those options cover many areas-ranging from defense to energy, Social Security, and provisions of the tax code. The budgetary effects identified for most of the options span the 10 years from 2014 to 2023 (the period covered by CBO's May 2013 baseline budget projections), although many of the options would have longer-term effects as well.

Chapters 2 through 5 present options in the following categories:

- Chapter 2: Mandatory spending other than that for health-related programs,
- Chapter 3: Discretionary spending other than that for health-related programs,
- Chapter 4: Revenues other than those related to health, and
- Chapter 5: Health-related programs and revenue provisions.

In addition to 11 options that are similar in scope to others in this volume, Chapter 5 includes 5 broad approaches for reducing spending on health care programs or revenues forgone because of tax provisions related to health care. Each would offer lawmakers a variety of possibilities for making changes in current laws. Chapter 6 differs from the rest of the volume; it discusses the challenges and the potential budgetary effects of eliminating a Cabinet department.

Chapters 2 through 5 begin with a description of budgetary trends for the topic area. Then, entries for the options provide background information, describe the possible policy change, and summarize arguments for and against that change. As appropriate, related options in this volume are referenced, as are related CBO publications. The options included in this volume come from a variety of sources. Some are based on proposed legislation or on the budget proposals of various Administrations; others came from Congressional offices or from entities in the federal government or in the private sector. As a collection, the options are intended to reflect a range of possibilities, not a ranking of priorities or an exhaustive list. Inclusion or exclusion of any particular option does not imply endorsement or disapproval by CBO, and the report makes no recommendations. This volume does not contain comprehensive budget plans, although it would be possible to devise such plans by combining certain options in various ways (although some overlap with others).

In addition to the budget options examined here, CBO has presented many other options in various publications it has issued in recent years; Appendix A lists most of those other options. Appendix B lists this volume's options by budget function (the programmatic category used in the budget to sort spending according to the national interests being addressed). Appendix C lists the options by major program or category.

^{1.} The most recent previous compilation of budget options was Reducing the Deficit: Spending and Revenue Options (March 2011), www.cbo.gov/publication/22043.

Figure 1-1.

120 120 Actual Projected 100 80 80 60 60 Debt Held by the Public 40 40 Spending 20 20 **Revenues** 0 Ω 2000 2005 2010 2015 2020 2025 2030 2035

Federal Debt, Spending, and Revenues, 2000 to 2038

(Percentage of gross domestic product)

Congressional Budget Office. Source:

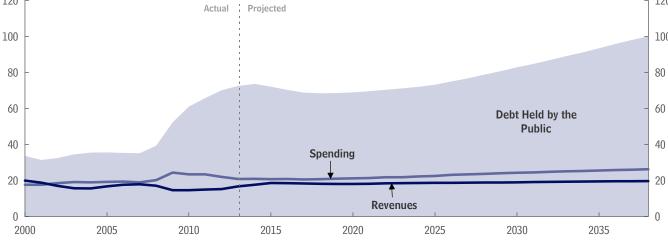
Note: CBO's long-term projections, which focus on the 25-year period ending in 2038, generally adhere closely to current law, following its 10-year baseline budget projections through 2023 and extending that baseline concept into later years.

The Current Context for **Decisions About the Budget**

The economy's gradual recovery from the 2007–2009 recession, the waning budgetary effects of policies enacted in response to the weak economy, and various changes to tax and spending policies-including the caps and automatic spending reductions put in place by the Budget Control Act of 2011-have resulted in the smallest budget deficit since 2008. The deficit in fiscal year 2013 was about 4 percent of gross domestic product (GDP), well below its peak of almost 10 percent in 2009 (see Figure 1-2). If current laws that govern taxes and spending remained generally unchanged—an assumption that underlies CBO's 10-year baseline budget projections-the deficit would continue to decline over the next few years, falling to 2.1 percent of GDP by 2015, CBO estimates. As a result, by CBO's estimates, federal debt held by the public also would decline, from 73 percent of GDP in 2013 to 68 percent in 2018.

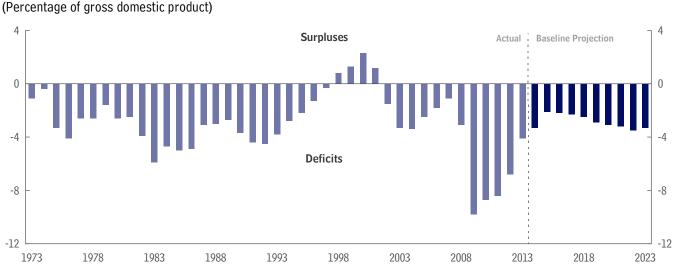
However, budget deficits would gradually rise again under current law, CBO projects, mainly because of rising interest costs and increased spending for Social Security and the government's major health care programs (Medicare, Medicaid, the Children's Health Insurance Program, and subsidies to be provided through health insurance exchanges). The agency expects interest rates to rebound in coming years from their current unusually low levels, sharply increasing the government's cost of borrowing. In addition, the pressures of caring for an aging population, rising health care costs generally, and an expansion of federal subsidies for health insurance would cause spending for some of the largest federal programs to increase relative to GDP. By 2023, CBO projects, the budget deficit would grow to 3.3 percent of GDP under current law, and federal debt held by the public would rise to 71 percent of GDP and would be on an upward trajectory (see Table 1-2 on page 8).

Looking beyond the 10-year period covered by its baseline projections, CBO has produced an extended baseline that extrapolates those projections through 2038.² Those extended projections show a substantial imbalance in the federal budget over the long run, with annual revenues consistently falling short of annual outlays. Budget deficits would rise steadily and, by 2038, would push federal debt held by the public to 100 percent of GDP-close



^{2.} See Congressional Budget Office, The 2013 Long-Term Budget Outlook (September 2013), www.cbo.gov/publication/44521. CBO's long-term projections, which focus on the 25-year period ending in 2038, generally adhere closely to current law, following the agency's May 2013 baseline budget projections through the usual 10-year projection period and then extending the baseline concept into later years.

Figure 1-2.



(Dereentage of grace demostic product)

Deficits or Surpluses, 1973 to 2023

Source: Congressional Budget Office (as of November 2013).

Note: These data reflect recent revisions by the Bureau of Economic Analysis to estimates of gross domestic product (GDP) in past years and CBO's extrapolation of those revisions to projected future GDP. Although CBO's projections of deficits over the 2014–2023 period have not changed since they were issued in May, those amounts measured as a percentage of GDP are now lower as a result of BEA's revisions.

to the peak percentage, which was seen just after World War II—even without factoring in the harm that growing debt would cause to the economy.

In fact, such high and rising amounts of federal debt would have significant negative consequences for both the economy and the federal budget. Those consequences include reducing the total amounts of national saving and income relative to what they would otherwise be; increasing the government's interest payments, thereby putting more pressure on the rest of the budget; limiting lawmakers' flexibility to respond to unexpected events; and increasing the likelihood of a fiscal crisis. With effects on the economy included, debt under the extended baseline would rise to 108 percent of GDP in 2038, CBO estimates.

The increase in federal debt would be even greater if certain policies that are now in place but that are scheduled to change under current law were instead continued and if some provisions of current law that might be difficult to sustain for a long period were modified. With such changes to current law, federal debt held by the public would reach 190 percent of GDP by 2038, CBO projects, after accounting for the harmful effects on the economy of the rapidly growing deficits.³

Choices for the Future

Current federal tax and spending policies present lawmakers and the public with difficult challenges because the United States is on track to have a federal budget that will look very different from budgets of the past. Under current law, spending for all federal activities other than the major health care programs and Social Security is projected to account for its smallest share of GDP in more than 70 years. At the same time revenues would represent a larger percentage of GDP in the future-averaging 18.3 percent of GDP over the 2014-2023 period-than they generally have in the past few decades. Despite those trends, revenues would not keep pace with outlays under current law because the government's major health care programs and Social Security would absorb a much larger share of the economy's output in the future than they have in the past.

To put the federal budget on a sustainable long-term path, lawmakers would need to make significant policy changes—allowing revenues to rise more than would occur under current law, reducing spending for large

See Congressional Budget Office, *The 2013 Long-Term Budget* Outlook (September 2013), pp. 83–85, www.cbo.gov/publication/ 44521.

benefit programs to amounts below those currently projected, or adopting some combination of those approaches.

Lawmakers and the public may weigh several factors in considering new policies that would reduce budget deficits: How much deficit reduction is necessary? What is the proper size of the federal government and what would be the best way to allocate federal resources? What types of policy changes would most enhance prospects for nearterm and long-term economic growth? What would be the distributional implications of proposed changes that is, who would bear the burden of particular cuts in spending or increases in taxes and who would realize long-term economic benefits?

Moreover, lawmakers face difficult trade-offs in deciding how quickly to carry out policy changes that will make the path of federal debt more sustainable. On the one hand, waiting to cut federal spending or to raise taxes would lead to a greater accumulation of debt and would increase the magnitude of the policy adjustments needed. On the other hand, implementing spending cuts or tax increases quickly would weaken the economy's current expansion and would give people little time to plan for and adjust to the policy changes. The negative short-term effects of deficit reduction on output and employment would be especially large now because output is so far below its potential level that the Federal Reserve has been holding short-term interest rates close to zero. The Federal Reserve thus has no room to reduce those rates any further to offset the effects of any changes in spending or tax policies.

Caveats About This Report

The ways in which specific federal programs, the budget as a whole, or the U.S. economy will evolve under current law are uncertain, as are the possible effects of proposed changes to federal spending and revenue policies. Because a broad range of results for any change in policy is plausible, CBO's estimates are designed to fall at the middle of the distribution of possible outcomes.

The estimates presented in this volume could differ from cost estimates for similar proposals that CBO might produce at a later date or from revenue estimates developed later by the staff of the Joint Committee on Taxation. One reason is that the proposals on which those estimates were based might not precisely match the options presented here. Another is that the baseline budget projections against which such proposals would ultimately be measured might have changed and thus would differ from the projections used for this report.

Many of the options in this report could be combined to provide building blocks for broader changes. In some cases, however, combining various spending or revenue options would produce budgetary effects that would differ from the sums of those estimates as presented because some options would overlap or interact with one another in ways that would change their budgetary impact. Also, some options would be mutually exclusive.

To reduce deficits through changes in discretionary spending, lawmakers would need to reduce the statutory funding caps below the levels already established under current law or enact appropriations below those caps. The discretionary options in this report could be used to accomplish either of those objectives. Alternatively, some of the options could be implemented to comply with the existing caps on discretionary funding, which are \$1.5 trillion lower over the 2014–2023 period than the amounts that would be required to continue the funding provided for 2013 in later years with increases for inflation.

The estimated budgetary effects of options do not reflect the extent to which those policy changes would reduce interest payments on federal debt. Those savings may be included as part of a comprehensive budget plan (such as the Congressional budget resolution), but CBO does not make such calculations for individual pieces of legislation or for individual options of the type discussed here.

Some of the estimates in this volume depend on projections of states' responses to federal policy changes, which can be difficult to predict and can vary over time because of states' changing fiscal conditions and other factors. CBO's analyses do not attempt to quantify the impact of options on states' spending or revenues.

Some options might impose federal mandates on other levels of government or on private entities. The Unfunded Mandates Reform Act of 1995 requires CBO to estimate the costs of any mandates that would be imposed by new legislation that the Congress considers. (The law defines mandates as enforceable duties imposed on state, local, or tribal governments or the private sector, as well as certain types of provisions affecting large mandatory programs that provide funds to states.) In this volume, CBO does not address the costs of any mandates that might be associated with the various options.

Table 1-1.

Options for Reducing the Deficit

Option Number	Title	Savings, 2014–2023 ^a (Billions of dollars)
•	Mandatory Spending (Other than that for health-related programs)	· · · · ·
Option 1	Change the Terms and Conditions for Federal Oil and Gas Leasing	6
Option 2	Limit Enrollment in Department of Agriculture Conservation Programs	13
Option 3	Reduce Subsidies in the Crop Insurance Program	27
Option 4	Eliminate Direct Payments to Agricultural Producers	25
Option 5	Reduce Subsidies to Fannie Mae and Freddie Mac	19
Option 6	Reduce or Eliminate Subsidized Loans for Undergraduate Students	18 to 41
Option 7	Eliminate the Add-On to Pell Grants That Is Funded With Mandatory Spending	76
Option 8	Increase Federal Insurance Premiums for Private Pension Plans	5
Option 9	Eliminate Concurrent Receipt of Retirement Pay and Disability Compensation for Disabled Veterans	108
Option 10	Reduce the Amounts of Federal Pensions	6
Option 11	Tighten Eligibility and Determinations of Income for the Supplemental Nutrition Assistance Program	50
Option 12	Eliminate Subsidies for Certain Meals in the National School Lunch and School Breakfast Programs	10
Option 13	Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States	404
Option 14	Eliminate Supplemental Security Income Benefits for Children	103
Option 15	Link Initial Social Security Benefits to Average Prices Instead of Average Earnings	58 to 93
Option 16	Raise the Full Retirement Age for Social Security	58
Option 17	Lengthen by Three Years the Computation Period for Social Security Benefits	43
Option 18	Reduce Social Security Benefits for New Beneficiaries by 15 Percent	188
Option 19	Eliminate Eligibility for Starting Social Security Benefits at Age 62 or Later	11
Option 20	Require Social Security Disability Insurance Applicants to Have Worked More in Recent Years	35
Option 21	Narrow Eligibility for Veterans' Disability Compensation by Excluding Certain Disabilities Unrelated to Military Duties	20
Option 22	Restrict VA's Individual Unemployability Benefits to Disabled Veterans Who Are Younger Than the Full Retirement Age for Social Security	15
Option 23	Use an Alternative Measure of Inflation to Index Social Security and Other Mandatory Programs	162
	Discretionary Spending (Other than that for health-related programs)	
Option 1	Reduce the Size of the Military to Satisfy Caps Under the Budget Control Act	495
Option 2	Cap Increases in Basic Pay for Military Service Members	25
Option 3	Replace Some Military Personnel With Civilian Employees	19
Option 4	Replace the Joint Strike Fighter Program With F-16s and F/A-18s	37
Option 5	Cancel the Army's Ground Combat Vehicle Program	11
Option 6	Stop Building Ford Class Aircraft Carriers	10
Option 7	Reduce the Number of Ballistic Missile Submarines	11
Option 8	Cancel the Littoral Combat Ship Program	12
Option 9	Defer Development of a New Long-Range Bomber	24
Option 10	Reduce Funding for International Affairs Programs	114
Option 11	Eliminate Human Space Exploration Programs	73
Option 12	Reduce Department of Energy Funding for Energy Technology Development	9
Option 13	Eliminate Certain Forest Service Programs	5
Option 14	Eliminate the International Trade Administration's Trade Promotion Activities	3
Option 15	Limit Highway Funding to Expected Highway Revenues	65
		Continue

NOVEMBER 2013

Continued

Table 1-1.

Options for Reducing the Deficit

Option Number	Title	Savings, 2014–2023ª (Billions of dollars)
	Discretionary Spending (Other than that for health-related programs) (Continued)	(2
Option 16	Eliminate Grants to Large and Medium-Sized Airports	8
Option 17	Increase Fees for Aviation Security	11
Option 18	Eliminate Subsidies for Amtrak	15
Option 19	Eliminate Capital Investment Grants for Transit Systems	14
Option 20	Restrict Pell Grants to the Neediest Students	1 to 68
Option 21	Eliminate Federal Funding for National Community Service and Senior Community Service Employment Programs	11
Option 22	Reduce Federal Funding for the Arts and Humanities	5
Option 23	Increase Payments by Tenants in Federally Assisted Housing	22
Option 24	Reduce the Annual Across-the-Board Adjustment for Federal Civilian Employees' Pay	53
Option 25	Reduce the Size of the Federal Workforce Through Attrition	43
Option 26	Impose Fees to Cover the Cost of Government Regulations and Charge for Services Provided to the Private Sector	21
Option 27	Repeal the Davis-Bacon Act	13
Option 28	Eliminate or Reduce Funding for Certain Grants to State and Local Governments	55
	Revenues (Other than those related to health)	
Option 1	Increase Individual Income Tax Rates	98 to 694
Option 2	Implement a New Minimum Tax on Adjusted Gross Income	76
Option 3	Raise the Tax Rates on Long-Term Capital Gains and Dividends by 2 Percentage Points	53
Option 4	Use an Alternative Measure of Inflation to Index Some Parameters of the Tax Code	140
Option 5	Convert the Mortgage Interest Deduction to a 15 Percent Tax Credit	52
Option 6	Eliminate the Deduction for State and Local Taxes	954
Option 7	Curtail the Deduction for Charitable Giving	212
Option 8	Limit the Value of Itemized Deductions	71 to 146
Option 9	Include Employer-Paid Premiums for Income Replacement Insurance in Employees' Taxable Income	326
Option 10	Include Investment Income From Life Insurance and Annuities in Taxable Income	210
Option 11	Tax Carried Interest as Ordinary Income	17
Option 12	Include All Income That U.S. Citizens Earn Abroad in Taxable Income	89
Option 13	Tax Social Security and Railroad Retirement Benefits in the Same Way That Distributions From Defined Benefit Pensions Are Taxed	388
Option 14	Further Limit Annual Contributions to Retirement Plans	89
Option 15	Eliminate the Tax Exemption for New Qualified Private Activity Bonds	31
Option 16	Eliminate Certain Tax Preferences for Education Expenses	155
Option 17	Lower the Investment Income Limit for the Earned Income Tax Credit and Extend That Limit to the Refundable Portion of the Child Tax Credit	11
Option 18	Increase the Maximum Taxable Earnings for the Social Security Payroll Tax	470
Option 19	Expand Social Security Coverage to Include Newly Hired State and Local Government Employees	81
Option 20	Increase the Payroll Tax Rate for Medicare Hospital Insurance by 1 Percentage Point	859
Option 20	Tax All Pass-Through Business Owners Under SECA and Impose a Material Participation Standard	129
Option 22	Increase Taxes That Finance the Federal Share of the Unemployment Insurance System	14 to 15
Option 22 Option 23	Increase Corporate Income Tax Rates by 1 Percentage Point	113
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Table 1-1.

Options for Reducing the Deficit

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_	-		-	-			-	-

Option Number	Title	Savings, 2014–2023ª (Billions of dollars)
	Revenues (Other than those related to health) (Continued)	
Option 25	Repeal Certain Tax Preferences for Extractive Industries	34
Option 26	Extend the Period for Depreciating the Cost of Certain Investments	272
Option 27	Repeal the Deduction for Domestic Production Activities	192
Option 28	Repeal the Low-Income Housing Tax Credit	41
Option 29	Modify the Rules for the Sourcing of Income From Exports	6
Option 30	Determine Foreign Tax Credits on a Pooling Basis	44
Option 31	Increase Excise Taxes on Motor Fuels by 35 Cents and Index for Inflation	452
Option 32	Increase All Taxes on Alcoholic Beverages to \$16 per Proof Gallon	64
Option 33	Impose a Tax on Financial Transactions	180
Option 34	Impose a Fee on Large Financial Institutions	64
Option 35	Impose a Tax on Emissions of Greenhouse Gases	1,060
Option 36	Increase Federal Civilian Employees' Contributions to Their Pensions	19
	Health	
Option 1	Impose Caps on Federal Spending for Medicaid	105 to 606
Option 2	Add a "Public Plan" to the Health Insurance Exchanges	37
Option 3	Eliminate Exchange Subsidies for People With Income Over 300 Percent of the Federal Poverty Guidelines	173
Option 4	Limit Medical Malpractice Torts	57
Option 5	Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life	31
Option 6	Convert Medicare to a Premium Support System	22 to 275
Option 7	Change the Cost-Sharing Rules for Medicare and Restrict Medigap Insurance	52 to 114
Option 8	Raise the Age of Eligibility for Medicare to 67	23
Option 9	Increase Premiums for Parts B and D of Medicare	20 to 287
Option 10	Bundle Medicare's Payments to Health Care Providers	17 to 47
Option 11	Require Manufacturers to Pay a Minimum Rebate on Drugs Covered Under Part D of Medicare for Low-Income Beneficiaries	123
Option 12	Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees	20 to 71
Option 13	Reduce or Constrain Funding for the National Institutes of Health	13 to 28
Option 14	End Enrollment in VA Medical Care for Veterans in Priority Groups 7 and 8	48
Option 15	Reduce Tax Preferences for Employment-Based Health Insurance	266 to 613
Option 16	Increase the Excise Tax on Cigarettes by 50 Cents per Pack	37

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

a. The savings constitute the change in the primary budget category—mandatory outlays, discretionary outlays, or revenues—and do not necessarily encompass all budgetary effects.

NOVEMBER 2013

Table 1-2.

CBO's Baseline Budget Projections

										_	Tot	
	2014	2015	2017	2017	2010	2010	2020	2021	2022	0000	2014-	2014-
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2018	2023
Revenues					In	Billions	of Dollars					
Individual income taxes	1,380	1,558	1,691	1,826	1,942	2,051	2,168	2,291	2,422	2,560	8,398	19,890
Social insurance taxes	1,020	1,066	1,126	1,192	1,253	1,309	1,366	1,428	1,492	1,559	5,656	12,811
Corporate income taxes	380	455	489	511	512	498	492	493	499	506	2,348	4,836
Other	262	319	300	249	237	245	253	282	319	333	1,367	2,800
Total	3,042	3,399	3,606	3,779	3,943	4,103	4,280	4,494	4,732	4,959	17,769	40,336
On-budget	2,311	2,634	2,796	2,919	3,038	3,155	3,289	3,459	3,653	3,834	13,698	31,089
Off-budget ^a	731	765	811	860	905	948	990	1,034	1,079	1,125	4,071	9,247
Outlays												
Mandatory	2,196	2,326	2,519	2,633	2,737	2,893	3,053	3,225	3,470	3,617	12,412	28,670
Discretionary	1,168	1,187	1,206	1,229	1,250	1,286	1,316	1,347	1,386	1,415	6,041	12,790
Net interest	237	264	313	398	497	573	644	703	764	823	1,710	5,216
Total	3,602	3,777	4,038	4,261	4,485	4,752	5,012	5,275	5,620	5,855	20,163	46,677
On-budget	2,890	3,022	3,235	3,408	3,581	3,793	3,993	4,191	4,468	4,628	16,135	37,207
Off-budget ^a	712	755	803	853	904	959	1,020	1,084	1,153	1,226	4,027	9,469
Deficit (-) or Surplus	-560	- 378	-432	-482	-542	-648	-733	-782	-889	-895	-2,394	-6,340
On-budget	-579	-388	-440	-489	-542	-637	-704	-732	-815	-794	-2,437	-6,118
Off-budget ^a	19	10	8	7	1	-11	-29	-50	-74	-102	44	-222
Debt Held by the Public	12,685	13,156	13,666	14,223	14,827	15,537	16,330	17,168	18,118	19,070	n.a.	n.a.
Memorandum:												
Gross Domestic Product	17,231	18,251	19,451	20,660	21,678	22,658	23,656	24,678	25,731	26,819	97,271	220,813
				As a	Percenta	ge of Gro	ss Domes	tic Produ	ict			
Revenues												
Individual income taxes	8.0	8.5	8.7	8.8	9.0	9.1	9.2	9.3	9.4	9.5	8.6	9.0
Social insurance taxes	5.9	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Corporate income taxes	2.2	2.5	2.5	2.5	2.4	2.2	2.1	2.0	1.9	1.9	2.4	2.2
Other	1.5	1.7	1.5	1.2	1.1	1.1	1.1	1.1	1.2	1.2	1.4	1.3
Total	17.7	18.6	18.5	18.3	18.2	18.1	18.1	18.2	18.4	18.5	18.3	18.3
On-budget Off-budget ^a	13.4 4.2	14.4 4.2	14.4 4.2	14.1 4.2	14.0 4.2	13.9 4.2	13.9 4.2	14.0 4.2	14.2 4.2	14.3 4.2	14.1 4.2	14.1 4.2
0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Outlays Mandatory	12.7	12.7	13.0	12.7	12.6	12.8	12.9	13.1	13.5	13.5	12.8	13.0
Discretionary	6.8	6.5	6.2	6.0	5.8	5.7	5.6	5.5	5.4	5.3	6.2	5.8
Net interest	1.4	1.4	1.6	1.9	2.3	2.5	2.7	2.8	3.0	3.1	1.8	2.4
Total	20.9	20.7	20.8	20.6	20.7	21.0	21.2	21.4	21.8	21.8	20.7	21.1
On-budget	16.8	16.6	16.6	16.5	16.5	16.7	16.9	17.0	17.4	17.3	16.6	16.9
Off-budget ^a	4.1	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.1	4.3
Deficit (-) or Surplus	-3.3	-2.1	-2.2	-2.3	-2.5	-2.9	-3.1	-3.2	-3.5	-3.3	-2.5	-2.9
On-budget	-3.4	-2.1	-2.3	-2.4	-2.5	-2.8	-3.0	-3.0	-3.2	-3.0	-2.5	-2.8
Off-budget ^a	0.1	0.1	*	*	*	*	-0.1	-0.2	-0.3	-0.4	*	-0.1
Debt Held by the Public	73.6	72.1	70.3	68.8	68.4	68.6	69.0	69.6	70.4	71.1	n.a.	n.a.

Source: Congressional Budget Office.

Notes: In July 2013, the Bureau of Economic Analysis (BEA) revised upward the historical values for gross domestic product (GDP); CBO extrapolated from those revisions so that its baseline projections of GDP reflect them. Although CBO's projections of revenues, outlays, deficits, and debt over the 2014–2023 period have not changed since they were issued in May, those amounts measured as a percentage of GDP are now lower as a result of BEA's revisions.

n.a. = not applicable; * = between zero and 0.05 percent.

a. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.

CHAPTER

9

Mandatory Spending Options

Andatory spending—which totaled about \$2.0 trillion in 2013, or about 60 percent of federal outlays, the Congressional Budget Office (CBO) estimates consists of all spending (other than interest on federal debt) that is not subject to annual appropriations.¹ Lawmakers generally determine spending for mandatory programs by setting the programs' parameters, such as eligibility rules and benefit formulas, rather than by appropriating specific amounts each year. Mandatory spending is net of offsetting receipts—certain fees and other charges that are recorded as negative budget authority and outlays.²

Nearly all mandatory outlays are for social insurance programs (in which most people who are eligible to participate do so and to which those participants have contributed at least part of the funding) or means-tested programs (which link eligibility to income). The largest mandatory programs are Social Security and Medicare. Together, CBO estimates, those programs accounted for about 65 percent of mandatory outlays in 2013—or roughly 40 percent of all federal spending. Medicaid and other health care programs accounted for about 15 percent of mandatory spending last year.

The rest of mandatory spending is for income security programs (such as unemployment compensation, the

nutrition assistance programs, and Supplemental Security Income), certain refundable tax credits, retirement benefits for civilian and military employees of the federal government, veterans' benefits, student loans, and agriculture programs.³

Trends in Mandatory Spending

Relative to the size of the economy, mandatory spending varied between roughly 9 percent and 10 percent of gross domestic product (GDP) from 1975 through 2007. Such spending peaked in 2009 at 14.5 percent of GDP, before dropping to 12.6 percent of GDP in 2012. That decline reflects the economy's gradual recovery from the 2007–2009 recession and the waning budgetary effects of policies enacted in response to the recession. CBO estimates that mandatory outlays fell to about 12 percent of GDP in 2013; much of that decline was attributable to payments from Fannie Mae and Freddie Mac (see Figure 2-1).

If no new laws were enacted that affected mandatory programs, CBO estimates, mandatory outlays would remain fairly stable as a share of the economy, between 12.6 percent and 13.1 percent, from 2014 through 2021.⁴ Mandatory spending would accelerate in the final two years of the projection period, however, reaching 13.5 percent of GDP in 2022 and 2023, by CBO's estimate. By comparison, such spending averaged 11.5 percent of GDP over the past 10 years and 9.9 percent over the past four decades.

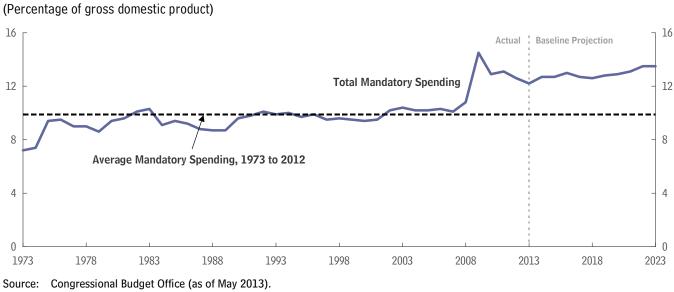
Although the amount spent in fiscal year 2013 by each agency and for major programs is now available from the *Monthly Treasury Statement* issued by the Department of the Treasury, the amounts of mandatory spending discussed here are estimates; CBO has not yet determined the exact split between discretionary and mandatory spending in that year.

^{2.} Unlike revenues, which are collected through the exercise of the government's sovereign powers (for example, in levying income taxes), offsetting receipts are generally collected from other government accounts or from members of the public through businesslike transactions (for example, in assessing Medicare premiums or rental payments and royalties for the extraction of oil or gas from public lands). In this introduction and in the options, spending for Medicare is reported net of offsetting receipts.

^{3.} Tax credits reduce a taxpayer's overall tax liability (the amount owed), and when a refundable credit exceeds the liability apart from the credit, the excess may be refunded to the taxpayer and the refund is recorded in the budget as an outlay.

For a more detailed discussion of the components of mandatory spending and CBO's baseline budget projections, see Congressional Budget Office, *Updated Budget Projections: Fiscal Years 2013–2023* (May 2013), www.cbo.gov/publication/44172.

Figure 2-1.



Mandatory Spending, 1973 to 2023

Note: Data include offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).

CBO's projections for total mandatory spending mask diverging trends for different components of such spending. CBO projects that, under current law, spending for Social Security and the major health care programs, notably Medicare and Medicaid, would grow from 9.8 percent of GDP in 2014 to 11.2 percent by 2023, driven largely by the aging of the population, rising health care costs per person, and an expansion of federal subsidies for health insurance. At the same time, outlays for all other mandatory programs would decline relative to GDP, from 3.0 percent in 2014 to 2.3 percent by 2023. That projected decline reflects an anticipated economic expansion, which would reduce the number of people who are eligible for many income security programs, and scheduled changes to tax provisions, which would reduce outlays arising from some tax credits.

Methodology Underlying Mandatory Spending Estimates

The budgetary effects of the various options are measured relative to the spending that CBO projected in its May 2013 baseline. In creating its baseline budget projections, CBO generally assumes that existing laws will remain unchanged. That assumption applies to most, but not all, mandatory programs. Following long-standing Congressional procedures, CBO assumes that most mandatory programs that are scheduled to expire in the coming decade under current law will instead be extended. In particular, under CBO's baseline, all such programs that predate the Balanced Budget Act of 1997 and that have outlays in the current year above \$50 million are presumed to continue; for programs established after 1997, continuation is assessed on a program-by-program basis in consultation with the House and Senate Committees on the Budget. CBO's projection of mandatory outlays is \$135 billion (or 4 percent) higher in 2023 as a result of the assumption that expiring programs continue. (The Supplemental Nutrition Assistance Program accounts for more than half of that increment.)

Another of CBO's assumptions involves the federal government's dedicated trust funds for Social Security and Medicare.⁵ If a trust fund is exhausted and the receipts coming into it during a given year are insufficient to pay full benefits as scheduled under law for that year,

^{5.} Social Security's beneficiaries receive payments from the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund. Medicare's Hospital Insurance Trust Fund pays for care in hospitals and other institutions under Part A; its Supplementary Medical Insurance Trust Fund pays for care by physicians and other providers under Part B and for prescription drugs under Part D. Both of those trust funds also pay benefits for people who join private Medicare Advantage plans under Part C.

the program has no legal authority to pay full benefits. In that case, benefits must be reduced to bring outlays in line with receipts. Nonetheless, in keeping with longstanding Congressional procedures, CBO's baseline incorporates the assumption that, in coming years, beneficiaries will receive full payments and all services to which they are entitled under Social Security or Medicare.

Options in This Chapter

The 23 options in this chapter encompass a broad range of mandatory spending programs, excluding those involving health care. (Options that would affect spending for health care programs are presented in Chapter 5, as are options affecting taxes related to health.) The options are grouped by program, but some are conceptually similar even though they concern different programs. For instance, several would shift spending from the government to a program's participants or from the federal government to the states. Others would redefine the population that is entitled to benefits or would reduce the amount of payments that beneficiaries receive.

Seven options in this chapter concern Social Security. Another four involve means-tested benefit programs (including nutrition programs and the Supplemental Security Income program). The remaining options focus on Fannie Mae and Freddie Mac; the Pension Benefit Guaranty Corporation; and programs that deal with education, the environment, veterans' benefits, federal pensions, and agriculture. Each option's budgetary impact is estimated independently, without consideration for potential interactions with other options.

Change the Terms and Conditions for Federal Oil and Gas Leasing												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-0.1	-0.5	-1.0	-0.8	-0.4	-0.9	-1.0	-0.6	-0.7	-2.3	-5.9
Note: This option would take effect in October 2014.												

Mandatory Spending—Option 1

The federal government offers private businesses the opportunity to bid on leases for the development of most of the onshore and offshore oil and natural gas resources on federal lands. By the Congressional Budget Office's estimates, under current laws and policies, the federal government's gross proceeds from all federal oil and gas leases on public lands will total \$127 billion over the next decade; after an adjustment for payments to states, the net proceeds will be \$108 billion.

This option would change several aspects of the federal oil and gas leasing programs. It would increase the acreage available for leasing by repealing the statutory prohibition on leasing in the Arctic National Wildlife Refuge (ANWR) and by directing the Department of the Interior (DOI) to auction leases for areas on the Outer Continental Shelf (OCS) that are unavailable for leasing under current administrative policies. The option also would eliminate payments of interest on overpayments of royalties by lessees. (Royalties are assessed on the value of oil and gas produced from leased areas.) Finally, the option would increase the federal government's share of the returns on leasing federal lands by imposing a fee on all new leases of tracts from which oil or gas is not being produced.

CBO estimates that implementing all of those changes would reduce net federal outlays by \$6 billion from 2015 through 2023 by increasing offsetting receipts from oil and gas leasing. Of that total, \$3 billion would result from leasing in ANWR and an increase in leasing on the OCS, \$2 billion would result from eliminating interest payments on overpayments, and the remainder would result from the new fees.

One rationale for offering leases in ANWR and additional leases on the OCS is that increasing oil and gas production from federal lands could boost employment and economic output, especially in the affected regions. Additional leasing also could raise revenues for state and local governments; the amounts would depend on state tax policies, the quantity of oil and gas produced in each area, and the existing formulas for distributing portions of federal oil and gas proceeds to states. The primary argument against expanded leasing is that oil and gas production in environmentally sensitive areas like the coastal plain in ANWR or other coastal areas could pose a threat to wildlife, fisheries, and tourist economies. Moreover, increased development of resources in the near term would reduce the oil and gas available for production in the future, when prices might be higher and the products might be valued more highly by households and businesses.

A rationale for eliminating interest payments on overpayments of royalties is that doing so would stop the federal government from paying a higher return on funds it receives through such overpayments than on funds it borrows through selling securities. Under current law, DOI is required to pay interest on overpayments at a rate that is 2 percentage points higher than the short-term interest rate the Treasury pays on securities that represent borrowing from the public. In a different context, the Treasury also pays interest that is the same amount higher than its borrowing rate for overpayments of federal corporate taxes, but provisions in the tax code limit the amount of money eligible to earn such interest, and no such provisions apply to overpayments on oil and gas leases. One result is that the amount of overpayments by lessees and the corresponding interest payments by DOI have grown in recent years. In 2012, overpayments exceeded \$3 billion, which was equivalent to more than 30 percent of the \$9 billion due as royalties on production from all federal lands. One argument against eliminating the incentive to overpay royalties, from lessees' point of view, is that it would increase the risk of underpaying the amounts due and then being liable for paying interest on the difference. Alternative approaches that would generate smaller savings include reducing the interest rate on

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overpayments or limiting the volume of overpayments eligible to earn interest.

Besides increasing federal offsetting receipts, a rationale for imposing a new fee on all "nonproducing" oil and gas leases—pegged at \$6 per acre per year for the purpose of this option-is that doing so would give firms a financial incentive to be more selective in acquiring leases and to explore and develop those leases more quickly. Firms holding nonproducing leases, which currently account for about 85 percent of offshore leases and about 70 percent of onshore leases, have the option to pursue production on those tracts but may postpone making any investment until conditions become more favorable-for example, if oil or gas is discovered on leases nearby or if the price of oil or gas rises more than expected. Although oil and gas resources might be more valuable in the future than they are today, if leasing does occur, the federal government's return would tend to be larger if firms that acquired leases began production quickly.

An argument against assessing higher fees prior to production is that they would cause some firms to bid less for the leases they acquire or to acquire fewer leases, which would reduce federal proceeds from the sale of new leases—although by only a small amount, CBO expects. In auctions, the amount that firms are willing to pay for a lease depends on a number of factors, including expected future drilling costs, trends in oil and gas prices, the quantity of oil or gas resources that may be covered by the lease, and the probability that other firms will compete to acquire the lease. Firms strive to set bids at levels that are lower than the value they assign to leases but higher than what they expect other firms to pay. Although imposing an annual fee of \$6 per acre paid by leaseholders until leased areas produce oil or gas would reduce the expected value of the leases (because production rarely begins in the first year of a lease), the effect of the fees would generally be small relative to other factors affecting firms' bids and, in CBO's view, would have only a small effect on bids and, therefore, offsetting receipts. Moreover, leases that were not acquired would be those with the lowest expected economic value and the lowest likelihood for development, so the production of oil and gas and the federal revenues from leases and royalties that would be given up because of the higher fees would probably also be quite small.

RELATED OPTION: Revenues, Option 25

RELATED CBO PUBLICATIONS: Potential Budgetary Effects of Immediately Opening Most Federal Lands to Oil and Gas Leasing (August 2012), www.cbo.gov/publication/43527; and Energy Security in the United States (May 2012), www.cbo.gov/publication/43012

Mandatory Spending—Option 2

Limit Enrollment in Department of Agriculture Conservation Programs

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Phase out the Conservation Stewardship Program	0	*	-0.2	-0.5	-0.7	-0.9	-1.2	-1.4	-1.6	-1.9	-1.4	-8.4
Scale back the Conservation Reserve Program	0	0	-0.3	-0.4	-0.5	-0.5	-0.7	-0.7	-0.8	-1.1	-1.2	-4.9
Both of the above policies	0	*	-0.6	-0.8	-1.2	-1.4	-1.8	-2.1	-2.4	-3.0	-2.6	-13.3

Notes: This option would take effect in October 2014.

* = between -\$50 million and zero.

Under the Conservation Stewardship Program (CSP), landowners enter into contracts with the Department of Agriculture (USDA) to undertake various conservation measures—including ones to conserve energy and improve air quality—in exchange for annual payments and technical help. Those contracts last for five years and can be extended for an additional five years. For every acre enrolled in the CSP, a producer receives compensation for carrying out new conservation activities and for improving, maintaining, and managing existing conservation practices. Current law limits new enrollment in the CSP to about 13 million acres per year, at an average cost of \$18 per acre; in 2012, USDA spent \$0.9 billion on the program.

Under the Conservation Reserve Program (CRP), landowners enter into contracts to stop farming on specified tracts of land, usually for 10 to 15 years, in exchange for annual payments and cost-sharing grants from USDA to establish conservation practices on that land. One type of tract used in the program is a "conservation buffer"—a narrow strip of land maintained with vegetation to intercept pollutants, reduce erosion, and provide other environmental benefits. Acreage may be added to the CRP through general enrollments, which are held periodically for larger tracts of land, or through continuous enrollments, which are available at any time during the year for smaller tracts of land. Current law caps total enrollment in the CRP at 32 million acres; in 2013, USDA spent \$2.0 billion on the roughly 27 million acres enrolled. The first part of this option would prohibit new enrollment in the Conservation Stewardship Program beginning in 2015. Land currently enrolled—and therefore hosting new or existing conservation activities—would be eligible to continue in the program until the contract for that land expired. By the Congressional Budget Office's estimates, the prohibition on new enrollment would reduce federal spending by \$8 billion from 2015 through 2023.

The second part of this option would prohibit both new enrollment and reenrollment in the general enrollment portion of the Conservation Reserve Program beginning in 2015; continuous enrollment would remain in effect under the option. That prohibition on general enrollment would reduce spending by \$5 billion from 2015 through 2023, CBO estimates. The amount of land enrolled in the CRP would drop to about 10 million acres by 2023.

One argument for prohibiting new enrollment in the Conservation Stewardship Program and thus phasing out the program is that some provisions of the program limit its effectiveness. For example, paying farmers for conservation practices they have already adopted may not enhance the nation's conservation efforts. Moreover, the criteria used by USDA to determine whether improvements in existing conservation practices have been made are not clear, and the absence of such objective measurements could result in higher payments than necessary to encourage the adoption of new conservation measures.

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An argument against phasing out the CSP is that it may offer a way to support farmers that provides more environmental benefits than traditional crop-based subsidies do. Furthermore, conservation practices often impose significant up-front costs, which can reduce the net economic output of agricultural land, and CSP payments help offset those costs.

One argument for scaling back the Conservation Reserve Program is that the land could become available for other uses that would provide greater environmental benefits. For example, reducing enrollment could free up more land to produce crops and biomass for renewable energy products.

An argument against scaling back the CRP is that studies have indicated that the program yields high returns—in enhanced wildlife habitat, improved water quality, and reduced soil erosion—for the money it spends. Furthermore, USDA plans to enroll only the most environmentally sensitive land in the CRP in the future, perhaps thereby providing an especially cost-effective way to protect fragile tracts.

RELATED OPTIONS: Mandatory Spending, Options 3 and 4

Reduce Subsidies in the Crop Insurance Program

2016	2017 -2.3	2018 -2.4	2019 -2.5	2020 -2.5	2021 -2.6	2022 -2.6	2023	2014–2018	2014–2023
-2.3	-2.3	-2.4	-2.5	-2.5	-2.6	-2.6	-2.6	-03	00 I
-2.3	-2.3	-2.4	-2.5	-2.5	-2.6	-2.6	-2.6	-0.3	00.1
								7.5	-22.1
-0.6	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-2.5	-5.2
-2.9	-2.9	-3.0	-3.0	-3.1	-3.1	-3.1	-3.2	-11.8	-27.3
	-2.9	-2.9 -2.9	-2.9 -2.9 -3.0	-2.9 -2.9 -3.0 -3.0	-2.9 -2.9 -3.0 -3.0 -3.1	-2.9 -2.9 -3.0 -3.0 -3.1 -3.1	-2.9 -2.9 -3.0 -3.0 -3.1 -3.1 -3.1	-2.9 -2.9 -3.0 -3.0 -3.1 -3.1 -3.1 -3.2	

The Federal Crop Insurance Program protects farmers from losses caused by drought, floods, pest infestation, other natural disasters, and low market prices. Farmers can choose various amounts and types of insurance protection-for example, they can insure against losses caused by poor crop yields, low crop prices, or both. Premium rates for federal crop insurance are set by the Department of Agriculture (USDA) so that the premiums equal the expected payments to farmers for crop losses. Of total premiums, the federal government pays about 60 percent, on average, and farmers pay about 40 percent. Insurance policies purchased through the program are sold and serviced by private insurance companies, which are reimbursed by the federal government for their administrative costs. The federal government reinsures those private insurance companies by agreeing to cover some of the losses when total payouts exceed total premiums.

This option would reduce the federal government's subsidy to 40 percent of the crop insurance premiums, on average. In addition, it would limit the federal reimbursement to crop insurance companies for administrative expenses to 9.25 percent of estimated premiums (or to an average of \$915 million each year from 2015 through 2023) and limit the rate of return on investment for those companies to 12 percent each year. Under current law, by the Congressional Budget Office's estimates, federal spending for crop insurance will total \$78 billion from 2015 through 2023. Reducing the crop insurance subsidies as specified by this option would save \$27 billion over that period, CBO estimates. An argument in favor of this option is that cutting the federal subsidies for premiums would probably not have a substantial effect on participation in the program. Private lenders increasingly view crop insurance as an important way to ensure that farmers can repay their loans, which encourages participation. In addition, the producers who dropped out of the program would generally continue to receive significant support from other federal farm programs.

Current reimbursements to crop insurance companies for administrative expenses (around \$1.3 billion per year) were established in 2010, when premiums were relatively high. Recent reductions in the value of the crops insured (due, in part, to lower average commodity prices) have resulted in lower average premiums for crop insurance. However, administrative expenses have not shown a commensurate reduction. A cap of 9.25 percent, or about \$915 million, is close to average reimbursements during the years prior to the run-up in commodity prices in 2010. Furthermore, a recent USDA study found that the current rate of return on investment for crop insurance companies, 14 percent, was higher than that of other private companies, on average.

An argument against this option is that cutting the federal subsidies for premiums would probably reduce the amount of insurance that farmers purchase. If the amount of insurance declined significantly, lawmakers might be more likely to enact special relief programs

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when farmers encountered significant difficulties, which would offset some of the savings from cutting the premium subsidies. (Such ad hoc disaster assistance programs for farmers have cost an average of about \$700 million annually over the past five years.) In

RELATED OPTIONS: Mandatory Spending, Options 2 and 4

addition, limiting reimbursements to companies for administrative expenses and reducing the targeted rate of return to companies could add to the financial stress of companies in years with significant payouts for covered losses.

Mandatory Spend	ding—	Option	14								FL	inction 350
Eliminate Direct Payments to Agricultural Producers												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	0	-4.6	-2.2	-2.9	-3.0	-3.1	-3.0	-3.0	-2.8	-10.1	-24.5
Note: This option woul	d take ef	fect in Ja	anuary 2	015.								

According to the Congressional Budget Office's projections, the Department of Agriculture's (USDA's) direct payments to agricultural producers for certain commodities (cotton, feed grains, oilseeds, peanuts, wheat, and rice) will cost \$41 billion between 2015 and 2023. Under current law, producers will receive payments each year regardless of market prices for those crops or which crops, if any, the producers plant on eligible land.

This option would eliminate those direct payments beginning in 2015. However, if producers did not receive direct payments, they would probably increase their participation in other federal programs that provide payments to farmers, such as the Average Crop Revenue Election (ACRE) program (which makes payments when farms' actual revenues are less than their expected revenues). CBO estimates that eliminating direct payments would result in an increase in ACRE payments of \$13 billion between 2015 and 2023. In addition, because USDA takes direct payments into account when it calculates countercyclical payments (which are payments made when market prices are below legislated target levels), eliminating direct payments would probably boost countercyclical payments by \$3 billion. With savings of \$41 billion in direct payments and partly offsetting

costs of \$16 billion, this option would reduce overall spending on farm programs by \$25 billion between 2015 and 2023, CBO estimates.

The primary rationale for eliminating direct payments to agricultural producers is that continued significant subsidies to the farm sector that are made regardless of the perceived need of producers have become less defensible given recent high commodity prices and record farm income. Because of structural changes that have occurred in commodity markets—for example, increased use of corn for ethanol production—few analysts expect the prices of most agricultural commodities to return to their lower levels of the past.

An argument against this option is that reducing certain other payments to farmers might increase efficiency in the farm sector more than would eliminating direct payments. For example, USDA payments in the form of price supports essentially guarantee minimum prices for certain crops and therefore distort market signals more than direct payments do.

RELATED OPTIONS: Mandatory Spending, Options 2 and 3

Mandatory Spending—Option 5

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Reduce Subsidies to Fannie Mae and Freddie Mac

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Increase guarantee fees	0	-6.5	-3.7	-2.4	-1.3	-0.4	-0.5	*	-2.3	-1.5	-14.0	-18.7
Decrease loan limits	0	0.1	0.1	0.1	*	-0.1	-0.3	*	-1.6	-1.4	0.3	-3.1
Both of the above policies ^a	0	-6.4	-3.6	-2.4	-1.4	-0.5	-0.7	*	-2.3	-1.5	-13.8	-18.8

Notes: This option would take effect in October 2014.

* = between -\$50 million and \$50 million.

a. If both policies were enacted together, the total effects would be less than the sum of the effects for each policy because of interactions between the approaches.

Fannie Mae and Freddie Mac are government-sponsored enterprises (GSEs) that were federally chartered to help ensure a stable supply of financing for residential mortgages, including those for low- and moderate-income borrowers. Over the past 40 years, those GSEs have carried out that mission through two activities in the secondary mortgage market (that is, the market for mortgages after they have been issued): by issuing and guaranteeing mortgage-backed securities (MBSs) and by buying mortgages and MBSs to hold as investments. Under current law, the entities are generally able to guarantee and purchase mortgages up to \$625,500 in areas with high housing costs and \$417,000 in other areas, and regulators can alter those limits if house prices change. Those two GSEs provided credit guarantees for about two-thirds of all home mortgages originated in 2012.

In September 2008, the federal government took control of Fannie Mae and Freddie Mac in a conservatorship process, after falling house prices and rising mortgage delinquencies threatened the GSEs' solvency and impaired their ability to ensure a steady supply of financing to the mortgage market. Because of that shift in control, the Congressional Budget Office concluded that the institutions had effectively become government entities whose operations should be reflected in the federal budget. By CBO's projections under current law, the mortgage guarantees that the GSEs issue from 2015 through 2023 will cost the federal government \$22 billion. That estimate reflects the subsidies inherent in the guarantees at the time they are made-that is, the up-front payments that a private entity would need to receive (in an orderly market and allowing for the fees that borrowers pay) to

assume the federal government's responsibility for those guarantees.

This option includes two approaches for reducing the federal subsidies provided to Fannie Mae and Freddie Mac. In the first approach, the average guarantee fee that Fannie Mae and Freddie Mac assess on loans they include in their MBSs would increase by 10 basis points (100 basis points are equivalent to 1 percentage point), to 60 basis points, beginning in October 2014. In addition, to keep guarantee fees constant after 2021—when an increase of 10 basis points that was put in place in 2011 is scheduled to expire—the average guarantee fee would be increased, relative to the amount under current law, by 20 basis points after 2021. The increased collections of fees, which the GSEs would be required to pass through to the Treasury, would reduce net federal spending by \$19 billion from 2015 through 2023, CBO estimates.

In the second approach, the maximum size of a mortgage that Fannie Mae and Freddie Mac could include in their MBSs would be reduced to \$150,000 nationally, beginning with a drop to \$500,000 in October 2014, followed by a series of reductions averaging less than \$50,000 a year. (Guarantee fees would remain as they are under current law.) This reduction in loan limits would save \$3 billion from 2015 through 2023, CBO estimates. Because the GSEs would lose their most profitable customers first as loan limits fell, lowering limits would initially raise federal costs slightly.

Taking both approaches together would lower federal subsidies for Fannie Mae and Freddie Mac by \$19 billion

from 2015 through 2023, according to CBO's estimates. Because raising guarantee fees by 10 basis points would eliminate most of the federal subsidies for the GSEs, taking the additional step of lowering loan limits would have very little effect on subsidies. For consistency, similar changes could be made to the limits on loans guaranteed by the Federal Housing Administration (FHA). The effects of lower limits on FHA loans, which would affect discretionary spending subject to appropriations, are not included in the estimates presented here.

Because some of the subsidies provided to Fannie Mae and Freddie Mac flow to mortgage borrowers in the form of lower rates, both approaches in this option would raise borrowing costs. The higher guarantee fees would probably pass directly through to borrowers in the form of higher mortgage rates. The lower loan limits would push some borrowers into the so-called jumbo mortgage market, where loans exceed the eligible size for guarantees by Fannie Mae and Freddie Mac and where rates are likely to be 20 to 50 basis points higher, on average.

The major advantage of those approaches for reducing federal subsidies for Fannie Mae and Freddie Mac is that they could restore a larger role for the private sector in the secondary mortgage market, which would reduce taxpayers' exposure to the risk of defaults. CBO estimates that raising fees as specified here would cause new guarantees by Fannie Mae and Freddie Mac to fall by around 45 percent, on average, between 2015 and 2023 and that lowering loan limits to the level described here would cause new guarantees to fall by about 35 percent. Combining the approaches would result in a drop in new guarantees of about 60 percent. Lessening subsidies would also help address the current underpricing of mortgage credit risk, which encourages borrowers to take out bigger mortgages and purchase more expensive homes. Consequently, the option could shift the allocation of some capital away from housing and toward more productive activities.

A particular advantage of lowering loan limits, rather than raising fees, is that many moderate- and low-income borrowers would continue to benefit from the subsidies provided to the GSEs. More-affluent borrowers generally would lose that benefit, but they typically can more easily find alternative sources of financing. The \$150,000 limit would allow for the purchase of a home for about \$190,000 (with a 20 percent down payment), which was roughly the median price of an existing single-family residence in April 2013; thus, most moderate- and lowincome borrowers would not be affected by lowering loan limits as specified here.

One disadvantage of reducing subsidies for the GSEs and thereby increasing the cost of mortgage borrowing is that doing so could weaken the housing market, which is currently recovering only slowly from its sharp drop several years ago. That concern is particularly salient because mortgage delinquency rates remain high, and many borrowers are still "underwater," which is to say that they owe more than their homes are worth. Posing another drawback, the slightly higher mortgage rates resulting from lower subsidies would limit some opportunities for refinancing-perhaps constraining spending by consumers, which is currently growing only slowly, and thereby hampering the economic recovery. If those were the only concerns about this option, they could be addressed by phasing in the specified changes more slowly, although that approach would reduce the budgetary savings as well.

Finally, this option affecting the GSEs would make FHA loans more attractive to some borrowers (in the absence of corresponding changes to the rules governing FHA loans), which could increase risks for taxpayers because FHA guarantees loans with lower down payments than do the GSEs.

RELATED OPTION: Revenues, Option 5

RELATED CBO PUBLICATIONS: Modifying Mortgages Involving Fannie Mae and Freddie Mac: Options for Principal Forgiveness (May 2013), www.cbo.gov/publication/44115; The Budgetary Cost of Fannie Mae and Freddie Mac and Options for the Future Federal Role in the Secondary Mortgage Market (June 2011), www.cbo.gov/publication/41487; Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market (December 2010), www.cbo.gov/publication/21992; CBO's Budgetary Treatment of Fannie Mae and Freddie Mac (January 2010), www.cbo.gov/publication/41887; and An Overview of Federal Support for Housing (November 2009), www.cbo.gov/publication/41219

Mandatory Spending—Option 6

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											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Restrict access to subsidized loans to students eligible for Pell grants	-0.5	-1.3	-1.7	-1.9	-1.9	-2.0	-2.0	-2.1	-2.1	-2.2	-7.3	-17.7
Eliminate subsidized loans altogether	-1.1	-3.0	-4.0	-4.3	-4.5	-4.7	-4.8	-4.9	-5.0	-5.1	-16.9	-41.4

Reduce or Eliminate Subsidized Loans for Undergraduate Students

The Federal Direct Student Loan Program lends money directly to students and their parents to help finance postsecondary education. Three types of loans are offered: subsidized loans and unsubsidized loans (which take their names not as an indication of the rates provided but because of other terms of the loans) and PLUS loans. Subsidized loans do not accrue interest while students are enrolled at least half-time, for six months after they leave school or drop below half-time status, and during certain other periods when borrowers may defer making payments; those loans are available only to undergraduates with demonstrated financial need.

Unsubsidized loans accrue interest from the date of disbursement; they are available to students regardless of need. PLUS loans also accrue interest beginning at disbursement; they are available to parents of dependent students and to graduate students. The program's rules cap the amount that students may borrow through subsidized and unsubsidized loans, with both annual limits and lifetime limits; no such cap applies for PLUS loans.

This option includes two possible changes to subsidized loans, which, by the Congressional Budget Office's estimates, will constitute about half of the dollar volume of federal direct loans to undergraduate students for the 2013–2014 academic year. In the first alternative, access to subsidized loans (and the associated interest subsidies) would be restricted to students eligible for Pell grants. The Federal Pell Grant Program provides grants to help finance postsecondary undergraduate education; to be eligible for those grants, students and their families must demonstrate financial need. Under current law, fewer students are eligible for Pell grants than are eligible for subsidized loans, so this change would reduce the number of students who could take out subsidized loans. Specifically, CBO projects that about 45 percent of students who would borrow through subsidized loans under current law would lose their eligibility for those loans—and would instead borrow almost as much through unsubsidized loans. As a result, federal costs would be reduced by \$18 billion from 2014 to 2023, CBO estimates.

In the second alternative, subsidized loans would be eliminated altogether. In this case, CBO also expects that students would borrow almost as much through unsubsidized loans as they would have borrowed through subsidized loans, and federal costs would be reduced by \$41 billion from 2014 to 2023.

Under either alternative, borrowers who lost access to subsidized loans would pay interest on unsubsidized loans from the date of loan disbursement, which would raise their costs. If a student who would have borrowed \$23,000 (the lifetime limit) through subsidized loans over five years beginning with the 2014–2015 academic year instead borrowed the same amount through unsubsidized loans, that student would leave school with additional debt of about \$3,800 because of the accrued interest costs. Over a typical 10-year repayment period, the student's monthly payment would be \$43 higher than if he or she had borrowed that same amount through subsidized loans.

Perspectives on those higher borrowing costs vary. According to an argument in favor of this option, postsecondary educational institutions might respond to increases in costs faced by their students by slowing tuition increases. If institutions responded in that way, then the effect of higher borrowing costs would be offset at least partially by lower tuition than would otherwise be charged. Also, higher costs might encourage students to pay closer attention to the economic value to be obtained from a degree, particularly in the form of increased earnings, and to increase the speed with which they complete a postsecondary program.

But by an argument against this option, students faced with a higher cost of borrowing for education might cut back on spending for education, by, for example, deciding not to attend college, leaving college before completing a degree, or applying to schools with lower tuition but educational opportunities not as well aligned with their interests and skills. Those decisions eventually could lead to lower earnings. Moreover, for any given amount borrowed, raising interest costs would require borrowers to devote a larger amount of their future income to interest payments. That, in turn, could strain their ability to make other financial commitments, such as buying a home.

RELATED OPTIONS: Revenues, Option 16; Mandatory Spending, Option 7; and Discretionary Spending, Option 20

RELATED CBO PUBLICATIONS: *The Pell Grant Program: Recent Growth and Policy Options* (September 2013), www.cbo.gov/publication/44448; and *Options to Change Interest Rates and Other Terms on Student Loans* (June 2013), www.cbo.gov/publication/44318

Mandatory Spend	ding—O	ption	7								F	unction 500
Eliminate the Add-On to Pell Grants That Is Funded With Mandatory Spending												
											То	otal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	-1.6	-6.1	-7.0	-8.0	-8.7	-8.8	-8.9	-9.0	-9.1	-9.2	-31.4	-76.4
Note: This option would	d take effe	ect in Ju	ly 2014.									

The Federal Pell Grant Program is the single largest source of federal grants to low-income students for postsecondary undergraduate education. The Congressional Budget Office estimates that, for the 2013–2014 academic year, the program will provide \$33 billion in grants to 8.9 million students. To be eligible for the maximum grant—\$5,645 for this year—a student must demonstrate a high level of financial need and must be enrolled in school full time. Other students are eligible for reduced grant amounts.

Pell grants are funded through a combination of discretionary spending (which must be appropriated by the Congress every year) and mandatory spending (which is authorized in law permanently). Awards for this academic year will be based on a maximum grant of \$4,860 set in appropriations and a \$785 "add-on" based on mandatory funding; the sum of those figures is the overall maximum grant of \$5,645. Under current law, the add-on is indexed to inflation through the 2017–2018 academic year (when, by CBO's estimates, it will equal \$1,240) and remains constant thereafter.

This option would eliminate the add-on to Pell grants. Over the next decade, this option would cause about 3 percent of people who will be eligible for Pell grants under current law to lose that eligibility, because eligibility is determined, in part, by the overall maximum grant, which would be reduced. In addition, grants to the 97 percent of people who would maintain eligibility would be smaller—by the full amount of the add-on for each full-time student. CBO estimates that this option would result in a reduction of \$76 billion in mandatory spending over the 2014–2023 period.

A few studies suggest that some institutions have responded to past increases in the size of Pell grants by raising tuition or shifting more of their own aid to students who did not qualify for Pell grants—providing a rationale for reducing the maximum Pell grant. In addition, spreading the reductions in grants across all recipients would, for any given amount of federal savings, minimize the impact on any individual recipient.

But an argument against reducing the maximum Pell grant is that, even with the grant at its current amount, most recipients attending public four-year colleges have unmet financial need—and attending most private colleges is well beyond the means of many of those recipients. Moreover, among students who remained eligible for Pell grants under this option, grant amounts would be reduced uniformly regardless of students' financial need, preparation for postsecondary education, or academic progress. By comparison, targeted reductions in grants might be more effective in protecting some of the program's goals, including maximizing the effectiveness of the grants in boosting the educational attainment of students from the lowest-income families.

RELATED OPTIONS: Revenues, Option 16; Mandatory Spending, Option 6; and Discretionary Spending, Option 20 RELATED CBO PUBLICATIONS: *The Pell Grant Program: Recent Growth and Policy Options* (September 2013), www.cbo.gov/publication/44448; and *Options to Change Interest Rates and Other Terms on Student Loans* (June 2013), www.cbo.gov/publication/44318

Increase Federal Insurance Premiums for Private Pension Plans

									To	tal
s of dollars)	2014 2015 20	2016 2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
n Outlays										
ease flat-rate iium	0 -0.2	-0.3 -0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-1.0	-2.5
ease variable-rat iium		-0.6 -0.5	-0.4	-0.3	-0.2	-0.2	-0.2	-0.3	-1.5	-2.8
of the above pol	cies 0 -0.2	-0.8 -0.8	-0.7	-0.6	-0.5	-0.5	-0.6	-0.6	-2.5	-5.3
of the above pol	ties 0 -0.2 take effect in January 2		-0.7	-0.6	-0.5	-0.5	-0.6	-0.6		-2.5

The Pension Benefit Guaranty Corporation (PBGC) is a federal agency that insures participants in defined benefit pension plans organized by private employers against the loss of specified benefits in the event that their plans have insufficient assets to pay promised benefits. Private employers are not required to provide pensions, but those that do must follow rules specified in the Employee Retirement Income Security Act (ERISA) regarding minimum standards for participation, accrual of benefits, vesting, funding, and other issues. If a plan sponsored by an employer is terminated with insufficient assets to pay promised benefits, PBGC assumes the plan's assets and liabilities up to an annual per-participant limit. (Under current law, plans sponsored by multiple employers are handled differently by PBGC; this option focuses on single-employer plans.) PBGC uses those assets along with insurance premiums from active plans to make monthly annuity payments to qualified retirees and their survivors. At the end of 2012, PBGC reported that the gap between its assets and the present value of the benefits owed to workers and retirees in terminated plans, as well as the assets and benefits of plans whose termination the agency viewed as "probable," was \$29 billion.

Individual employers that offer defined benefit pension plans pay PBGC annual premiums that are equal to a flat-rate payment (\$42 in 2013) for each participant (worker or retiree) in the plan and, for underfunded plans, a variable payment equal to \$9 for each \$1,000 by which the plan is underfunded (capped at \$400 per participant). Those premium rates are adjusted each year to account for growth in average wages; additionally, they increase by set amounts specified in law. In 2015, the flatrate premium is scheduled to rise to \$49 per participant, and the variable-rate premium is set to increase to \$19 for each \$1,000 of underfunding; by 2023, the flat-rate premium will rise to \$70, and by 2022, the variable-rate premium will increase to \$25 per \$1,000 of underfunding (variable-rate premiums due for 2022 are paid in 2023). In 2012, PBGC collected \$1.1 billion in fixedrate premiums and \$1.0 billion in variable-rate premiums. Those amounts are recorded in the federal budget as offsetting receipts, which are credits against direct spending.

The first part of this option would increase collections from the flat-rate premiums by about 15 percent. That increase could occur either by maintaining the current system and boosting the charge from \$49 to \$57 per participant in 2015 and by rising amounts that would reach \$80 per participant in 2023, or by changing the way that premiums are assessed (for example, by making premiums a percentage of insured benefits) and setting premiums such that collections would be 15 percent higher than those projected under current law. This component of the option would increase offsetting receipts (that is, reduce direct spending) by \$3 billion through 2023, the Congressional Budget Office estimates.

The second part of this option would increase collections from the variable-rate premiums by about one-third. That increase could occur either by maintaining the current system and upping the rate from \$19 to \$25 per \$1,000 of underfunding in 2015 and by rising amounts that would reach \$34 by 2022 (with adjustments each year to account for growth in average wages), or by creating a new formula based on a broader range of risk factors (like the financial condition of the sponsors and the share of a plan's assets allocated to risky securities, for instance) that yields the same overall increase. This component of

СВО

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the option would increase offsetting receipts by \$3 billion through 2023, CBO estimates.

Combining both parts of the option would increase offsetting receipts, and thereby reduce direct spending, by \$5 billion through 2023, CBO estimates.

A principal advantage of increasing premiums is that doing so would improve PBGC's financial condition in the long run. For the first component of the option, changing the assessment base for the flat-rate premiums rather than increasing the charge per participant could more directly relate premiums to insured benefits. In particular, that change would help younger companies that have many employees who have not yet accumulated significant pension benefits. Raising premiums for riskier plans, as in the second component of the option, would align premiums more closely with the financial risk posed to PBGC; currently, premiums increase only with underfunding, even though other factors can also generate greater risk for PBGC. By raising the cost of maintaining riskier plans, that change would boost the incentive for employers to fully fund their plans and reduce the risks of their plans in other ways.

A disadvantage of increasing premiums is that the higher costs of underfunding might lead more businesses to restrict growth in the benefits offered in their pension plans. Also, increasing premiums would raise the risk that financially weak employers would terminate their plans. A disadvantage of simply increasing variable-rate premiums as they are currently structured is that the charges limit only one risk factor (underfunding), and changing the formula to incorporate additional risk factors (such as the financial condition of the firms sponsoring the plans) would add complexity.

RELATED CBO PUBLICATIONS: A Guide to Understanding the Pension Benefit Guaranty Corporation (September 2005), www.cbo.gov/publication/17179; and The Risk Exposure of the Pension Benefit Guaranty Corporation (September 2005), www.cbo.gov/publication/17160

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Eliminate Concurrent Receipt of Retirement Pay and Disability Compensation for Disabled Veterans

											То	tal
(Billions of dollars)	201 4	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-9	-11	-11	-11	-12	-13	-13	-15	-14	-41	-108
Note: This option woul	ld take ef	fect in O	ctober 2	2014.								

Military service members who retire—either following 20 or more years of military service under the longevitybased retirement program or early because of a disability—are eligible for retirement annuities from the Department of Defense (DoD). In addition, veterans with medical conditions or injuries that were incurred or worsened during active-duty military service (excluding those resulting from willful misconduct) are eligible for disability compensation from the Department of Veterans Affairs (VA).

Until 2003, military retirees who were eligible for disability compensation could not receive both their full retirement annuity and their disability compensation. Instead, they had to choose between receiving their full retirement annuity from DoD or receiving their disability benefit from VA and forgoing an equal amount of their DoD retirement annuity; that reduction in the retirement annuity is generally referred to as the VA offset. Because the retirement annuity is taxable and disability compensation is not, most retirees chose the second alternative.

As a result of several laws, starting with the National Defense Authorization Act for 2003, two classes of retired military personnel who receive VA disability compensation (including those who retired before the enactment of those laws) can now receive payments that make up for part or all of the VA offset, benefiting from what is often called concurrent receipt. Specifically, retirees whose disabilities arose from combat are eligible for combat-related special compensation (CRSC), and veterans who retire with 20 or more years of military service and who receive a VA disability rating of 50 percent or more are eligible

for what is termed concurrent retirement and disability pay (CRDP). CRSC is exempt from federal taxes, but CRDP is not; some veterans would qualify for both types of payments but must choose between the two.

This option would eliminate concurrent receipt of retirement pay and disability compensation beginning in 2015: Military retirees currently drawing CRSC or CRDP would no longer receive those payments, nor would future retirees. As a result, the option would reduce federal spending by \$108 billion between 2015 and 2023, the Congressional Budget Office estimates.

In 2012, of the roughly 2 million military retirees, about half were subject to the VA offset; about 40 percent of that latter group—or 420,000 retirees—got concurrent receipt payments totaling \$7 billion. Spending for concurrent receipt, which was just over \$1 billion in 2005, has climbed sharply because of both an expansion of the program and an increase in the share of military retirees receiving disability compensation. In particular, the share of military retirees receiving a longevity-based retirement annuity who also receive disability compensation rose from 33 percent in 2005 to 45 percent in 2012.

One argument for this option is that disabled veterans would no longer be compensated twice for their service, reflecting the reasoning underlying the creation of the VA offset. However, military retirees who receive VA disability payments would still receive higher after-tax payments than would retirees who are not disabled and who have the same retirement annuity because VA disability benefits are not taxed. An argument against this option is that the DoD retirement system and the VA disability program compensate for different characteristics of military service: rewarding longevity in the former case and remunerating for pain and suffering in the latter. In addition, a determination of disability by VA is a gateway to receiving other VA services (such as health care or vocational training), yet many veterans consider the disability-rating process onerous. If fewer retirees applied for VA disability compensation because concurrent receipt was no longer available, some veterans might bypass other VA services for which they would be entitled otherwise. Moreover, some retirees would find the loss of income financially difficult.

RELATED OPTIONS: Mandatory Spending, Options 21 and 22 RELATED CBO PUBLICATION: *Costs of Military Pay and Benefits in the Defense Budget* (November 2012), www.cbo.gov/publication/43574

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Military retirement	0	*	*	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.2	-2.1
CSRS and FERS	<u>0</u>	*	-0.1	-0.2	-0.2	-0.4	-0.5	-0.6	-0.7	-0.8	<u>-0.5</u>	<u>-3.5</u>
Total	0	*	-0.1	-0.2	-0.4	-0.5	-0.7	-1.0	-1.2	-1.3	-0.8	-5.5

Notes: This option would take effect in January 2015.

* = between -\$50 million and zero; CSRS = Civil Service Retirement System; FERS = Federal Employees Retirement System.

In 2012, the federal government paid pension benefits of about \$75 billion to civilian retirees and their survivors and roughly \$50 billion to military retirees and their survivors. About 85 percent of current civilian employees are accruing those benefits through the Federal Employees Retirement System (FERS), and most of the others chose to remain in its predecessor, the Civil Service Retirement System (CSRS). In both systems, the size of an individual's annuity is based on the average of his or her earnings over the three consecutive years with the highest earnings, but the formula linking that average to the pension amount differs between the systems. Similarly, the size of a military retiree's annuity is based on the average of his or her basic pay (not including special types of pay and allowances) over the 36 months of his or her career with the highest pay. To qualify for retirement pay, members of the military must serve in the armed forces for at least 20 years. (They can retire earlier if they become disabled.)

This option would use a five-year average for civilian retirees and a 60-month average for military retirees instead of the three-year and 36-month averages used under current law—to compute benefits for federal workers who retire beginning in January 2015. That change would reduce annuities by about 3 percent, on average, for new retirees, saving the federal government \$6 billion from 2015 through 2023, the Congressional Budget Office estimates. Because annuities are typically larger for civilian retirees in CSRS and military retirees than for civilian retirees in FERS, the former groups of retirees would tend to see the largest reductions in benefits. In 2015, this option would affect new retirees in roughly these numbers: 67,000 in FERS, 28,000 in CSRS, and 60,000 in the military's system.

One rationale for using the longer period for determining average earnings is that doing so would better align federal practices with practices in the private sector, where pensions are commonly based on a five-year average of earnings. More broadly, this option would shift the ratio of deferred compensation to current compensation in the federal government toward the ratio in the private sector. Although a substantial number of private-sector employers no longer provide health insurance benefits for retirees and have shifted from defined benefit pension plans to defined contribution plans that require smaller contributions from employers, the federal government has not substantially reduced the retirement benefits it provides. As a result, federal employees receive a much larger portion of their compensation in retirement benefits than private-sector workers do, on average. Consequently, reducing pensions might be less harmful to the federal government's ability to compete with the private sector in attracting and retaining highly qualified personnel than a reduction in current compensation would be.

A rationale against this option is that cutting retirement benefits would reduce the attractiveness of the overall compensation provided by the federal government, which would discourage some people from entering federal service and hamper the ability of the government to retain its current workforce. This option would have a particularly large impact on the compensation available to military personnel and civilians in CSRS. Whereas federal employees participating in FERS also receive government contributions to the 401(k)–like Thrift Savings Plan, military personnel and civilians in CSRS do not. This option would encourage some younger service members to leave the military after several years rather than remain for an entire career and receive retirement benefits, and it would cause some federal civilian employees to retire earlier than they otherwise would because additional federal service would result in smaller increases in their retirement benefits.

RELATED OPTION: Revenues, Option 36

RELATED CBO PUBLICATIONS: Comparing the Compensation of Federal and Private-Sector Employees (January 2012), www.cbo.gov/ publication/42921; Justin Falk, Comparing Benefits and Total Compensation in the Federal Government and the Private Sector, Working Paper 2012-04 (January 2012), www.cbo.gov/publication/42923; and Costs of Military Pay and Benefits in the Defense Budget (November 2012), www.cbo.gov/publication/43574

Tighten Eligibility and Determinations of Income for the Supplemental Nutrition Assistance Program

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Apply income and asset limits to categorically eligible households	0	-0.5	-1.3	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-4.3	-10.3
Lower the gross income limit to 100 percent of the federal poverty guidelines	0	-0.1	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.9	-1.7
Eliminate the automatic deduction from income for recipients of LIHEAP benefits	0	-0.7	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-1.3	-1.3	-4.6	-10.8
All of the above policies ^a	0	-3.0	-6.2	-6.1	-5.9	-5.8	-5.7	-5.7	-5.7	-5.6	-21.2	-49.8

Notes: This option would take effect in October 2014.

LIHEAP = Low Income Home Energy Assistance Program.

a. If all three policies were enacted together, the total effects would be greater than the sum of the effects for each policy because of interactions among the approaches. In particular, the savings from lowering the gross income limit would be greater if the income and asset limits were applied to categorically eligible households.

The Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp program) provides benefits to low-income households to help them purchase food. Eligibility is generally based on participation in other government assistance programs or on the income and assets of a household. Most households that receive SNAP benefits—about 90 percent in fiscal year 2011—are considered to be "categorically eligible"; that is, they automatically qualify for benefits on the basis of their participation in other federal or state programs.

Among categorically eligible households, the majority almost three-quarters in 2011—qualify for benefits under what is termed broad-based categorical eligibility. Namely, all household members receive or are authorized to receive *noncash* benefits from the Temporary Assistance for Needy Families (TANF) program (such as child care, transportation assistance, or even a token benefit such as a pamphlet describing TANF). The remaining categorically eligible households—roughly one-quarter in 2011—are ones in which all members receive *cash* assistance from TANF, Supplemental Security Income (SSI), or certain state programs that serve people with low income.¹

Households that receive SNAP benefits but are not categorically eligible for the program—about 10 percent of all participating households in 2011—qualify by meeting certain income and asset tests set by law that vary depending on households' characteristics. For households that do not include an elderly or disabled person, total income must be less than or equal to 130 percent of the federal poverty guidelines (commonly known as the federal poverty level, or FPL), and cash assets must be less than or equal to \$2,000. For households that include an elderly or disabled person, different tests apply.

This option encompasses three approaches for reducing SNAP spending. The first approach would apply the standard income and asset requirements to people who would otherwise be entitled to benefits through broadbased categorical eligibility. The Congressional Budget

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^{1.} SSI provides cash assistance to people who are disabled, aged, or both and who have low income and few assets.

Office estimates that this approach would yield federal savings of \$10 billion from 2015 to 2023.

The second approach would lower the income limit for households that are not categorically eligible for benefits and that have no elderly or disabled members. For those households, the approach would lower the limit from 130 percent of the FPL to 100 percent. The approach would yield federal savings of \$2 billion from 2015 to 2023, CBO estimates.

The third approach would modify how net income-the measure used to determine benefit amounts-is calculated for some households. Under current law, net income is calculated by deducting certain amounts from a household's gross income, including a portion of earnings and certain expenses for shelter, dependent care, and medical care. This approach would modify those deductions from income by changing how receiving energy assistance payments (such as those through the Low Income Home Energy Assistance Program, or LIHEAP) affects the deductible amount. Under current law, households qualify for a heating and cooling standard utility allowance (HCSUA), which is typically worth several hundred dollars a month, if they pay heating or cooling expenses or if they receive any assistance through LIHEAP. The number of households claiming the utility allowance through LIHEAP has increased in recent years, in part because some states now send token LIHEAP benefit amounts (typically between \$1 and \$5 and typically only once per year) to SNAP participants so they can qualify for the allowance. This approach would eliminate that automatic qualification for the allowance, thereby allowing only households that pay heating or cooling expenses to claim the related deductions. The approach would yield federal savings of \$11 billion over the 2015-2023 period, CBO estimates.

CBO expects that implementing all three approaches simultaneously would yield savings of \$50 billion through 2023, considerably more than the sum of the effects of the three approaches taken one at a time. When considered alone, lowering the income limit for eligibility for SNAP from 130 percent to 100 percent of the FPL would not affect participants who were eligible for benefits through broad-based categorical eligibility. However, if broad-based categorical eligibility was eliminated and the income limit for eligibility was lowered to 100 percent of the FPL simultaneously, eligibility for people who are not elderly and not disabled would be based on the lower income limit. As a result, the savings from implementing those two approaches together would be larger than the sum of the savings from implementing either of them separately. By contrast, eliminating SNAP participants' ability to automatically qualify for the utility allowance because they receive assistance through LIHEAP would produce smaller federal savings if implemented together with the other two approaches: Because those approaches would reduce the number of recipients of SNAP benefits, the changed treatment of LIHEAP assistance would affect fewer people.

A rationale for eliminating broad-based categorical eligibility or for lowering the income limit for eligibility is that doing so would focus SNAP benefits on those most in need. A rationale for eliminating the automatic utility allowance based on participation in LIHEAP is that doing so would end a practice that artificially inflates deductions from income. Moreover, some of the households receiving token LIHEAP benefits have their heating and cooling costs included in their rent, and their rent is already considered in the deductions of expenses for shelter. Finally, eliminating broad-based categorical eligibility or the automatic utility allowance would make the eligibility for and benefits from SNAP more consistent across states because states currently have different policies regarding other assistance programs and LIHEAP.

An argument against eliminating broad-based categorical eligibility or eliminating the automatic utility allowance is that doing so would increase the complexity and time involved in verifying information on SNAP applications, which would probably result in more errors and greater administrative costs. Adopting either of those approaches would also increase the paperwork for applicants. An argument against eliminating broad-based categorical eligibility or lowering the income limit for eligibility to 100 percent of the FPL is that doing so would eliminate benefits for some households in difficult financial situations.

RELATED OPTIONS: Mandatory Spending, Options 12 and 13 RELATED CBO PUBLICATION: *The Supplemental Nutrition Assistance Program* (April 2012), www.cbo.gov/publication/43173

Eliminate Subsidies for Certain Meals in the National School Lunch and School Breakfast Programs

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	-0.1	-0.7	-1.0	-1.0	-1.1	-1.1	-1.2	-1.2	-1.3	-1.3	-3.9	-10.1
Note: This option wou	ld take ef	fect in J	ulv 2014	L.								

The National School Lunch Program and the School Breakfast Program provide funds that enable public schools, nonprofit private schools, and residential child care institutions to offer subsidized meals and snacks to students. In the 2013–2014 school year, federal subsidies for each lunch are \$0.57 and for each breakfast are \$0.28 for many students in households with income above 185 percent of the federal poverty guidelines (commonly known as the federal poverty level, or FPL). The programs provide larger subsidies for meals served to students from households with income at or below 185 percent of the FPL and above 130 percent of the FPL, and still larger subsidies to students from households with income at or below 130 percent of the FPL. As a result of the subsidies, students from households with income at or below 130 percent of the FPL pay nothing for their meals.

This option would eliminate the subsidies for meals served to students from households with income greater than 185 percent of the FPL beginning in July 2014. The Congressional Budget Office estimates that the option would reduce federal spending by \$10 billion through 2023.

Under current law, federal subsidies for meals served to students from households with income greater than 185 percent of the FPL can include base cash subsidies, certain commodities, and, for those schools in compliance with federal nutrition guidelines, an additional cash subsidy. In the 2013–2014 school year, the base cash subsidies for meals served to students from households with income greater than 185 percent of the FPL are \$0.28 per lunch and \$0.28 per breakfast; for after-school snacks provided to such students, the amount is \$0.07. All participating schools also receive commodities—food from the Department of Agriculture, such as fruit and meat with a value of \$0.23 per lunch. Schools do not receive commodities for breakfasts or snacks. Schools that are in compliance with federal nutrition guidelines receive an additional cash subsidy of \$0.06 per lunch. (Schools in Alaska and Hawaii and schools with large numbers of meals served to students from households with income at or below 185 percent of the FPL receive additional subsidies.)

The primary rationale for this option is that it would target federal subsidies to those most in need. No clear justification exists for subsidizing meals for students who are not from low-income households, and because the subsidies for meals served to students from households with income greater than 185 percent of the FPL are small, the effect of the option on those students and the members of their households would probably be minimal.

A rationale against this option is that schools would probably offset part or all of the loss of the subsidies by increasing the prices they charge higher-income students for meals. In addition, schools that incur costs to administer the programs that are greater than the subsidies they receive for meals served to students from households with income at or below 185 percent of the FPL might leave the programs. Eligible students at such schools would no longer receive subsidized meals, and the meals served at those schools would no longer have to meet any of the other requirements of the programs (including the nutrition guidelines).

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RELATED OPTIONS: Mandatory Spending, Options 11 and 13

Mandatory Spending—Option 13

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Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Mandatory Outlays												
SNAP	0	-38	-38	-35	-33	-31	-29	-27	-26	-24	-144	-281
SSI	0	-3	-8	-4	1	-5	-5	-6	-12	-7	-14	-49
Child nutrition programs	<u>0</u>	<u>-6</u>	<u>-7</u>	7_	<u>-7</u>	<u>-8</u>	<u>-9</u>	<u>-9</u>	<u>-10</u>	<u>-11</u>	27	74
Total	0	-48	-52	-46	-40	-44	-43	-42	-48	-42	-186	-404
Change in Discretionary Outlays for SSI	0	-4	-4	-4	-4	-5	-5	-5	-5	-5	-17	-42

Notes: This option would take effect in October 2014.

SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income.

A number of sizable federal programs assist people who have relatively low income. Such programs include the Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), and a collection of child nutrition programs. Federal spending for SNAP, SSI, and child nutrition programs in 2013 was \$156 billion, the Congressional Budget Office estimates, or roughly 5 percent of total federal spending.

SNAP, formerly known as the Food Stamp program, provides benefits to low-income households to help them purchase food. Federal outlays for the program were \$83 billion in 2013, CBO estimates. SSI provides cash assistance to people who are disabled, aged, or both and who have low income and few assets; spending (most of it mandatory) for that program totaled an estimated \$54 billion that year. Child nutrition programs subsidize meals provided to children at school, at child care centers, in after-school programs, and in other settings; in 2013, spending for those programs was an estimated \$19 billion, most of it for the National School Lunch Program and the School Breakfast Program.

This option would convert SNAP, SSI, and the child nutrition programs into separate, smaller block grants to the states beginning in 2015. Each of the three block grants would provide a set amount of funding to states each year, and states would be allowed to make significant changes to the structure of the programs. The annual funding provided would equal federal outlays for each program in 2007, increased to account for inflation for all urban consumers since then. (The 2007 starting values would include outlays for both benefits and administrative costs and, for child nutrition programs, would represent total spending for that set of programs.)

By CBO's estimates, this option would reduce spending on SNAP by \$281 billion from 2015 through 2023—or by 41 percent of the amount that would be spent under current law. For SSI, mandatory spending during that period would decline by \$49 billion, or by 9 percent. For child nutrition programs, the reduction would be \$74 billion, or 33 percent. In addition, funding for the administration of SSI is provided annually in discretionary appropriations; this option would eliminate those appropriations, which would result in \$42 billion in discretionary savings during the 2015–2023 period provided that appropriations were adjusted accordingly.

The budgetary effects of switching SNAP, SSI, and child nutrition programs to block grants would depend heavily on the formulas used to set the amounts of the grants. For this option, the inflation-adjusted value of the grants would remain at 2007 amounts. If, instead, the grants were fixed in nominal dollars (as is, for example, the block grant for Temporary Assistance for Needy Families), savings would be larger (and increasingly so) each year. By contrast, if the grants were indexed for both inflation and population growth—that is, if they were allowed to grow at faster rates than specified—savings would be smaller (and increasingly so) each year. Savings would also be less if the starting values for the grants were based on higher amounts than the outlays in 2007—for example, the outlays of those programs in more recent years. And savings would be less if spending in 2015 and the following few years was adjusted downward from CBO's current-law projections more slowly, rather than immediately reverting to the 2007 amounts adjusted for inflation.

Although the formula used to set the amount of each block grant in this option is the same, the effects on spending for the programs would differ. For SNAP, the effect on projected spending would be larger early on, whereas for the child nutrition programs and, in general, for SSI, the effects would be larger in the later years.

For SNAP, the estimated reduction in federal spending from converting to the specified block grant would decline over time, both in dollar terms and as a share of projected spending under current law. CBO projects that, under current law, spending on SNAP will decline over the 2015–2023 period because the number of people receiving benefits will decline as the economy improves and the effect of the decline in the number of participants will outweigh the increase in per-person benefits (SNAP benefits are adjusted annually for changes in food prices). By contrast, under the option, spending on SNAP would increase over time. Under current law, spending on SNAP will be \$79 billion in 2015, CBO projects; this option would reduce that amount by an estimated \$38 billion, or by about one-half. In 2023, spending on SNAP under current law is projected to be \$73 billion; the option would cut that figure by an estimated \$24 billion, or by about one-third.

For SSI, the estimated reduction in mandatory outlays from converting to the specified block grant would generally increase over time, both in dollar terms and as a share of projected spending under current law. (The reduction in spending would bounce up and down in a few years because, as scheduled under current law, benefit payments in October shift to the previous fiscal year when the first day of the month falls on a weekend.) The option would result in greater reductions in the later years primarily because, by CBO's estimates, participation in the program will increase. Under current law, mandatory spending on SSI will be \$52 billion in 2015, CBO projects; this option would reduce that spending by \$3 billion, or by 6 percent. In 2023, mandatory spending on SSI under current law is projected to be \$66 billion; the option would cut that figure by an estimated \$7 billion, or by 11 percent.¹

For child nutrition programs, the estimated reduction in federal spending from converting to the specified block grant would increase over time, both in dollar terms and as a share of projected spending under current law. In 2015, the estimated reduction in spending would be \$6 billion, or 28 percent; and in 2023, the estimated reduction would be \$11 billion, or 37 percent. The savings would be greater in the later years of the period because most spending for the programs under current law is indexed to an inflator that adjusts benefits for changes in the price of food away from home—which CBO projects will be larger than the changes in prices to which the specified block grant is indexed—and because, by CBO's expectations, participation in the programs will grow.

A rationale for this option is that block grants would make spending by the federal government more predictable. The programs affected by this option are currently legally obligated to make payments to people who meet the eligibility criteria. Therefore, spending increases or decreases without any legislative changes. For example, outlays for SNAP benefits more than doubled between 2007 and 2011, primarily because of an increase in the number of participants that stemmed in large part from the deterioration in labor market conditions. And even if the number of participants in a program does not change, the benefits paid per person can change if the income of participants changes.

Another rationale for the option is that state programs might better suit local needs and might be more innovative. States could define eligibility and administer benefits in ways that might better serve their populations. Moreover, allowing states to design their own programs would result in more experimentation, and some states could adopt approaches that had been successful elsewhere.

A rationale against this option is that, from 2015 to 2023, it would cut mandatory federal spending for

^{1.} Because the block grants as specified in this option bundle the funding for both benefits and administration as mandatory spending, the option would effectively move the cost of administration for SSI from discretionary to mandatory spending. That shift reduces the savings in mandatory spending by the cost of the administration of the program, adjusted for inflation.

programs that support lower-income people by \$404 billion (with an additional cut of \$42 billion in discretionary spending, if appropriations were reduced as specified). Who was affected by that cut in spending and how they were affected would depend on how states structured their programs and how state spending changed. But such a cut—amounting to 28 percent of the projected mandatory spending on SNAP, SSI, and child nutrition programs during those years—would almost certainly eliminate benefits for some people who would have otherwise received them, as well as significantly reduce the benefits of some people who remained in the programs. Another rationale against this option is that block grants would not be as responsive to economic conditions as the current federal programs are. The automatic changes in spending on benefits under current law help stabilize the economy, reducing the depth of recessions during economic downturns. Those stabilizing effects would be lost under the option. Furthermore, if federal spending did not increase during a future economic downturn and the number of people eligible for benefits increased, states that could not increase their spending (probably at a time when their own revenues were declining) would have to reduce the benefits received by each participant or tighten eligibility, perhaps adding to the hardship for families just when their need was greatest.

RELATED OPTIONS: Mandatory Spending, Options 11, 12, and 14; and Health, Option 1

RELATED CBO PUBLICATIONS: *The Supplemental Nutrition Assistance Program* (April 2012), www.cbo.gov/publication/43173; and *Supplemental Security Income: An Overview* (December 2012), www.cbo.gov/publication/43759

Eliminate Supplemental Security Income Benefits for Children

Change in Mandatory												То	tal
Outlays 0 -10 -11 -11 -10 -11 -12 -12 -13 -13 -42 -1	(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Discretionary	• •	0	-10	-11	-11	-10	-11	-12	-12	-13	-13	-42	-103
Outlays 0 -1 -1 -1 -1 -1 -1 -1 -1 -1 -4 -4	• • •	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-4	-10

The Supplemental Security Income (SSI) program provides cash assistance to people who are disabled, aged, or both and who have low income and few assets. Currently, about 60 percent of SSI recipients are disabled adults (between the ages of 18 and 64), about 15 percent are disabled children (under age 18), and about 25 percent are aged adults (age 65 or older) with or without disabilities. To qualify for benefits, adults age 65 or older need to have low income and few assets, and adults younger than 65 must also demonstrate that they have a disability that prevents them from participating in "substantial gainful activity," which in 2013 is considered to mean work that would produce earnings of more than \$1,040 a month. Children are not expected to work, so to qualify for benefits, they must have "marked and severe functional limitations" and, in most cases, must live in a household with low income and few assets. The maximum SSI benefit is specified in law and indexed to inflation, and the amount someone receives is the difference between that maximum and a measure of the person's income. In 2013, the maximum benefit is \$710 per month, and the average benefit is about three-quarters as large.

This option would eliminate SSI benefits for children. The Congressional Budget Office estimates that making this change would reduce mandatory spending by \$103 billion through 2023. The administrative costs of SSI are paid through annual discretionary appropriations; by eliminating the need to administer the program for children, the option would generate an additional \$10 billion in discretionary savings over the same period if appropriations were adjusted accordingly.

One rationale for limiting SSI to adults is to refocus the program on replacing earnings for people who cannot work, which was the objective stated in the legislation that established SSI in 1974. Policymakers might choose to make this change to SSI and leave other programs unchanged. Alternatively, if policymakers wanted to continue to provide support for disabled children, they could create a new program to do so or they could increase funding for other existing programs. For example, states could be given grants to provide educational, medical, and social services to disabled children and their families. That approach might help to ensure that the appropriate services are effectively integrated with one another, and it might increase policymakers' confidence that government spending directly benefits disabled children-whereas SSI benefits are usually paid to children's parents or guardians, without a way to ensure that the money is used in ways that help the children. As other examples, federal funding for Temporary Assistance for Needy Families (TANF) could be expanded, or federal funding for states' education programs could be expanded. To the extent that funds that would have been used to provide SSI benefits for children were instead used for a new program or to increase the resources of other existing programs, federal savings from this option would be correspondingly reduced.

One rationale for maintaining SSI benefits for children, and against this option, is that the benefits are generally well targeted to needy people. Parents of disabled children—especially mothers—tend to work less than other parents, which lowers their income, and even parents who receive government-provided educational and medical services for disabled children still face other costs associated with those disabilities. According to one study,

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forgone work by mothers with a disabled child reduces their families' earnings by roughly \$5,000 per year, on average, and the direct cost of treatments for disabled children is around \$1,000 per year, on average.¹ (Those treatments include health care; therapeutic, behavioral, and educational services; transportation; services by caregivers; and other special needs services.) However, that study did not attempt to estimate how much of the reduction in mothers' work results from SSI itself; because SSI benefits are reduced by 50 cents for each dollar of recipients' monthly wages and self-employment income after the first \$65, the availability of SSI reduces the incentive to work.

RELATED OPTION: Mandatory Spending, Option 13

RELATED CBO PUBLICATION: Supplemental Security Income: An Overview (December 2012), www.cbo.gov/publication/43759

^{1.} Ron Haskins, "The SSI Program for Children: Time for Change?" *Children With Disabilities*, vol. 22, no. 1 (Spring 2012), http://tinyurl.com/kk5loph (PDF, 290 KB); and Mark Stabile and Sara Allin, "The Economic Costs of Childhood Disability," Children With Disabilities, vol. 22, no. 1 (Spring 2012), http://tinyurl.com/dyqqroh.

Mandatory Spending—Option 15

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											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Implement pure price indexing	0	0	-0.1	-0.7	-2.2	-5.1	-9.7	-16.2	-24.6	-34.8	-3.0	-93.4
Implement progressive price indexing	0	0	-0.1	-0.5	-1.4	-3.1	-6.0	-9.9	-15.1	-21.4	-2.0	-57.5

Link Initial Social Security Benefits to Average Prices Instead of Average Earnings

Social Security benefits for retired and disabled workers are based on their average earnings over a lifetime. The Social Security Administration uses a statutory formula to compute a worker's initial benefits, and through a process known as wage indexing, the benefit formula changes each year to account for economywide growth of wages. Average initial benefits for Social Security recipients therefore tend to grow at the same rate as do average wages, and such benefits replace a roughly constant portion of wages. (After people become eligible for benefits, their monthly benefits are adjusted annually to account for increases in the cost of living but not for further increases in wages.)

One approach to constrain the growth of Social Security benefits would be to change the computation of initial benefits so that the real (inflation-adjusted) value of average initial benefits did not rise over time. That approach, often called "pure" price indexing, would allow increases in average real wages to result in higher real Social Security payroll taxes but not in higher real benefits. The first alternative in this option takes that approach. It would link the growth of initial benefits to the growth of prices (as measured by changes in the consumer price index for all urban consumers) rather than to the growth of average wages, beginning with participants who became eligible for benefits in 2015.

That alternative would reduce federal outlays by \$93 billion through 2023, the Congressional Budget Office estimates. By 2038, scheduled Social Security outlays would be reduced by 18 percent relative to what would occur under current law; when measured as a percentage of total economic output, the reduction would be 1.1 percentage points, as outlays would decline from
 6.2 percent to 5.1 percent of gross domestic product.

Under pure price indexing, the reduction in payments relative to those that are scheduled to be paid under current law would be larger for each successive cohort of beneficiaries; the extent of the reduction would be determined by the growth of average real wages. For example, if real wages grew by 1.4 percent annually (approximately the rate underlying CBO's long-term Social Security projections), workers who were newly eligible for benefits in the first year the policy was in effect would receive about 1.4 percent less than they would have received under the current rules; those becoming eligible in the second year would receive 2.8 percent less; and so on. The actual incremental reduction would vary from year to year, depending on the growth of real earnings. Under pure price indexing, people newly eligible for benefits in 2038, CBO estimates, would experience a reduction in benefits of about one-third relative to the benefits scheduled under current law.

Another approach, called "progressive" price indexing, would retain the current benefit formula for workers who had lower earnings and would reduce the growth of initial benefits for workers who had higher earnings. Currently, the formula for calculating initial benefits is structured so that workers who have higher earnings receive higher benefits, but the benefits paid to workers with lower earnings replace a larger share of their earnings.

Under the alternative with progressive price indexing in this option, initial benefits for the 30 percent of workers with the lowest lifetime earnings would increase with average wages, as they are currently slated to do, whereas initial benefits for other workers would increase more slowly, at a rate that depended on their position in the distribution of earnings. For example, for workers whose earnings put them at the 31st percentile of the distribution, benefits would rise only slightly more slowly than average wages, whereas for the highest earners, benefits would rise with prices-as they would under pure price indexing. Thus, under progressive price indexing, the initial benefits for most workers would increase more quickly than prices but more slowly than average wages. As a result, the benefit formula would gradually become flatter, and after about 60 years, everyone in the top 70 percent of earners would receive the same monthly benefit. A partially flat benefit formula would represent a significant change from Social Security's traditional structure, under which workers who pay higher taxes receive higher benefits.

Progressive price indexing would reduce scheduled Social Security outlays less than would pure price indexing, and beneficiaries with lower earnings would not be affected. Real annual average benefits would still increase for all but the highest-earning beneficiaries. Benefits would replace a smaller portion of affected workers' earnings than they would under current law but a larger portion than they would under pure price indexing.

A switch to progressive price indexing would reduce federal outlays by \$58 billion through 2023, CBO estimates. By 2038, outlays for Social Security would be reduced by 10 percent; when measured as a percentage of total economic output, the reduction would be 0.6 percentage points, as outlays would fall from 6.2 percent to 5.6 percent of gross domestic product.

Under both approaches, the reductions in benefits relative to those under current law would be greatest for beneficiaries in the distant future. Those beneficiaries, however, would have had higher real earnings during their working years and thus a greater ability to save for retirement.

An advantage of both approaches in this option is that, although they would reduce outlays for Social Security compared with those scheduled to be paid under current law, average inflation-adjusted benefits in the program would not decline over time. If the pure price-indexing approach was adopted, future beneficiaries would generally receive the same real monthly benefit paid to current beneficiaries, and they would, as average longevity increased, receive larger total lifetime benefits.

But because benefits would no longer be linked to average wages, a disadvantage of both approaches is that affected beneficiaries would no longer share in overall economic growth. As a result, benefits would replace a smaller portion of workers' earnings than they do today. Moreover, relative to currently scheduled benefits, reductions would be largest during periods of high wage growth.

RELATED OPTIONS: Mandatory Spending, Options 16, 17, and 18

RELATED CBO PUBLICATIONS: *Social Security Policy Options* (July 2010), www.cbo.gov/publication/21547; letter to the Honorable Paul Ryan providing CBO's analysis of the Roadmap for America's Future Act of 2010 (January 27, 2010), www.cbo.gov/publication/41860; and *Long-Term Analysis of S. 2427, the Sustainable Solvency First for Social Security Act of 2006* (attachment to a letter to the Honorable Robert F. Bennett, April 5, 2006), www.cbo.gov/publication/17701

Mandatory Spen	ding_	Optior	า 16								Fur	nction 650
Raise the Full R	etirem	ent Aş	ge for	Socia	l Secu	rity						
											Το	otal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-0.2	-0.7	-1.6	-2.9	-5.8	-9.2	-11.0	-12.5	-14.4	-5.4	-58.2
Note: This option wou	ld take ef	fect in Ja	anuary 20	015.								

The age at which workers become eligible for full retirement benefits from Social Security-the full retirement age, also called the normal retirement age-depends on their year of birth. For workers born before 1938, the full retirement age was 65. It increased in two-month increments until it reached 66 for workers born in 1943. For workers born between 1944 and 1954, the full retirement age holds at 66, but it then increases again in two-month increments until reaching 67 for workers born in 1960 or later. As a result, workers who turn 62 in 2022 or later will be subject to a full retirement age of 67. Workers will continue to be able to receive benefits at age 62, but at that age, the amount of benefits will be smaller than the amount they would receive by waiting until the full retirement age to claim benefits.

Under this option, the full retirement age would increase to 67 more quickly and would then increase further. Specifically, the full retirement age would increase in twomonth increments for six years, rising to 66 years and 2 months for workers born in 1953 (who turn 62 in 2015) and reaching 67 for workers born in 1958 (who turn 62 in 2020). Thereafter, it would continue to increase by two months per year until reaching 70 for workers born in 1976 or later (who turn 62 in 2038 or later). As under current law, workers could still choose to begin receiving reduced benefits at 62, but the reductions would be larger. The benefits for workers who qualify for disability insurance would not be reduced under this option.

This approach would reduce lifetime Social Security benefits. Depending on the age at which a worker claims benefits, a one-year increase in the full retirement age is equivalent to a reduction in the monthly benefit of between 5 percent and 8 percent. Workers could maintain the same monthly benefit by claiming benefits at a later age, but then they would receive benefits for fewer years. Because many workers retire at the full retirement age, increasing that age is likely to result in beneficiaries'

remaining employed longer and claiming Social Security benefits later than they would if a policy with identical benefits at each age was implemented through adjustments in the benefit formula. The additional work would increase total output and boost federal revenues from income and payroll taxes. It would also result in higher future Social Security benefits, although the increase in benefits would be smaller than the increase in revenues. The estimates shown here for this option over the next decade do not include those effects of additional work.

This option would shrink federal outlays by \$58 billion from 2015 through 2023, the Congressional Budget Office estimates. By 2038, the option would reduce Social Security outlays relative to what would occur under current law by 6 percent; when measured as a percentage of total economic output, the reduction would be 0.4 percentage points, as outlays would fall from 6.2 percent to 5.9 percent of gross domestic product.

A rationale for this option is that people who turn 65 today will, on average, collect Social Security benefits for significantly longer than retirees did in the past, and the average life span in the United States is expected to continue to lengthen. In 1940, life expectancy at age 65 was 11.9 years for men and 13.4 years for women. Life expectancy has risen by more than five years for 65-year-olds, to 17.9 years for men and 20.2 years for women, and CBO projects that by 2038, those figures will increase to 20.2 years and 22.5 years, respectively. Therefore, a commitment to provide retired workers with a certain monthly benefit beginning at age 65 in 2038 will be significantly more costly than is that same commitment made to today's recipients.

A disadvantage of this option, like any proposal to reduce retirement benefits but not disability benefits, is that it would increase the incentive for older workers nearing retirement to apply for disability benefits. Under current

law, workers who retire at age 62 in 2038 will receive 70 percent of their primary insurance amount (what they would have received if they had claimed benefits at their full retirement age); if they qualify for disability benefits, however, they will receive 100 percent of that amount. Under this option, workers who retired at 62 in 2038 would receive only 55 percent of their primary insurance amount; they would still receive 100 percent if they qualified for disability benefits. (The estimates of the budgetary effects of this option account for the effect on the Social Security Disability Insurance program.) To eliminate that added incentive to apply for disability benefits, policymakers could narrow the difference by also reducing scheduled disability payments. For example, disability benefits could be reduced for people age 53 or older, or eligibility for disability benefits could be limited to people younger than 62 (as discussed in detail in the first related publication cited below). However, that additional change would adversely affect people who would no longer qualify for disability benefits.

Some proposals to increase the full retirement age would also increase the early eligibility age, when participants may first claim retirement benefits, from 62. Increasing only the full retirement age would reduce monthly benefit amounts and would increase the risk of poverty at older ages for people who did not respond to the increase in the full retirement age by delaying the age at which they claimed benefits. Increasing the early eligibility age along with the full retirement age would make some people wait longer to receive retirement benefits, so their average monthly payments would be higher; that outcome would help people who lived a long time. However, for people who would depend on benefits at age 62, increasing the early eligibility age could cause financial hardship, even if, over their lifetime, the total value of benefits would be generally unchanged. Increasing the early eligibility age together with the full retirement age would cause federal spending to be somewhat lower in the first few decades of the policy and higher in later decades than if only the full retirement age was increased.

RELATED OPTIONS: Mandatory Spending, Options 15, 17, 18, and 19; and Health, Option 8

RELATED CBO PUBLICATIONS: Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/ 43421; Raising the Ages of Eligibility for Medicare and Social Security (January 2012), www.cbo.gov/publication/42683; "Raise the Earliest Eligibility Age for Social Security," in *Reducing the Deficit: Spending and Revenue Options* (March 2011), www.cbo.gov/publication/22043; Social Security Policy Options (July 2010), www.cbo.gov/publication/21547; and Jae Song and Joyce Manchester, *Have People Delayed Claiming Retirement Benefits? Responses to Changes in Social Security Rules*, Working Paper 2008-04 (May 2008), www.cbo.gov/ publication/19575

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Lengthen by Thr	ree Yea	rs the	Comp	outatio	on Per	iod fo	r Soci	al Sec	urity I	Benefit	ts	
											То	otal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-0.1	-0.4	-1.1	-2.2	-3.6	-5.5	-7.6	-10.0	-12.6	-3.8	-43.2
Note: This option wou	ld take eff	ect in Ja	nuary 20	15.								

Mandatory Spending—Option 17

As required by law, the Social Security Administration calculates retirement benefits on the basis of a worker's wage history, using the worker's average indexed monthly earnings, or AIME. The current formula computes the AIME on the basis of a worker's earnings that are subject to Social Security taxes during his or her highest 35 years of earnings. If a person has worked for fewer than 35 years, the average includes years with zero earnings.

This option would lengthen the AIME computation period to 36 years for people who turn 62 in 2015, to 37 years for people who turn 62 in 2016, and to 38 years for people who turn 62 in 2017 and beyond. Extending the computation period would generally reduce benefits by requiring that additional years of lower earnings be factored into the benefit computation. The option would not change the number of years used to compute AIME amounts for disabled workers; only retirement benefits would be affected.

The option would have the largest effect on people who worked for fewer than 38 years, because they would have additional years with no earnings included in the calculation of their benefits. However, the option would reduce benefits even for people who worked 38 years or more, because almost all of those people would have lower average earnings in the additional computation years than they would have in their highest 35 years of earnings.

Lengthening the period by three years would reduce federal outlays by \$43 billion through 2023, the Congressional Budget Office estimates. By 2038, Social Security outlays would be reduced by 2 percent; when measured as a percentage of total economic output, the reduction would be 0.1 percentage point, as outlays would fall from 6.2 percent to 6.1 percent of gross domestic product. An argument in support of expanding the computation period is based on people's increased life expectancy: Because people generally live longer than they used to and are expected to live longer in the future, lengthening the computation period would encourage them to remain in the labor force longer. That additional work would increase total output. It would also extend the amount of time that people pay into the Social Security system, boosting federal revenues from income and payroll taxes, and it would result in higher future Social Security benefits (although the increase in benefits would be smaller than the increase in revenues). The estimates shown here for this option over the next decade do not include those effects of additional work.

Extending the computation period also would reduce the advantage currently enjoyed by workers who postpone entering the labor force—while they pursue advanced education, for instance. People with more education generally earn more than their counterparts who enter the labor force sooner; because a number of years of low or no earnings can now be ignored in calculating the AIME amount, the former group experiences little or no loss of benefits for any additional years spent not working and thus not paying Social Security taxes.

An argument against this option is that it would adversely affect some beneficiaries who were not able to continue working for 38 years because of circumstances they could not control, such as poor health. Other disproportionately affected workers would be parents who interrupted a career to raise children or workers who experienced long stretches of unemployment. On average, the benefit reduction would be larger for women than for men, because women tend to spend more years out of the workforce.

RELATED OPTIONS: Mandatory Spending, Options 15, 16, and 18 RELATED CBO PUBLICATION: *Social Security Policy Options* (July 2010), www.cbo.gov/publication/21547

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	*	-1	-4	-8	-14	-23	-33	-45	-58	-13	-188

Mandatory Spending—Option 18

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* = between -\$500 million and zero.

The Social Security benefits that people receive in the year they are first entitled to benefits—at age 62 for retired workers and 5 months after the onset of disability for disabled workers—depend on a formula set in law. When workers first claim Social Security benefits, payments are based on their average lifetime earnings. The formula used to translate average earnings into benefits is progressive; that is, the replacement rate—the ratio of benefits received to a worker's past earnings—is higher for people with lower average earnings than for people with higher average earnings. One way to reduce benefits would be to adjust that formula to lower benefits for all new beneficiaries.

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This option would adjust the benefit formula to reduce Social Security benefits for people who become eligible in calendar year 2015 or later. Benefits would be permanently reduced by 3 percent for people newly eligible in 2015, 6 percent for people newly eligible in 2016, and so on, up to 15 percent for people newly eligible in 2019 or later. Federal savings from that change in the formula would continue to grow in later years as more beneficiaries were subject to the cuts. The Congressional Budget Office estimates that federal outlays would be reduced by \$188 billion through 2023. By 2038, this option would reduce Social Security outlays by about 12 percent relative to what would occur under current law; when measured as a percentage of total economic output, the reduction would be 0.7 percentage points, as outlays would fall from 6.2 percent to 5.5 percent of gross domestic product.

Only future beneficiaries would be affected, so the option would not affect payments to people who turned 62 or became entitled to disability benefits before 2015. Nor would this option affect the annual cost-of-living adjustments for current or future beneficiaries.

An advantage of this option is its simplicity. The current benefit structure would be retained, and equal percentage reductions would be applied to all benefits, including those paid to survivors and dependents, which are based on the same formula used to compute workers' benefits.

Because the same benefit reductions would apply to all beneficiaries, a disadvantage is that people with lower benefits would generally experience a larger percentage reduction in total income. In particular, such people are less likely than others to have savings and sources of income outside of Social Security, such as pensions, so a reduction in Social Security benefits would result in a larger reduction in total income for that group and a greater decline in their standard of living. An alternative approach would reduce Social Security benefits by larger percentages for people with higher benefits.

Another disadvantage of this option is that reductions would be applied fairly soon. An alternative approach is to reduce Social Security benefits only for people becoming eligible for benefits 5 or 10 years in the future. That approach would give people more time to adjust to the change, but it would also reduce the budgetary savings over many years.

RELATED OPTIONS: Mandatory Spending, Options 15, 16, and 17 RELATED CBO PUBLICATION: *Social Security Policy Options* (July 2010), www.cbo.gov/publication/21547

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Mandatory Spen	aing—a	Jption	19								Fur	1Ction 650
Eliminate Eligib	ility fo	r Star	ting So	ocial S	Securi	ty Disa	ability	Benef	fits at	Age 62	or Later	
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-0.2	-0.4	-0.6	-0.9	-1.1	-1.4	-1.7	-2.1	-2.5	-2.2	-11.0

Mandatory Spending—Option 19

Note: This option would take effect in January 2015.

Under current law, people are eligible for Social Security Disability Insurance (DI) until they reach the full retirement age, which is currently 66 and is scheduled to increase gradually beginning in 2017 for those born in 1955 until it reaches 67 for workers born in 1960 or later. Workers who claim retirement benefits at age 62 rather than at their full retirement age receive lower benefits for as long as they live. In contrast, workers who at age 62 shift from being employed to receiving benefits from the DI program and who then move to Social Security's retirement program at their full retirement age are not subject to a reduction. Instead, they receive approximately the same retirement benefits in each year that they would have received if they had enrolled directly in the retirement program at their full retirement age.

That difference in benefits encourages some people between age 62 and their full retirement age to apply for DI at the same time that they apply for Social Security retirement benefits. If their DI application is approved, they receive higher benefits for the rest of their life than if they had applied only for retirement benefits. (Some people claim retirement benefits during the five-month waiting period that the DI program imposes on applicants. If they receive retirement benefits during the waiting period and then are approved for the DI program, their DI benefits and subsequent retirement benefits are reduced a little; for example, if they receive retirement benefits for five months, their future DI and retirement benefits are generally reduced by 2 percent.)

Under this option, workers would not be allowed to apply for DI benefits after their 62nd birthday or to receive DI benefits if they became eligible for benefits after that date. Under such a policy, individuals who would have become eligible for DI benefits at age 62 or later under current law would instead have to claim retirement benefits if they wanted to receive any Social Security benefits. Benefits for those people over their lifetime would be as much as 30 percent lower than the DI and retirement benefits they are scheduled to receive under current law. (The actual reduction in lifetime benefits would depend on their year of birth, the age at which they claimed retirement benefits, and their life span.) Workers who begin receiving benefits before age 62 could continue to receive those benefits until they reach the full retirement age.

By 2023, this option would affect about 450,000 disabled worker beneficiaries. The option would reduce federal outlays by \$11 billion between 2015 and 2023, the Congressional Budget Office estimates. Those savings would be the net result of a \$53 billion reduction in DI outlays and a \$42 billion increase in Social Security retirement benefits as people shifted from the DI program to the retirement program. By 2038, Social Security outlays (including both DI and retirement benefits) would be reduced by roughly 1 percent relative to what they would be under current law. (Those estimates do not include any effects of this option on spending for other federal programs, such as Medicare, Medicaid, and the Supplemental Security Income [SSI] program.)

A rationale for this option is that it eliminates the incentive for people who are applying for retirement benefits to apply for disability benefits at the same time in hopes of an outcome that advantages them financially. Moreover, workers who became disabled between age 62 and the full retirement age would still have access to Social Security retirement benefits, although those benefits would be less than the disability benefits available under current law. In addition, some beneficiaries with low income and few assets would qualify for SSI, which provides benefits for people with limited resources who are age 65 or older or who are younger than 65 and are disabled. Thus, some disabled workers could receive SSI benefits beginning at age 62 and then claim Social Security retirement benefits at the full retirement age. An argument against this option is that it would substantially reduce the support available to older people who, under current law, would be judged to be too disabled to perform substantial work. In 2011, 8 percent of workers who became newly entitled to disability benefits were age 62 or older. Those people would have received significantly lower benefits from Social Security if they had been ineligible for DI and had applied for retirement benefits instead. In addition, they also usually would have lost coverage by Medicare because that program's benefits are generally not available to people under age 65, whereas most recipients of DI become entitled to Medicare benefits 24 months after their DI benefits begin. The option's net effect on older people's participation in the labor force is unclear. On the one hand, the option would induce some people to work longer than they will under current law: Although DI benefits are available only to people who are judged unable to perform substantial work, some of those people could, in fact, work in a sufficiently supportive environment. If DI benefits were not available, some of them would work longer than they would under current law. On the other hand, the option would induce some people who were planning to work until age 62 or later to leave the labor force at age 61 so that they could apply for DI benefits. (The estimates presented here do not include any effects of changes in labor supply.)

RELATED OPTIONS: Mandatory Spending, Options 16 and 20

RELATED CBO PUBLICATIONS: Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/ 43421; Social Security Disability Insurance: Participation Trends and Their Fiscal Implications (July 2010), www.cbo.gov/publication/ 21638; and Supplemental Security Income: An Overview (December 2012), www.cbo.gov/publication/43759

Mandatory Spending—Option 20	
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Require Social S	ecurity Disability	y Insurance Appl	licants to Have	Worked	More in Recent Years
1		11			

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-0.5	-1.2	-1.9	-2.8	-3.7	-4.6	-5.6	-6.7	-7.8	-6.3	-34.8
Note: This option woul	d take eff	ect in Ja	nuary 20	15.								

To be eligible for benefits under Social Security Disability Insurance (DI), disabled workers must generally have worked 5 out of the past 10 years. Specifically, workers more than 30 years old must have earned at least 20 "quarters of coverage" in the past 10 years. In 2013, a worker receives one quarter of coverage for each \$1,160 of earnings during the year, up to a maximum of four quarters; the amount of earnings required for a quarter of coverage generally increases annually with average wages.

This option would raise that threshold for recent work by requiring disabled workers older than 30 to have earned 16 quarters in the past six years, which is usually equivalent to working four of the past six years. The change in policy would apply to people seeking benefits in 2015 and later and would not affect blind applicants. It would reduce the number of workers who received DI benefits by 4 percent by 2023, the Congressional Budget Office estimates, and would reduce federal outlays for Social Security by \$35 billion from 2015 through 2023. By 2038, outlays for Social Security would be about 1 percent lower than those projected under current law. (Those estimates do not include any effects of this option on spending for other federal programs, such as Medicare, Medicaid, and the Supplemental Security Income program.)

An argument in favor of this option is that it would probably target benefits more narrowly toward people who leave the workforce because of their disability. To qualify for disability benefits, applicants must be judged to be unable to perform "substantial" work because of a disability—but there is no way to know whether applicants would have worked if they were not disabled. Under current law, even people who have not worked for five years can qualify for disability benefits. By comparison, the tightening of work requirements under this option would ensure that only people with a substantial record of recent work qualified for benefits, and those people would be more likely to work if they were not disabled than would people without a substantial record of recent work.

A reason to retain the existing work requirement is that the option could reach well beyond denying benefits to people who left the workforce for reasons other than their disability. In particular, some people might not meet the new requirement for recent work but would be working if they did not have a disability. For example, some people who left the workforce temporarily to care for children or pursue additional education and then became disabled while out of the workforce or shortly after returning to work could qualify for disability benefits under current law but not under the option. Similarly, some people who were searching for work for an extended time before becoming disabled would become ineligible for benefits under the option.

RELATED OPTION: Mandatory Spending, Option 19

RELATED CBO PUBLICATIONS: Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/ 43421; and Social Security Disability Insurance: Participation Trends and Their Fiscal Implications (July 2010), www.cbo.gov/publication/ 21638

Mandatory Spending—Option 21

Function 700

Narrow Eligibility for Veterans' Disability Compensation by Excluding Certain Disabilities Unrelated to Military Duties

											То	tal
(Billions of dollars)	201 4	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-2.1	-2.5	-2.3	-2.1	-2.3	-2.3	-2.2	-2.4	-2.2	-9.0	-20.4
Note: This option woul	ld take ef	fect in C	ctober 2	2014.								

Veterans may receive disability compensation from the Department of Veterans Affairs (VA) for medical conditions or injuries that occurred or worsened during activeduty military service (excluding those resulting from willful misconduct). Disabilities that are deemed to be connected to military service in that sense range widely in severity and type, from the loss of limbs to migraines and treatable hypertension. VA also provides dependency and indemnity compensation—payments to surviving spouses or children of a deceased veteran whose death resulted from a service-related injury or disease. The Department of Defense (DoD) has a separate disability compensation system for those service members who can no longer fulfill their military duties because of a disability.

Some medical conditions and injuries that are deemed to be service-connected disabilities were incurred or exacerbated in the performance of military duties, but others were not. For example, a qualifying injury can be something that occurred when a service member was at home or on leave, and a qualifying medical condition can be something, such as diabetes, that developed independently of military activities while the service member was on active duty. In 2012, VA paid 520,000 veterans a total of \$2.9 billion, the Congressional Budget Office estimates, to compensate for seven medical conditions that, according to the Government Accountability Office (GAO), are generally neither caused nor aggravated by military service. Those conditions are chronic obstructive pulmonary disease, arteriosclerotic heart disease, hemorrhoids, uterine fibroids, multiple sclerosis, Crohn's disease, and osteoarthritis.

This option would cease veterans' disability compensation for the seven medical conditions identified by GAO. Under the option, veterans currently receiving compensation for those conditions would have their compensation reduced or eliminated following a reevaluation, and veterans who applied for compensation for those conditions in the future would not be eligible for it. The option would not alter DoD's disability compensation system, which focuses on fitness for military duties rather than compensation for disabilities.

By CBO's estimates, this option would reduce outlays by \$20 billion from 2015 to 2023. About 80 percent of the savings in the last year of that period (and an even larger share in earlier years) would result from curtailing payments to current recipients of disability compensation. A broader option could eliminate compensation for all disabilities unrelated to military duties, not just the seven conditions identified by GAO. For a condition such as arthritis, for instance, which may or may not result from military duties, the determination of whether the condition was related to military activities could be left up to VA. An option with that broader reach would generate significantly larger savings but would be more difficult to administer.

An argument in support of this option is that the disability compensation system for military veterans should be more comparable to civilian systems. Few civilian employers offer long-term disability benefits, and among those that do, benefits do not typically compensate individuals for all medical problems that developed during a period of employment.

An argument against this option is that military service is not like a civilian job; instead, it confers unique benefits to society and imposes extraordinary risks on service members. By that logic, the pay and benefits provided to service members should reflect the hardships of military life, including compensating veterans who become disabled in any way during the period of their military service.

Mandatory Spending—Option 22

Restrict VA's Individual Unemployability Benefits to Disabled Veterans Who Are Younger Than the Full Retirement Age for Social Security

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	0	-0.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-6.3	-15.3
Note: This option wou	ld take ef	fect in C	ctober 2	2014.								

More than 3.4 million veterans with medical conditions or injuries that were incurred or worsened during activeduty service are receiving disability compensation from the Department of Veterans Affairs (VA). The amount of compensation they receive depends on the severity of their disabilities (which are generally assigned a single composite rating in an increment of 10 on a scale up to 100 percent), their number of dependents, and other factors—but not on their income or civilian employment history.

However, VA may supplement the regular disability compensation payments for veterans whom it deems unable to engage in substantial work. To qualify for those supplemental benefits, termed individual unemployability (IU) payments, veterans may not earn more than the federal poverty guidelines (commonly referred to as the federal poverty level) and generally must be rated between 60 percent and 90 percent disabled. A veteran qualifying for the IU supplement receives a monthly disability payment equal to the amount that he or she would receive if rated 100 percent disabled. In 2012, for those veterans who received the supplement, it boosted monthly VA disability payments by an average of about \$1,500. The largest increases were paid to veterans rated 60 percent disabled: For them, the supplement raised the monthly payment by about \$1,800, on average. In 2012, nearly 300,000 veterans received IU payments.

Under this option, VA would no longer make IU payments to veterans who are past Social Security's full retirement age, which varies from 65 to 67 depending on beneficiaries' birth year. Therefore, at the full retirement age, VA disability payments would revert to the amount associated with the rated disability level. By the Congressional Budget Office's estimates, the savings from this option between 2015 and 2023 would be \$15 billion. VA's regulations require that IU benefits be based on a veteran's inability to maintain substantial employment because of the severity of a service-connected disability and not because of age, voluntary withdrawal from work, or other factors. Consequently, a veteran may begin to receive IU payments, or continue to receive them, after the full retirement age for Social Security. In 2005 (the most recent year for which VA reports such statistics), more than 80,000 veterans who received the IU supplement, or about one-third of the total number in that year, were over the age of 65.

One rationale for this option is that most veterans who are older than Social Security's full retirement age would not be in the labor force because of their age, so for those veterans, a lack of earnings would probably not be attributable to service-connected disabilities. In particular, in 2010, about 35 percent of men who were 65 to 69 years old were in the labor force, and that number dropped to 10 percent for those age 75 or older. In addition, most recipients of IU payments who are over age 65 would have other sources of income: They would continue to receive regular VA disability payments and might collect Social Security benefits as well. (Most recipients of the IU supplement begin collecting it in their 50s and probably have worked enough to earn Social Security benefits.)

An argument for retaining the current policy is that IU payments should be determined solely on the criterion of a veteran's ability to work and that having age be a consideration would be unfair. In addition, some disabled veterans would find it difficult or impossible to replace the income provided by the IU supplement. If they had been out of the workforce for a long time, their Social Security benefits might be small, and they might not have been able to accumulate much in personal savings.

Mandatory Spending—Option 23

Multiple Functions

Use an Alternative Measure of Inflation to Index Social Security and Other Mandatory Programs

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays												
Social Security	0	-1.6	-3.9	-6.4	-9.1	-11.8	-14.5	-17.3	-20.1	-23.0	-21.0	-107.8
Other benefit programs with COLAs ^a	0	-0.5	-1.3	-1.9	-2.5	-3.3	-4.1	-4.8	-5.9	-6.3	-6.2	-30.7
Effects on SNAP from interactions with COLA programs ^b	0	*	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.5	2.2
Health programs	0	-0.3	-0.7	-1.1	-1.6	-2.0	-2.7	-3.3	-3.8	-4.9	-3.8	-20.4
Other federal spending ^c	<u>0</u>	*	<u>-0.2</u>	<u>-0.4</u>	-0.6	-0.7	-0.8	-0.8	-1.0	-1.1	-1.2	-5.5
Total	0	-2.5	-6.1	-9.6	-13.5	-17.5	-21.8	-25.9	-30.4	-34.8	-31.7	-162.1
Change in Revenues ^d	0	*	*	*	*	*	*	0.1	0.1	0.1	*	0.3
Net Effect on the Deficit	0	-2.5	-6.1	-9.7	-13.5	-17.5	-21.8	-26.0	-30.4	-34.9	-31.7	-162.5

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Notes: This option would take effect in January 2015.

This estimate does not include the effects of using the chained consumer price index for parameters in the tax code.

* = between -\$50 million and \$50 million; COLA = cost-of-living adjustment; SNAP = Supplemental Nutrition Assistance Program.

- a. Other benefit programs with COLAs include civil service retirement, military retirement, Supplemental Security Income, veterans' pensions and compensation, and other retirement programs whose COLAs are linked directly to those for Social Security or civil service retirement.
- b. The policy change would reduce payments from other federal programs to people who also receive benefits from SNAP. Because SNAP benefits are based on a formula that considers such income, a decrease in those other payments would lead to an increase in SNAP benefits.
- c. Other federal spending includes changes to benefits and various aspects (eligibility thresholds, funding levels, and payment rates, for instance) of other federal programs, such as those providing Pell grants and student loans, SNAP, child nutrition programs, and programs (other than health programs) linked to the federal poverty guidelines. (The changes in spending on SNAP included here are those besides the changes in benefits that result from interactions with COLA programs.)
- d. The effects on revenues include changes in the revenue portion of refundable tax credits for health insurance purchased through exchanges, as well as other effects on revenues of the Affordable Care Act's provisions related to insurance coverage.

Cost-of-living adjustments (COLAs) for Social Security and many other parameters of federal programs are currently indexed to increases in the consumer price index (CPI), a measure of overall inflation calculated by the Bureau of Labor Statistics (BLS). That agency computes another measure of inflation—the chained CPI—that is designed to account fully for changes in spending patterns and that effectively eliminates a statistical bias that exists in the traditional CPI.

This option would use the chained CPI for indexing COLAs for Social Security and parameters of other

programs beginning in 2015. The chained CPI has grown an average of about 0.25 percentage points more slowly per year over the past decade than the traditional CPI has, and the Congressional Budget Office expects that gap to persist. Therefore, the option would reduce federal spending, and savings would grow each year as the effects of the change compounded. Outlays would be reduced by \$162 billion through 2023, CBO estimates, and the net effect on the deficit would be about the same. (This option would not change the measure of inflation used for indexing parameters of the tax code, as would be done in the related option cited below; the small revenue effects estimated here stem from changes in the revenue portion of refundable tax credits for health insurance purchased through exchanges, as well as other effects on revenues of the Affordable Care Act's provisions related to insurance coverage.)

COLAs for Social Security and the pensions that the government pays to retired federal civilian employees and military personnel are linked to the CPI, as are outlays for veterans' pensions and veterans' disability compensation. In most of those programs, the policy change would not alter people's benefits when they are first eligible to receive them, either now or in the future, but it would reduce their benefits in subsequent years because the annual COLAs would be smaller, on average. The impact would be greater the longer people received benefits (that is, the more of the reduced COLAs they experienced). Therefore, the impact would ultimately be especially large for the oldest beneficiaries as well as for some disabled beneficiaries and military retirees, who generally become eligible for annuities before age 62 and thus can receive COLAs for a longer period.

Growth in the CPI also affects spending for Supplemental Security Income, Medicare, Medicaid, the health insurance exchanges established under the Affordable Care Act, Pell grants, student loans, the Supplemental Nutrition Assistance Program (SNAP), child nutrition programs, and other programs. The index is used to calculate various eligibility thresholds, payment rates, and other factors that affect the number of people eligible for those programs and the benefits they receive. Therefore, switching to the chained CPI would reduce spending by both decreasing the number of people who are eligible for certain programs and reducing the average benefits that eligible people receive.

One argument for switching to the chained CPI in Social Security and other federal programs is that that index is generally viewed as a more accurate measure of overall inflation than the traditional CPI, for two main reasons. First, the chained CPI more fully accounts for the way that people tend to respond to price changes. Consumers often lessen the impact of inflation on their standard of living by purchasing fewer goods or services that have risen in price and more goods or services that have not risen in price or have risen less. Measures of inflation that do not account for such substitution overstate growth in the cost of living—a problem known as substitution bias. BLS's current procedures for calculating the traditional CPI account for some types of substitution, but the chained CPI fully incorporates the effects of changing buying patterns.

A second reason to believe that the chained CPI is a better measure of inflation is that it is largely free of an error known as small sample bias. That bias, which is significant in the traditional CPI, occurs when certain statistical methods are applied to price data for only a small portion of the items in the economy.

One argument against using the chained CPI, and thereby reducing COLAs in Social Security and other federal retirement programs, is that the prices faced by Social Security beneficiaries and other retirees generally rise faster than prices faced by the population at large. That issue may be of particular concern because Social Security and pension benefits are the main source of income for many older people. BLS computes an unofficial price index that reflects the purchasing patterns of older people, called the experimental CPI for Americans 62 years of age and older (CPI-E). Since 1982 (the earliest date for which that index has been computed), annual inflation as measured by the CPI-E has been 0.2 percentage points higher, on average, than inflation as measured by the traditional CPI. That difference mainly reflects the fact that a larger percentage of spending by the elderly is for items whose prices tend to rise especially quickly, such as medical care. However, whether the cost of living actually grows at a faster rate for the elderly than for younger people is unclear, because measuring the prices that individuals actually pay for health care and accurately accounting for changes in the quality of that care are difficult.

Another potential drawback of this option is that a reduction in COLAs would ultimately have larger effects on the oldest beneficiaries and on those who initially become eligible for Social Security on the basis of a disability. For example, if benefits were adjusted every year by 0.25 percentage points less than the increase in the traditional CPI, Social Security beneficiaries would face a reduction in retirement benefits at age 75 of about 3 percent compared with what they would receive under current law, and a reduction at age 95 of about 8 percent. To protect vulnerable people, lawmakers might choose to reduce COLAs only for beneficiaries whose income or benefits were greater than specified amounts. Doing so, however, would reduce the budgetary savings from the option. Finally, policymakers might prefer to maintain current law because they want benefits to grow faster than the cost of living, so that beneficiaries would share some of the benefits of economic growth. An alternative option would be to link benefits to wages or gross domestic product. Because those measures generally grow faster than inflation, such a change would increase outlays.

RELATED OPTION: Revenues, Option 4

RELATED CBO PUBLICATIONS: Testimony of Jeffrey Kling, Associate Director for Economic Analysis, before the Subcommittee on Social Security, House Committee on Ways and Means, *Using the Chained CPI to Index Social Security, Other Federal Programs, and the Tax Code for Inflation* (April 18, 2013), www.cbo.gov/publication/44083; *Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code* (February 2010), www.cbo.gov/publication/21228; and "Technical Appendix: Indexing With the Chained CPI-U for Tax Provisions and Federal Programs" (supplemental material for *Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code*, February 2010), www.cbo.gov/publication/21228

CHAPTER

3

Discretionary Spending Options

iscretionary spending—the part of federal spending that lawmakers control through annual appropriation acts—totaled about \$1.2 trillion in 2013, the Congressional Budget Office (CBO) estimates, or about 35 percent of federal outlays.¹ Just over half of that spending was for defense programs; the rest paid for an array of nondefense activities. Some fees and other charges that are triggered by appropriation action are classified in the budget as offsetting collections and are credited against discretionary spending.

The discretionary budget authority (that is, the authority to incur financial obligations) provided in appropriation acts results in outlays when the money is spent. Some appropriations (such as those for employees' salaries) are spent quickly, but others (such as those for major construction projects) are disbursed over several years. Thus, in any given year, discretionary outlays include spending both from new budget authority and from budget authority provided in earlier appropriations.²

Trends in Discretionary Spending

A distinct pattern in the federal budget since the 1970s has been the diminishing share of spending that occurs through the annual appropriation process. Between 1973 and 2013 discretionary spending fell from 53 percent to about 35 percent of total federal spending. Relative to the size of the economy, discretionary spending declined from 9.6 percent of gross domestic product (GDP) in 1973 to a low of 6.0 percent in 1999 before rising back to about 7 percent in 2013, CBO estimates (see Figure 3-1).

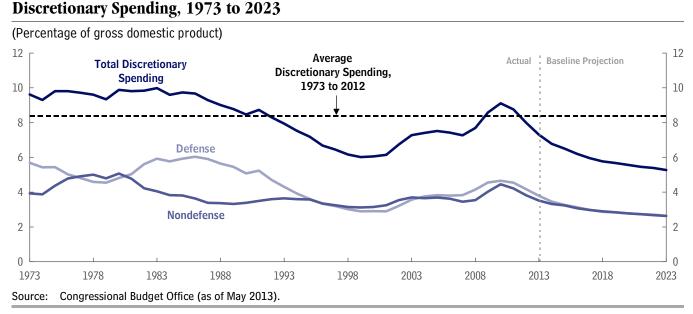
Most of the decline over that period involved spending for national defense. In 1973, discretionary spending for defense was 5.7 percent of GDP. By the late 1970s, it dropped below 5.0 percent, but it rose again during the defense buildup from 1982 to 1986, when it averaged 5.9 percent. After the end of the Cold War, outlays fell relative to GDP, reaching a low of 2.9 percent at the turn of the century. Such outlays began climbing again shortly thereafter, reaching an average of 4.6 percent of GDP from 2009 through 2011. Roughly half of the growth in defense spending over the 2001-2011 period resulted from spending on operations in Iraq and Afghanistan; in 2011 such spending was equal to 1.0 percent of GDP. In 2012, discretionary spending for defense fell to 4.2 percent of GDP, and CBO estimates that it declined further in 2013.

Nondefense discretionary spending funds an array of federal activities in areas such as education, transportation, income security, veterans' health care, and homeland security. Over the past four decades, spending in that category has generally ranged from about 3 percent to 4 percent of GDP. One exception was from 1975 to 1981, when such spending averaged almost 5 percent of GDP. Another exception was from 2009 through 2011, when funding from the American Recovery and Reinvestment Act of 2009 (ARRA) and from other sources associated with the federal government's response to the 2007-2009 recession helped push nondefense outlays above 4 percent of GDP. Like defense discretionary spending, nondefense discretionary outlays as a share of GDP fell in 2012, to 3.8 percent, and CBO estimates that they declined further in 2013.

^{1.} Although the amount spent in fiscal year 2013 by each agency and for major programs is now available from the *Monthly Treasury Statement* issued by the Department of the Treasury, the amounts of discretionary spending discussed here are estimates; CBO has not yet determined the exact split between discretionary and mandatory spending in that year.

^{2.} For some major transportation programs, budget authority is considered mandatory, but the outlays resulting from that authority are discretionary. The reason is that such programs receive budget authority through authorizing legislation, but annual appropriation acts limit the amount of that budget authority that the Department of Transportation can obligate. Those obligation limitations are treated as a measure of discretionary budgetary resources, and the resulting outlays are classified as discretionary.

Figure 3-1.



In 2012 and 2013, discretionary outlays declined not only relative to GDP but also in nominal terms. That decline stemmed largely from a waning of spending from ARRA, reduced funding for military operations in Afghanistan and Iraq, and constraints imposed by the Budget Control Act of 2011. Through 2021, most discretionary appropriations will be constrained by the caps and automatic spending reductions put in place by that act; in its baseline projections for 2022 and 2023, CBO assumed that discretionary appropriations would equal the 2021 amount, with increases for projected inflation. Under that assumption, outlays from discretionary appropriations are projected to decline from about 7 percent of GDP in 2013—already below the 40-year average of 8.4 percent-to 5.3 percent in 2023. That would be the lowest amount relative to GDP at least since 1962 (the first year for which comparable data are available). Under those projections, in 2023, defense and nondefense discretionary spending would each equal 2.6 percent of GDP-the smallest share of the economy for either category in at least five decades.

Methodology Underlying Discretionary Spending Estimates

For the most part, the budgetary effects described in this chapter were calculated relative to CBO's baseline projections, which depict paths for discretionary spending of different types over the next 10 years as directed by section 257 of the Balanced Budget and Emergency Deficit Control Act of 1985. That law states that current appropriations should be assumed to continue in later years, with adjustments to keep pace with projected inflation. (Although CBO follows that law in constructing baseline projections for individual components of discretionary spending, CBO's baseline projections of overall discretionary spending incorporate the caps and automatic spending reductions put in place by the Budget Control Act.) The measures of inflation that CBO uses for its baseline are those specified in the law: the employment cost index for wages and salaries (applied to spending for federal personnel) and the GDP price index (for other spending).

The budgetary effects of options involving military force structure (Option 1) and acquisition (Options 4 through 9) were measured on a different basis. Because the baseline projections do not reflect programmatic details for force structure and specific weapon systems, the effects of those options are calculated relative to the Department of Defense's (DoD's) 2014 Future Years Defense Program (FYDP). That plan includes a comprehensive outline of DoD's intended funding requests for the 2014–2018 period that is based on the Administration's plans for the number of military and civilian personnel, procurement and maintenance of weapon systems, and operational intensity. Through 2018, therefore, the budgetary effects considered in those options are based on DoD's estimates of the costs of its plans. From 2019 through 2023, they are based on DoD's estimates,

if such estimates are available (for example, the Navy prepares an annual 30-year shipbuilding plan), and on CBO's projections of price and compensation trends for the overall economy if they are not. For an option that would cancel the planned acquisition of a weapon system, for example, the potential savings reported in this volume reflect DoD's estimates of the cost and purchasing schedule of that system, often netting out the costs to continue purchasing and operating existing systems in lieu of the system that would be canceled. The text of each acquisition option discusses the effects of the option on DoD's ability to perform its missions—and other consequences—apart from budgetary cost.

Because the costs of implementing the FYDP would exceed CBO's baseline projections for defense spending, the options involving military force structure and acquisition are not necessarily ways to reduce the deficits projected in CBO's baseline. At least in part they represent options for reducing DoD's planned spending to the amounts projected in the baseline.

In many instances, CBO would have estimated higher costs for DoD's planned programs than the amounts budgeted either in DoD's FYDP or in an extension of the FYDP that relies primarily on DoD's cost estimates.³ However, the savings from an option relative to DoD's budget request are better represented by the program's costs embedded in the FYDP and its extension than by CBO's independent cost estimates. If lawmakers enacted legislation to cancel a planned weapon system, for instance, DoD could delete the amounts budgeted for that system from its FYDP and add amounts for operating some existing systems in lieu of the canceled system in order to bring the department's budget request closer to the funding that could be provided within the limits specified by the Budget Control Act.

Options in This Chapter

The 28 options in this chapter encompass a broad range of discretionary programs, excluding those involving health care. (Options that would affect spending for health care programs are presented in Chapter 5, as are options affecting taxes related to health.) Nine options in this chapter would affect defense programs, and the rest are for nondefense programs. Some envision broad cuts—such as Option 1, which would reduce the size of the military to meet the caps specified by the Budget Control Act, or Option 25, which would reduce federal civilian employment. Others focus on specific programs, such as Option 12, which concerns the Department of Energy's programs for research and development in energy technologies. Some options would change the rules of eligibility for certain federal programs, such as for Pell grants (Option 20). Option 26 would impose fees to cover the cost of enforcing regulations and providing certain services.

To reduce deficits through changes in discretionary spending, lawmakers would need to reduce the statutory funding caps below the levels already established under current law or enact appropriations below those caps. The options in this chapter could be used to accomplish either of those objectives (although the savings shown for some of the defense options are measured relative to DoD's plans rather than CBO's baseline projections).

Alternatively, some of the options could be implemented to comply with the existing caps on discretionary funding rather than to reduce projected deficits. For example, as discussed above, savings from some of the defense options might bridge part of the gap between DoD's plans and the existing caps. The savings from specific reductions in appropriations like those presented here also could be used to create room for an increase in appropriations for other, higher-priority purposes—while keeping total discretionary appropriations at or very close to the current statutory caps.

Overall, under the caps on budget authority established by the Budget Control Act, discretionary appropriations are projected to be \$1.5 trillion lower over the 2014– 2023 period than they would be if the funding provided for 2013 was continued in later years with increases for inflation; that difference would mean an 11 percent decrease during the decade as a whole in real (inflationadjusted) outlays for a large collection of government programs and activities. The reduction in discretionary budget authority that would be accomplished by implementing all of the options presented in this chapter other than those involving military force structure or acquisition (which CBO measured relative to DoD's plans rather than to its baseline) would account for less than half of that \$1.5 trillion difference.

^{3.} For CBO's estimates of the cost of DoD's plans, see *Long-Term Implications of the 2014 Future Years Defense Program* (forthcoming).

Discretionary Sp	ending	—Opt	ion 1								F	unction 050		
Reduce the Size	educe the Size of the Military to Satisfy Caps Under the Budget Control Act													
											То	tal		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023		
Change in Spending														
Budget authority	0	-28	-39	-49	-45	-66	-73	-80	-86	-86	-161	-552		
Outlays	0	-18	-31	-42	-43	-57	-67	-75	-81	-83	-133	-495		

Discretionary Spending—Option 1

Note: This option would take effect in October 2014. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

The cost of the plans described in the Department of Defense's (DoD's) most recent Future Years Defense Program (FYDP) would greatly exceed the funding allowed under the Budget Control Act of 2011 (BCA). For example, by DoD's estimate, implementing the FYDP would require funding of \$560 billion in 2017, which is \$49 billion, or nearly 10 percent, higher than the limit of \$511 billion implied by the BCA for that year (estimated as 95.5 percent of the overall BCA cap of \$536 billion in 2017 for the broader category of national defense). (The gap is even larger when estimated using the Congressional Budget Office's projections of cost factors and growth rates that reflect DoD's experience in recent years.) Closing some or all of that gap will require reducing the size of the military (measured by the number of major combat units such as Army brigade combat teams—BCTs—or Marine regiments); decreasing the per-unit funding provided to man, equip, train, and operate forces; or both.

Under this option, the size of the military would be reduced so that, by 2017, DoD's budget would satisfy the BCA cap for that year and average funding per military unit would remain commensurate with 2012 amounts (including adjustments for anticipated cost growth in areas such as pay, military health care, and new weapon systems). Further force reductions would be taken each year to stay within the caps between 2018 and 2021 as cost growth continued to compound. The size of the military would remain unchanged thereafter. Relative to DoD's current plans (and under the department's cost assumptions), the force cuts would reduce the need for budget authority by \$552 billion from 2015 through 2023. The initial cuts would be phased in over three years to provide time for an orderly drawdown and to avoid sudden disruptions while substantial military forces remain in Afghanistan. As a consequence, this option

alone would not satisfy the BCA caps between 2014 and 2016.

If reductions were spread evenly across DoD's four military services and among all full-time (active) and part-time (reserve and Guard) units, those reductions might eliminate, for example, the following forces by 2021: 10 Army brigade combat teams (out of a planned force of 66 in 2017); 34 major warships (out of 244 in 2017); 2 Marine regiments (out of 11 in 2017); and 170 Air Force fighters (out of about 1,100 in combat squadrons in 2017). (As a comparison, in 2013 the Army had 73 BCTs, the Navy had 214 major warships, the Marines had 11 regiments, and the Air Force had about 1,100 fighter aircraft in combat squadrons.) Reductions in similar proportions would be made to the other types of units in each service and support organizations across DoD.

This option would not, however, reduce spending and deficits below those projected in CBO's baseline, which reflects the BCA caps. Reducing the size of the military to obtain savings relative to the baseline would require larger force reductions.

An advantage of this option is that it would avert the risk of having a so-called hollow force-one sized to satisfy the current national security strategy but with inadequate equipment or training to be effective-because units would, in the long term, receive support equivalent to what they had in 2012, an amount that has produced the highly capable forces of today's military. (Staying within the BCA caps from 2014 to 2016 might require shortterm reductions in funding per unit, however, much like the cuts resulting from sequestration in 2013.) Also, unlike reductions that merely postpone costs, savings from the force-structure reductions under this option

would continue to accrue after 2021 and for as long as forces were held at the smaller size.

The disadvantage of this option is that the size and number of military operations that could be simultaneously conducted and the duration for which they could be sustained would be reduced if the size of the force was cut. Under Army policy, for example, three active BCTs (or five National Guard BCTs) are required to support the rotation of a single BCT in and out of a combat zone. Therefore, if three (or five) BCTs were eliminated, the service would lose the ability to continuously deploy one BCT.

RELATED CBO PUBLICATIONS: Approaches for Scaling Back the Defense Department's Budget Plans (March 2013), www.cbo.gov/publication/ 43997; and Long-Term Implications of the 2014 Future Years Defense Program (forthcoming)

Cap Increases in	p Increases in Basic Pay for Military Service Members													
											То	tal		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023		
Change in Spending														
Budget authority	0	-0.4	-0.9	-1.4	-2.0	-2.6	-3.3	-4.0	-4.8	-5.5	-4.7	-24.9		
Outlays	0	-0.3	-0.8	-1.4	-2.0	-2.6	-3.3	-4.0	-4.7	-5.5	-4.6	-24.6		

Discretionary Spending—Option 2

Note: This option would take effect in January 2015. About 30 percent of the above savings reflect intragovernmental transfers and thus would not reduce the deficit.

The three major components of cash compensation for active-duty military personnel are basic pay and the allowances for food and for housing. Of those three, basic pay is the largest and accounts for about 70 percent. Between 2001 and 2012, in inflation-adjusted dollars, per capita spending on basic pay rose by 28 percent.

During most of the 1990s, lawmakers set the annual increase in basic pay for service members to be equal to the percentage increase in the employment cost index (ECI) for wages and salaries of workers in private industry or to 0.5 percentage points below that amount. From 2000 to 2010, lawmakers approved raises-including across-the-board increases and, in some cases, additional amounts for personnel at specific seniority levels-that, on average, exceeded the ECI by 0.5 percentage points. (Since 2004, the law has established the percentage change in the ECI as the default pay raise, but from that year through 2010, lawmakers overrode that specification via the annual defense authorization and appropriation acts and continued to enact pay raises equal to the increase in the ECI plus 0.5 percentage points; they have not done so since.) Starting in January 2015, this option would cap basic pay raises at 0.5 percentage points below the increase in the ECI. The Congressional Budget Office estimates that this option would reduce discretionary outlays by \$25 billion from 2015 through 2023 compared with what personnel costs would be if the raises were equal to the percentage increase in the ECI.¹

The military services' year-to-year continuation rates (which measure the proportion of active-duty personnel in one year who are still in active-duty status in the next) since 2010 are among the highest recorded since 2000. Although the prospect of smaller basic pay raises could make it harder to retain personnel, CBO anticipates that the effect of such an option would be minor and the military services would not need to offer additional incentives to service members (in the form of enlistment or reenlistment bonuses, for example).

For this estimate, CBO assumed that the number of military personnel in each service branch would remain at the current level throughout the decade. The Department of Defense (DoD) has announced plans to reduce the size of the Army and Marine Corps through 2017. If those plans are realized, the savings from this option would be smaller. However, the reductions in force size would make it easier for the Army and Marine Corps to tolerate small declines in retention and still fill out their (smaller) force structures, in turn making it less likely that they would need to enhance other forms of compensation.

One rationale for this option is that DoD has consistently exceeded its goal of ensuring that the average cash compensation for military personnel—including the tax advantage that arises because military food and housing allowances are not subject to federal taxes—exceeds the wages and salaries received by 70 percent of civilians with comparable education and work experience. According to the department's most recent analysis, cash compensation for enlisted personnel is greater than the wages and salaries of 90 percent of their civilian counterparts; the corresponding figure for officers is 83 percent. Furthermore, the annual increase in the ECI might not be the most

That estimate reflects the effect of this proposal on the need for appropriated funds; however, the estimate does not reflect the proposal's net effect on the federal budget from 2015 through 2023. About 30 percent of the savings in this option comes from amounts being appropriated to one government account and later paid to a different account (including the trust funds for Social Security, civil service retirement, and military retirement). Reducing the amounts of such intragovernmental transfers would have no effect on total federal spending.

appropriate benchmark for setting pay raises over the long run. The comparison group for the ECI includes a broad sample of civilian workers who, on average, are older than military personnel and more likely to have postsecondary education. Historically, pay raises for those workers have been larger than for younger or less educated workers, who more closely match the demographic profile of military personnel. An argument against this option is that, over the next decade, military recruiting and retention could be compromised unless basic pay raises keep pace with the ECI. Capping raises also would constrain the amount service members received in other benefits, such as the retirement annuities that are tied to a member's 36 highest months of basic pay over the course of a military career.

RELATED OPTION: Discretionary Spending, Option 24

RELATED CBO PUBLICATIONS: *Costs of Military Pay and Benefits in the Defense Budget* (November 2012), www.cbo.gov/publication/43574; and testimony of Carla Tighe Murray, Analyst, before the Subcommittee on Personnel, Senate Committee on Armed Services, *Evaluating Military Compensation* (April 28, 2010), www.cbo.gov/publication/21430

Replace Some M	eplace Some Military Personnel With Civilian Employees													
											То	tal		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023		
Change in Spending														
Budget authority	0	-0.3	-0.9	-1.6	-2.3	-2.7	-2.9	-3.0	-3.2	-3.4	-5.0	-20.2		
Outlays	0	-0.2	-0.8	-1.4	-2.1	-2.6	-2.8	-3.0	-3.1	-3.3	-4.6	-19.4		

Discretionary Spending—Option 3

Note: This option would take effect in October 2014. About 30 percent of the above savings reflect intragovernmental transfers and thus would not reduce the deficit.

The workforce of the Department of Defense (DoD) consists of members of the active-duty and reserve military, federal civilian employees, and private contractors. According to data from DoD, thousands of members of the military work in support, or "commercial," jobs that could be performed by civilians. The jobs are done in military units that do not deploy overseas for combat, and they do not involve functions that could raise concerns about personal safety or national security.

Under this option, over four years DoD would replace 70,000 of the more than 500,000 uniformed military personnel in commercial jobs with 47,000 civilian employees and, as a result, decrease military end strength (the number of military personnel on the rolls as of the final day of a fiscal year) by 70,000. By the Congressional Budget Office's estimate, those changes could reduce the need for appropriations by \$20 billion and for discretionary outlays by \$19 billion from 2015 through 2023. The reductions would occur primarily because fewer civilians would be needed to replace a given number of military personnel (civilians have fewer collateral duties and do not generally rotate among positions as rapidly as military personnel do) and because the cost of employing a civilian is, on average, less than that for a military service member.¹

Although there is precedent for such conversions (between 2004 and 2010, DoD converted about 48,000 military positions to 32,000 civilian jobs), only a small percentage of all military positions have been reviewed for that purpose. Moreover, the approach to using military or civilian employees to perform various commercial functions differs from branch to branch. For example, the Army fills 5 percent of its contract administration jobs with military personnel, whereas the Air Force has 63 percent of those jobs staffed with military personnel. The Navy employs military personnel for 49 percent of its jobs in retail supply operations; the Air Force, 70 percent. If each service adopted the personnel mix with the lowest percentage of military personnel in commercial occupations, up to 140,000 military positions could be opened to civilians, CBO estimates. Under this option, civilians would carry out the responsibilities for about half of those positions.

An argument for converting military to civilian positions is that civilians require, on average, less job-specific training over their careers because they are not subject to the frequent transfers that military personnel are. Replacing military with civilian personnel also would increase efficiency and save money if, as CBO anticipates, fewer workers could provide services of the same quantity and quality. However, if DoD did not reduce military end strength but simply reassigned military personnel to other duties, total personnel costs would increase by an amount reflecting the costs of the civilian replacements. In that case, this option would still free some military personnel to fulfill their primary mission of training for and, if necessary, engaging in combat.

This estimate reflects the effect of this proposal on the need for appropriated funds; however, the estimate does not reflect the proposal's net effect on the federal budget from 2015 through 2023. About 30 percent of the savings in this option comes from amounts being appropriated to one government account and later paid to a different account (including the trust funds for Social Security, civil service retirement, and military retirement). Reducing the amounts of such intragovernmental transfers would have no effect on total federal spending. The estimate also does not reflect the fact that, over the long term, the net reduction in personnel resulting from this option would reduce costs for federal retirement benefits.

An argument against this option is that, even though many service members might spend part of their careers in jobs that could be performed by civilians, most are trained fighters who could be deployed if needed. Replacing such military personnel with civilians could reduce DoD's ability to respond quickly if called upon to do so. Moreover, despite the potential cost savings, the military services try to avoid converting certain types of positions because it could lead to reductions in effectiveness or morale. For example, the Navy must provide shore positions for sailors—so that they do not spend their entire careers at sea—even if some of those positions could be filled by civilians.

Discretionary	Spending—Option 4
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Replace the Joint	Strike Fighter	Program With	ı F-16s and	l F/A-18s
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											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-5.5	-5.9	-6.1	-5.8	-4.6	-4.8	-5.5	-5.0	-5.3	-23.3	-48.5
Outlays	0	-1.1	-2.4	-3.7	-4.7	-5.1	-5.1	-5.0	-5.0	-5.0	-11.9	-37.1

Note: This option would take effect in October 2014. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

The F-35 Joint Strike Fighter (JSF) program is the military's largest aircraft development program. Its objective is to design and produce three versions of the stealthy aircraft, which are designed to reduce the probability of detection by radar and other sensors: a conventional takeoff version for the Air Force; a carrier-based version for the Navy; and a short takeoff and vertical landing (STOVL) version for the Marine Corps. The Departments of the Navy and the Air Force placed orders for 150 F-35s from 2007 through 2013 and anticipate purchasing about 2,300 more from 2014 through 2037. The Department of Defense (DoD) has estimated that the remaining cost for those purchases, including the cost to complete development, will amount to about \$300 billion (in nominal dollars). (All three versions of the aircraft are still under development and will not enter operational service for several years.)

Under this option, DoD would cancel the F-35 program and instead purchase the most advanced versions of fighter aircraft already in production: the Lockheed Martin F-16 for the Air Force, and the Boeing F/A-18 for the Navy and Marine Corps. By the Congressional Budget Office's estimates, the option would save \$37 billion in outlays from 2015 through 2023 if the F-16s and F/A-18s were purchased on the same schedule as that planned for the F-35s. An additional \$60 billion in savings, roughly, would accrue from 2024 through 2037 as the F-35s planned for those later years were also replaced with F-16s and F/A-18s.

An argument in favor of this option is that new F-16s and F/A-18s would be sufficiently advanced—if equipped

with upgraded modern radar, precision weapons, and digital communications-to meet the threats that the United States is likely to face in the foreseeable future. The extreme sophistication of the F-35 and the additional technical challenge of building three distinct types of aircraft with a common airframe and engine have resulted in significant cost growth and schedule delays, and additional cost growth and schedule delays remain a possibility. As a result of the delays that have already occurred, the Air Force and the Navy are incurring substantial costs to maintain their force sizes by extending the service life of fighters currently in the force. Further delays in F-35 deliveries could increase those costs as well. The cost of new upgraded F-16s and F/A-18s also could escalate, but their lesser technical challenges (relative to those of the F-35) would make comparable cost growth unlikely.

A disadvantage of this option is that F-16 and F/A-18 aircraft lack the stealth design features that would help the F-35 evade detection and hence operate more safely in the presence of enemy air defenses. The armed services would maintain some stealth capabilities, however, with the B-2 bomber and F-22 fighters already in the force. Any greater need for stealth capabilities that might arise in the future would have to be addressed with a new system—for example, stealthy unmanned attack aircraft or long-range bombers that the services also plan to develop. Another potential disadvantage of this option is that substituting F/A-18s for the F-35B—the Marine Corps' STOVL version of the F-35—would remove that service's capability to operate fixed-wing fighters from the amphibious assault ships in naval expeditionary strike groups, a capability currently provided by the AV-8B Harrier. Those strike groups would have to rely on armed helicopters (which lack the range, speed, payload, and survivability of the F-35) or on other forces, such as aircraft from aircraft carrier strike groups.

RELATED CBO PUBLICATIONS: Long-Term Implications of the 2014 Future Years Defense Program (forthcoming); Strategies for Maintaining the Navy's and Marine Corps' Inventories of Fighter Aircraft (May 2010), www.cbo.gov/publication/25077; and Alternatives for Modernizing U.S. Fighter Forces (May 2009), www.cbo.gov/publication/41181

Cancel the Army	's Gro	und C	omba	t Vehi	cle Pr	ogran	1					
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-0.9	-0.8	-0.6	-0.7	-2.3	-2.8	-2.6	-2.2	-2.1	-3.0	-15.1
Outlays	0	-0.3	-0.7	-0.7	-0.6	-0.8	-1.5	-2.1	-2.3	-2.3	-2.2	-11.2

Note: This option would take effect in October 2014. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

The Ground Combat Vehicle (GCV) program is the Army's latest attempt to design and field a new combat vehicle. Army officials have stated that the service needs a vehicle large enough to carry and protect a full squad of nine infantry soldiers at one time, and the Army plans to use the GCV to replace the Bradley Infantry Fighting Vehicles (IFVs) in its armored combat brigades. To meet its goal of producing GCVs beginning in 2019, the Army estimates it would require appropriations of about \$4.0 billion from 2014 through 2018: \$3.8 billion for development—that is, to design, test, and evaluate the vehicle—and almost \$300 million to procure the items needed to begin production. Starting in 2019, the Army could need more than \$2 billion in funding annually to purchase 150 GCVs each year.

Under this option, the Army would cancel the GCV program but develop and purchase upgrades for Bradley IFVs, decreasing outlays on net by \$11 billion between 2015 and 2023, the Congressional Budget Office estimates. The bulk of those savings-about \$9 billionwould be realized after 2018. Additional net savings of \$16 billion would be realized between 2024 and 2036. Because the GCV program is in its early stages, the estimated savings are less certain than those that could be estimated for canceling an acquisition program already in production. In particular, CBO cannot predict what trade-offs in cost, schedule, and vehicle performance the Army would make within the GCV program if it continued with the acquisition process. Any trade-offs that might be made could affect the overall cost of the program and, thus, the amount of savings from cancellation.

An argument in favor of this option is that the GCV, although more capable than existing vehicles when operating in an open battle space, is too large and heavy to operate effectively in congested areas with limited space to maneuver; such conditions were common in Iraq and Afghanistan and are likely to occur in the future. In contrast, the Bradley IFV is significantly smaller and lighter than the GCV and could be a better choice for potential future conflicts. Furthermore, because the Army plans to replace less than 20 percent of its armored vehicles with GCVs, it will continue to rely on vehicles that it currently uses to equip its forces-including various versions of the Bradley fighting vehicles and Abrams tanks-for decades to come. In fact, the Army has invested \$14 billion since 2004 to upgrade its Bradley fighting vehicles and Abrams tanks, and it plans to retain and continue upgrading them for several decades. By keeping the infantry version of its Bradley fighting vehicles, rather than replacing them with GCVs, the Army would avoid the risk and expense associated with developing and purchasing a fleet of new vehicles.

An argument against this option is that it would prevent the fielding of a combat vehicle with greater capabilities than those currently available and better able to meet the demands of future operations. For instance, the Bradley IFV cannot carry its own crew and a full infantry squad at the same time-but keeping a squad together, which the GCV would allow, would facilitate tactical planning while the force was moving. That capability would allow a squad to better synchronize its actions when it left the vehicle. In addition, the greater protection afforded by the GCV-especially against improvised explosive devices-would enhance the safety of soldiers who conduct the types of close operations among civilian populations that are becoming increasingly common. By contrast, Bradley vehicles do not have modular armor kits that can be adapted to meet a range of threats, and they lack extra capacity to accept new systems that might improve survivability or capability.

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A further argument against this option is that the Army has not fielded a new combat vehicle since the early 1990s. Canceling the GCV program would mean that the Army would continue to use systems originally developed in the 1980s or earlier (although those systems have been updated several times since then). Improving the data processing and connectivity of those older systems would require that newer components be integrated into older frames, which can be a difficult and potentially expensive process. (Such costs are not included in the above estimates.) Finally, retaining old systems might eventually cause the Army to lose its technological edge and compromise the service's dominance on the battlefield.

RELATED CBO PUBLICATIONS: *The Army's Ground Combat Vehicle Program and Alternatives* (April 2013), www.cbo.gov/publication/44044; and *Long-Term Implications of the 2014 Future Years Defense Program* (forthcoming)

Discretionary	Spending—Option	6
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Stop Building Ford	d Class Aircraft Carriers
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											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	0	-0.7	-1.0	-1.1	-3.4	-2.7	-3.2	-2.9	-2.9	-2.8	-17.8
Outlays	0	0	-0.1	-0.3	-0.5	-0.9	-1.5	-2.0	-2.4	-2.6	-0.8	-10.2

Note: This option would take effect in October 2015. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

The Administration's 2014 budget calls for maintaining a fleet of 10 aircraft carriers and 10 active-duty naval air wings. The number of carriers is temporarily below the Navy's stated goal of 11 as a result of a three-year gap between the decommissioning of the U.S.S. *Enterprise* in early 2013 and the scheduled commissioning of its replacement, the U.S.S. *Gerald R. Ford*, in early 2016. (The number of active air wings is one less than the number of carriers because, at any particular time, one of the Navy's carriers is usually undergoing a major overhaul.) Aircraft carriers are also accompanied by a mix of surface combatants (typically cruisers and destroyers) and submarines to defend against enemy aircraft, ships, and submarines. The Navy calls such a force a carrier strike group.

Under this option, the Navy would stop building new aircraft carriers after completion of the U.S.S. *John F. Kennedy*, which lawmakers authorized in 2013. Thus, the next aircraft carrier the Navy intends to purchase under its shipbuilding plan, the U.S.S. *Enterprise* in 2018, would be canceled, as would future carriers, which the Navy plans to buy at the pace of one every five years. (Because those ships take a long time to build and are so expensive, the Congress allows the Navy to purchase them over six years. Funding for the *Enterprise* would have begun in 2016.)

Savings under this option would result exclusively from not buying new carriers; those savings would be offset somewhat by higher costs for nuclear-powered submarines and for refueling the Navy's existing carriers. (The same commercial shipyard that builds and overhauls aircraft carriers also builds parts of submarines; some overhead costs for that yard would now be charged instead to submarine programs.) Overall, this option would save \$10 billion in outlays from 2016 through 2023, the Congressional Budget Office estimates. Additional savings would be realized beyond 2023, because of reduced costs to construct aircraft carriers and because the Navy would need to buy fewer aircraft to put on its slowly shrinking carrier fleet. Those additional savings would be offset, however, if the Navy decided that it had to buy other weapon systems to replace the lost capability and capacity of the canceled carriers.

One argument in favor of this option is that the existing fleet and the carriers under construction would maintain the current size of the carrier force for a long time because the ships are designed to operate for 50 years. Replacements for two carriers in the current fleet are already under construction, and by 2030, the Navy would still field 10 carriers under this option. The size of the carrier force would decline thereafter, however, and by 2040, the force would fall to 7 ships. If stopping production did not accord with perceived national security interests in the future, the Navy could start building new carriers again. But doing so would be a more expensive and complex process than building new carriers is today, and those large ships take years to construct. Building new designs of small warships is a challenge; relearning how to build the largest warship ever built would pose much greater challenges for the shipyard tasked with the job.

Another argument in favor of this option is that, at some point in the future, the large aircraft carrier may no longer be an effective weapon system for defending U.S. interests overseas as new technologies designed to threaten and destroy surface ships are developed and spread to many countries. Among the technologies that might threaten the future survivability of the carrier are long-range supersonic antiship cruise missiles, antiship ballistic missiles, very quiet submarines, and satellite tracking systems and other sensors. The risk to the carrier force is not great today, but the future is much more

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uncertain. As those technologies are developed and improved in the decades to come and as more countries acquire them, the Navy's large surface warships may be at greater risk if U.S. defensive capabilities do not keep pace. If in 20 years the technologies to detect, track, and attack the U.S. Navy's aircraft carriers advanced such that the Navy could not effectively defend against them, then the Navy's large investments in new carriers today would not be cost-effective.

An argument against this option is that it could hamper the Navy's fighting ability. Since World War II, the aircraft carrier has been the centerpiece of the U.S. Navy. According to the Navy, today's Nimitz class ships can sustain 95 strike sorties per day and, with each aircraft carrying four 2,000-pound bombs, deliver three-quarters of a million pounds of bombs each day. That firepower far exceeds what any other surface ship can deliver.

Another argument against this option is that carriers may prove adaptable to a future environment that includes more sophisticated threats to surface ships-perhaps through the development of new weapon systems on the carriers. Since World War II, carriers have taken on board many different types and generations of aircraft. The Navy is now developing long-range unmanned aircraft that would be capable of striking an enemy's shores while allowing the carrier to operate outside the range of air and missile threats. Equipping long-range unmanned aircraft with long-range precision, perhaps stealthy munitions could extend the life of the aircraft carrier as an effective weapon system for decades to come. Furthermore, the Navy is developing new technologies that may make the defense of large surface ships economically and tactically effective. Energy-based weapons designed to shoot down incoming missiles would be far more costeffective than today's ship defenses in which the missiles used to defend a ship cost more than the missiles that prospective opponents would use to attack the ship. In short, if either of those technological developments bears fruit, then the large aircraft carrier could remain a potent weapon system into the distant future.

RELATED OPTIONS: Discretionary Spending, Options 7 and 8

RELATED CBO PUBLICATIONS: Long-Term Implications of the 2014 Future Years Defense Program (forthcoming); and An Analysis of the Navy's Fiscal Year 2014 Shipbuilding Plan (October 2013), www.cbo.gov/publication/44655

		Dalli	Stie III	10011	, oubl							
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	0.1	0	-0.9	-1.0	-2.6	-2.3	-4.9	-4.4	0.2	-1.7	-15.7
Outlays	0	*	*	-0.1	-0.4	-0.8	-1.4	-2.0	-2.9	-2.9	-0.5	-10.5

Reduce the Number of Ballistic Missile Submarines

Notes: This option would take effect in October 2014. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

* = between zero and \$50 million.

The Navy maintains a force of 14 Ohio class ballistic missile submarines (SSBNs). Those submarines collectively carry 336 nuclear-armed missiles, which is about half of the deployed warheads in the U.S. arsenal. Each submarine can carry 24 missiles with up to eight warheads per missile. (However, the Administration plans to meet the limits in the most recent U.S.-Russian Strategic Arms Reduction Treaty, commonly known as New START, by reducing the number of missiles per submarine to 20 by 2018.) Over the next two decades, the Ohio class submarines will reach the end of their service life. The Navy plans to replace those submarines with 12 new ballistic missile submarines, currently designated as the Ohio Replacement class; those submarines are designed to carry 16 missiles each. The first such boat will be purchased and construction will begin in 2021 (although procurement funding for that boat is slated to begin in 2017). Under the Navy's 2014 shipbuilding plan, the SSBN force will fall to 10 submarines between 2032 and 2040 (because the boats will be replaced at a rate of one per year between 2026 and 2035) before leveling out at 12 submarines in 2042.

This option would reduce the Navy's SSBN force to eight submarines in 2020 by retiring one Ohio class submarine a year over the 2015–2020 period. That number would be maintained through the 2040s and beyond by delaying the start of the Ohio Replacement program from 2021 to 2024 and reducing the number of SSBNs purchased under that program to eight. The savings under this option would total \$11 billion in outlays from 2015 through 2023. During the 2030s, this option would save an additional \$30 billion by avoiding the purchase of four more Ohio Replacement submarines. An advantage of this option is that reducing the SSBN force to eight submarines would still provide a robust strategic deterrent at sea. Although the force would carry a smaller complement of missiles, the option would not dramatically reduce the total number of warheads that could be deployed at sea. To achieve the missile-reduction goals under New START, the Administration is expected to allocate 1,050 to 1,100 warheads to the SSBN force of 14 submarines. The Administration's preferred allocation would place 20 missiles on each deployed submarine with four or five warheads per missile. (Only 12 of the Ohio class submarines, and thus 240 missiles, would be considered deployed under the treaty, because two boats would be in long-term maintenance at any given time over the 10-year life of the treaty.) With an eight-boat Ohio class force called for under this option, the Navy could still deploy roughly the maximum number of warheads at sea consistent with New START using a different allocation-24 missiles on each submarine (for a total of 192 missiles), with five or six warheads per missile Furthermore, if the deployed warhead requirement for strategic submarines had not changed by the time the Ohio Replacement program was completed, the Navy could continue to deploy similar numbers of warheads: Eight submarines, each carrying 16 missiles (for a total of 128) with eight warheads per missile, would carry a total of 1,024 deployed warheads. Another advantage of this option is that some costs of extending the service lives of missiles and warheads would be avoided because the SSBNs would be carrying fewer of them.

This option has the disadvantage of making the Navy's nuclear forces less effective and somewhat more vulnerable. With a force of 8 SSBNs—instead of 12—the Navy would have fewer boats at sea and available for quick deployment in a crisis. Fewer submarines would give the

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Navy a smaller area in which to operate, thus making it more difficult to be sure that a sufficient number of warheads were in position to implement a war plan. Moreover, loading more warheads on a smaller number of missiles and submarines would substantially reduce their flexibility in range and in targeting in the event they needed to be used. Fewer submarines would also make it easier for a potential adversary to track and target U.S. forces; the operating areas for those submarines would be more predictable because missiles must fly a certain trajectory to hit key targets.

Another disadvantage of the option is that it would disrupt development of the missile compartment for the Ohio Replacement submarines, a project being undertaken jointly between the U.S. Navy and the British Navy. Both navies are contributing to the design, development, and production of the portion of the submarine that houses and launches ballistic missiles. Delaying production of the Ohio Replacement for three years would mean that the British Navy—in order to meet its schedule for replacing its own strategic submarines—would need to have the missile compartment completed years before the U.S. Navy would need it. In that case, shared costs, planning, and scheduling for those activities would need to be renegotiated.

By phasing in the reduction of the Ohio class SSBNs and by delaying the purchase of the Ohio Replacement class, the Navy would preserve the ability to build more submarines if the future security environment changed. For example, if policymakers decided that they needed to retain 10 SSBNs by the time New START has been fully implemented (in 2018), the last two retirements could be canceled. Likewise, the Navy could purchase additional Ohio Replacement submarines in 2025 and 2026 and reduce to just two years the period over which the force might be at greater risk because of having only eight boats.

RELATED OPTIONS: Discretionary Spending, Options 6 and 8

RELATED CBO PUBLICATIONS: Long-Term Implications of the 2014 Future Years Defense Program (forthcoming); and An Analysis of the Navy's Fiscal Year 2014 Shipbuilding Plan (October 2013), www.cbo.gov/publication/44655

Discretionary	Spending—Option	8
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Cancel t	the L	ittoral	Comb	oat Ship	Program
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											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	0	-1.4	-1.5	-1.5	-2.3	-2.5	-2.7	-3.0	-3.4	-4.4	-18.3
Outlays	0	0	-0.2	-0.5	-0.8	-1.3	-1.7	-2.2	-2.6	-3.0	-1.5	-12.3

Note: This option would take effect in October 2015. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

The Navy plans to buy 36 littoral combat ships (LCSs) over the next 13 years to complete its planned force of 52. The ship is intended to perform three types of missionscountermine, antisubmarine, and anti-surface ship operations-in the world's coastal regions. The Navy is building two versions of the ship: a steel monohull and an allaluminum trimaran. The ships would carry interchangeable mission packages, which are being developed and built separately. (Mission packages are the primary combat systems and associated equipment put on the ship to perform one of the three stated missions.) As of October 2013, the Navy has built two of each version of the ship; an additional 20 ships are under construction or expected to be built as part of existing contracts through fiscal year 2015. Under its 2014 shipbuilding plan, the Navy would purchase 21 ships between 2016 and 2023 and complete all 52 ships by 2026.

This option would limit purchases of the LCS to the 24 now built or under contract, canceling the program thereafter. Doing so would reduce outlays by \$12 billion from 2016 through 2023 (and \$6 billion more beyond 2023) as a result of not purchasing additional LCSs as well as purchasing fewer mission packages, the Congressional Budget Office estimates.

Since the LCS program began in November 2001, the ship has been criticized for its cost, design, construction, and mission effectiveness. The program's first four ships cost more than twice what the Navy originally estimated. Since then, the costs of those ships (as set in two contracts for 10 ships each) have declined considerably and are on course to satisfy per-vessel cost caps for the LCS program established by the Congress, but production remains behind schedule. One rationale for canceling the program is that early reviews of both variants of the LCS raised questions about the ships' performance in conducting missions as defined in the Navy's overall strategy document, A Cooperative Strategy for 21st Century Seapower. The Navy's core missions are forward presence (routinely operating ships overseas), deterrence, sea control, power projection, maritime security, humanitarian assistance, and disaster response. Internal Navy assessments and the LCS's concept of operations-a document that explains how the ship will perform its missions-currently rate the LCS poorly for being able to contribute to forward presence and for sea control and power projection using its primary mission packages. Those core missions differ somewhat from the three primary LCS missions, but some critics argue that if the LCS cannot contribute effectively to the missions outlined in the Navy's strategy document, then the program should be canceled.

Also, in contrast to some comparably sized ships in foreign navies, the LCS does not carry much firepower. In addition, the Department of Defense's Office of Operational Test and Evaluation has raised concerns about the ability of the LCS to continue to perform its missions after being hit in a hostile environment, even though the LCS's concept of operations states that the ships can operate independently in a high-density, multithreat environment. Testing has also indicated problems with reliability and performance in some key systems, such as the ships' guns, particularly when operating at high speeds (as would be likely in engagements with small, fast attack boats). Finally, other Navy assessments indicate that the greatest need for the LCSs is for the ones that perform countermine missions; with 24 ships in the fleet, the Navy will already have substantially more countermine capability than today's fleet provides.

Canceling the LCS program would have several disadvantages, however. Both variants of the LCS represent innovative additions to the future force at a price much lower than that of other shipbuilding programs, and thus far no alternatives have been put forth that could perform its three types of missions more effectively and at a lower cost. Virtually every new class of surface combatant over the past 30 years-Spruance destroyers, Oliver Hazard Perry frigates, Ticonderoga cruisers, and Arleigh Burke destroyers-was initially criticized over its capabilities and costs but, when the construction was finished and the problems fixed, was regarded as a valuable component of the Navy's fleet. Also, the ship's sea frame (the ship itself) and interchangeable mission packages give it considerable flexibility to adapt as the security environment evolves over the ship's 25-year service life. In addition, canceling the program would not eliminate the missions

the LCSs would be needed to perform; other existing ships or newly designed ships would have to perform any missions that the 24 LCSs could not.

Moreover, in an era of tight funding, the LCS represents a relatively inexpensive way to increase the fleet's size to reach the Navy's goal of more than 300 ships. Although the LCS may not be able to perform some missions as effectively as larger and more-expensive ships, it is a key component of the Navy's planned force structure: The Navy will be able to make use of the ships for maritime security operations and other, noncore missions such as engagement with allies. At \$550 million, the average cost of an LCS with a mission package is one-third as expensive as an Arleigh Burke destroyer and cheaper than what it would cost to build a new Oliver Hazard Perry frigate today.

RELATED OPTIONS: Discretionary Spending, Options 6 and 7

RELATED CBO PUBLICATIONS: Long-Term Implications of the 2014 Future Years Defense Program (forthcoming); and An Analysis of the Navy's Fiscal Year 2014 Shipbuilding Plan (October 2013), www.cbo.gov/publication/44655

Defer Developm	ent of a	a New	Long	g-Kang	ge Bo	mber						
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-1.0	-1.8	-2.7	-2.8	-3.4	-5.0	-5.2	-5.1	-5.0	-8.4	-32.1
Outlays	0	-0.6	-1.3	-2.1	-2.6	-2.8	-3.6	-4.0	-3.3	-3.3	-6.6	-23.5

Defer Development of a New Long Dange Domber

Note: This option would take effect in October 2014. Estimates of savings displayed in the table are based on the fiscal year 2014 Future Years Defense Program and the Congressional Budget Office's extension of that program.

The Air Force operates a fleet of 159 long-range bombers: 76 B-52Hs built in the 1960s, 63 B-1Bs from the 1980s, and 20 B-2A stealth bombers from the 1990s. Although those aircraft should be able to continue flying through at least the mid-2030s, the Air Force is in the early stages of developing a new bomber it plans to field in the mid-2020s. The goal of that program is to produce between 80 and 100 aircraft possessing global range at a total cost of no more than \$55 billion (in nominal dollars). Other specifics-such as the aircraft's speed, payload, stealth characteristics, whether it will be manned or unmanned, and its production schedule-have yet to be determined. The new aircraft could augment and eventually replace today's bombers.

Under this option, development of a new bomber would be deferred until after 2023, reducing the need for new budget authority by \$32 billion through that year. Those savings include \$8 billion the Air Force has budgeted for 2015 through 2018 in the most recent Future Years Defense Program, plus \$24 billion for 2019 through 2023. Outlay savings would total \$24 billion from 2015 through 2023, the Congressional Budget Office estimates. CBO based its estimate of savings for the latter period on its analysis of the projected funding for bombers in the Annual Aviation Inventory and Funding Plan that the Department of Defense issued in 2013.

An advantage of this option is that it would free up budgetary resources for other priorities during the coming decade. Funding would not have to be provided for full bomber production at the same time the Air Force is also planning to purchase up to 15 KC-46A tankers per year and 80 F-35A fighters per year. (Production of those aircraft is expected to end in 2027 and 2037, respectively, although the Air Force will probably continue purchasing tankers after 2027.) Another advantage of this option is that a bomber program that begins later might be able to take advantage of general advances in aerospace technology that might be made in the coming years. Such technologies might make possible an even more capable bomber or might lead to other types of weapons that would make a new bomber unnecessary or reduce the number of bombers needed. Taking advantage of future technological developments can be particularly valuable for weapon systems that are expected to be in use for several decades. Even with a 10-year delay, a new bomber would still be available by about the time today's bombers are nearing the end of their service life.

A disadvantage of this option is that it would run the risk that a new bomber would not be available if estimates of the service life of today's bombers are incorrect and some of them need to be retired sooner than expected. By 2035, the B-52Hs will be almost 75 years old, the B-1Bs about 50 years old, and the B-2As about 40 years old. Expecting those aircraft to perform reliably at such advanced ages may prove to be overly optimistic. Similarly, a gap in capability could arise if the new bomber is deferred and ends up taking significantly more time to field than expected (as was the case for the F-35 fighter program). Another disadvantage is that the Air Force's inventory of stealthy bombers able to fly in defended airspace would remain limited to the B-2A, which makes up only about 12 percent of today's bomber force. Larger numbers of stealthy bombers might be useful for operations against adversaries that employ advanced air defenses. A third disadvantage is that the recent shift in strategic focus toward the western Pacific Ocean-with its long distances and limited basing options-will make long-range aircraft particularly important should a conflict arise in that region.

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Reduce Funding f	educe Funding for International Affairs Programs														
											То	tal			
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023			
Change in Spending															
Budget authority	0	-14	-14	-15	-15	-15	-16	-16	-16	-17	-58	-137			
Outlays	0	-6	-9	-11	-13	-14	-14	-15	-15	-16	-39	-114			

Discretionary Spending—Option 10

Note: This option would take effect in October 2014.

The budget for international affairs funds diplomatic and consular programs, global health initiatives, security assistance, and other programs. In 2012, the cost of those programs totaled \$49.1 billion, including \$11.6 billion for international security assistance, \$7.9 billion for diplomatic and consular programs, \$7.7 billion for global health programs, and \$1.9 billion for narcotics control and law enforcement programs. Most funding for international affairs is funneled through the Department of State and the Agency for International Development. Several other agencies, such as the departments of Defense, Agriculture, and the Treasury, also receive funding for or implement overseas assistance programs. Eliminating any one program would result in very modest savings, but a broad cut to the entire international affairs budget could yield significant savings.

This option would reduce the total international affairs budget by 25 percent. That change would save \$114 billion from 2015 through 2023, the Congressional Budget Office estimates.

An advantage of this option is that reducing federal spending on international affairs would allow lawmakers to redirect resources toward critical domestic programs or to avoid some reductions in those programs. Such a shift could also encourage the private sector to take a larger role in providing foreign assistance. Private organizations already provide significant resources for various international initiatives, such as HIV/AIDS research and

financial development assistance. Diversifying funding sources for international initiatives could increase their overall success. In addition, some studies have argued that some U.S. foreign assistance is wasted because it is ineffective at promoting growth and reducing poverty. Although some projects and programs are generally considered successful, the Congressional Research Service concludes that "in most cases, clear evidence of the success or failure of U.S. assistance programs is lacking, both at the program level and in the aggregate."1

The primary disadvantage of this option is the potentially far-reaching impact of reducing funding for advancing the international and ultimately the domestic policy agendas of the United States. International affairs programs, which encompass many activities in addition to foreign aid, are key to establishing and maintaining positive relations with other countries. Those relationships contribute to increased economic opportunities at home, better international cooperation, and enhanced national security. Significant reductions in federal funding for international affairs programs would hinder humanitarian, environmental, public health, economic, and national security efforts.

^{1.} Marian Leonardo Lawson, Does Foreign Aid Work? Efforts to Evaluate U.S. Foreign Assistance, CRS Report for Congress R42827 (Congressional Research Service, February 13, 2013), pp. 2–3.

Function 250

Eliminate Huma	liminate Human Space Exploration Programs														
											То	tal			
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023			
Change in Spending															
Budget authority	0	-7.7	-7.9	-8.1	-8.3	-8.5	-8.7	-8.9	-9.1	-9.3	-32.1	-76.6			
Outlays	0	-5.2	-7.6	-8.0	-8.2	-8.4	-8.6	-8.8	-9.0	-9.2	-29.0	-73.1			
Note: This option woul	d take effe	ect in Oc	tober 20	014.											

Discretionary Spending—Option 11

The National Aeronautics and Space Administration's (NASA's) Human Exploration and Operations programs focus on developing systems and capabilities required to explore deep space while continuing operations in low-Earth orbit. The exploration programs fund research and development of the next generation of systems for deep space exploration and provide technical and financial support to the commercial space industry. Complementing those efforts, NASA's space operations programs involve operating in low-Earth orbit, most notably using the International Space Station, as well as providing space communications capabilities.

This option would terminate NASA's human space exploration and space operations programs, except for those necessary to meet space communications needs (such as communication with the Hubble Space Telescope). The agency's science and aeronautics programs and robotic space missions would continue. Eliminating those human space programs would save \$73 billion between 2015 and 2023, the Congressional Budget Office estimates.

The main argument for this option is that increased capabilities in electronics and information technology have generally reduced the need for humans to fly space missions. The scientific instruments used to gather knowledge in space rely much less (or not at all) on nearby humans to operate them. NASA and other federal agencies have increasingly adopted that approach in their activities on Earth, using robots to perform missions without putting humans in harm's way. For example, NASA has been using remotely piloted vehicles to track hurricanes over the Atlantic Ocean at much longer distances than those for which tracking aircraft are conventionally piloted.

Eliminating humans from spaceflights would avoid risk to human life and would decrease the cost of space exploration by reducing the weight and complexity of the vehicles needed for the missions. (Unlike instruments, humans need water, air, food, space to move around in, and rest.) In addition, by replacing people with instruments, the missions could be made one way—return would be necessary only when the mission required it, such as to collect samples for further analysis—thus eliminating the cost, weight, and complexity of return and reentry into the Earth's atmosphere.

A major argument against this option is that eliminating human spaceflight from the orbits near Earth would end the technical progress necessary to prepare for human missions to Mars (even though those missions are at least decades away). Moreover, if, in the future, robotic missions proved too limiting, then human space efforts would have to be restarted. Another argument against this option is that there may be some scientific advantage to having humans at the International Space Station to conduct experiments in microgravity that could not be carried out in other, less costly, ways. (However, the International Space Station is currently scheduled to be retired in 2020, postponed from an earlier decommissioning in 2015.)

-Ontion 11

Function 270

Reduce Department of Energy Funding for Energy Technology Development

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
			Redu	ce Fundi	ng for Fo	ossil Ene	rgy Rese	arch, De	velopme	nt, and De	emonstration	
Change in Spending												
Budget authority	0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.5	-1.4
Outlays	0	*	*	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-1.0
			Reduc	e Fundin	g for Nu	clear En	ergy Res	earch, D	evelopm	ent, and D	emonstration	
Change in Spending												
Budget authority	0	-0.1	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-1.2	-3.5
Outlays	0	-0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-1.0	-3.2
	Re	duce Fu	nding fo	r Energy	Efficien	cy and Ro	enewable	e Energy	Researc	h, Develo	pment, and Demo	onstration
Change in Spending												
Budget authority	0	-0.3	-0.5	-0.8	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-2.4	-6.8
Outlays	0	-0.1	-0.2	-0.4	-0.5	-0.6	-0.7	-0.8	-0.8	-0.9	-1.2	-5.0
							То	tal				
Change in Spending												
Budget authority	0	-0.4	-0.9	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-1.6	-4.1	-11.7
Outlays	0	-0.2	-0.4	-0.8	-1.0	-1.2	-1.3	-1.4	-1.5	-1.5	-2.4	-9.2

Notes: This option would take effect in October 2014.

* = between -\$50 million and zero.

Since 1980, the Department of Energy (DOE) has received about \$120 billion (in 2012 dollars) to develop new technologies in the areas of fossil fuels, nuclear power, and energy efficiency and renewable energy (EERE) and to promote energy efficiency. Currently, various DOE programs support research and development (R&D) of those energy technologies and their commercial demonstration. Many analysts have questioned the value of those technology development programs and have considered whether DOE should cut back on programs to develop near-term energy technologies and concentrate instead on basic research in those fields, which is less likely to be undertaken by the private sector.

This option would reduce spending for technology development in the fossil, nuclear, and EERE R&D programs to 25 percent of their 2013 amounts stepwise over three years. The Congressional Budget Office estimates that, in total, those reductions would reduce discretionary outlays by \$9 billion from 2015 through 2023. This option would eliminate DOE's efforts to support the later stages of technology development and demonstration of commercial feasibility while leaving untouched DOE's support of basic and early applied research. (This option would not affect funds for technical assistance and financial assistance, such as weatherization services for low-income families; for such an option, see Option 28.)

An argument for this option is that some of DOE's activities are better undertaken by the private sector, which has an advantage in the development, demonstration, and deployment of new energy technologies. Generally, the direct feedback that the markets provide to private investors has proven more cost-effective than the judgment of government managers in selecting which technologies will be commercially successful. The limits on the government's ability to foster new energy technologies are illustrated by federal efforts to commercialize technology to capture and store carbon dioxide. For example, although DOE has offered financial incentives to firms to build that technology into new commercial power plants, it has found few firms willing to do so. Overall, DOE has long sought to introduce new energy technologies for coal through expensive technology demonstration plants that have often failed to deliver commercially useful knowledge or attract much private interest.

Furthermore, the Government Accountability Office (GAO) has long been critical of DOE's project management, pointing to inadequate oversight of contractors and to projects that failed to meet expectations for costs or schedules. For example, despite DOE's attempts at reform, GAO concluded in 2007 that DOE's performance had not improved substantially because new management processes had not been applied consistently.

Other arguments focus on the merits of specific programs. Regarding R&D related to nuclear energy in particular, electric utilities—the intended recipients—have not built much new nuclear capacity that would make use of such technology in many years. Since many state policymakers moved to deregulate the electricitygeneration market in the 1990s, investors have generally shied away from building capital-intensive generating facilities, preferring to rely on less expensive natural gas facilities instead. Recent developments suggest that the natural gas required to power those new generators will remain cheap and plentiful for the foreseeable future, casting further doubt on the financial viability of nuclearpowered generators.

In the EERE area, which includes energy conservation as well as solar, wind, and other sources of renewable energy, the federal government provides support through other means. Many of the technologies whose development is supported by the EERE programs also receive support from the tax credit for renewable electricity production or conservation-related tax credits. Furthermore, several of the EERE industries already have high rates of growth. Given the tax preferences and the high level of market penetration, it may be time to begin withdrawing federal commitments for further technology development in those areas.

An argument against this option is that federal support may be needed because the prices businesses and consumers pay for energy do not compensate for the potentially large long-run costs of climate change. Reducing emissions of greenhouse gases would diminish those costs, but, because those costs are not reflected in current energy prices, producers and consumers have little incentive to manufacture or purchase products that reduce energy consumption or produce energy with minimal greenhouse gas emissions. Thus, some observers argue that DOE's energy technology development programs fill a gap left by the market by providing the resources and incentives necessary to develop new technologies to produce and conserve energy.

In addition, energy is one of the many sectors in which investors do not receive all the benefits of investment in R&D because others also benefit from the knowledge gained. That result suggests a possible need for federal support to ensure that adequate R&D takes place. Because society gains even if the original investor does not capture all the benefits, it is argued, the federal government should invest in R&D to compensate for the gap between all the benefits that accrue to society and those that the original investors receive.

Finally, some analysts assert that DOE's technology development programs are a worthwhile activity on their own merits. Panels convened by the National Academy of Sciences have estimated that some of DOE's technology development programs, especially in the area of energy efficiency, have provided substantial benefits that exceed their costs.

RELATED CBO PUBLICATIONS: Testimony of Terry M. Dinan, Senior Advisor, before the Subcommittee on Energy, House Committee on Science, Space, and Technology, *Federal Financial Support for Fuels and Energy Technologies* (March 2013), www.cbo.gov/publication/43993; *Federal Efforts to Reduce the Cost of Capturing and Storing Carbon Dioxide* (June 2012), www.cbo.gov/publication/43357; and *Federal Climate Change Programs: Funding History and Policy Issues* (March 2010), www.cbo.gov/publication/21196

Discretionary	Spending—	Option 13
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												Total	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Spending													
Budget authority	0	-0.6	-0.6	-0.6	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8	-2.6	-6.2	
Outlays	0	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.7	-0.7	-1.9	-5.1	

Note: This option would take effect in October 2014.

The Department of Agriculture's Forest Service maintains the largest organization in the world devoted to research on forestry and rangeland. The Forest and Rangeland Research program addresses environmental and social concerns and provides information and tools to assist private industry and other stakeholders in the sustainable management and use of natural resources. Research in seven primary areas, ranging from the systematic collection of data on the trees that make up a forest to resource management and use, supports work in diverse areas: the development of new biomass and bioenergy products and markets (wood-based chemicals, biofuels, and products that can substitute for petroleum-based materials, for example), nanotechnology innovations in the development of wood products (making wood more dense for use in building materials or using materials from wood fibers to make composite windshields for defense vehicles, for example), and improvements in how resilient resources are to changes in climate. Another program, the Forest Service's State and Private Forestry program, provides support to sustain forests and meet domestic and international demand for the goods and services that they provide. The program addresses forest health management, such as efforts to combat damaging insects, diseases, and invasive plants. It also focuses on assisting private landowners as they develop comprehensive plans to manage their forests for various purposes, such as product development, fire protection, and the maintenance of environmentally sensitive forestlands.

This option would eliminate the Forest Service's programs in Forest and Rangeland Research and in State and Private Forestry. Doing so would save \$5 billion from 2015 through 2023, the Congressional Budget Office estimates.

One argument in favor of this option is that it is not efficient for the federal government to extend support to private industry because doing so distorts decisions about investments when the costs of developing new products—for example, fuels and chemicals derived from plant materials, and new durable composite materials and papers made from wood—do not have to be weighed against the potential gains from production. Similarly, in a well-functioning market, the domestic and international demand for forest and rangeland products and services would compensate resource managers for investing appropriately in the sustainable production of those goods and services.

One argument against this option is that the benefits of those programs are so widely dispersed that only the federal government has sufficient incentive to provide them. Accordingly, it would be appropriate, for example, for the federal government to conduct research and disseminate information on the resiliency of forest and rangeland resources to changes in climate. Similarly, because the benefits that forests and rangelands provide in terms of improved air quality, water quality, and habitat are not compensated through well-functioning markets, addressing forest health and the maintenance of environmentally sensitive lands could be an appropriate role for the federal government.

Function 300

	onanig	- Pl									-	
Eliminate the International Trade Administration's Trade Promotion Activities												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-1.4	-3.4
Outlays	0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-1.3	-3.3

Note: This option would take effect in October 2014.

The International Trade Administration (ITA) is an agency within the Department of Commerce that provides support to U.S. businesses selling their goods and services abroad. The agency assists domestic companies that wish to increase their exports or that are new to the exporting process. Under its authority to provide assistance for trade development, ITA assesses the competitiveness of specific U.S. industries in foreign markets and develops trade and investment policies to promote U.S. exports. In addition, ITA supports U.S. exporters in their pursuit of fair market value for U.S. goods, monitors compliance with trade agreements, and enforces U.S. trade law. ITA is one of several federal agencies that engage in trade development and promotion; it receives the largest discretionary appropriations. The Congressional Budget Office estimates that ITA's 2013 appropriation for those purposes was \$308 million.

This option would eliminate ITA's trade promotion activities. That change would reduce discretionary outlays by \$3 billion from 2015 through 2023, CBO estimates.

One rationale for this option is that such business activities are usually better left to the companies and individuals that would be expected to benefit rather than to a government agency. Another rationale is that the cost to taxpayers to provide those services at the federal level probably exceeds the benefit to U.S. businesses; because those costs are not reflected in the prices of the goods and services sold abroad, a portion of the benefits are passed on to consumers and firms in other countries in the form of lower prices for U.S. exports. In addition, trade promotion activities that are developed by an industry are probably more efficient than those developed by government agencies because they can be better tailored to meet the particular needs of the businesses involved. Several private-sector entities already provide trade promotion services that target particular industries or regions. For example, TradePort, a joint venture of the Bay Area Council Economic Institute and the Los Angeles Area Chamber of Commerce, is a repository of free information and resources for businesses seeking to increase international trade to and from California.

An argument against eliminating ITA's trade promotion activities is that those activities may be subject to economies of scale, so having a single entity (the federal government) develop the expertise to counsel exporters about foreign legal and other requirements, disseminate information about foreign markets, and promote U.S. products abroad might be more effective. In addition, the cut could curtail efforts that are under way to increase U.S. exports. The National Export Initiative, established by Executive Order 13534 in March 2010, presented a strategy for doubling U.S. exports that relies in part on ITA's trade promotion programs. According to the 2012 National Export Strategy published by the Trade Promotion Coordinating Committee, ITA's trade promotion efforts supported \$73 billion in U.S. exports from January 2010 through September 2012.

Function 370

Function 400

Limit Highway Fu	Limit Highway Funding to Expected Highway Revenues											
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Obligation limitations	0	-7.2	-7.3	-7.5	-8.2	-9.1	-10.1	-10.9	-11.7	-12.6	-30.2	-84.5
Outlays	0	-1.8	-4.8	-5.9	-6.6	-7.4	-8.3	-9.1	-9.9	-10.7	-19.1	-64.5

Discretionary Spending—Option 15

Lingt Highmory Frandling to Francested High

Note: This option would take effect in October 2014. Most of the outlays for the highway program are controlled by limitations on obligations set in annual appropriation acts rather than by contract authority (a mandatory form of budget authority) set in authorizing law. By CBO's estimate, \$739 million in contract authority is exempt from the limitations each year; spending stemming from that authority would not be affected by this option.

The Federal-Aid Highway program provides grants to states for highway and other surface transportation projects. The last reauthorization for the highway program the Moving Ahead for Progress in the 21st Century Act, or MAP-21—provides highway funding for 2013 and 2014 in the form of contract authority, a type of mandatory budget authority. However, most spending from the program is controlled by annual limitations on obligations set in appropriation acts.

Historically, most of the funding for highway programs has come from the Highway Trust Fund, which has two accounts. In 2012, \$42 billion was spent from the fund's highway account and \$35 billion in revenues and interest was credited to that account. The fund also includes a mass transit account. Revenues credited to both accounts are generated by the federal taxes on gasoline and diesel fuels, as well as other federal taxes related to highway transportation. Since 2001, revenues credited annually to the highway account have consistently fallen short of outlavs from that account. Since 2008, lawmakers have addressed the funding shortfall by supplementing revenues dedicated to the trust fund with multiple transfers totaling \$41 billion from the Treasury's general fund. (In 2012, an additional \$2 billion was transferred from the Leaking Underground Storage Tank Trust Fund.) MAP-21 authorizes a transfer of about \$12 billion more from the general fund in 2014.

This option would reduce federal funding for the highway system, starting in fiscal year 2015, by lowering the obligation limitations for the Federal-Aid Highway program to the amount of projected revenues going to the highway account of the Highway Trust Fund. The federal taxes that directly fund the Highway Trust Fund would not change. The Congressional Budget Office estimates that this option would reduce resources provided for the highway program by \$85 billion from 2015 through 2023, relative to the obligation limitations in CBO's baseline projections. Outlays would decrease by \$65 billion over those years, CBO estimates.

A key rationale for this option is that funding federal spending on highways with revenues obtained from highway users, rather than from general taxpayers, is fairer (because those who benefit from the highways would pay the costs of the program) and tends to promote a more efficient allocation of resources (because use of highways would better reflect the costs of building and maintaining them). That argument suggests that it would be appropriate to increase the taxes that are credited to the Highway Trust Fund if current revenues are too low to fund a desired level of federal support for highways.

A related argument is that it is fairer and more efficient to have local or state tax revenues pay for highway projects that primarily benefit people in a particular area and to reserve federal revenues for projects that have true interstate significance. Another rationale for this option is that it would reduce the extent to which differing amounts of federal support distort the spending choices states make between highways and other priorities and among highway projects, perhaps resulting in projects that do not yield the greatest net benefits. It could also reduce the substitution of federal spending for spending by state and local governments. (The Government Accountability Office reported in 2004 that the existence of federal highway grants has encouraged state and local governments to reduce their own spending on highways and to use those funds for other purposes.)

A general argument against reducing federal spending on highways is that doing so would increase the economic and social costs associated with aging roads and bridges and increased traffic on them. In addition, the road network as a whole supports interstate commerce and thus strengthens the national economy.

A specific argument against reducing federal spending on highways by funding it solely through the current federal taxes on highway users is that the existing federal taxes give motorists only weak incentives to use highways efficiently—that is, to avoid contributing to traffic congestion and to minimize pavement damage by heavy trucks. Another argument for using general revenues is that money from the Highway Trust Fund is spent on nonhighway projects and purposes, such as public transit, sidewalks, bike paths, recreational trails, scenic beautification, and preservation of historic transportation structures.

RELATED CBO PUBLICATIONS: Statement for the record by Sarah Puro, Analyst for Surface Transportation Programs, for the House Committee on the Budget, *Status of the Highway Trust Fund* (April 24, 2013), www.cbo.gov/publication/44093; *Alternative Approaches to Funding Highways* (March 2011), www.cbo.gov/publication/22059; and *Spending and Funding for Highways* (January 2011), www.cbo.gov/publication/22003

Function 400

Discretionary	Spending—Option	16

Eliminate Grants to Large and Medium-Sized Airports

		0				-						
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Obligation limitations	0	-1.0	-1.0	-1.0	-1.1	-1.1	-1.1	-1.1	-1.2	-1.2	-4.1	-9.8
Outlays	0	-0.2	-0.6	-0.8	-1.0	-1.0	-1.1	-1.1	-1.1	-1.1	-2.6	-8.1

Note: This option would take effect in October 2014. Outlays for the grants to large and medium-sized airports are controlled by limitations on obligations set in annual appropriation acts rather than by contract authority (a mandatory form of budget authority) set in authorizing law. For the above estimates, the contract authority is assumed to equal the obligation limitations that would be in effect under the option.

Under the Airport Improvement Program (AIP), the Federal Aviation Administration (FAA) provides grants to airports to expand runways, improve safety and security, and make other capital investments. In 2012, about 30 percent of that money went to airports that are classified, on the basis of the number of passenger boardings, as large and medium-sized. Those airports—there were 64 in 2012, although the number fluctuates from year to year—account for nearly 90 percent of passenger boardings.

This option would eliminate the AIP's grants to large and medium-sized airports but would continue to provide grants to smaller airports in amounts that match funding in 2012. That year, smaller airports received \$2.3 billion, more than two-thirds of the \$3.3 billion available under the program. Retaining only that portion of the program would reduce federal outlays by \$8 billion from 2015 through 2023, the Congressional Budget Office estimates.

The AIP, like some other transportation programs, is treated in an unusual way in the budget. The program's budget authority is provided in authorization acts as contract authority, a mandatory form of budget authority. But because the spending of contract authority is subject to obligation limitations contained in appropriation acts, the resulting outlays are categorized as discretionary.

The main rationale for this option is that federal grants substitute for funds that larger airports could raise from private sources. Those airports have financed many investments by using bond issues to leverage funds collected from passenger facility charges and other fees, although federal law limits the collection and use of such funds. Smaller airports may have more difficulty raising funds for capital improvements, although some have been successful in tapping the same sources of funding as their larger counterparts. By eliminating grants to larger airports, this option would focus federal spending on airports that appear to have the fewest alternative sources of funding.

One argument against ending federal grants to large and medium-sized airports is that those airports would be unable to substitute private sources of funding for reduced federal grants unless the current federal limits on the collection and use of passenger facility charges were eased. Another argument against ending such grants is that they allow the FAA to retain greater control over how those airports spend their funds by imposing conditions for aid.

RELATED CBO PUBLICATIONS: *Issues and Options in Infrastructure Investment* (May 2008), www.cbo.gov/publication/19633; and *Financing Small Commercial-Service Airports: Federal Policies and Options* (April 1999), www.cbo.gov/publication/11482

Function	400

Increase Fees for Aviation Security

										Total			
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Spending													
Budget authority	0	-0.3	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.5	-1.5	-4.2	-11.3	
Outlays	0	-0.3	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.5	-1.5	-4.2	-11.3	

Note: This option would take effect in October 2014. Fees collected under this option could be recorded in the budget as offsetting collections (discretionary), offsetting receipts (usually mandatory), or revenues, depending on the specific legislative language used to establish them.

The Aviation and Transportation Security Act, enacted in response to the attacks of September 11, 2001, made the federal government, rather than airlines and airports, responsible for screening passengers, carry-on luggage, and checked baggage. Implementing new standards under the 2001 law required the hiring of screeners who were more highly qualified and trained, necessitating increased compensation and raising overall security costs. To help pay for increased security, the law directed airlines to charge passengers a fee, remitted to the government, of \$2.50 for a one-way trip with no stops and \$5 for a trip with one or more stops. The 2001 law also authorized the government to impose fees on the airlines themselves. In 2012, the Transportation Security Administration collected about \$2 billion from the fees on passengers and airlines—less than half of the \$5 billion federal aviation security budget that year.

This option would increase fees to cover a greater portion of the federal government's costs for aviation security. Passengers would pay a flat fee of \$5 per one-way trip because travelers typically pass through security screening only once per one-way trip. Implementing the option would boost collections (and thus reduce net spending) by \$11 billion from 2015 through 2023, the Congressional Budget Office estimates. Under standard budgetary treatment, the collections would be classified as revenues, but because the Aviation and Transportation Security Act requires that revenues from the existing fees be recorded as offsets to federal spending, the budgetary impact of this option is presented that way.

The arguments for and against this option rest on the principle that the beneficiaries of a service should pay for it. The differences lie in who is seen as benefiting from such measures. A justification for the option is that the primary beneficiaries of transportation security enhancements are the users of the system, and that security is a basic cost of airline transportation in the same way that fuel and labor are. The current situation, in which those costs are covered partly by taxpayers in general and partly by users of the aviation system, provides a subsidy to users of air transportation.

Conversely, an argument against higher fees is that the economy as a whole and the public in general—not just air travelers—benefit from the availability and security of air transportation. To the extent that greater security reduces the risk of terrorist attacks, the entire population is better off. By that reasoning, the federal government should fund at least part of its transportation security measures without collecting funds directly from the airline industry or its customers to pay for them.

RELATED OPTION: Discretionary Spending, Option 26

Function	400
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Eliminate Subsidies for Amtrak

											Total		
(Billions of dollars)	201 4	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Spending													
Budget authority	0	-1.5	-1.5	-1.6	-1.6	-1.6	-1.7	-1.7	-1.7	-1.8	-6.3	-14.8	
Outlays	0	-1.5	-1.5	-1.6	-1.6	-1.6	-1.7	-1.7	-1.7	-1.8	-6.2	-14.8	

Note: This option would take effect in October 2014.

Lawmakers appropriated more than \$1.5 billion in 2013 to subsidize intercity passenger rail services provided by the National Railroad Passenger Corporation-or Amtrak—including \$1.0 billion in grants for capital expenses and debt service, \$0.5 billion in grants for operating subsidies, and \$0.1 billion for disaster mitigation and repair work after Hurricane Sandy. Those amounts were subsequently reduced by a total of \$71 million by sequestration. All told, the government covers almost all of Amtrak's capital costs as well as more than 10 percent of its operating costs. In 1970, when the Congress established Amtrak, it anticipated subsidizing the railroad for only a short time, until it became self-supporting. Since then, however, the federal subsidies to Amtrak have totaled about \$45 billion. This option would eliminate those subsidies, yielding savings of \$15 billion from 2015 through 2023, the Congressional Budget Office estimates.

An argument in favor of this option is that federal funding is subsidizing the operation of uneconomic services and routes (including sleeper-class service and many long-distance routes) that are not used extensively and provide little public benefit in terms of reducing congestion or emissions of greenhouse gases. Eliminating Amtrak's federal subsidy would encourage its managers to improve operating efficiency, in part by cutting unprofitable services and routes. It is also argued that if states or localities value those routes highly, they should be prepared to subsidize their operation (as is already done in some cases). One obstacle to more efficient operation has been the limited cost data available to Amtrak's managers. According to the Inspector General of the Department of Transportation, new accounting and financial reporting systems that the Federal Railroad Administration and Amtrak were required by law to develop, replacing older systems that assigned only 5 percent of Amtrak's costs, still capture just 20 percent of the costs. Without the federal subsidy, Amtrak's managers would have stronger incentives to further improve the collection and reporting of cost data and to take steps to reduce the net costs of their operations.

An argument against eliminating support for Amtrak is that the amount of such support needs to be analyzed in the context of the federal subsidies for travel by highways and air and in light of the fact that rail travel has certain advantages from society's point of view, including a better safety record and lower emissions of air pollutants and greenhouse gases. Also, eliminating federal support could require Amtrak to significantly shrink its route network, raise its fares substantially, or both. Eliminating lightly traveled routes would cause hardship for passengers on those routes (some of whom may have few transportation alternatives) and for small communities along the routes. Raising fares could reduce ridership, which in turn would temper the benefits to Amtrak of the higher fares. Even without fare increases, ridership could suffer because of a decrease in service quality resulting from reductions in capital investment (which currently relies almost entirely on federal support).

RELATED CBO PUBLICATIONS: *Effects of Gasoline Prices on Driving Behavior and Vehicle Markets* (January 2008), www.cbo.gov/publication/ 41657; *The Past and Future of U.S. Passenger Rail Service* (September 2003), www.cbo.gov/publication/14769; and *A Financial Analysis of H.R. 2329, the High-Speed Rail Investment Act of 2001* (September 2001), www.cbo.gov/publication/13276

Eliminate Capital Investment Grants for Transit Systems												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-1.9	-2.0	-2.0	-2.0	-2.1	-2.1	-2.2	-2.2	-2.3	-7.9	-18.8
Outlays	0	-0.3	-0.9	-1.3	-1.6	-1.8	-2.0	-2.0	-2.1	-2.1	-4.1	-14.1
Note: This option woul	d take effe	ect in Oc	tober 20)14.								

The Capital Investment Grants program of the Department of Transportation's Federal Transit Administration awards grants on a competitive basis for investments in public transit systems. Rail systems, bus systems that use exclusive or controlled rights-of-way, and ferries are eligible for grants; in practice, almost all of the funds go to rail projects. For 2013, the Congress appropriated \$1.9 billion for the program, net of the reduction from sequestration.

This option would eliminate the Capital Investment Grants program. The Congressional Budget Office estimates that this option would save \$14 billion from 2015 through 2023.

One rationale for ending that federal spending is that the benefits of public transit systems are primarily local and should be financed locally. If the people who benefit from a project bear its costs, it is less likely that too large a project (or too many projects) will be undertaken or that too many infrastructure services will be consumed relative to the resources needed to provide them. A second rationale is that federal support for capital investment in local transit may make new rail systems and other capital-intensive options more attractive to local decisionmakers than other options, such as bus systems, that are less capitalintensive and often more cost-effective overall. Moreover, the federal government already supports local transit systems through formula grants (noncompetitive awards based on a formula). Those formula grants impose fewer restrictions on how funds can be spent; for example, urban transit systems that operate no more than 100 buses or that serve urban areas with populations below 200,000 can use some of their formula grant funds for operating expenses. Consequently, formula grants may be less likely to distort choices among local transit options. (In 2013, the federal government provided \$4.8 billion in formula grants to urban areas and an additional \$600 million to rural areas.)

One argument against this option is that, unlike the formula grants, the capital improvement grants fund transit projects that have been identified as most promising in a competitive selection process. By another argument, reducing federal support for transit could encourage increased construction of new roads, which can promote sprawling development and its associated problems, including increased emissions of local air pollutants and greenhouse gases. By contrast, transit systems, and new rail transit systems in particular, may help channel future commercial and residential development into corridors served by those systems, potentially increasing access to jobs by people who do not own cars and reducing transportation costs for society as a whole.

RELATED OPTION: Discretionary Spending, Option 28

RELATED CBO PUBLICATIONS: *Public Spending on Transportation and Water Infrastructure* (November 2010), www.cbo.gov/publication/ 21902; and *Issues and Options in Infrastructure Investment* (May 2008), www.cbo.gov/publication/19633

Function 400

Function 500

Restrict Pell Grants to the Neediest Students

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
				Restric	t Pell Gr	ants to	Student	s With a	an EFC c	of \$3,850	or Less	
Change in Discretionary Spending												
Budget authority	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.6	-1.2
Outlays	*	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.5	-1.1
Change in Mandatory Outlays	-0.1	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-1.9	-4.7
				Re	estrict P	ell Gran	ts to Stu	udents \	With an	EFC of Ze	ro	
Change in Discretionary Spending												
Budget authority	-7.4	-7.4	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-36.6	-73.0
Outlays	-2.0	-7.3	-7.4	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-7.3	-31.2	-67.6
Change in Mandatory Outlays	-0.6	-2.2	-2.6	-3.0	-3.3	-3.3	-3.3	-3.3	-3.4	-3.6	-11.7	-28.7

Notes: This option would take effect in July 2014.

* = between -\$50 million and zero; EFC = expected family contribution.

The Federal Pell Grant Program is the single largest source of federal grant aid to low-income students for postsecondary undergraduate education. Grant recipients enroll at a variety of educational institutions, including four-year colleges and universities, for-profit schools, two-year community colleges, and institutions that specialize in occupational training. (Pell grants are not available to students pursuing graduate or first professional degrees.) For the 2013-2014 academic year, the program is estimated to provide \$33 billion in aid to 8.9 million students. A student's Pell grant eligibility is chiefly determined on the basis of a federal calculation of what is called the expected family contribution (EFC), which determines his or her family's ability to pay for postsecondary education. The EFC is based on factors such as the student's income and assets and, for dependent students (in general, unmarried undergraduate students under the age of 24 without dependents of their own), the parents' income and assets, as well as the number of other dependent children in the family attending postsecondary schools. Families with a high EFC generally have less financial need than those with a low EFC and thus are able to contribute more to their child's education.

Since 2008, funding for the Pell grant program has had both a discretionary and a mandatory component. The mandatory funding supports "add-ons" to the maximum award set in each fiscal year's appropriation act. The addon for the 2013–2014 award year is \$785, which, when added to the maximum award of \$4,860 set in the appropriation act, results in a total maximum award of \$5,645.

Savings in the program could be generated by reducing grant amounts or tightening eligibility criteria; this option would take the latter approach. Under current law, students with an EFC exceeding 90 percent of the total maximum Pell grant award (that is, an EFC of \$5,081 for academic year 2013–2014) are ineligible for a grant. One version of this option would make students with an EFC exceeding \$3,850-the eligibility ceiling in 2006–2007—ineligible for a Pell grant; that ceiling would be adjusted for inflation in subsequent years. About 6 percent of the least needy Pell grant recipients would lose eligibility under that approach. Assuming that, as under current law, the maximum discretionary award amount specified in appropriation acts would remain at \$4,860 in future years, the Congressional Budget Office estimates that this option would yield discretionary savings of \$1 billion and mandatory savings of \$5 billion from 2014 through 2023.

A stricter version of this option would reduce the eligibility ceiling to an EFC of zero. Under that version, about 35 percent of Pell grant recipients would lose eligibility over the 10-year period. That approach would yield discretionary savings of \$68 billion and mandatory savings of about \$29 billion through 2023, CBO estimates.

A rationale in favor of both versions of this option is that they would focus federal aid on students who, on the basis of the federally calculated EFC, have the greatest need. Furthermore, students who lost eligibility under the first version of the option (in 2013–2014, for example, those with an EFC between \$3,851 and \$5,081) would probably still be able to afford a public two-year college, according to the program's method of calculating what a family should contribute toward the cost of education. Tuition and fees at public two-year colleges for the 2011-2012 academic year averaged about \$2,650, which is still below the EFC of students who would lose eligibility under that version of the option. In addition, most students with an EFC in the affected range under either approach would be eligible for \$3,500 or more in federal loans that are interest-free while students are in school.

An argument against the option is that, among Pell grant recipients with an EFC above zero, significant educational expenses are not covered by the family's expected contribution or by federal, state, institutional, or other sources of aid (grants, loans, and work-study programs). For example, in 2007–2008, 25 percent of students with an EFC above \$3,850 and 83 percent of students with an EFC between zero and \$3,850 had educational expenses that were not covered by those sources. Denying Pell grants to those students would further increase the financial burden of obtaining an undergraduate education and might cause some to choose less postsecondary education or to forgo it altogether. The amount of postsecondary education received is an important determinant of future wages. In 2012, for example, the median wage for workers between the ages of 16 and 64 who had a bachelor's degree was about 70 percent more than the median wage for those who had only a high school diploma or GED certification.

RELATED OPTIONS: Mandatory Spending, Options 6 and 7; and Revenues, Option 16

RELATED CBO PUBLICATIONS: *The Pell Grant Program: Recent Growth and Policy Options* (September 2013), www.cbo.gov/publication/44448; *Options to Change Interest Rates and Other Terms on Student Loans* (June 2013), www.cbo.gov/publication/44318; and *Changes in the Distribution of Workers' Hourly Wages Between 1979 and 2009* (February 2011), www.cbo.gov/publication/22010

Function 500

Eliminate Federal Funding for National Community Service and Senior Community	Service
Employment Programs	

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-1.4	-1.4	-1.5	-1.5	-1.6	-1.6	-1.6	-1.7	-1.7	-5.8	-14.1
Outlays	0	-0.2	-1.0	-1.2	-1.3	-1.4	-1.4	-1.5	-1.5	-1.6	-3.8	-11.2

Note: This option would take effect in October 2014.

National community service programs provide financial and in-kind assistance to students, seniors, and others who volunteer in their communities in areas such as education, public safety, the environment, and health care. In fiscal year 2013, funding for national community service programs totaled \$1.4 billion. About \$1.0 billion supported programs of the Corporation for National & Community Service (CNCS), which includes Ameri-Corps and the National Senior Service Corps. The other \$0.4 billion supported the Senior Community Service Employment Program (SCSEP), which is administered by the Department of Labor. Participants in those national community service programs may receive wages, stipends for living expenses, training, and subsidies for health insurance and child care. In addition, upon completing their service, participants of certain CNCS programs may earn education awards in amounts up to the maximum value of the Pell grant (\$5,550 for 2013) paid from the National Service Trust. In 2012, participation in AmeriCorps was roughly 76,000; in the National Senior Service Corps, 360,000; and in SCSEP, 70,000.

This option would eliminate federal funding for national community service programs and for SCSEP, reducing outlays by \$11 billion from 2015 through 2023, the Congressional Budget Office estimates. (That estimate includes the savings in administrative costs associated with terminating the programs.) An argument in favor of this option is that funding community service programs at the local level might be more efficient than funding them at the federal level because the benefits of community service accrue locally rather than nationally. From that standpoint, the local government, community, or organization that receives the benefits would know better whether a service project was valuable enough to fund and which service projects should receive the highest priority in tight budgetary situations. Another rationale for eliminating studentfocused national service programs and associated education benefits is that they do not focus exclusively on lowincome students, which is a goal of federal programs that provide financial aid to students. Because participation in AmeriCorps is not based on family income or assets, funds do not necessarily go to the poorest students to help them learn through service and pursue a postsecondary education.

An argument against implementing this option is that the programs provide opportunities for participants of all socioeconomic backgrounds to engage in public service and to develop skills that are valuable in the labor market. In addition, relative to other approaches, the programs may offer a cost-effective way of providing community service because of the low budgetary cost per hour of service provided.

Function 500

Reduce Federal Funding for the Arts and Humanities												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-0.4	-0.5	-0.5	-0.6	-0.6	-0.7	-0.7	-0.8	-0.9	-2.0	-5.7
Outlays	0	-0.3	-0.4	-0.5	-0.6	-0.6	-0.7	-0.7	-0.8	-0.8	-1.8	-5.4

Discretionary Spending—Option 22

Note: This option would take effect in October 2014.

Federal funding for several arts and humanities programs totaled \$1.7 billion in 2013. Recipients of the subsidies include the Smithsonian Institution (\$776 million), the Corporation for Public Broadcasting (\$422 million), the National Endowment for the Humanities (\$139 million), the National Endowment for the Arts (\$139 million), the National Gallery of Art (\$122 million), the United States Holocaust Memorial Museum (\$48 million), the John F. Kennedy Center for the Performing Arts (\$35 million), and the National Capital Arts and Cultural Affairs program (\$2 million).

This option would cut federal support for those programs by 25 percent and would not adjust future appropriations for inflation. As a result, federal outlays would be reduced by \$5 billion from 2015 through 2023, the Congressional Budget Office estimates.

One argument in favor of this option is that such programs may not provide social benefits that equal or exceed their costs and thus should have a lower priority than many other programs. Another argument is that additional funding could be obtained from other sources and that certain practices—such as charging admission at museums—could be more widely used to help mitigate the effects of a reduction in federal funding.

An argument against such a policy change is that a decline in federal support would reduce activities that preserve and advance the nation's culture and that introduce the arts and humanities to people who might not otherwise have access to them. The effects on the arts and humanities nationwide would depend in large part on the extent to which other sources of funding—state and local governments, individual or corporate donors, and foundations—boosted their contributions. But alternative sources might not fully offset a drop in federal funding; most state and local governments, for example, are facing tight budgetary constraints. Subsidized projects and organizations in rural or low-income areas might find it especially difficult to garner increased private backing or sponsorship.

Function 600

Increase Paymer	nts by T	enant	s in F	edera	lly As	sisted	Hous	ing				
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-0.6	-1.2	-1.8	-2.5	-3.2	-3.3	-3.3	-3.4	-3.5	-6.0	-22.7
Outlays	0	-0.4	-1.0	-1.6	-2.3	-3.0	-3.2	-3.3	-3.4	-3.5	-5.3	-21.8

Discretionary Spending—Option 23

n

Note: This option would take effect in October 2014.

Most low-income tenants who qualify for federal rental assistance receive aid through the Housing Choice Voucher Program (sometimes called Section 8), the Public Housing Program, or project-based assistance programs (which designate privately owned, governmentsubsidized units for low-income tenants). Those programs are funded by the Department of Housing and Urban Development (HUD) and generally require that tenants pay 30 percent of their gross monthly family income (after certain adjustments) for rent; the federal government subsidizes the difference between that amount and the maximum allowable rent. In 2012, by the Congressional Budget Office's estimates, expenditures for all of HUD's rental housing assistance programs came to an average of roughly \$8,000 per household. That amount includes the housing subsidies and fees paid to the agencies that administer the programs.

Under this option, tenants' rental contributions would gradually increase from 30 percent of adjusted gross family income to 35 percent over the 2015–2019 period and then remain at the higher rate. Provided that federal appropriations were reduced accordingly, those higher rent contributions would reduce outlays by a total of \$22 billion from 2015 through 2023, CBO estimates (roughly \$10 billion for the Housing Choice Voucher Program, about \$5 billion for the Public Housing Program, and almost \$6 billion for project-based assistance programs).

An argument in support of this option is that renters who do not currently receive vouchers or rent subsidies— "unassisted" renters—whose income is comparable to that of assisted renters spend, on average, roughly 40 percent of their income on rent. Thus, even if the required contribution for assisted renters was increased to 35 percent of family income, it would still be below the amount paid by most unassisted renters. Furthermore, households that received assistance would continue to benefit from paying a fixed percentage of their income toward housing, whereas unassisted renters with similar family income could face increases in housing costs relative to income.

An argument against implementing this option is that housing costs for most renters who receive assistance would rise, and even a modest increase in rent could be difficult to manage for households with very low income. In addition, by increasing the proportion of income that tenants are required to pay in rent, the option would reduce the incentive for some participants to boost their income by working more.

RELATED OPTION: Revenues, Option 28

RELATED CBO PUBLICATIONS: Growth in Means-Tested Programs and Tax Credits for Low-Income Households (February 2013), www.cbo.gov/publication/43934; and An Overview of Federal Support for Housing (November 2009), www.cbo.gov/publication/41219

Multiple Functions

Reduce the Annual Across-the-Board Ac	ljustment for Federal	Civilian Employees' Pay
	,	1 / /

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-0.8	-1.9	-3.0	-4.3	-5.6	-7.1	-8.6	-10.2	-11.9	-9.9	-53.3
Outlays	0	-0.7	-1.8	-3.0	-4.2	-5.6	-7.0	-8.5	-10.1	-11.8	-9.8	-52.8

Note: This option would take effect in January 2015. About one-fifth of the savings would be reductions in intragovernmental payments and thus would not reduce the deficit.

Under the Federal Employees Pay Comparability Act of 1990 (FEPCA), most federal civilian employees receive a pay adjustment each January. As specified by that law, the size of the adjustment is set at the annual rate of increase of the employment cost index (ECI) for wages and salaries minus 0.5 percentage points.¹ The across-the-board increase as spelled out under FEPCA, however, does not always occur. For example, the President can limit the size of the increase if he determines that a national emergency exists or that serious economic conditions call for such action. (Similarly, the Congress can authorize an adjustment that differs from the one sought by the President.) Lawmakers enacted legislation forgoing across-the-board adjustments for federal civilian employees for 2011, 2012, and 2013.

Under this option, the annual across-the-board increase that would be expected to occur under FEPCA would be reduced by 0.5 percentage points each year from 2015 through 2023. Under the assumption that appropriations were reduced by a commensurate amount, federal outlays would be reduced by \$53 billion from 2015 through 2023, the Congressional Budget Office estimates.² One rationale for this option is that it would significantly decrease the costs of operating government agencies without diminishing the services they provide. Moreover, compensation for federal civilian employees makes up roughly 15 percent of federal discretionary spending, and it is difficult to attain a significant reduction in that category of spending without constraining personnel costs. In addition, such a change would signal that the federal government and its workers were sharing in the sacrifices that many beneficiaries of federal programs have made or will have to make to help reduce the deficit.

An argument against this option is that it could make it more difficult for the federal government to recruit qualified employees, and that effect might be pronounced for federal agencies that require workers with advanced degrees and professional skills. Recent research suggests that although federal workers with less education are paid more than private-sector workers in comparable occupations, federal workers with professional and advanced degrees are paid less than their private-sector counterparts. Thus, smaller across-the-board increases in federal pay would bring federal and private pay closer to parity for less educated workers but widen the gap between federal and private-sector workers in jobs that require more education. For federal employees who are eligible to retire but have not done so, such an action also could reduce the incentive to continue working. If a significant

^{1.} FEPCA specifies that the increase should be calculated by measuring the annual growth in the ECI in the third quarter that ended 15 months earlier. For example, in 2013 the law would have set the adjustment at the rate of increase between the ECI in the third quarter of 2010 and the third quarter of 2011, minus 0.5 percentage points; however, it was superseded by the Full-Year Continuing Appropriations Act of 2013, which extended the pay freeze through 2013. FEPCA also sought to reduce the disparity between the salaries of federal and private-sector workers in similar occupations and locations by granting locality adjustments designed to reduce the gap to no more than 5 percent within nine years. However, those locality adjustments have not been fully implemented.

^{2.} That estimate reflects the effect of this proposal on the need for appropriated funds; however, it does not reflect the proposal's net effect on the federal budget from 2015 through 2023. About one-fifth of the savings in this option would be attributable to amounts appropriated to one government account and later paid to a different account, such as the trust funds for Social Security and civil service retirement. Reducing the amount of such intragovernmental payments has no effect on total federal spending.

number of those workers decided to retire as a result of smaller increases in pay, increased retirement costs could offset some of the payroll savings produced by the policy change. (Such increases in mandatory spending are not included in the estimates shown here.)

RELATED OPTION: Discretionary Spending, Option 2

RELATED CBO PUBLICATIONS: Comparing the Compensation of Federal and Private-Sector Employees (January 2012), www.cbo.gov/publication/42921; and Analysis of Federal Civilian and Military Compensation (January 2011), www.cbo.gov/publication/22002

Multiple Functions

Reduce the Size of the Federal Workforce Through Attrition

											To	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-1.0	-2.9	-4.5	-5.2	-5.4	-5.6	-5.9	-6.1	-6.3	-13.6	-42.9
Outlays	0	-0.9	-2.8	-4.4	-5.2	-5.4	-5.6	-5.9	-6.1	-6.3	-13.3	-42.6

Note: This option would take effect in October 2014. About one-fifth of the savings would be reductions in intragovernmental payments and thus would not reduce the deficit.

In 2012, the federal government employed about 2.2 million civilian workers, excluding Postal Service employees. About 45 percent worked in the Department of Defense or Department of Homeland Security, and roughly 15 percent were employed by the Department of Veterans Affairs. The rest of the civilian workforce worked in agencies providing a variety of public services—they regulated businesses; investigated crimes; collected taxes; and administered programs for the elderly, poor, and disabled, for example. The largest costs the federal government incurred for those employees were for salaries, health insurance, and pension benefits.

This option would reduce the number of federal civilian employees at certain agencies by 10 percent by allowing those agencies to hire no more than one employee for every three workers who left. The President would be allowed to exempt an agency from the requirement under certain conditions-because of a national security concern or an extraordinary emergency, for instance, or if the performance of a critical mission required doing so. About two-thirds of the federal civilian workforce would be exempt, the Congressional Budget Office estimates, thus limiting the workforce reduction to about 70,000 employees. (Agencies would not be allowed to hire contractors to offset the reduction in the federal workforce.) Provided that appropriations were reduced concomitantly, discretionary outlays would be reduced by \$43 billion from 2015 through 2023.¹

An argument for this option is that some agencies could continue to provide crucial services with a smaller workforce by working more efficiently and by eliminating services that are not cost-effective. The number of management and supervisory positions has increased in many agencies as the workforce has aged, and research suggests that, in some cases, the additional layers of management hamper performance. This option could encourage agencies to reduce the number of managers and supervisors through attrition as people in those positions retired over the next few years. Research also suggests that federal workers earn more in occupations that do not require a college diploma than do their counterparts in the private sector. If private-sector compensation is indicative of the value of those positions, then the savings that agencies would generate by trimming that part of the workforce would exceed the value of the services that those jobs produce.

An argument against this option is that trends in federal employment suggest that the federal workforce may already be under strain from cost-cutting measures and that further reductions could impede the government's ability to fulfill parts of its mission. The federal civilian workforce is about the same size it was 20 years ago, although both the number of people the government serves (as measured by the U.S. population) and federal spending per capita have grown substantially since that time. After declining during most of the 1990s, federal employment has increased moderately over the past dozen years. That growth largely reflects new responsibilities for the Department of Homeland Security and the increase in services the Department of Veterans Affairs

That estimate reflects the effect of this proposal on the need for appropriated funds; however, it does not reflect the proposal's net effect on the federal budget from 2015 through 2023. About one-fifth of the savings in this option would be attributable to amounts appropriated to one government account and later paid to a different account, such as the trust funds for Social Security and civil service retirement. Reducing the amount of such intragovernmental payments has no effect on total federal spending.

is providing for soldiers returning from Iraq and Afghanistan. Workforce reductions at those or other agencies would probably reduce the quality and quantity of some of the services provided and could have other negative effects, such as increasing the amount of fraud and abuse in some government programs.

RELATED CBO PUBLICATION: Comparing the Compensation of Federal and Private-Sector Employees (January 2012), www.cbo.gov/publication/ 42921

Multiple Functions

Impose Fees to Cover the Cost of Government Regulations and Charge for Services Provided to the Private Sector

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Spending												
Budget authority	0	-1.5	-1.8	-2.0	-2.3	-2.5	-2.6	-2.7	-2.8	-2.9	-7.7	-21.0
Outlays	0	-1.5	-1.8	-2.0	-2.3	-2.5	-2.6	-2.7	-2.8	-2.9	-7.7	-21.0

Note: This option would take effect in October 2014. Fees collected under this option could be recorded in the budget as offsetting collections (discretionary), offsetting receipts (usually mandatory), or revenues, depending on the specific legislative language used to establish them.

Federal law imposes regulations on individuals and businesses to ensure the health and safety of the public and to facilitate commerce. The federal government also provides the private sector with a wide array of services and allows the use of public assets that have economic value, such as navigable waterways and grazing land. This volume includes a number of budget options that would raise substantial amounts of income by imposing fees on users of certain services or otherwise charging for those services. For example, Option 17, would increase the fees that cover the cost of aviation security, generating \$11 billion from 2015 through 2023. A number of other fees or taxes that would raise smaller amounts could be imposed either to cover the cost to the government of administering regulations or to ensure that the government is compensated for the value of services provided to the private sector. Those fees could be applied across a wide array of federal agencies and through a variety of programs.

This option encompasses an illustrative group of relatively small fees and taxes that could be implemented individually. However, if all were put in place, they could increase income to the government by \$21 billion from 2015 through 2023 by doing the following:

- Increasing fees for permits issued by the Army Corps of Engineers (\$0.6 billion),
- Setting grazing fees for federal lands on the basis of the state-determined formulas used to set grazing fees for state-owned lands (\$0.1 billion),
- Imposing fees on users of the St. Lawrence Seaway (\$0.3 billion),

- Increasing fees for the use of the inland waterway system (\$4.3 billion),
- Imposing fees that recover the costs of registering pesticides and new chemicals (\$0.4 billion),
- Charging fees to offset the cost of federal rail-safety activities (\$1.7 billion),
- Charging transaction fees to fund the Commodity Futures Trading Commission (\$2.2 billion),
- Assessing new fees to cover the costs for the Food and Drug Administration to review advertising and promotional materials for prescription drugs and biological products (\$0.2 billion), and
- Collecting new fees for activities of the Food Safety and Inspection Service (\$11.2 billion).

Depending on the way the legislation was written, the fees included in this option could be recorded as revenues or as collections that would then be subtracted from either discretionary or mandatory spending. Several of the specific fees listed in this option would typically be classified as revenues, consistent with the guidance provided by the 1967 President's Commission on Budget Concepts. That guidance indicates that receipts from a fee that is imposed under the federal government's sovereign power to assess charges for government activities should generally be recorded as revenues. If that treatment was applied to any of these specific fee options, the amounts shown in the table would be reduced to account for the fact that the fees would shrink the tax base for income and payroll taxes and, thus, reduce revenues from those sources. However, lawmakers have sometimes legislated the budgetary classification of fees, specifying that they be recorded as offsets to spending when they otherwise would have been recorded as revenues.

A rationale for implementing user charges is that private businesses should cover all of their costs of doing business, including the costs of ensuring the safety of their activities and products—for example, the Federal Railroad Administration's costs for rail-safety activities (such as safety inspections of tracks and equipment and accident investigations) and the Environmental Protection Agency's costs to register pesticides and new chemicals. In addition, it is argued that the private sector should compensate the government for the market value of services it benefits from, such as the dredging of the inland waterway system, and for using or acquiring resources on public lands, such as grasslands for grazing. If businesses

RELATED OPTION: Discretionary Spending, Option 17

provide products or services that cannot be priced high enough to cover all of their costs, it is unfair to taxpayers to have to make up the difference and a net drain on the productivity of the economy.

An argument against setting fees to cover the cost of regulation and recover the value of public services and resources is that some of the products and services provided by private businesses are beneficial to people not involved in producing or consuming those products and services; thus, it is both fair and efficient for taxpayers to subsidize the provision of those benefits. For example, by lowering the cost of rail transportation, taxpayers' support for rail-safety activities reduces highway congestion and emissions of greenhouse gases. Similarly, support for the registration of new chemicals reduces the use of older chemicals that may be more damaging to public health and to the environment.

Repeal the	e Davis-Bacon	Act
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											Total		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Spending													
Spending authority	0	-1.6	-1.7	-1.7	-1.8	-1.8	-1.8	-1.9	-1.9	-2.0	-6.8	-16.2	
Budget authority	0	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-3.8	-9.0	
Outlays	0	-0.4	-0.9	-1.3	-1.5	-1.6	-1.7	-1.7	-1.8	-1.8	-4.1	-12.7	

Note: This option would take effect in October 2014. Spending authority includes budget authority as well as obligation limitations (such as for certain transportation programs). The option would also result in reductions in mandatory spending of less than \$50 million per year (not shown in the table).

Since 1935, the Davis-Bacon Act has required that workers on all federally funded or federally assisted construction projects whose contracts total more than \$2,000 be paid no less than "prevailing wages" in the area in which the project is located. (A federally assisted construction project is paid for in whole or in part with funds provided by the federal government or borrowed on the credit of the federal government.) The Department of Labor measures such wages on the basis of the wages and benefits earned by at least 50 percent of the workers in a particular type of job or on the basis of the average wages and benefits paid to workers for that type of job.

This option would repeal the Davis-Bacon Act, reducing appropriations, as well as limits on the government's authority to enter into obligations for certain transportation programs, accordingly. If this policy change was implemented, the federal government would spend less on construction, saving \$13 billion in discretionary outlays from 2015 through 2023, the Congressional Budget Office estimates. Savings would accrue to federal agencies that engage in construction projects: In 2013, about half of all federal or federally financed construction was funded through the Department of Transportation, although a significant portion of federal construction projects were funded through the Department of Defense, the Department of Housing and Urban Development, and the Department of Homeland Security, among others.

A rationale for repealing the Davis-Bacon Act is that, as a result of the enactment of other federal and state laws (including the adoption of a federal minimum wage) and other changes in labor markets since the 1930s, the Davis-Bacon Act is no longer needed to ensure minimum wages for workers employed in federal or federally financed construction. Moreover, when prevailing wages (including fringe benefits) are higher than the wages and benefits that would be paid in the absence of the Davis-Bacon Act, the Davis-Bacon Act distorts the market for construction workers. In that situation, federally funded or federally assisted construction projects are likely to use more capital and less labor than they otherwise would, thus reducing the employment of construction workers. In addition, by reducing the cost of federally funded or federally assisted construction projects, this option would result in more construction projects being undertaken for a given amount of federal dollars; however, the savings shown above would be attained only if federal funding was reduced. Additional rationales for repealing the Davis-Bacon Act are that the paperwork associated with the act effectively discriminates against small firms and that the act is difficult for the federal government to administer effectively.

An argument against repealing the Davis-Bacon Act is that it prevents out-of-town firms from coming into a locality, competing with local contractors for federal work using lower-paid workers from other areas of the country, and then leaving the area upon completion of the work. Another argument against repealing the act is that doing so would lower the earnings of some construction workers. An additional argument against such a change is that it might jeopardize the quality of construction at federally funded or federally assisted projects. When possible, managers of some construction projects would reduce costs by paying a lower wage than what is permitted under the Davis-Bacon Act. As a result, they might attract workers who are less skilled and do lower-quality work.

Multiple Functions

Multiple Functions

Eliminate or Reduce Funding for Certain Grants to State and Local Governments

(Billions of dollars)											Total	
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
		I	Eliminat	e Depart	ment of	Energy	Grants fo	or Energ	y Conse	rvation an	d Weatherization	1
Change in Spending												
Budget authority	0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.8	-2.0
Outlays	0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.5	-1.5
	P	hase Ou	t Enviro	nmental	Protecti	ion Agen	icy Gran	ts for Wa	astewate	r and Dri	nking Water Infra	structure
Change in Spending												
Budget authority	0	-0.2	-1.2	-2.5	-2.6	-2.6	-2.7	-2.8	-2.8	-2.9	-6.6	-20.4
Outlays	0	*	-0.1	-0.4	-1.1	-1.7	-2.2	-2.4	-2.5	-2.6	-1.7	-13.0
	Eliminate New Funding for Community Development Block Grants											
Change in Spending												
Budget authority	0	-3.1	-3.1	-3.2	-3.3	-3.3	-3.4	-3.5	-3.5	-3.6	-12.6	-29.9
Outlays	0	-0.8	-2.4	-2.9	-3.1	-3.2	-3.2	-3.3	-3.4	-3.4	-9.1	-25.6
	Eliminate Certain Department of Education Grants											
Change in Spending												
Budget authority	0	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-1.6	-1.6	-1.6	-5.7	-13.5
Outlays	0	*	-0.8	-1.3	-1.4	-1.5	-1.5	-1.5	-1.5	-1.6	-3.5	-11.1
	Decrease Funding for Certain Department of Justice Grants											
Change in Spending												
Budget authority	0	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-2.1	-5.0
Outlays	0	-0.1	-0.3	-0.4	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-1.2	-4.0
	Total											
Change in Spending												
Budget authority	0	-5.4	-6.5	-7.9	-8.1	-8.2	-8.4	-8.6	-8.8	-8.9	-27.9	-70.8
Outlays	0	-1.0	-3.7	-5.2	-6.2	-7.1	-7.6	-8.0	-8.2	-8.4	-16.0	-55.3

Notes: This option would take effect in October 2014.

* = between -\$50 million and zero.

The federal government provided \$545 billion in grants to state and local governments in 2012. Those grants redistribute resources among communities around the country, finance local projects that may have national benefits, encourage policy experimentation by state and local governments, and promote national priorities. Although federal grants to state and local governments fund a wide variety of programs, spending is concentrated in the areas of health care, income security, education, and transportation. The conditions that accompany those federal funds vary substantially—some grant programs give state and local governments broad flexibility in spending federal funds, whereas others impose more stringent conditions.

This option would reduce or eliminate funding for a group of grants. Specifically, it would:

- Eliminate new funding for the Department of Energy's grants for energy conservation and weatherization, saving \$2 billion between 2015 and 2023;
- Phase out grants from the Environmental Protection Agency for wastewater and drinking water infrastructure over three years, reducing outlays by \$13 billion between 2015 and 2023;
- Eliminate new funding for the Community Development Block Grant program, saving \$26 billion from 2015 to 2023;
- Eliminate Department of Education grants that fund nonacademic programs that address the physical, emotional, and social well-being of students, reducing federal outlays by \$11 billion between 2015 and 2023; and
- Decrease funding for certain Department of Justice (DOJ) grants to nonprofit community organizations and state and local law enforcement agencies by 25 percent relative to the Congressional Budget Office's baseline, reducing spending by \$4 billion from 2015 through 2023. (Those DOJ grants fund various activities, including the purchase of equipment for law enforcement officers, the improvement of forensic activities, substance abuse treatment for prisoners, Boys and Girls Clubs, and research and data collection for justice programs and the judiciary.)

If all of those reductions were put in place, federal spending would be reduced by \$55 billion from 2015 through 2023. (More details on the individual grant programs appear in similar options presented in CBO's March 2011 version of this report.)

The main argument for this option is that the concerns those grant programs address are primarily local, so requiring local governments to pay for the programs, if they viewed them as worthwhile, would lead to a more efficient allocation of resources. According to that reasoning, if local governments had to bear the full costs of those activities, they might be more careful in weighing those costs against potential benefits when making spending decisions. In addition, the federal funding may not always provide a net increase in spending for those activities because state and local governments may reduce their own funding of such programs in response to the availability of federal funds.

One argument against this option is that those grant programs support policies that the federal government considers a priority but which state and local governments lack the incentive or funding to implement as much as would be desirable from a national perspective. In fact, many state and local governments face fiscal constraints that might make it difficult for them to compensate for the loss of federal funds. In addition, reducing funding for grants that redistribute resources across jurisdictions could lead to more persistent inequities among communities or individuals. Smaller federal grants could also limit the federal government's ability to encourage experimentation and innovation at the state and local level and to learn from the different approaches taken to address a given policy issue.

RELATED OPTION: Discretionary Spending, Option 19

RELATED CBO PUBLICATION: Federal Grants to State and Local Governments (March 2013), www.cbo.gov/publication/43967



Revenue Options

n fiscal year 2013, the federal government collected \$2.8 trillion in revenues. Individual income taxes were the largest source of revenues, accounting for more than 47 percent of the total. Social insurance taxes (primarily payroll taxes collected to support Social Security and Medicare) accounted for 34 percent, about 10 percent came from corporate income taxes, and other receipts from excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and miscellaneous fees and fines—made up the remaining 9 percent.

Relative to the size of the economy, federal revenues increased robustly between 2012 and 2013. In 2013, revenues equaled 16.7 percent of gross domestic product (GDP), which is 1.5 percentage points above their share of GDP in 2012. That strong growth is attributable partly to the January 2013 expiration of a 2 percentagepoint reduction in the payroll tax, but receipts of individual income taxes also rose because of three other factors:

- Beginning in January, tax rates on personal income above certain thresholds went up;
- In anticipation of changes in tax law, some highincome taxpayers realized more income late in calendar year 2012 and therefore paid taxes on that income in fiscal year 2013; and
- Personal income rose for reasons that are unrelated to changes in tax provisions.

The Congressional Budget Office (CBO) also attributes some of the growth in revenues this year to increases in the average tax rate on domestic economic profits, which boosted receipts from corporate income taxes.¹

Revenues would be greater if not for the more than 200 tax expenditures in the individual and corporate income tax system, which will total more than \$1 trillion in 2013, CBO estimates.² Those tax expenditures—so called because they resemble federal spending to the

extent that they provide financial assistance for specific activities, entities, or groups of people—are exclusions, deductions, exemptions, and credits in the individual and corporate income tax systems that cause revenues to be lower than they would be otherwise for any given schedule of tax rates (see Box 4-1).

Trends in Revenues

Over the past 40 years, total federal revenues have averaged 17.4 percent of GDP—ranging from a high of 19.9 percent of GDP in 2000 to a low of 14.6 percent in 2009 and 2010 (see Figure 4-1 on page 102). The variation over time in total revenues as a percentage of GDP is primarily the result of fluctuations in receipts of individual income tax payments and, to a lesser extent, of fluctuations in collections of corporate income taxes. Revenues from individual income taxes have ranged from slightly more than 6 percent of GDP (in 2010) to slightly less than 10 percent of GDP (in 2000). Since the 1970s, corporate income taxes have ranged from about 1 percent to about 3 percent of GDP.

The variation in revenues generated by individual and corporate income taxes has stemmed in part from changes in economic conditions and from the way those changes interact with the tax code. For example, in the absence of legislated tax reductions, receipts from individual income taxes tend to grow relative to GDP

The average tax rate is the ratio of corporate income taxes to domestic economic profits. An increase in that measure typically occurs because taxable corporate profits increase faster than domestic economic profits. Domestic economic profits do not account for certain factors that affect corporate income taxes, such as deductions for bad debts, income from capital gains realizations, and deductions for accelerated depreciation.

^{2.} The estimates of tax expenditures account for effects both from income taxes and from payroll taxes. Because they are based on people's behavior with the tax expenditures in place, the estimates do not represent the revenues the government would collect if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response.

Box 4-1.

Types of and Limits on the Cost of Tax Expenditures

All tax expenditures reduce what taxpayers owe but their particular structures differ. There are five types of tax expenditures in individual and corporate income taxes, and eligibility for them and their amounts vary as well.

Types of Tax Expenditures

A *tax exclusion* reduces the amount of income that filers must report on tax returns. Taxpayers are permitted, for example, to exclude employers' contributions for health insurance and interest on state and local bonds from the income they report. Because exclusions reduce taxable income, their net effects depend on a taxpayer's marginal tax rate (the rate that applies to the last dollar of income). For instance, \$10,000 in exclusions reduces tax liability by \$1,500 for someone in the 15 percent tax bracket but by \$2,800 for someone in the 28 percent tax bracket.

A *tax deduction* is an expense that is subtracted from reported income in the calculation of taxable income. The tax code gives people a choice between *itemizing deductions* for certain types of expenses, such as state and local income taxes, mortgage interest, and charitable contributions, and claiming the *standard deduction*, a flat amount that is the same for everyone. *Statutory adjustments*, sometimes called above-the-line deductions, can be claimed by taxpayers whether they itemize deductions to individual retirement accounts fall into the category of statutory adjustments. Like exclusions, the tax value of deductions—whether they are itemized, standard, or above-the-line—varies with the taxpayer's marginal tax rate.

Some types of income are taxed at lower, *preferential rates*. Long-term capital gains and most dividends, for example, are taxed at lower rates than other types of income.

A *tax credit* can be a flat amount or it can depend on the amount of earnings or how much is spent on a particular good or activity. A *nonrefundable tax credit* (such as the foreign tax credit, which offsets some or all of the taxes paid to another country by people or businesses) reduces a taxpayer's tax liability, dollar for dollar. In contrast, a *refundable tax credit* (such as the earned income tax credit) offsets liabilities, and eligible individuals and businesses receive the full amount of the credit even if their liabilities are less than the amount of the credit. In such a case, they receive money from the government, rather than owing taxes.

In some instances, taxpayers can *defer* a portion of the taxes owed from one year to another. Some companies, for instance, defer taxes on income earned abroad from the operations of their subsidiaries until that income is remitted (or "repatriated") to the U.S. parent company, at least temporarily allowing some foreign-earned income to escape U.S. taxation.

Limits on the Costs of Tax Expenditures

Lawmakers have placed limits on some tax expenditures to lower their costs. Some limits apply broadly to a group of tax expenditures; in other cases, limits are placed on specific tax expenditures. In many cases, those limits also change the incentives faced by taxpayers, and their effects vary with the form of the limit.

Continued

because of a phenomenon known as real bracket creep rising real (inflation-adjusted) income tends to push more and more income into higher tax brackets. In addition, because some parameters of the tax system are not indexed for inflation, rising prices also push a greater share of income into higher tax brackets.³ During economic downturns, corporate profits generally fall as a share of GDP, causing corporate tax revenues to shrink, and losses in households' income tend to push a greater share of total income into lower tax brackets, resulting in lower revenues from individual income taxes. Thus, total tax revenues automatically rise relative to GDP when the economy is strong and decline relative to GDP when the economy is weak.

^{3.} That effect was more pronounced before 1984, when the parameters of the individual income tax began to be indexed for inflation.

Box 4-1.

Continued

Types of and Limits on the Cost of Tax Expenditures

Restrictions are placed on certain exclusions and deductions-sometimes in the form of a ceilingsuch as the limit on contributions to certain types of retirement funds. In 2013, for example, employees are not permitted to allocate more than \$17,500 of their pretax earnings to a conventional 401(k) plan. That dollar threshold is adjusted, or indexed, for inflation. In other cases, the dollar limits placed on certain tax expenditures are not indexed for inflation, effectively lowering the amount that can be claimed over time. The mortgage interest deduction, for example, is limited to interest on qualified debt up to \$1.1 million, but the inflation-adjusted value of that limit declines over time as prices rise. The government also offers tax subsidies for expenses above a threshold amount—a *floor*. Thus, taxpayers can claim medical and dental expenses that exceed 10 percent of their adjusted gross income, or AGI.1 (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.)

Ceilings and floors reduce the incentive to engage in tax-favored activities, although in different ways. The ceiling on contributions to retirement plans, for example, encourages saving up to the amount of the threshold but removes the subsidy for additional contributions. The floor on itemized medical deductions eliminates that subsidy for the first dollar spent on health-related expenditures but maintains the incentive for spending above the threshold.

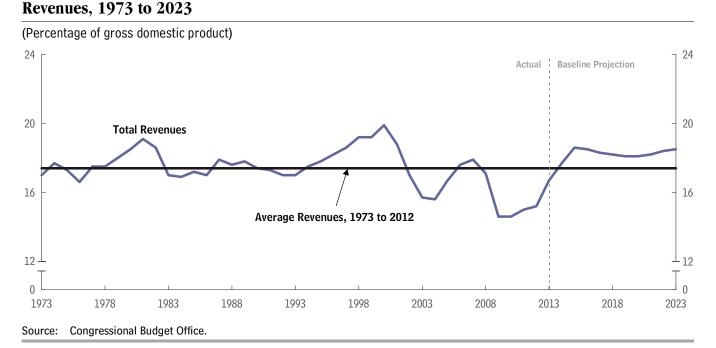
Social insurance taxes, by contrast, have been a stable source of federal revenues. Receipts from those taxes increased as a percentage of GDP during the 1970s and 1980s because of rising tax rates, increases in the number of people paying those taxes, and growth in the share of wages subject to the taxes. For most of the past two decades, legislation has not had a substantial effect on social insurance taxes, and the primary base for those Another approach to limiting costs prevents some filers from receiving any benefit from certain tax expenditures. For example, taxpayers must pay either their regular tax or the alternative minimum tax (AMT), whichever is greater. Tax liability is computed differently for the AMT and the regular income tax; the AMT allows taxpayers to take fewer exemptions, deductions, and tax credits than are permitted under the regular tax. Under the AMT, taxpayers may not deduct state and local income taxes or unreimbursed business expenses, for example, which are deductible under the regular income tax; all such adjustments are replaced with a single exemption.

Some limits do not change the incentive to engage in a tax-favored activity that would produce a tax expenditure, but they affect other types of incentives. One such provision reduces the total a taxpayer can claim in itemized deductions. The amount of certain deductions—including the deduction for charitable contributions—is reduced by 3 percent of the amount by which a taxpayer's AGI exceeds a threshold (often called the Pease limitation, after Congressman Donald Pease who proposed it), up to a maximum reduction of 80 percent of itemized deductions (that is, taxpayers retain no less than 20 percent of their deductions). Because the Pease limitation increases tax liabilities as people's income rises, it boosts the marginal tax rate on income and reduces the incentive to work, save, and invest for people who are subject to it. The Pease limitation, however, does not affect the tax subsidy that people receive for each additional dollar in itemized deductions.

taxes—wages and salaries—has varied less as a share of GDP than have other sources of income. In 2011 and 2012, however, the temporary reduction in the Social Security tax rate caused receipts from social insurance taxes to drop; with the expiration of that provision at the end of 2012, social insurance receipts as a share of GDP are expected to approach their historical level—close to 6 percent of GDP.

Through 2016, the floor on itemized medical deductions for people who are age 65 or older is 7.5 percent of AGI—the same threshold that applied to all taxpayers before the Affordable Care Act increased that amount, beginning in 2013.

Figure 4-1.



Revenues from other taxes and fees declined relative to the size of the economy over the period from 1971 to 2013 mainly because receipts from excise taxes—which are levied on such goods and services as gasoline, alcohol, tobacco, and air travel—have steadily dwindled as a share of GDP over time. That decline is chiefly because those taxes are usually levied on the quantity of goods sold rather than on their cost, and the rates have generally not kept up with inflation.

Under current law, revenues are projected to increase further, to 17.7 percent of GDP in 2014 and 18.6 percent in 2015, and then to remain above 18 percent of GDP from 2016 through 2023. About half of the expected increase in the next two years would stem from changes in tax rules, such as the scheduled expiration at the end of December 2013 of enhanced depreciation deductions allowed for certain business investments. Accounting for the other half are factors related mainly to the strengthening economy, including increases relative to GDP in some components of taxable income (such as wages and salaries, capital gains realizations, proprietors' income, and domestic economic profits) and the continued rise to more normal levels in the average tax rate on domestic economic profits. CBO projects that revenues will grow at close to the same rate as GDP over the 2015-2023 period. Individual income tax receipts are projected to

rise relative to GDP as increases in taxpayers' real income push more income into higher tax brackets; in contrast, corporate income tax receipts and remittances to the U.S. Treasury from the Federal Reserve are projected to fall relative to GDP.

Trends in Tax Expenditures

Unlike discretionary spending programs (and some mandatory programs), most tax expenditures are not subject to periodic reauthorization or annual appropriations. And, as is the case for entitlement programs, any person or entity that meets program requirements can receive benefits. Because of the way tax expenditures are treated in the budget, however, they are much less transparent than is spending on entitlement programs.

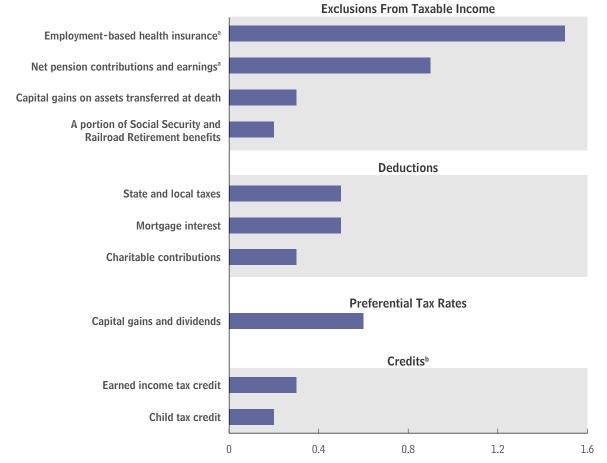
Ten of the largest tax expenditures will account for approximately two-thirds of the total budgetary effect of all tax expenditures in 2013, CBO estimates. They fall in four major categories, as follows:

Exclusions from taxable income of employment-based health insurance, net pension contributions and earnings, capital gains on assets transferred at death, and a portion of Social Security and Railroad Retirement benefits;

Figure 4-2.

Budgetary Effects of Selected Major Tax Expenditures, Fiscal Years 2014 to 2023

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Notes: Because estimates of tax expenditures are based on people's behavior with the tax expenditures in place, the estimates do not reflect the amount of revenues that would be raised if those provisions of the tax code were eliminated and taxpayers adjusted their activities in response to those changes.

The exclusion from taxable income of employment-based health insurance includes employers' contributions for health care, health insurance premiums, and long-term-care insurance premiums.

- a. Includes effect on payroll taxes.
- b. Includes effect on outlays.
- Itemized deductions for certain taxes paid to state and local governments, mortgage interest payments, and charitable contributions;
- Preferential tax rates applied to capital gains and dividends; and
- *Tax credits*, specifically the earned income tax credit and the child tax credit.

CBO estimates that in 2013, those 10 tax expenditures will total more than \$900 billion in income and payroll taxes, or 5.6 percent of GDP, and they are projected to amount to nearly \$12 trillion, or 5.3 percent of GDP, between 2014 and 2023 (see Figure 4-2).⁴ In 2013, the combined costs of the 10 tax expenditures will equal

Congressional Budget Office, *The Distribution of Major Tax* Expenditures in the Individual Income Tax System (May 2013), www.cbo.gov/publication/43768.

about one-third of federal revenues, CBO estimates, and they will exceed spending on Social Security, defense, or Medicare.⁵

Beginning in 2014, the tax credits that some people will receive to help pay health insurance premiums under the Affordable Care Act will represent a new tax expenditure. CBO and the staff of the Joint Committee on Taxation (JCT) estimate that those tax credits will equal 0.2 percent of GDP in 2015 and 0.5 percent of GDP by 2023.

Corporate tax expenditures reduce revenues by much less than individual tax expenditures do. The largest corporate tax expenditure—estimated by JCT to total about \$42 billion in fiscal year 2013 and \$266 billion from 2013 through 2017—is for the deferral of taxes on the income of controlled foreign corporations (that is, income earned by foreign subsidiaries of U.S. multinational corporations) from their business activities abroad.⁶ Although the federal government taxes the worldwide income of U.S. businesses, the income that foreign subsidiaries of U.S. multinational corporations earn is not subject to U.S. taxation until it is paid to a U.S. parent company—that is, the tax is deferred until the income is repatriated.

The second-largest corporate tax expenditure is the deduction for domestic production activities: U.S. businesses engaged in manufacturing and certain other types of domestic production may deduct from their taxable income a percentage of what they earn from those activities. That expenditure will total \$14 billion in fiscal year

2013 and \$78 billion from 2013 through 2017, JCT estimates.⁷

Methodology Underlying the Revenue Estimates

Nearly all of the revenue estimates in this chapter were prepared by JCT. The budgetary savings were estimated relative to CBO's baseline projections for receipts, under the general assumption that current laws remain in effect and specifically that scheduled changes in provisions of the tax code take effect and no additional changes are enacted to those provisions.⁸ If combined, the options might interact with one another in ways that could alter their revenue effects and their impact on households and the economy.

CBO's and JCT's budget estimates generally reflect changes in the behavior of people and firms, except for those that would affect total output in the economy such as any changes in labor supply or private investment resulting from changes in fiscal policy. The convention of not incorporating macroeconomic effects in cost estimates has been followed in the Congressional budget process since it was established in 1974. CBO and JCT separately produce estimates of the effects of some major proposals on overall output and, in turn, the effects of those changes in output on the federal budget.

However, cost estimates incorporate other changes in people's behavior that would have budgetary effects. An impending increase in the tax rate applicable to capital gains, for example, would spur some investors to sell assets before the rate increase took effect. Or, when faced with paying higher Social Security taxes for their employees, employers would pay less in salaries and benefits to offset the higher payroll taxes. Revenue estimates for those options would incorporate such behavioral responses: The acceleration of capital gains realizations in the first example would cause a temporary hike in taxable realizations in the year before implementation of the

^{5.} For calendar year 2013, more than half of the combined benefits of those expenditures will accrue to households in the nation's top quintile (or one-fifth) by income, and 17 percent will go to households in the top 1 percent, CBO estimates. In contrast, 13 percent will accrue to households in the middle quintile, and just 8 percent will accrue to those in the lowest quintile. Measured relative to after-tax income, the benefits are greatest for the lowest and highest income quintiles. In calendar year 2013, CBO estimates, the combined benefits will equal nearly 12 percent of after-tax income for households in the lowest quintile, more than 9 percent for households in the highest quintile, and less than 8 percent for households in the middle three quintiles. See Congressional Budget Office, *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768.

^{6.} See Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2012–2017* (February 2013), http://go.usa.gov/W9T3.

^{7.} The estimates for the deduction include revenues from both the corporate income tax and the individual income tax (attributable to activities of noncorporate businesses).

^{8.} As specified in the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline reflects the assumption that expiring excise taxes dedicated to trust funds will be extended (unlike other expiring tax provisions, which are assumed to follow the schedules set forth in current law).

increase, and the change in compensation in the second example would cause individual income tax receipts to fall at the same time that payroll tax revenues rise.

Some revenue options would affect outlays as well as receipts. For example, options that would change eligibility for, or the amount of, refundable tax credits would generally cause a change in outlays because the amount of such credits that exceeds someone's income tax liability (before the tax credit) is usually paid to the person and is recorded in the budget as an outlay. In addition, changes in other tax provisions could affect the allocation of refundable credits between outlays and receipts. For instance, when tax rates are increased (with no changes in the amounts of refundable tax credits or eligibility for them), the portion of the refundable credits that offsets tax liabilities increases (because the tax liabilities that can be offset are greater) and the outlay portion of the credits falls correspondingly; the total cost of the credit remains the same. For simplicity in presentation, the revenue estimates for options that affect refundable tax credits represent the net effects on revenues and outlays combined.

Options that would expand the base for Social Security taxes would affect outlays as well. When options would require some or all workers to contribute more to the Social Security system, those workers would receive larger benefits when they retired or became disabled. For nearly all such options in this report, CBO anticipates that a change in Social Security benefit payments would be small over the period from 2014 through 2023, and thus the estimates for those options do not include those outlay effects. One exception, however, is Option 18, which would increase the amount of earnings subject to Social Security tax. In that case, the effects on Social Security outlays over the 10-year projection period would be more sizable; they are shown separately in the table for that option.

Options in This Chapter

This chapter presents 36 options grouped into several categories according to the part of the tax system they would target: individual income tax rates, the individual income tax base, individual income tax credits, payroll taxes, taxation of income from businesses and other entities, taxation of income from worldwide business activity, excise taxes, and other taxes and fees.

Several comprehensive approaches to changing tax policy—each with the potential to increase revenues substantially—that have received much attention lately are not included in this report. One would eliminate or reduce the value of all or most tax expenditures. Another would fundamentally change the tax treatment of multinational corporations. Yet another would impose a tax on most goods and activities, possibly through a value-added tax.

Each would have significant consequences for the economy and for the federal budget:

- Limiting or eliminating a broad array of tax expenditures would influence many taxpayers' decisions to engage in certain activities or to purchase favored goods.
- Changing the tax treatment of multinationals would, to some extent, affect businesses' choices about how and where to invest. Those changes also would affect incentives for engaging in various strategies that allow a business to avoid paying U.S. taxes on some income.
- Creating a value-added tax would favor saving more than consumption because it would tax businesses' receipts from the sales of their goods and services instead of taxing people's income.

Although this chapter includes options that contain elements of those approaches, none of the options is as comprehensive as those approaches. One reason that the report does not contain options that entail comprehensive changes to the tax code is that such proposals often are combined with those that would reduce individual and corporate income tax rates or—in the case of a valueadded tax—replace an existing tax, and therefore their effects may be best assessed in the context of such broader packages. Moreover, the estimates would vary greatly depending on the particular proposals' specifications. Hence, the amount—and even the direction—of the budgetary impact of broad approaches to changing tax policy is uncertain.

Increase Individual Income Tax Rates

										То	tal
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
37	56	60	65	69	73	77	81	86	90	287	694
7	11	12	14	15	16	17	19	20	21	59	152
5	7	8	9	10	10	11	12	13	13	38	98
	37	37 56 7 11	37 56 60 7 11 12	37 56 60 65 7 11 12 14	37 56 60 65 69 7 11 12 14 15	37 56 60 65 69 73 7 11 12 14 15 16	37 56 60 65 69 73 77 7 11 12 14 15 16 17	37 56 60 65 69 73 77 81 7 11 12 14 15 16 17 19	37 56 60 65 69 73 77 81 86 7 11 12 14 15 16 17 19 20	37 56 60 65 69 73 77 81 86 90 7 11 12 14 15 16 17 19 20 21	2014 2015 2016 2017 2018 2019 2020 2021 2023 2014-2018 37 56 60 65 69 73 77 81 86 90 287 7 11 12 14 15 16 17 19 20 21 59

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. The estimates include the effects on outlays resulting from changes in refundable tax credits.

Under current law, ordinary income earned by most individuals is taxed at the following seven statutory rates: 10 percent, 15 percent, 25 percent, 28 percent, 33 percent, 35 percent, and 39.6 percent. (Ordinary income is all income subject to the income tax except long-term capital gains and dividends.)

As specified by the tax code, different statutory tax rates apply to different portions of people's taxable ordinary income. (Taxable income generally equals gross income minus allowable adjustments, exemptions, and deductions.) Tax brackets—the income ranges to which the different rates apply—vary depending on taxpayers' filing status (see the table on the next page). In 2013, for example, a person filing singly with taxable income of \$40,000 would pay a tax rate of 10 percent on the first \$8,925 of taxable income, 15 percent on the next \$27,325, and 25 percent on the remaining \$3,750 of taxable income. The starting points for those income ranges are adjusted, or indexed, to increase with inflation each year. Income in the form of long-term capital gains and dividends is taxed under a separate rate schedule, with a maximum statutory rate of 20 percent. Income from both short-term and long-term capital gains and dividends, along with other investment income received by higher-income taxpayers, is also subject to an additional tax of 3.8 percent as a result of the Affordable Care Act.

Taxpayers who are subject to the alternative minimum tax (AMT) face statutory rates of 26 percent and 28 percent. (The AMT is a parallel income tax system with fewer exemptions, deductions, credits, and rates than the regular income tax. Households must calculate the amount they owe under both the AMT and the regular income tax and pay the larger of the two amounts.) However, the AMT does not affect most of the highestincome taxpayers because the highest statutory rate under the AMT is only 28 percent, and many deductions allowed under the regular income tax are still allowed under the AMT.

Starting Points for Tax	Brackets (2013 dollars)	Statutory Tax Rate on Ordinary Taxable Income (Percent)
Single Filers	Joint Filers	2013
0	0	10
8,925	17,850	15
36,250	72,500	25
87,850	146,400	28
183,250	223,050	33
398,350	398,850	35
400,000	450,000	39.6

This option includes three alternative approaches for increasing statutory rates under the individual income tax. Those approaches are as follows:

- Raise all tax rates on ordinary income (income subject to the regular rate schedule) by 1 percentage point.
- Raise all tax rates on ordinary income in the top four brackets—28 percent and over—by 1 percentage point.
- Raise all tax rates on ordinary income in the top two brackets—35 percent and over—by 1 percentage point.

Raising all statutory tax rates on ordinary income by 1 percentage point would increase revenues by a total of \$694 billion from 2014 through 2023, according to estimates by the staff of the Joint Committee on Taxation (JCT). If this alternative was implemented, for example, the top rate of 39.6 percent would increase to 40.6 percent. Because the AMT would remain the same as under current law, some taxpayers would not face higher taxes under the option.

Alternatively, lawmakers could target specific individual income tax rates. For example, *boosting rates only on ordinary income in the top four brackets—28 percent and over—by 1 percentage point* would raise revenues by \$152 billion over the 10-year period, according to JCT. By targeting a smaller group of taxpayers than the first approach, this alternative would raise significantly less revenue. As another example, *boosting rates only on ordinary income in the top two brackets*—35 *percent and over by 1 percentage point* would raise revenues by \$98 billion over the 10-year period, according to JCT. Because most people who are subject to the top rate in the regular income tax are not subject to the alternative minimum tax, the AMT would not significantly limit the effect of that increase in regular tax rates. By targeting a smaller group of taxpayers than the first or second alternative, this alternative would raise even less revenue.

As a way to boost revenues, an increase in tax rates would offer some administrative advantages over other types of tax increases because it would require only minor changes to the current tax system. Rate hikes also would have drawbacks, however. Higher tax rates would reduce people's incentive to work and save. In addition, they would encourage taxpayers to shift income from taxable to nontaxable forms (for example, by substituting tax-exempt bonds for other investments or opting for more taxexempt fringe benefits instead of cash compensation) and to increase spending on tax-deductible items relative to other items (for example, by paying more in home mortgage interest and less for other things). In those ways, higher tax rates would cause economic resources to be allocated less efficiently than they would be under current law.

The estimates shown here incorporate the effect of taxpayers shifting income from taxable forms to nontaxable or tax-deferred forms. However, the estimates do not incorporate changes in how much people would work or save in response to higher tax rates. Such changes would depend in part on whether the federal government used the added tax revenues to reduce deficits or to finance increases in spending or cuts in other taxes.

RELATED OPTIONS: Revenues, Options 2 and 3

RELATED CBO PUBLICATIONS: *The Distribution of Household Income and Federal Taxes, 2008 and 2009* (July 2012), www.cbo.gov/publication/ 43373; testimony of Douglas W. Elmendorf, Director, before the Senate Committee on Finance, *Trends in Federal Tax Revenues and Rates* (December 2, 2010), www.cbo.gov/publication/21938; testimony of Douglas W. Elmendorf, Director, before the Senate Committee on the Budget, *The Economic Outlook and Fiscal Policy Choices* (September 28, 2010), www.cbo.gov/publication/21836; *Average Federal Taxes by Income Group* (June 2010), www.cbo.gov/publication/42870; *The Individual Alternative Minimum Tax* (January 2010), www.cbo.gov/ publication/41810; and *Analyzing the Economic and Budgetary Effects of a 10 Percent Cut in Income Tax Rates* (December 2005), www.cbo.gov/publication/17507

Implement a New Minimum Tax on Adjusted Gross Income												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	14.7	-0.5	6.9	6.8	6.9	7.4	7.8	8.1	8.5	8.9	34.8	75.5
Source: Staff of the Jo	oint Com	mittee o	n Taxatio	on.								

Note: This option would take effect in January 2014.

Under current law, individual taxpayers are subject to statutory tax rates on ordinary income (income other than capital gains and dividends) that rise from 0 percent to 39.6 percent. The Affordable Care Act imposed an additional tax of 3.8 percent on investment earnings realized by high-income taxpayers. However, people in the highest tax brackets generally may pay a smaller share of their income in income taxes than those brackets might suggest, for at least two reasons. First, income realized from capital gains and dividends-which represents a substantial share of income for many people in the highest brackets-is generally subject to income tax rates of 20 percent or less (before the application of the 3.8 percent additional tax). Second, taxpayers can claim exemptions and deductions (both subject to limits) to reduce their taxable income, and they can further lower their tax liability using credits.

Taxpayers may also be liable for an alternative minimum tax (AMT), which was intended to impose taxes on highincome individuals who use tax preferences to greatly reduce or even eliminate their liability under the regular income tax. The AMT allows fewer exemptions, deductions, and tax credits than are allowed under the regular income tax, and taxpayers are required to pay the higher of their regular tax liability or their AMT liability. However, the AMT does not affect most of the highestincome taxpayers because the highest statutory rate under the AMT is only 28 percent, and many deductions allowed under the regular income tax are still allowed under the AMT.

In addition to the individual income tax, taxpayers are subject to payroll tax rates of up to 7.65 percent on their earnings: 6.2 percent for Social Security (Old-Age and Survivors Insurance and Disability Insurance) and 1.45 percent for Medicare Part A (Hospital Insurance). Employers also pay 7.65 percent of their employees' earnings to help finance those benefits. Beginning in 2013, the Affordable Care Act imposed an additional tax of 0.9 percent on all earnings above \$200,000 for single taxpayers and \$250,000 for joint filers. However, the majority of those payroll taxes—specifically, those that fund Social Security benefits—are levied only on the first \$113,700 of earned income. Therefore, as a share of income, payroll taxes have a smaller effect on higherincome taxpayers than on many lower-income taxpayers.

This option would impose a new minimum tax equal to 30 percent of adjusted gross income, or AGI. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) To reduce the liability associated with the new minimum tax, taxpayers could use just one credit equal to 28 percent of their charitable contributions. Taxpayers would pay whichever was higher: the new minimum tax or the sum of individual income taxes owed by the taxpayer and the portion of payroll taxes he or she paid as an employee. (When calculating individual income taxes, the taxpayer would include the 3.8 percent surtax on investment income and any liability under the current AMT.) The new minimum tax would be phased in for taxpayers with AGI between \$1 million and \$2 million beginning in 2014; those thresholds would be adjusted, or indexed, for inflation thereafter. The option would raise \$76 billion from 2014 through 2023, according to estimates by the staff of the Joint Committee on Taxation.

One argument in favor of this option is that it would enhance the progressivity of the tax system. The various exclusions, deductions, credits, and preferential tax rates on certain investment income under the individual income tax—combined with the cap on earnings that are taxable for Social Security—allow some higher-income taxpayers, especially those whose income is primarily in the form of capital gains and dividends, to pay a smaller share of their income in taxes than many lower-income taxpayers, especially those whose income is primarily in the form of wages or salaries. By creating a new minimum tax with no deductions and just one tax credit, the option would increase the share of income paid in taxes by some higher-income taxpayers.

One argument against this option is that, by effectively imposing a second AMT, it would increase the complexity of the tax code—reducing the transparency of the tax system and making tax planning more difficult. Raising taxes on higher-income people through the existing tax system—for example, by increasing the top statutory rates or eliminating or limiting certain tax deductions or exclusions—would be simpler to implement.

Further, by eliminating or limiting tax preferences, the option would alter the affected taxpayers' incentives to undertake certain activities. Under current law, for example, the tax subsidy rate for charitable contributions can be as high as 39.6 percent. For taxpayers subject to the minimum tax, this option would cap the subsidy rate at 28 percent of contributions. That reduction in the tax subsidy for charitable contributions would reduce donations to charities.

The option would also raise marginal tax rates faced by some taxpayers. (The marginal tax rate is the percentage of an additional dollar of income from labor or capital that is paid in taxes.) For example, the option would impose a minimum tax rate of 30 percent on most capital gains and dividends received by affected taxpayers. In contrast, the highest tax rate on most capital gains and dividends is 23.8 percent under current law. Raising the marginal tax rate on capital gains and dividends would reduce taxpayers' incentives to save. In addition, the higher marginal tax rates on earnings faced by some higher-income taxpayers would lessen their incentive to work.

RELATED OPTIONS: Revenues, Options 1 and 3 RELATED CBO PUBLICATION: *The Individual Alternative Minimum Tax* (January 2010), www.cbo.gov/publication/41810

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	1.2	4.6	5.0	5.3	5.6	5.9	6.1	6.4	6.6	6.8	21.7	53.4
Source: Staff of the Jo	oint Comr	nittee o	n Taxatio	n.								

Raise the Tax Rates on Long-Term Capital Gains and Dividends by 2 Percentage Points

Note:	This option would take effect in Ja	anuary 2014.

When individuals sell an asset for more than the price at which they obtained it, they generally realize a capital gain that is subject to taxation. Most taxable capital gains are realized from the sale of corporate stocks, other financial assets, real estate, and unincorporated businesses. Since the adoption of the individual income tax in 1913, long-term gains (those realized on assets held for more than a year) have usually been taxed at lower rates than other sources of income, such as wages, interest, and dividends. However, starting in 2003, the tax rates on qualified dividends were lowered to match those of long-term capital gains. Qualified dividends are generally paid by domestic corporations or certain foreign corporations (including, for example, corporations whose stock is traded in one of the major securities markets in the United States).

The current tax rates on long-term capital gains and qualified dividends depend on several features of the tax code:

- The basic tax rates on those forms of income depend on the statutory tax rates that would be applicable to taxpayers' ordinary income—that is, income from sources other than long-term capital gains and qualified dividends. A taxpayer in the 10 percent or 15 percent tax bracket for ordinary income does not pay any taxes on long-term capital gains and qualified dividends. A taxpayer in the brackets for ordinary income that range from 25 percent through 35 percent faces a basic tax rate on long-term capital gains and dividends of 15 percent. For a taxpayer in the top bracket for ordinary income—39.6 percent—that rate increases to 20 percent.
- Beginning in 2013, certain income from long-term capital gains and dividends, along with certain other types of investment income, is also subject to an additional tax of 3.8 percent under provisions of the Affordable Care Act. Married taxpayers who file joint

returns are subject to that additional tax if their modified adjusted gross income is greater than \$250,000; that threshold drops to \$200,000 for taxpayers who are not married. (Adjusted gross income, or AGI, includes income from all sources not specifically excluded by the tax code, minus certain deductions. Modified AGI includes foreign income that is normally excluded from AGI.) The additional tax is applied to the smaller of two amounts: net investment income or the amount by which modified AGI exceeds the thresholds.

Other provisions of the tax code—including those that limit or phase out other tax preferences—effectively increase taxes on long-term capital gains and dividends. For example, the total value of certain itemized deductions is reduced if a taxpayer's AGI is above a specified threshold.¹ As a result, most taxpayers in the 39.6 percent tax bracket for ordinary income lose 3 cents of itemized deductions for each dollar of additional long-term gains, causing their tax rate to increase by more than a percentage point.

Taking all of those provisions together, the tax rate on long-term capital gains and dividends is nearly 25 percent for most people in the top income tax bracket. Although that bracket applies to less than 1 percent of all taxpayers, the income of those taxpayers accounts for roughly twothirds of income from dividends and realized long-term capital gains.

Under the American Taxpayer Relief Act of 2012, those thresholds were set, beginning in 2013, at \$250,000 for taxpayers filing as single, \$275,000 for taxpayers filing as a head of household, \$300,000 for married taxpayers filing jointly, and \$150,000 for married taxpayers filing separately. The thresholds are adjusted, or indexed, for inflation. A similar provision, with lower thresholds, was in effect before 2010.

This option would raise the basic tax rates on long-term capital gains and dividends by 2 percentage points. Those basic rates would then be 2 percent for taxpayers in the 10 percent and 15 percent brackets for ordinary income, 17 percent for taxpayers in the brackets ranging from 25 percent through 35 percent, and 22 percent for taxpayers in the top bracket. The option would not change the other provisions of the tax code that also affect taxes on capital gains and dividends. The staff of the Joint Committee on Taxation estimates that this option would raise federal revenues by \$53 billion over the 2014–2023 period.

One advantage of raising tax rates on long-term capital gains and dividends, rather than raising tax rates on ordinary income, is that it would reduce the incentive for taxpayers to try to mischaracterize labor compensation and profits as capital gains. Such strategizing occurs under current law even though the tax code and regulations governing taxes contain numerous provisions that attempt to limit it. Reducing the incentive to mischaracterize compensation and profits as capital gains would reduce the resources devoted to circumventing the rules.

Another rationale for raising revenue through this option is that it would be progressive with respect to people's wealth and income. Most taxable dividends and capital gains are received by people with significant wealth and income, although some are received by retirees who have greater wealth but less income than some younger people who are still in the labor force. Therefore, raising tax rates on long-term capital gains and dividends would impose, on average, a larger burden on people with significant financial resources than on people with fewer resources.

A disadvantage of the option is that raising tax rates on long-term capital gains and dividends would influence investment decisions by increasing the tax burden on investment income. By lowering the after-tax return on investments, the increased tax rates would reduce the incentive to invest in businesses. Another disadvantage is that the proposal would exacerbate an existing bias that favors debt-financed investment by businesses over equity-financed investment. That bias is greatest for investors in firms that pay the corporate income tax because corporate profits are taxed once under the corporate income tax and a second time when those profits are paid out as dividends or reinvested and taxed later as capital gains on the sale of corporate stock. In contrast, profits of unincorporated businesses, rents, and interest are taxed only once. That difference distorts investment decisions by discouraging investment funded through new issues of corporate stock and encouraging, instead, either borrowing to fund corporate investments or the formation and expansion of noncorporate businesses. The bias against equity funding of corporate investments would not expand if the option exempted dividends and capital gains on corporate stock-limiting the tax increase to capital gains on those assets that are not taxed under both the corporate and the individual income

taxes. That modification, however, would also reduce the revenue gains from the option. Another argument against implementing the option is that, by taxing long-term capital gains and dividends at

that, by taxing long-term capital gains and dividends at higher rates, certain undertakings—such as starting a new business or investing in a new technology—might be less profitable, and investors might therefore undervalue their benefits to the economy. The option could also encourage people to hold on to investments longer than they would prefer so as to postpone the capital gains tax, although taxpayer responses would vary over time and depend on the type of investment. If assets are held until death, the tax is avoided entirely. Postponing the sale of assets, however, means that people could not modify their holdings to suit their current needs.

RELATED CBO PUBLICATIONS: *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/publication/43768; *The Distribution of Household Income and Federal Taxes, 2008 and 2009* (July 2012), www.cbo.gov/publication/43373; and Tim Dowd, Robert McClelland, and Athiphat Muthitacharoen, *New Evidence on the Tax Elasticity of Capital Gains*, Working Paper 2012-09 (June 2012), www.cbo.gov/publication/43334

RELATED OPTIONS: Revenues, Options 1, 2, 11, and 34

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	1	3	6	9	11	15	18	22	25	29	30	140

Use an Alternative Measure of Inflation to Index Some Parameters of the Tax Code

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. The estimates include the effects on outlays resulting from changes in refundable tax credits.

Some parameters of the tax code are adjusted each year on the basis of changes in the prices of goods and services, as measured by the consumer price index for all urban consumers (CPI-U). Adjusting those tax parameters every year by the percentage change in the CPI-U is intended to keep their values relatively stable in real (inflationadjusted) terms. Among the tax parameters that are adjusted, or indexed, for inflation are the amounts of the personal and dependent exemptions; the size of the standard deductions; the income thresholds that divide the rate brackets for the individual income tax; the amount of annual gifts exempt from the gift tax; and the income thresholds and phaseout boundaries for the earned income tax credit and several other credits. In addition, starting in 2013, the exemption amounts for the individual alternative minimum tax (AMT), the income thresholds at which those exemptions phase out, and the income threshold at which the second AMT rate bracket begins are all indexed for inflation.

Indexing is accomplished by adjusting a parameter's value in a base year by the percentage change in the CPI-U between that base year and the most recent year for which the CPI-U is available. The annual period used for the calculation is not a calendar year but the 12 months that elapse from September to August. The value of the CPI-U in August becomes available in September, which allows enough time to index the tax parameters and prepare the necessary forms for the coming tax year. Adjustments in parameters of the tax code are calculated as follows: In the base year of 1987, for example, the standard deduction for a single tax filer was \$3,000. Between 1987 and 2011, the CPI-U increased by 98.6 percent; correspondingly, the standard deduction (rounded to the lowest \$50 increment) increased to \$5,950 for 2012.

The standard CPI-U, however, overstates changes in the cost of living by not fully taking into account the extent

to which households substitute one product for another when the relative prices of products change. To address that "substitution bias," the Bureau of Labor Statistics (BLS) created the chained CPI-U. Whereas the standard CPI-U uses a basket of products reflecting consumption patterns that are as much as two years old, the chained CPI-U incorporates adjustments that people make in the types of products they buy from one month to the next. Although the chained CPI-U corrects for the substitution bias in the standard CPI-U, neither the chained nor the standard CPI-U perfectly captures changes in the cost of living because neither fully accounts for increases in the quality of existing products or the value of new products. The CPI-U also overstates increases in the cost of living because of a statistical bias related to the limited amount of price data that BLS can collect. The chained CPI-U does not have the same statistical bias.

Under this option, the chained CPI-U would be used instead of the standard CPI-U to adjust various parameters of the tax code. The Congressional Budget Office estimates that the chained CPI-U is likely to grow at an average annual rate that is 0.25 percentage points less than the standard CPI-U over the next decade. Therefore, using the chained CPI-U to index tax parameters would increase the amount of income subject to taxation and result in higher tax revenues. Furthermore, the effects of instituting such a policy would grow over time. The net revenue increase would be about \$1 billion in 2014 but would reach \$29 billion in 2023, the staff of the Joint Committee on Taxation estimates. Net additional revenues would total about \$140 billion from 2014 through 2023.

An argument in favor of using the chained CPI-U to adjust tax parameters is that this approach would more accurately reflect changes in the cost of living and modify each taxpayer's liability accordingly. The chained CPI-U provides a better measure of changes in the cost of living in two ways: by more quickly capturing the extent to which households adjust their consumption in response to changes in relative prices and by using a formula that essentially eliminates the statistical bias that can occur when estimates of aggregate price changes are calculated on the basis of relatively small samples of prices.

An argument against implementing this option is that only an initial estimate of the chained CPI-U is available on a monthly basis; a final and more accurate estimate is delayed because it is more complicated and time-consuming to compute than the standard CPI-U. (Details of that approach are available in a web-only technical appendix that CBO released with its February 2010 issue brief *Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code.*) At the start of every year, all of the initial estimates for the prior year are revised, and one year later those interim estimates are further revised and made final. Because of those delays, the initial and interim estimates of the chained CPI-U, which typically contain errors, would need to be used to index the parameters in the tax code. Since the chained CPI-U was first published in 2002, however, the changes between the initial and final values have been relatively small. If the adjustment for each year was based on the index value from an earlier base year, those small errors would not accumulate beyond the current year. Furthermore, because the initial and interim estimates of the chained CPI-U have been closer to the final version of the chained CPI-U than the standard CPI-U has been, those estimates still reflect the basic improvement attributable to the chained CPI-U.

RELATED OPTION: Mandatory Spending, Option 23

RELATED CBO PUBLICATIONS: Testimony of Jeffrey Kling, Associate Director for Economic Analysis, before the Subcommittee on Social Security of the House Committee on Ways and Means, *Using the Chained CPI to Index Social Security, Other Federal Programs, and the Tax Code for Inflation* (April 18, 2013), www.cbo.gov/publication/44083; and *Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code* (February 2010), www.cbo.gov/publication/21228

Revenues —	Option 5
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Convert the Mor	tgage	Intere	est De	ductio	on to a	a 15 P	ercen	t Tax	Credi	t		
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	0.2	0.9	1.4	2.2	3.4	5.5	8.4	9.1	9.9	10.8	8.1	51.7

Convert the Mortgage Interest Deduction to a 15 P

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. The estimates include the effects on outlays resulting from changes in refundable tax credits.

The tax code treats investments in owner-occupied housing more favorably than it does other types of investments. For example, landlords can deduct certain expenses-such as mortgage interest, property taxes, depreciation, and maintenance-from their income, but they have to pay taxes on rental income, net of those expenses, and on any capital gain realized when their property is sold. In contrast, homeowners can deduct mortgage interest and property taxes if they itemize deductions, even though they do not pay tax on the net rental value of their home. (Other housing-related expenses, however, cannot be deducted from homeowners' income.) In addition, in most circumstances, homeowners can exclude from taxation capital gains of up to \$250,000 (\$500,000 for married couples filing joint tax returns) when they sell their primary residence.

Under current law, the deduction for mortgage interest is restricted in two ways. First, the tax code limits the amount of mortgage debt that can be included in calculating the interest deduction to \$1.1 million: \$1 million for debt that a homeowner incurs to buy, build, or improve a first or second home; and \$100,000 for other debt (such as a home-equity loan) for which the owner uses the personal residence as security, regardless of the purpose of that loan. Second, beginning in 2013, the total value of certain itemized deductions—including the deduction for mortgage interest—is reduced if the taxpayer's adjusted gross income is above a specified threshold.¹ (Adjusted gross income includes income from all sources not specifically excluded by the tax code, minus certain deductions.)

This option would gradually convert the tax deduction for mortgage interest to a 15 percent nonrefundable tax credit. The option would be phased in over six years, beginning in 2014. From 2014 through 2018, the deduction would still be available, but the maximum amount of the mortgage deduction would be reduced by \$100,000 each year-to \$1 million in 2014, \$900,000 in 2015, and so on, until it reached \$600,000 in 2018. In 2019 and later years, the deduction would be replaced by a 15 percent credit, the maximum amount of mortgage debt that could be included in the credit calculation would be \$500,000, and the credit could be applied only to interest on debt incurred to buy, build, or improve a first home. (Other types of loans, such as those incurred to buy second homes and those using homes as security, would be excluded.) Because the credit would be nonrefundable, people with no income tax liability before the credit was taken into account would not receive any credit, and people whose precredit income tax liability was less than the full amount of the credit would receive only the portion of the credit that offset the amount of taxes they otherwise would owe. The option would raise \$52 billion from 2014 through 2023, according to estimates by the staff of the Joint Committee on Taxation.

Relative to other taxpayers, lower-income people receive the least benefit from the current itemized deduction, for three reasons. First, lower-income people are less likely than higher-income people to have sufficient deductions to make itemizing worthwhile; for taxpayers with only small amounts of deductions that can be itemized, the standard deduction—which is a flat dollar amount provides a larger tax benefit. Second, the value of itemized deductions is greater for people in higher income tax brackets. And third, the value of the mortgage interest

Under the American Taxpayer Relief Act of 2012, thresholds for reducing the value of certain itemized deductions were set, beginning in 2013, at \$250,000 for taxpayers filing as single, \$275,000 for taxpayers filing as head of household, \$300,000 for married taxpayers filing jointly, and \$150,000 for married taxpayers filing separately. The thresholds are adjusted, or indexed, for inflation. A similar provision, with lower thresholds, was in effect before 2010.

deduction is greater for people who have larger mortgages.

Unlike the current mortgage interest deduction, a credit would be available to taxpayers who do not itemize and would provide the same subsidy rate to all recipients, regardless of income; however, taxpayers with larger mortgages—up to the \$500,000 limit specified in this option—would still receive a greater benefit from the credit than would households with smaller mortgages. Altogether, many higher-income people would receive a smaller tax benefit for housing than under current law, and many lower- and middle-income people would receive a larger tax benefit. (The credit could be made available to more households by making it refundable, although doing so would significantly reduce the revenue gain.)

One argument, then, in favor of the option is that it would distribute the mortgage interest tax subsidy more evenly across households with different amounts of income. Another argument in favor of the option is that it would increase the tax incentive for homeownership for lower- and middle-income taxpayers who might otherwise rent. Research indicates that when people own their homes rather than rent, they maintain their properties better and participate more in civic affairs. However, because individuals are unlikely to consider those benefits to the community when deciding whether to buy or rent a personal residence, a subsidy that encourages homeownership can help align individuals' choices with the community's interest.

Another argument for such a change is that it probably would improve the overall allocation of resources in the economy. With its higher subsidy rates for taxpayers in higher tax brackets and its high \$1.1 million limit on loans, the current mortgage interest deduction encourages people who would buy houses anyway to purchase more expensive dwellings than they otherwise might. That reduces the savings available for productive investment in businesses. Reducing the tax subsidy for owneroccupied housing would moderate that effect. And because investment in owner-occupied housing is boosted by the tax subsidy, and investment in many businesses is held down by taxes on their profits, the before-tax return on the additional business investment that would occur under this option would generally be higher than the forgone return from housing.

One disadvantage of the option is that, by providing a larger tax benefit to lower- and middle-income people than they receive under current law and thereby encouraging more of them to buy houses and to buy more expensive houses than they otherwise would, the option would increase the risk that some people take on. Principal residences tend to be the largest asset that people own and the source of their largest debt. When home prices rise, homeowners' wealth can rise significantly. However, when prices drop, people can lose their homes and much of their wealth, especially if their incomes fall at the same time and they cannot keep up with their mortgage payments. The experience of the past half-dozen years demonstrates that risk vividly.

Another disadvantage of the option is that it would adversely affect the housing industry and people who currently own their own homes-especially in the short term. Many homeowners have taken out long-term mortgages under the presumption that they would be able to deduct the interest on their loans. Many financial institutions have been willing to lend homebuyers higher amounts than they otherwise might have under the presumption that the mortgage interest deduction would help those buyers repay their loans. Reducing the tax subsidy for housing would make it more difficult for some homeowners to meet their mortgage obligations. Such a change would also reduce the amount new homebuyers would be willing to pay, which would lower the prices of homes, on average. Lower housing prices would create further stress on the finances of existing owners and lead to reduced housing construction. Over time, as the supply of housing declined, housing prices would rise again, but probably not to the levels they would reach

under current law. Most of those hardships could be eased by phasing in restrictions on the mortgage interest deduction. Because of the lengthy terms of mortgages, however, and the slowness with which the stock of housing changes, substantial adjustment costs would still occur even with a six-year phase-in period.

RELATED OPTIONS: Revenues, Options 6 and 8; and Mandatory Spending, Option 5

RELATED CBO PUBLICATIONS: *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/ publication/43768; Larry Ozanne, *Taxation of Owner-Occupied and Rental Housing*, Working Paper 2012-14 (November 5, 2012), www.cbo.gov/publication/43691; *An Overview of Federal Support for Housing* (November 2009), www.cbo.gov/publication/41219; and *Taxing Capital Income: Effective Rates and Approaches to Reform* (October 2005), www.cbo.gov/publication/17393

Eliminate the Deduction for State and Local Taxes												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	20	87	86	92	98	103	108	114	120	126	383	954
Source: Staff of the J Note: This option wou												

In determining their taxable income, taxpayers may choose the standard deduction when they file their tax returns, or they may itemize and deduct certain expenses (including state and local taxes on income, real estate, and personal property) from their adjusted gross income, or AGI. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) Under the American Jobs Creation Act of 2004, taxpayers who itemized could opt to deduct state and local sales taxes, which previously had not been deductible, instead of state and local income taxes. The American Taxpayer Relief Act of 2012 extended that provision but only through 2013. Beginning in 2013, the total value of certain itemized deductions-including the deduction for state and local taxes-is reduced if the taxpayer's AGI is above a specified threshold.¹

This option would eliminate the deductibility of state and local tax payments, a change that would increase federal revenues by \$954 billion from 2014 through 2023, the staff of the Joint Committee on Taxation estimates.

The deduction for state and local taxes is effectively a federal subsidy to state and local governments; that means the federal government essentially pays a share of people's state and local taxes. Therefore, the deduction indirectly finances spending by those governments at the expense of other uses of federal revenues. This option would take away the incentive that the current subsidy provides for state and local government spending, although some research indicates that total state and local spending is not sensitive to that incentive.

An argument in favor of removing the deduction is that the federal government should not subsidize state and local governments through the tax deduction because state and local taxes are largely paid in return for services provided to the public. If that is the case, such taxes are analogous to spending on other types of consumption, which are nondeductible. Another argument is that the deduction largely benefits wealthier localities, where many taxpayers itemize, are in the upper income tax brackets, and enjoy more abundant state and local government services. Because the value of an additional dollar of itemized deductions increases with the marginal tax rate (the percentage of an additional dollar of income from labor or capital that is paid in federal taxes), the deductions are worth more to taxpayers in higher income tax brackets than they are to those in lower income brackets. Additionally, the deductibility of taxes could deter states and localities from financing services with nondeductible fees, which could be more efficient.

An argument against eliminating the current deduction involves the equity of the tax system as a whole. A person who must pay relatively high state and local taxes has less money with which to pay federal taxes than does someone with the same total income and smaller state and local tax bills. The validity of that argument, however, depends at least in part on whether people who pay higher state and local taxes also benefit more from goods and services provided by states and localities.

RELATED OPTIONS: Revenues, Options 5 and 8

RELATED CBO PUBLICATIONS: *Federal Support for State and Local Governments Through the Tax Code* (April 2012), www.cbo.gov/publication/ 43047; and *The Deductibility of State and Local Taxes* (February 2008), www.cbo.gov/publication/41647

Under the American Taxpayer Relief Act of 2012, those thresholds were set at \$250,000 for taxpayers filing as single, \$275,000 for taxpayers filing as a head of household, \$300,000 for married taxpayers filing jointly, and \$150,000 for married taxpayers filing separately. The thresholds are adjusted, or indexed, for inflation. A similar provision, with lower thresholds, was in effect before 2010.

Curtail the Deduction for Charitable Giving													
											То	tal	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Revenues	4	18	19	21	22	23	25	26	27	28	84	212	

Current law allows taxpayers who itemize to deduct the value of their contributions to qualifying charitable organizations. By lowering the after-tax cost of donating to charities, the deduction provides an added incentive to donate. In calendar year 2011 (the most recent year for which data are available), taxpayers claimed \$174 billion in charitable contributions on 38 million tax returns.

The deduction is restricted in two ways. First, charitable contributions may not exceed 50 percent of a taxpayer's adjusted gross income (AGI) in any one year. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) Second, beginning in 2013, the total value of certain itemized deductions—including the deduction for charitable donations—is reduced if the taxpayer's AGI is above a specified threshold.¹

This option would further curtail the deduction for charitable donations while preserving a tax incentive for donating. Only contributions in excess of 2 percent of AGI would be deductible for a taxpayer who itemizes. That amount would still be subject to the additional reduction described above for higher-income taxpayers in 2013 and thereafter. Limiting the deduction to contributions in excess of 2 percent of AGI would match the treatment that now applies to unreimbursed employee expenses, such as job-related travel costs and union dues. Such a policy change would increase revenues by \$212 billion from 2014 through 2023, the staff of the Joint Committee on Taxation estimates.

An argument in favor of this option is that, even without a deduction, a significant share of charitable donations would probably still be made. Therefore, allowing taxpayers to deduct contributions is economically inefficient because it results in a large loss of federal revenue for a very small increase in charitable giving. For taxpayers who contribute more than 2 percent of their AGI to charity, this option would maintain the current incentive to donate but at much less cost to the federal government. People who make large donations often are more responsive to that tax incentive than people who make small contributions. Moreover, deductions of smaller contributions are more likely to be fraudulent because donations that are less than \$250 do not require the same degree of documentation as those that are larger.

A potential disadvantage of this option is that total charitable giving would decline, albeit by only a small amount, the Congressional Budget Office estimates. People who contribute less than 2 percent of their AGI would no longer have a tax incentive to donate, and many of them could reduce their contributions. Although larger donors would still have an incentive to give, they would have slightly lower after-tax income because of the smaller deduction and thus might reduce their contributions as well (although by a lesser percentage than smaller donors). Another effect of creating the 2 percent floor is that it would encourage taxpayers who had planned to

^{1.} Under the American Taxpayer Relief Act of 2012, those thresholds were set at \$250,000 for taxpayers filing as single, \$275,000 for taxpayers filing as a head of household, \$300,000 for married taxpayers filing jointly, and \$150,000 for married taxpayers filing separately. The thresholds are adjusted, or indexed, for inflation. A similar provision, with lower thresholds, was in effect before 2010.

make gifts over several years to combine donations into a single tax year to qualify for the deduction. As a result, some taxpayers would devote more resources to tax

planning than they otherwise would have in an effort to best time their contributions and thereby minimize the amount of taxes they owe over a multiyear period.

RELATED OPTION: Revenues, Option 8

RELATED CBO PUBLICATIONS: Options for Changing the Tax Treatment of Charitable Giving (May 2011), www.cbo.gov/publication/41452; The Estate Tax and Charitable Giving (July 2004), www.cbo.gov/publication/15823; and Effects of Allowing Nonitemizers to Deduct Charitable Contributions (December 2002), www.cbo.gov/publication/14230

Limit the Value of Itemized Deductions

											Tot	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues												
Limit the tax benefits of itemized deductions to 28 percent of their total value	6	12	13	13	14	14	15	15	16	17	58	135
Limit the tax value of itemized deductions to 6 percent of AGI	6	11	9	8	7	7	6	6	6	6	40	71
Limit itemized deductions to \$500,000 for joint filers (\$250,000 for all others)	9	17	16	15	15	15	15	15	15	15	72	146

Source: Staff of the Joint Committee on Taxation.

Notes: This option would take effect in January 2014.

AGI = adjusted gross income.

When preparing their income tax returns, taxpayers may either choose the standard deduction-which is a flat dollar amount-or choose to itemize and deduct certain expenses, such as state and local taxes, mortgage interest, charitable contributions, and some medical expenses. Taxpayers benefit from itemizing when the value of their deductions exceeds the amount of the standard deduction. The fact that those expenses are deductible reduces the cost of incurring them; so, in effect, the itemized deductions serve as subsidies for undertaking deductible activities. The tax savings from itemized deductions, and thus the amount of the subsidies, generally depend on a taxpayer's marginal tax rate (the percentage of an additional dollar of income from labor or capital that is paid in taxes). For instance, \$10,000 in deductions reduces tax liability by \$1,500 for someone in the 15 percent tax bracket and by \$2,800 for someone in the 28 percent tax bracket. Those tax savings constitute a "tax expenditure" by the federal government. (Tax expenditures resemble federal spending by providing financial assistance for specific activities, entities, or groups of people.)

The tax code imposes some limits on the amount of itemized deductions that taxpayers can claim. For some types of expenses (such as medical expenses), only the amount that exceeds a certain percentage of the taxpayer's adjusted gross income (AGI) can be deducted. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.) Moreover, taxpayers cannot deduct home mortgage interest on loans above \$1.1 million. In addition, the total value of certain itemized deductions is reduced by 3 percent of the amount by which a taxpayer's AGI exceeds a specified threshold. The maximum limit is equal to 80 percent of itemized deductions (that is, taxpayers retain no less than 20 percent of their deductions). That limit, originally proposed by Congressman Donald Pease, is often called the Pease limitation.

This option considers three alternative approaches that would replace the Pease limitation with broader restrictions on the total amount of itemized deductions that taxpayers are allowed to take:

The first alternative would limit the tax benefits of itemized deductions to 28 percent of the deductions' total value. As a result, taxpayers in tax brackets with statutory rates above 28 percent would receive less benefit from itemized deductions than under current law, whereas taxpayers in tax brackets with statutory rates that are equal to or less than 28 percent would be unaffected by the change. The staff of the Joint Committee on Taxation (JCT) estimates that this approach would increase revenues by \$135 billion from 2014 through 2023.

- The second alternative would limit the tax benefits of itemized deductions to 6 percent of a taxpayer's AGI. As a result, taxpayers whose savings from itemized deductions exceeded 6 percent of their AGI would receive less benefit from itemized deductions than under current law, whereas taxpayers whose savings from itemized deductions was 6 percent or less of their AGI would be unaffected by the change. This approach would raise revenues by \$71 billion from 2014 through 2023, according to JCT's estimates.
- The third alternative would limit itemized deductions to \$500,000 for married taxpayers who file joint returns and \$250,000 for other taxpayers, with those thresholds adjusted, or indexed, for inflation. As a result, taxpayers whose itemized deductions exceeded \$500,000 or \$250,000, depending on their filing status, would receive less benefit from itemized deductions than under current law, whereas taxpayers whose itemized deductions were equal to or less than those thresholds would be unaffected by the change. JCT estimates that this approach would raise revenues by \$146 billion from 2014 through 2023.

The primary argument for the option is that the availability of itemized deductions encourages taxpayers to spend more on deductible activities in order to receive the tax benefits those activities provide, and that tendency can lead to an inefficient allocation of economic resources. For example, the mortgage interest deduction prompts people to take out larger mortgages and buy more expensive houses, and therefore to invest less in other assets, than they would if all investments were treated equally. Reducing the tax benefits of itemized deductions would reduce taxpayers' incentive to spend more on goods or activities than they ordinarily would just because those activities receive favored treatment in the tax code. Doing less of certain activities for which expenses can be deducted under current law-in particular, activities that primarily benefit the taxpayers undertaking the activities-would improve the allocation of resources. However, doing less of other activities for which expenses can be deducted-in particular, those activities that offer widespread benefits-could worsen the allocation of resources. An oft-cited example in the latter category is the work of charitable organizations.

If policymakers wanted to maintain the current tax subsidy for certain activities while reducing the tax subsidy for others, they could adopt one of the approaches described in this option but exempt certain deductions entirely from the restrictions or limit certain deductions in a less constraining way. For example, policymakers could limit most itemized deductions in one of the ways offered above but allow taxpayers to fully deduct at their marginal tax rates any charitable contributions that are *greater* than some specified percentage of AGI (see Option 7). Imposing a floor on the amount of charitable contributions that could be deducted would reduce the tax expenditure for such contributions while continuing to encourage additional contributions by taxpayers who would give charities the threshold amount anyway.

Each of the three alternatives in this option would reduce the incentives for taxpayers to spend more on goods or activities that can be deducted, but in different ways and to different degrees. Limiting the tax benefit of deductions to 28 percent of their total value would reduce the incentives created by the existing system only for taxpayers in rate brackets above 28 percent, who would see their subsidy rate fall to 28 percent from as high as 39.6 percent. Those taxpayers would continue to receive a tax benefit for each additional dollar they spent on taxpreferred items, but the amount of that benefit would be less than under current law. Other taxpayers would not experience any change in their incentives to spend money on tax-preferred items. In contrast, limiting the tax value of itemized deductions to 6 percent of AGI or capping deductions at fixed-dollar amounts would eliminate the tax incentives for some taxpayers to spend more on taxpreferred items because taxpayers would not receive any tax benefit for each additional dollar spent above those thresholds. Among all itemizers, limiting the tax subsidy to 28 percent would have the smallest effect on incentives to spend on tax-preferred items, the Congressional Budget Office estimates.¹ Limiting the tax benefits of itemized deductions to 6 percent of a taxpayer's AGI would have the largest effect on incentives.

Each variant would increase the tax burden more for higher-income taxpayers than for those with lower incomes because people with higher incomes typically have more deductions and because the per-dollar tax

^{1.} Those estimates take into account the number of people who would be affected as well as the amount of deductions that they currently claim.

benefit of those deductions rises with income. Under current law, the tax benefit of the three largest itemized deductions-for state and local taxes, mortgage interest, and charitable contributions-equals 0.1 percent of aftertax income for households in the lowest income quintile, 0.4 percent for the middle quintile, 2.5 percent for the highest quintile, and 3.9 percent for the top percentile. Capping the tax value of deductions at 28 percent would increase taxes primarily on taxpayers in the top 10 percent of the pretax household income distribution. Limiting the amount of deductions to a fixed dollar amount would chiefly increase taxes on taxpayers in top percentile of the income distribution because only the highestincome taxpayers tend to have deductions over \$250,000 (or \$125,000 for taxpayers who do not file jointly). In contrast, limiting the tax value of deductions to 6 percent of AGI would, to some extent, increase taxes on taxpayers throughout the top half of the income distribution because even some taxpayers in the middle quintile have deductions that are a large share of their income.

An argument against any of the alternatives described in this option is that some deductions are intended to yield a measure of taxable income that more accurately reflects a person's ability to pay taxes. For example, the deductions for payments of investment interest and unreimbursed employee business expenses allow people to subtract the costs of earning the income that is being taxed. And taxpayers with high medical expenses or casualty and theft losses have fewer resources than taxpayers with the same amount of income and smaller expenses or losses (all else being equal). Under this option, taxpayers subject to the limitations on deductions would not be able to fully subtract those expenses from their taxable income.

Another argument for not adopting any of the three alternatives is that they would increase the complexity of the tax code to some extent. Of the three approaches, the simplest would be to cap total itemized deductions at a flat dollar amount. In contrast, capping the tax benefit of itemized deductions—either at 28 percent of itemized deductions or at 6 percent of AGI—would require taxpayers to do more complicated calculations to determine their tax liability: They would have to compute their taxes using two different methods and then pay the higher of the two amounts.

Each of these approaches could be expanded by subjecting more tax provisions to the limits or by tightening the limits on itemized deductions described above. For example, the President's budget for 2014 proposed that a 28 percent limit be applied not only to itemized deductions but also to a broader set of tax provisions, including the exclusion for interest earned on tax-exempt state and local bonds, employment-based health insurance paid for by employers or with before-tax employee dollars, and employee contributions to defined contribution retirement plans and individual retirement plans. Applying a 28 percent limit to all of the provisions specified in the President's budget would increase revenues by more than \$400 billion over the 2014–2023 period. Alternatively, adopting the third approach above but reducing the income thresholds to \$100,000 for joint filers and \$50,000 for other taxpayers would also raise more than \$400 billion over that period.

RELATED OPTIONS: Revenues, Options 5, 6, and 7

RELATED CBO PUBLICATIONS: *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (May 2013), www.cbo.gov/ publication/43768; Larry Ozanne, *Taxation of Owner-Occupied and Rental Housing*, Working Paper 2012-14 (November 2012), www.cbo.gov/publication/43691; *Options for Changing the Tax Treatment of Charitable Giving* (May 2011), www.cbo.gov/publication/ 41452; and *The Deductibility of State and Local Taxes* (February 2008), www.cbo.gov/publication/41647

Include Employer-Paid Premiums for Income Replacement Insurance in Employees' Taxable Income

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	18	33	33	34	33	34	35	35	36	37	150	326

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. To the extent that the option would affect Social Security payroll taxes, a portion of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Benefits that replace income for the unemployed, injured, or disabled are currently subject to different tax treatments. Whereas unemployment benefits are fully taxable, benefits paid under workers' compensation programs (for work-related injuries or illnesses) are tax-exempt. Disability benefits (for non-work-related injuries) may be taxable, depending on who paid the premiums for the disability insurance. If the employer paid the premiums, the benefits are taxable (although the recipient's tax liability can be offset partly by special income tax credits for the elderly or disabled). If the employee paid the premiums out of after-tax income, the benefits are not taxed.

This option would gradually eliminate any tax on income replacement benefits over a five-year period but would immediately include in employees' taxable income the value of several taxes, insurance premiums, and other contributions paid by employers. Specifically, all of the following would be subject to the individual income tax and the payroll taxes for Social Security and Medicare: the taxes that employers pay under the Federal Unemployment Tax Act and to various state unemployment programs; 50 percent of the premiums that employers pay for workers' compensation (that is, excluding the portion covering medical expenses); and the portion of insurance premiums or contributions to pension plans that employers pay to fund disability benefits. Together, those changes would increase revenues by \$326 billion over the 2014-2023 period, the staff of the Joint Committee on Taxation estimates. Over the long term, the gain in revenues would result almost entirely from adding workers' compensation premiums to taxable income. Including those various items in employees' taxable earnings, and thus in the wage base from which Social Security benefits are calculated, also would increase federal spending for Social Security. Between 2014 and

2023, the option would increase federal spending very slightly, but the effect on spending would continue to increase after 2023 as more people whose premiums were taxed retired and began collecting Social Security benefits. The estimates shown above do not include any such effects on outlays.

An advantage of this option is that it would treat different kinds of income replacement insurance similarly and thereby eliminate many of the somewhat arbitrary disparities that currently exist. For example, people who are unable to work because of an injury would not be taxed differently on the basis of whether their injury was related to a previous job. Another advantage of the option is that it would spread the tax burden among all workers covered by such insurance rather than placing the burden solely on beneficiaries, as is presently the case with unemployment insurance and employer-paid disability insurance. The effect on covered workers would be relatively small: Their after-tax earnings would fall, on average, by less than one-half of one percent. However, the effect would be greatest among low-wage workers, some of whom would be less likely to seek work as a result.

A disadvantage of the option is that it would discourage unemployed individuals from accepting available work because, with unemployment benefits no longer taxable, their disposable income would be higher while they were unemployed than is the case under current law. Research shows that higher after-tax unemployment benefits tend to lengthen periods of unemployment, particularly among those who have no savings and cannot obtain loans after they lose their job. (However, in a tight labor market, the increase in disposable income would also allow unemployed people more time to find a job that best matches their skill set.) Another argument against the option is that it would not eliminate all disparities in the way income replacement benefits are treated. For example, the income replacement portion of adjudicated awards and out-of-court settlements for injuries not related to work and not covered by insurance would remain entirely exempt from taxation. Likewise, extended unemployment benefits that the federal government sometimes provides during economic downturns would never be taxed because no amount corresponding to an employer's contribution would ever have been included in the recipients' taxable income.

RELATED OPTION: Revenues, Option 22

RELATED CBO PUBLICATION: *Unemployment Insurance in the Wake of the Recent Recession* (November 2012), www.cbo.gov/publication/43734

4-2023

210

Include Investm	ent In	come	From	Life I	nsura	ince a	nd An	nuitie	es in T	[axable	Income	
											_	
(Billions of dollars)	2014	2015	2016	2017	2010	2010	2020	2021	2022	2022	To 2014-2018	tal 2014

21

21

22

22

23

Revenues—Option 10

Change in Revenues

Source: Staff of the Joint Committee on Taxation. Note: This option would take effect in January 2014.

13

24

21

20

Certain types of life insurance policies and annuities combine features of insurance and tax-favored savings accounts. (An annuity is a contract with an insurance company under which, in exchange for premiums, the company agrees to make fixed or variable payments to a person at a future time, usually during retirement.) Portions of the premiums paid for certain types of insurance policies, such as whole-life polices, and for annuities are invested and earn interest, dividends, and other types of investment income. (A whole-life policy is a contract with an insurance company that provides life insurance coverage throughout the policyholder's lifetime-not just for a specified period, as is the case with term life insurance.) That investment income, sometimes called inside buildup, is generally not included in taxable income until it is paid out to the policyholder as a return of cash value or as a recurring payment. If the inside buildup is used to reduce premiums in later years (as occurs with whole-life policies) or is paid out because of the death of the insured, it can escape taxation under the income tax.

Under this option, life insurance companies would inform policyholders annually of the investment income their accounts have realized, just as mutual funds do now, and policyholders would include those amounts in their taxable income for that year. In turn, the cash value from life insurance policies and recurring payments from annuities would be taxable only to the extent that accrued capital gains had not already been taxed. This approach would make the tax treatment of investment income from life insurance and annuities match the treatment of income from bank accounts, taxable bonds, or mutual funds. (Taxes on investment income from annuities purchased as part of a qualified pension plan or qualified individual retirement account would still be deferred until benefits were paid.) Such changes in tax treatment would increase revenues by \$210 billion from 2014

through 2023, the staff of the Joint Committee on Taxation estimates. Those revenue gains would diminish over time, however, relative to the size of the economy, because taxes paid on the inside buildup would lower taxes paid on future payouts.

23

99

An advantage of the option is that people would be less likely to base decisions about the purchase of whole life insurance and annuities on tax considerations. Investment income from whole life insurance and annuities would be taxed as it was realized, just as income from bank accounts, mutual funds, and many other types of financial instruments is taxed. The option would tax whole life insurance and term life insurance in the same way. Because term insurance provides coverage for a specified period and pays benefits only if the policyholder dies during the term, it generates no inside buildup and, hence, does not offer the tax advantage that whole-life insurance does under current law. By eliminating the tax advantages associated with whole life insurance and annuities, when compared with those provided by other forms of investment, the option would encourage people to focus on how much life insurance and annuity income they need-rather than on the expected tax savingswhen purchasing those products.

As a result, the change would reduce people's incentive to purchase life insurance and annuities. Without that incentive, however, people might buy too little insurance if they underestimate the financial hardship that their death would impose on their families. They might also underestimate their retirement spending or life span and, thus, buy too little annuity insurance to protect against outliving their assets. However, little evidence exists about how successful the current tax treatment is in encouraging people to obtain adequate amounts of insurance. If providing an incentive to purchase life insurance is, indeed, considered a useful part of the tax system, an alternative approach would be to encourage such purchases directly by giving people a tax credit for their life insurance premiums or by allowing them to deduct part of those premiums from their taxable income. Either approach would encourage people to purchase term insurance as well as whole-life policies.

RELATED OPTIONS: Revenues, Options 13 and 14

Another disadvantage of taxing inside buildup is that the people who would be affected by the change would not have access to the buildup to pay the tax. People who had accumulated considerable savings from contributions to whole-life policies or annuities could owe substantial amounts of taxes relative to the cash income from which they would have to pay the taxes.

Tax Carried Interest as Ordinary Income

											Total			
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023		
Change in Revenues	1.2	1.5	1.8	2.2	2.2	2.0	1.8	1.7	1.5	1.4	8.9	17.4		

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. To the extent that the option would affect Social Security payroll taxes, a portion of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Investment funds—such as private equity, real estate, and hedge funds—are typically organized as partnerships with one or more general partners managing the fund. The general partners determine investment strategy; solicit capital contributions; acquire, manage, and sell assets; arrange loans; and provide administrative support for all of those activities. Such partnerships also typically include limited partners, who contribute capital to the partnership but do not participate in the fund's management. General partners can invest their own financial capital in the partnership, but such investments usually represent a small share of the total funds invested.

General partners typically receive two types of compensation for managing a fund: a fee tied to some percentage of the fund's assets under management; and a profit share, or "carried interest," tied to some percentage of the profits generated by the fund. A common compensation agreement gives general partners a 2 percent fee and 20 percent in carried interest. The fee, less the fund's expenses, is subject to ordinary income tax rates and the self-employment tax. In contrast, the carried interest that general partners receive is taxed in the same way as the investment income passed through to the limited partners. For example, if that investment income consists solely of capital gains, the carried interest is taxed only when those gains are realized and at the lower capital gains rate. The general partners' share of dividends is also taxed at the lower rate.

This option would treat the carried interest that partners receive for performing investment management services as labor income, taxable at ordinary income tax rates and subject to the self-employment tax. Income those partners received as a return on their own capital contribution would not be affected. If implemented, the change would produce an estimated \$17 billion in revenues from 2014 through 2023. Almost all of the additional labor income would be above the maximum amount subject to the Social Security portion of the self-employment tax; however, the small amount of such income below the cap would affect the wage base from which Social Security benefits are calculated and thus increase federal spending in future years. The estimates shown here do not include any effects on such outlays.

Arguments in favor of this option reflect the view that carried interest should be considered performance-based compensation for management services rather than a return on the financial capital invested by the general partner. In accordance with that viewpoint, the option would eliminate two notable differences in the way carried interest and comparable forms of income are currently taxed. First, taxing carried interest as ordinary income would make its treatment consistent with that applied to many other forms of performance-based compensation, such as bonuses and most stock options. Second, the option would equalize the tax treatment of income that partners receive for performing investment management services and the treatment of income earned by corporate executives who do similar work. (The managers of publicly traded mutual funds, for example, also invest in a variety of assets. And the executives of many corporations direct investment, arrange financing, purchase other companies, or spin off components of their enterprises.)

Arguments against the option reflect the view that general partners' investment decisions are more analogous to those of an entrepreneur than those of a corporate executive. From that perspective, this option would treat the income of partners who manage investment funds differently from that earned by entrepreneurs when they sell their businesses. Profits from such sales generally are taxed as capital gains, even though some of those profits represent a direct return on specific labor services provided by the entrepreneur. Another argument against such a policy change is that to the extent that carried interest is a reward for taking successful risks, the policy change would reduce the incentive for general partners to undertake such risks. That reduced incentive, in turn, would probably deter innovation, new products, and more efficient markets and businesses. It is not clear, however, to what extent a lower rate on capital gains contributes to such outcomes, or even whether promoting risky investment offers more economic advantages than disadvantages.

Some firms would probably respond to such a change by restructuring their compensation arrangements so that as much compensation as possible could continue to be treated as capital gains. (The revenue estimates shown above reflect the likelihood of such restructuring.) That could be accomplished if the limited partners made an interest-free nonrecourse loan to the general partner, who would then invest the proceeds of that loan in the fund. (A borrower is not personally liable for a nonrecourse loan beyond the pledged collateral, which in this case would be the general partner's claim on future profits.) At the time the partnership sold its assets, any difference between the proceeds allocated to the general partner and the loan principal, plus the implicit interest costs attributable to that loan, would be treated as a capital gain or loss. An alternative (but complex) policy approach would be to treat all carried interest as if a nonrecourse loan had actually been made. Under that approach, the general partner would typically pay more in taxes than under current law but less than if all carried interest was treated as ordinary income.

RELATED CBO PUBLICATION: Testimony of Peter R. Orszag, Director, before the House Committee on Ways and Means, *The Taxation of Carried Interest* (September 6, 2007), www.cbo.gov/publication/19113

RELATED OPTION: Revenues, Option 3

Include All Income That U.S. Citizens Earn Abroad in Taxable Income													
											Total		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Revenues	2.8	6.2	7.2	8.2	8.9	9.5	10.3	11.0	11.7	12.7	33.3	88.5	

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. The estimates include the effects on outlays resulting from changes in refundable tax credits.

U.S. citizens who live in other countries must file an individual U.S. tax return each year, but several provisions of the tax code reduce their U.S. tax liability. First, those citizens may exclude from taxation some of the income they earn abroad: up to \$97,600 for single filers and up to \$195,200 for joint filers in calendar year 2013. (Those amounts are adjusted, or indexed, for inflation.) Second, under certain circumstances, U.S. citizens living abroad can also claim an exclusion or deduction for any allowance their employers provide for housing in a foreign country. Those two tax provisions-combined with the personal exemptions and deductions available to taxpayers living in either the United States or other countries-mean that U.S. citizens who reside abroad and earn over \$100,000 (or, in the case of married U.S. citizens living abroad, over \$200,000) may not incur any U.S. income tax liability, even if they pay no taxes to the country in which they live. Third, if those citizens pay taxes to the country in which they live, they can receive a credit on their U.S. taxes for foreign taxes paid on any income above the U.S. exclusion amount. As a result, most U.S. tax filers who live abroad do not have any U.S. tax liability.¹

This option would retain the credit for taxes paid to foreign governments but would require U.S. citizens living overseas to include all of the income they earned abroad, including housing allowances, in their adjusted gross income. (Adjusted gross income includes income from all sources not specifically excluded by the tax code, minus certain deductions.) As a result, U.S. citizens living in

RELATED OPTION: Revenues, Option 30

countries with lower tax rates than those in the United States would tend to owe more—and, in some cases, potentially much more—in U.S. taxes than under current law, while U.S. citizens residing in countries with higher tax rates would generally continue not to owe U.S. taxes on their earned income. The staff of the Joint Committee on Taxation estimates that implementing such a change would increase revenues by \$89 billion over the 2014–2023 period.

One rationale for eliminating the partial exclusion for foreign earnings is related to a certain concept of equity—that U.S. citizens with comparable income should incur similar tax liabilities, regardless of where they live. Under the option, people could not move to low-tax foreign countries to escape U.S. tax liability while retaining the benefits of U.S. citizenship. (To discourage U.S. citizens from moving abroad to avoid taxes, the Heroes Earnings Assistance and Relief Tax Act of 2008 instituted a significant "expatriation tax" on the net worth of wealthy taxpayers who renounce their U.S. citizenship for any reason.)

However, the United States is the only member of the Organisation for Economic Co-operation and Development that taxes the income of its citizens on a worldwide basis; therefore, eliminating the exemption for income earned abroad would move the United States further out of alignment with the rest of the world in terms of the tax treatment of foreign-earned income. Another argument for not making this change is that U.S. citizens who live in other countries do not receive all of the same services from the U.S. government that are available domestically, and they may receive fewer services from the low-tax countries in which they reside.

Internal Revenue Service, National Taxpayer Advocate 2012 Annual Report to Congress, vol. 1 (December 2012), p. 271, www.taxpayeradvocate.irs.gov/userfiles/file/Full-Report/ Volume-1.pdf.

Tax Social Security and Railroad Retirement Benefits in the Same Way That Distributions From Defined Benefit Pensions Are Taxed													
											Total		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Revenues	17	35	37	38	40	41	43	44	46	48	166	388	
Source: Staff of the Joint Committee on Taxation.													

Note: This option would take effect in January 2014.

Under current law, less than 30 percent of the benefits paid by the Social Security and Railroad Retirement programs are subject to the federal income tax. Recipients with income below a specified threshold pay no taxes on those benefits. Most recipients fall into that category, which constitutes the first tier of a three-tiered tax structure. If the sum of their adjusted gross income, their nontaxable interest income, and one-half of their Social Security and Tier I Railroad Retirement benefits exceeds \$25,000 (for single taxpayers) or \$32,000 (for couples filing jointly), up to 50 percent of the benefits are taxed. Above a higher threshold—\$34,000 for single filers and \$44,000 for joint filers—as much as 85 percent of the benefits are taxed.

By contrast, distributions from defined benefit plans are taxable except for the portion that represents the recovery of an employee's "basis"-that is, his or her after-tax contributions to the plan. In the year that distributions begin, the recipient determines the percentage of each year's payment that is considered to be the nontaxable recovery of previous after-tax contributions, based on the cumulative amount of those contributions and projections of his or her life expectancy. Once the recipient has recovered his or her entire basis tax-free, all subsequent pension distributions are fully taxed. (Distributions from traditional defined contribution plans and from individual retirement accounts, to the extent that they are funded by after-tax contributions, are also taxed on amounts exceeding the basis.)¹

This option would treat the Social Security and Railroad Retirement programs in the same way that defined benefit pensions are treated—by defining a basis and taxing only those benefits that exceed that amount. For employed individuals, the basis would be the payroll taxes they paid out of after-tax income to support those programs (but not the equal amount that employers paid on their workers' behalf). For self-employed people, the basis would be the portion (50 percent) of their selfemployment taxes that is not deductible from their taxable income. Revenues would increase by \$388 billion from 2014 through 2023, the staff of the Joint Committee on Taxation estimates.

An argument in favor of this option concerns equity. Taxing benefits from the Social Security and Railroad Retirement programs in the same way as those from defined benefit pensions would make the tax system more equitable in at least two ways. First, it would eliminate the preferential treatment given to Social Security benefits but not to pension benefits-a preference that is minimal for higher-income taxpayers but much larger for low- and middle-income taxpayers. Second, it would treat elderly and nonelderly taxpayers with comparable income the same way. For people who pay taxes on Social Security benefits under current law, the option could also simplify the preparation of tax returns. Instead of taxpayers calculating the taxable portion themselves, the Social Security Administration—which would have information on their lifetime contributions and life expectancy-could compute the taxable amount of benefits and provide that information to beneficiaries each year.

This option also has drawbacks. It would have the greatest impact on people with the lowest income: People with income below \$44,000, including some who depend solely on Social Security or Railroad Retirement for their support, would see their taxes increase by the greatest

^{1.} Distributions from Roth plans, which allow after-tax contributions only, are entirely tax-exempt—a more favorable treatment than the tax-free recovery of basis only. If Social Security benefits were treated like distributions from Roth plans, half the benefits would be exempt from taxation, reflecting the share financed by employees' contributions, which are after-tax (or, in the case of the self-employed, the share of their contributions that is not deducted from their taxable income).

percentage. In addition, raising taxes on Social Security and Railroad Retirement benefits would be equivalent to reducing those benefits and could be construed as violating the implicit promises of those programs, especially because the option would provide little or no opportunity for current retirees and people nearing retirement to adjust their saving or retirement strategies to mitigate the impact. Finally, more elderly people would have to file tax returns than do so now, and calculating the percentage of each recipient's benefits that would be excluded from taxation would impose an additional burden on the Social Security Administration.

RELATED OPTIONS: Revenues, Options 10 and 14

RELATED CBO PUBLICATION: Social Security Policy Options (July 2010), www.cbo.gov/publication/21547

Revenues—Optio	Revenues—Option 14												
Further Limit Annual Contributions to Retirement Plans													
											Total		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Revenues	4.5	6.7	7.3	8.1	8.7	9.4	10.0	10.8	11.3	12.0	35.3	88.7	

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. To the extent that the option would affect Social Security payroll taxes, a portion of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Current law allows taxpayers to make contributions to certain types of tax-preferred retirement plans up to a maximum annual amount that varies depending on the type of plan and the age of the taxpayer. The most common such vehicles are defined contribution plans (any plan that does not guarantee a particular benefit amount upon retirement) and individual retirement accounts (IRAs). Defined contribution plans are sponsored by employers. Some-most commonly, 401(k) plansaccept contributions by employees; others are funded entirely by the employer. IRAs are maintained by the participants themselves.

Most of the tax savings associated with retirement plans arise because the investment income that accrues in the account is either explicitly or effectively exempt from taxation. That is clearest in the case of Roth retirement plans-both IRAs and 401(k)s-which do not allow contributions to be excluded from taxable income. Instead, the taxpayer benefits by not paying tax on the investment income, either as it accrues or when it is withdrawn. More traditional types of tax-preferred retirement plans allow taxpayers to exclude contributions from their taxable income and defer the payment of taxes until they withdraw funds. If the taxpayer is subject to the same tax rate that applied when the contribution was made, the value of the deduction is offset by the tax on withdrawals. The actual tax benefit is equivalent to that provided by Roth plans-effectively exempting investment income from taxation. (In the traditional structure, however, the tax benefits can be higher or lower than under a Roth plan depending on the tax bracket participants are in when they retire.)

The value of the tax exemption for investment earnings increases with the participant's income tax rate. Thus, a worker in the 15 percent tax bracket saves 15 cents on each dollar of investment income accrued in his or her

retirement plan; however, an employee in the 35 percent tax bracket avoids taxes equal to 35 cents per dollar of investment income. (If the investment income is in the form of capital gains, lower tax rates apply, but they are still graduated by income.)

Individuals under the age of 50 may contribute up to \$17,500 to 401(k) and similar employment-based plans in 2013; participants ages 50 and above are also allowed to make "catch-up" contributions of up to \$5,500, enabling them to make as much as \$23,000 in total contributions in 2013. In general, the limits on an individual's contributions apply to all defined contribution plans combined. However, contributions to 457(b) plans, available primarily to employees of state and local governments, are subject to a separate limit. As a result, employees who are enrolled in both 401(k) and 457(b) plans can contribute the maximum amount to both plans, thereby allowing some people to make tax-preferred contributions of as much as \$46,000 in a single year. Employers may also contribute to their workers' defined contribution plans, up to a maximum of \$51,000 per person in 2013, less any contributions made by the employee.

In 2013, contributions to IRAs are limited to \$5,500 for taxpayers under the age of 50 and \$6,500 for those ages 50 and above. The amount of such contributions that is tax deductible is phased out above certain income thresholds if either the taxpayer or the taxpayer's spouse is covered by an employment-based plan. Annual contribution limits for all types of plans are adjusted, or indexed, for inflation but increase only in \$500 increments.

Under this option, individuals' maximum allowable contributions would be reduced to \$15,500 per year for 401(k)-type plans and \$5,000 per year for IRAs, regardless of a taxpayer's age. The option would also require that all contributions to employment-based plansincluding 457(b) plans—be subject to a single combined limit. Total allowable employer and employee contributions to a defined contribution plan would be reduced from \$51,000 per year to \$46,000. If implemented, the option would increase revenues by \$89 billion from 2014 through 2023, the staff of the Joint Committee on Taxation estimates. The option would also affect federal outlays, but by much smaller sums. Reducing the amount that employers are allowed to contribute would increase taxable wages, the base from which Social Security benefits are calculated, and thus would increase federal spending for Social Security by a small amount. Contributions by employees are already included in the wage base for Social Security. (The estimates shown here do not include any effects on such outlays.)

One argument in favor of this option centers on fairness. The option would reduce the disparity in tax benefits that exists between higher- and lower-income taxpayers in two ways. First, those directly affected by the option would make fewer contributions and accrue less taxpreferred investment income, so the greater benefit of the exemption to those in higher tax brackets would be reduced. Second, the option would affect more higherincome taxpayers than lower-income taxpayers. The limits on 401(k) contributions affect few taxpayers—only 5 percent of participants in calendar year 2006 (the most recent year for which such data are available)-but of those affected, 69 percent had income in excess of \$160,000 that year. The option also would level the playing field between those who currently benefit from higher contribution limits (people ages 50 and over and employees of state and local governments) and those subject to lower limits.

In addition to enhancing fairness, the option would improve economic efficiency. A goal of tax-preferred retirement plans is to increase private saving (although at the cost of some public saving). However, the higherincome individuals who are constrained by the current limits on contributions are most likely to be those who can fund the tax-preferred accounts using money they have already saved or would save anyway; in that case, the tax preference provides benefits to the individuals involved without boosting aggregate saving. Thus, the option would increase public saving—by reducing the deficit—at the cost of very little private saving.

The main argument against this option is that it would reduce the retirement saving of some people, particularly those who find it difficult to save because of income constraints or family responsibilities. Although only 5 percent of workers with income under \$80,000 contributed to IRAs in 2006, more than one-third contributed the maximum amount permitted. Those workers generally have relatively little in accumulated savings and are more likely to respond to the incentive to save than are people in higher-income groups. Eliminating the extra allowance for catch-up contributions would adversely affect those ages 50 and over who might have failed to save enough for a comfortable retirement while raising their families. The amount that they could contribute to tax-preferred retirement accounts would be cut at precisely the time when reduced family obligations and impending retirement make them more likely to respond to tax incentives to save more.

Finally, further limiting total contributions to a defined contribution plan would create an incentive for some small businesses to terminate their plans if the tax benefits of the plan to the owners were outweighed by the cost of administering it. To the extent that plans were terminated, employees would then have to rely on IRAs, which would lead some to save less because of the lower contribution limits.

RELATED OPTIONS: Revenues, Options 10 and 13

RELATED CBO PUBLICATION: Use of Tax Incentives for Retirement Saving in 2006 (October 2011), www.cbo.gov/publication/42731

Eliminate the Ta	ix Exe	mptio	n for i	New Q	ualifi	ed Pr	ivate	Activit	ty Bon	ds		
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	0.1	0.5	1.0	1.7	2.4	3.2	4.1	5.0	5.9	6.6	5.7	30.5
Source: Staff of the Jo	oint Com	mittee o	n Taxatio	on.								

Note: This option would take effect in January 2014.

The U.S. tax code permits state and local governments to finance certain projects by issuing bonds whose interest payments are exempt from federal income taxes. As a result, those bonds pay lower rates of interest than they would if the interest payments were taxable. For the most part, proceeds from tax-exempt bonds finance public projects, such as the construction of schools and highways. In some cases, however, state and local governments issue tax-exempt bonds to finance private-sector projects. The issuance of such bonds-which are known as qualified private activity bonds-is authorized by the tax code to fund private projects that provide at least some public benefits. Eligible projects include the construction or repair of infrastructure and certain activities, such as building schools and hospitals, undertaken by nonprofit organizations. (Those organizations are sometimes called 501(c)(3)s after the section of the tax code that authorizes them.)

This option would eliminate the tax exemption for new qualified private activity bonds beginning in 2014. The option would increase revenues by \$31 billion through 2023, according to estimates by the staff of the Joint Committee on Taxation.

One rationale for this option is that eliminating the tax exemption for new qualified private activity bonds would improve economic efficiency in some cases. For example, the owners of some of the infrastructure facilities that benefit from the tax exemption can capture—through fees and other charges—much of the value of the services they provide. Therefore, such investments probably would take place without a subsidy. In those instances, providing a tax exemption for such investments would be inefficient because the tax exemption would shift resources from taxpayers to private investors without generating any additional public benefits. As another example, in cases in which the public benefit from a privatesector facility would be small relative to the existing tax exemption, the subsidy sometimes would lead to investment in projects whose total value (counting private as well as public benefits) was less than their costs.

Another argument in favor of this option is that it would encourage nonprofit organizations to be more selective when choosing projects and, in general, to operate more efficiently. Nonprofit organizations do not pay federal income tax on their investment income. Many nonprofit universities, hospitals, and other institutions use taxexempt debt to finance projects that they could fund by selling their own assets. By holding onto those assets, they can earn an untaxed return that is higher than the interest they pay on their tax-exempt debt. Eliminating the tax exemption for the debt-financed projects of nonprofit organizations would put those projects on an even footing with the projects financed by selling assets. Further, the tightening of nonprofit organizations' financial constraints that would result from eliminating the tax exemption would encourage those organizations to operate more cost-effectively, although some nonprofits with small asset bases, or endowments, could be forced to cut back or even cease operations.

A disadvantage of this option is that some projects that would not be undertaken without a tax exemption would provide sufficient public benefits to warrant a subsidy. For example, some roads can have broad social benefits (because they are part of a larger transportation network) and, at the same time, be appealing to private owners (because those owners and operators could collect tolls from users). State and local governments are increasingly looking to the private sector to undertake projects of that sort, and supporters of qualified private activity bonds argue that eliminating the tax exemption would remove an important source of funding for them. (This concern may be especially acute now because the finances of state and local governments have been weakened by the economic downturn and slow recovery; if that were the principal concern about this option, however, then its implementation could be delayed a few years until the economy is expanding more strongly.)

If lawmakers wished to continue to support infrastructure investment and other projects undertaken by the private sector, they could do so more efficiently by subsidizing them directly rather than by subsidizing them through the tax system. Tax-exempt financing is inefficient for two reasons: First, the reduction in borrowing costs for issuers of those bonds is less than the federal revenues forgone through the tax exemption. (The interest rate on tax-exempt debt is determined by the market-clearing tax-exempt bond buyer, who will typically be in a lower marginal income tax bracket—and hence be willing to accept a lower tax-free rate of return—than the average tax-exempt bond buyer, who determines the amount of federal revenue forgone as a result of the tax exemption.) Second, the amount of subsidy delivered is determined by the tax code and so does not vary across projects according to federal priorities. Lawmakers could, instead, provide a direct subsidy for certain projects by guaranteeing loans or making loans available to the private sector at below-market rates of interest. By offering a direct subsidy, the federal government would be better able than it is through the tax system both to select the types of projects receiving support and to determine the amount of the subsidy.

RELATED OPTION: Revenues, Option 6

RELATED CBO PUBLICATIONS: Testimony of Frank Sammartino, Assistant Director for Tax Analysis, before the Senate Committee on Finance, *Federal Support for State and Local Governments Through the Tax Code* (April 25, 2012), www.cbo.gov/publication/43047; *Using Public-Private Partnerships to Carry Out Highway Projects* (January 2012), www.cbo.gov/publication/42685; Testimony of Joseph Kile, Assistant Director for Microeconomic Studies, before the Senate Committee on Finance, *The Highway Trust Fund and Paying for Highways* (May 17, 2011), www.cbo.gov/publication/41455; *Tax Arbitrage by Colleges and Universities* (April 2010), www.cbo.gov/publication/21198; *Subsidizing Infrastructure Investment With Tax-Preferred Bonds* (October 2009), www.cbo.gov/publication/41359; and *Nonprofit Hospitals and Tax Arbitrage* (attachment to a letter to the Honorable William "Bill" M. Thomas, December 6, 2006), www.cbo.gov/publication/18257

Eliminate Certai	n Tax	Prefe	rences	s for I	Educa	tion E	xpens	ses				
(Dillions of dollars)	0014	0015	001/	0017	0010	0010	0000	0001	0000	0000	To	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014–2018	2014–2023
Change in Revenues	5	23	23	23	21	11	12	12	12	13	95	155

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. The estimates include the effects on outlays resulting from changes in refundable tax credits.

Federal support for higher education takes many forms, including grants, subsidized loans, and tax preferences. Those tax preferences include several types of tax-advantaged accounts that allow families to save for their child's postsecondary education as well as education-related credits and deductions. The major credits and deductions in effect in 2013 or scheduled to be reinstated under current law are the following:

■ The American Opportunity Tax Credit (AOTC) replaced and expanded the Hope tax credit starting in 2009. Although it was scheduled to expire at the end of 2012, the AOTC was extended through 2017 by the American Taxpayer Relief Act of 2012. Unlike the Hope tax credit, which was nonrefundable, the AOTC is partially refundable-that is, families whose income tax liability (before the credit is applied) is less than the total amount of the credit may receive all or a portion of the credit as a payment. The AOTC is available to cover qualifying educational expenses for up to four years of postsecondary education. In 2013, the AOTC can total as much as \$2,500 (100 percent of the first \$2,000 in qualifying expenses and then 25 percent of the next \$2,000). Up to 40 percent of the credit (or \$1,000) is refundable. The amount of the AOTC gradually declines (is "phased out") for higher-income tax filers. In 2013, the AOTC is reduced for married couples who file jointly and have modified adjusted gross income (MAGI) between \$160,000 and \$180,000 and for single filers with MAGI between \$80,000 and \$90,000.1 Neither the credit amount nor the income thresholds are adjusted, or indexed, for

inflation over the 2009–2017 period in which the AOTC is in effect.

- The nonrefundable Lifetime Learning tax credit provides up to \$2,000 for qualifying tuition and fees. (The credit equals 20 percent of each dollar of qualifying expenses up to a maximum of \$10,000.) Only one Lifetime Learning credit may be claimed per tax return per year, but the expenses of more than one family member (a taxpayer, spouse, or dependent) may be included in the calculation. The Lifetime Learning credit can be used after the first two years of postsecondary education and by students who attend school less than half-time. Taxpayers may not claim the Lifetime Learning credit and the AOTC for the same student in the same year. In 2013, the Lifetime Learning tax credit is gradually reduced for joint filers whose MAGI is between \$107,000 and \$127,000 and for single filers whose MAGI is between \$53,000 and \$63,000. Those income thresholds are adjusted for inflation over time.
- Tax filers may deduct from their taxable income up to \$2,500 per year for interest payments on student loans. This deduction is available regardless of whether a tax filer itemizes deductions. In 2013, the interest deduction for student loans phases out for joint filers with MAGI between \$125,000 and \$155,000 and for single filers with MAGI between \$60,000 and \$75,000. Although the maximum deduction amount is not indexed for inflation, the income thresholds for the phaseout ranges are adjusted for inflation.
- Taxpayers (regardless of whether they claim the standard deduction or itemize their deductions) can deduct up to \$4,000 from their taxable income for qualifying tuition and fees instead of taking a credit. That deduction is scheduled to expire at the end of 2013.

^{1.} Certain foreign income and foreign housing allowances that are excluded from taxable income are added to adjusted gross income (AGI) to calculate the modified AGI measure used to determine eligibility for education-related tax credits. (AGI includes income from all sources not specifically excluded by the tax code, minus certain deductions.)

■ Although not currently available, the Hope tax credit is scheduled to be reinstated in 2018 when the AOTC expires. The Hope credit is nonrefundable (the credit may not exceed the filer's income tax liability) and can be claimed only for expenses incurred in the first two years of a postsecondary degree or certificate program; during that period, the student must be enrolled at least half-time. Fewer types of expenses qualify for the Hope credit than for the AOTC. In 2008, the last year it was available, the Hope credit was equal to 100 percent of the first \$1,200 of qualifying tuition and fees and 50 percent of the next \$1,200 for a maximum credit of \$1,800 per year. As was the case before the Hope credit expired, the parameters used to calculate the credit amount will be indexed for inflation when the credit is reinstated. On the basis of that adjustment for inflation, CBO estimates that in 2018, the maximum credit will be \$2,100. As was previously the case, the reinstated Hope credit will decline for highincome tax filers. In 2018, CBO estimates, the credit will be reduced for joint filers with MAGI between \$118,000 and \$138,000 and for single filers with MAGI between \$59,000 and \$69,000.

This option would eliminate the AOTC and the Lifetime Learning tax credit beginning in 2014 and cancel the reinstatement of the Hope tax credit in 2018. (The \$4,000 deduction for qualifying tuition and fees described above would have already expired by 2014.) The option would also gradually eliminate the deductibility of interest expenses for student loans. Because students borrowed money with the expectation that a portion of the interest would be deductible over the life of the loan, the interest deduction for student loans would be phased out in annual increments of \$250 over a 10-year period. If implemented, the option would raise revenues by \$155 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation estimates.

An argument in favor of the option is that the current tax benefits are not targeted to those who need assistance the most. Many low-income families do not have sufficient income tax liability to claim all—or in some cases, any of the education-related tax benefits. However, the cost of higher education may impose a greater burden on those families as a proportion of their income. Further, some research indicates that lower-income individuals and families may be more sensitive to the cost of higher education than those with higher income and thus more likely to enroll in higher education programs if tuition and fees are subsidized.

A second rationale in favor of the option concerns the administration of education benefits through the income tax system. Education benefits administered through the tax system are poorly timed because families must pay tuition and fees before they can claim the benefits on their tax returns. In contrast, federal spending programs such as the Pell grant program are designed to provide assistance when the money is needed—at the time of enrollment. Further, providing education assistance through various credits and deductions, each with slightly different eligibility rules and benefit amounts, makes it difficult for families to determine which tax preferences provide the most assistance. As a result, some families may not choose the most advantageous educational benefits for their particular economic circumstances.

A drawback of this policy option is that some households would not receive as much assistance for educational expenses unless federal outlays for education assistance were increased. The option would increase the financial burden on families with postsecondary students—particularly middle-income families who do not qualify for current federal spending programs. Another drawback is that despite the current system's complexity—which creates overlapping tax benefits—some families may find it easier to claim benefits on their tax returns (on which they already provide information about their family structure and income) than to fill out additional forms for assistance through other federal programs.

RELATED OPTIONS: Mandatory Spending, Options 6 and 7; and Discretionary Spending, Option 20

RELATED CBO PUBLICATIONS: Options to Change Interest Rates and Other Terms on Student Loans (June 2013), www.cbo.gov/publication/ 44318; Refundable Tax Credits (January 2013), www.cbo.gov/publication/43767; Costs and Policy Options for Federal Student Loan Programs (March 2010), www.cbo.gov/publication/21018; and Private and Public Contributions to Financing College Education (January 2004), www.cbo.gov/publication/15178

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(Billions of dollars)	201 4	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	*	1.2	1.2	1.2	1.3	1.1	1.2	1.2	1.2	1.3	4.9	10.9

Source: Staff of the Joint Committee on Taxation.

Notes: This option would take effect in January 2014. The estimates represent the change in the overall budget balance that would result from the sum of changes to revenues and outlays.

* = between zero and \$50 million.

Low- and moderate-income people are eligible for certain refundable tax credits under the individual income tax if they meet the specified criteria. Refundable tax credits differ from other tax preferences, such as deductions, in that their value may exceed the amount of income taxes that the person owes. Refundable tax credits thus can result in net payments from the government to a taxpayer: If the amount of a refundable tax credit exceeds a taxpayer's tax liability before that credit is applied, the government pays the excess to that person. Two refundable tax credits are available only to workers: the earned income tax credit (EITC) and the refundable portion of the child tax credit (referred to in the tax code as the additional child tax credit).

To qualify for the EITC and the refundable portion of the child tax credit, people must meet several income tests. First, they must have income from wages, salaries, or self-employment. Second, their adjusted gross income cannot exceed thresholds that vary with family characteristics.¹ (Adjusted gross income includes income from all sources not specifically excluded by the tax code, minus certain deductions.) For the EITC, the income thresholds for 2013 range from \$14,340 for an unmarried worker who does not live with a child to \$51,567 for a married couple that files jointly and has three or more children. For the child tax credit, the income threshold for 2013 is \$95,000 for an unmarried person with one child and \$130,000 for joint filers with one child; the income thresholds increase with the number of children in the family. Finally, eligibility for the EITC is restricted to

filers with investment income that is \$3,300 or less in 2013. Investment income includes interest (counting taxexempt interest), dividends, capital gains, royalties and rents from personal property, and returns from passive activities (business pursuits in which the person is not actively involved). The limitations on adjusted gross income and investment income are adjusted, or indexed, for inflation each year.

This option would lower the threshold for the EITC investment income test from \$3,300 to \$1,650. As under current law, that threshold would be indexed for inflation. Moreover, the option would extend that requirement to the refundable portion of the child tax credit. If implemented, the option would raise \$11 billion from 2014 through 2023, according to estimates by the staff of the Joint Committee on Taxation.

The main rationale for the option is that it would better target the credits to people without substantial means by denying the credits to people who have low earnings but have other resources to draw upon. Asset tests-requirements that recipients do not have savings in bank accounts, stocks, and other types of investments whose value is above a specified threshold—serve a similar role in some spending programs that provide benefits to lower-income populations. However, asset tests would be very difficult for the Internal Revenue Service (IRS) to administer because the agency does not collect information on the amount of assets held by individuals. By contrast, the IRS does have extensive information on the income from most of those investments, and much of that information is accurate because it is reported independently to the agency by financial institutions as well as by taxpayers on their returns.

^{1.} A special rule applies to the EITC when a person's earnings are higher than his or her adjusted gross income (because of investment losses). In that instance, eligibility for the EITC is denied if the earnings exceed the specified thresholds.

An argument against the option is that it would reduce the incentive to save, especially among people whose income from investments is near the threshold amount and who could become (or remain) eligible for the credits under the option by making small reductions in their assets. However, some people would not respond to the lower thresholds by reducing their saving but instead by shifting their investments to less liquid forms (such as cars) that are not subject to the investment test or by changing the timing of the return from their investments (for example, by retaining stocks for longer periods in order to avoid realizing capital gains). For people with very low income, the investment test would probably have little effect because they have little means to save and invest.

RELATED CBO PUBLICATIONS: *Growth in Means-Tested Programs and Tax Credits for Low-Income Households* (February 2013), www.cbo.gov/publication/43934; and *Refundable Tax Credits* (January 2013), www.cbo.gov/publication/43767

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	*	*	*	*	1	1	1	2	2	3	2	10
Change in Revenues	8	40	46	49	51	52	53	55	57	59	194	470
Net Effect on the Deficit	-8	-39	-46	-49	-51	-51	-52	-53	-55	-57	-192	-460

Increase the Maximum Taxable Earnings for the Social Security Payroll Tax

Sources: Staff of the Joint Committee on Taxation; Congressional Budget Office.

Notes: This option would take effect in January 2014. The change in revenues would consist of an increase in receipts from Social Security payroll taxes (which would be off-budget), offset in part by a reduction in individual income tax revenues (which would be on-budget). The outlays would be for additional payments of Social Security benefits and would be classified as off-budget.

* = between zero and \$500 million.

Social Security—which consists of Old-Age and Survivors Insurance and Disability Insurance—is financed by payroll taxes on employers, employees, and the self-employed. Only earnings up to a maximum, which is \$113,700 in 2013, are subject to the tax. That maximum usually increases each year at the same rate as average wages in the economy.

When payroll taxes for Social Security were first collected in 1937, about 92 percent of earnings from jobs covered by the program were below the maximum taxable amount. During most of the program's history, the maximum was increased only periodically, so the percentage varied greatly. It fell to 71 percent in 1965 and by 1977 had risen to 85 percent. Amendments to the Social Security Act in 1977 boosted the amount of covered taxable earnings, which reached 90 percent in 1983. That law also specified that the taxable maximum be adjusted, or indexed, annually to match the growth in average wages. Despite those changes, the percentage of earnings that is taxable has slipped in the past decade because earnings for the highest-paid workers have grown faster than average earnings. Thus, in 2011, about 83 percent of earnings from employment covered by Social Security fell below the maximum taxable amount.

This option would increase the taxable share of earnings from jobs covered by Social Security to 90 percent by raising the maximum taxable amount to \$177,500 in calendar year 2014. (In later years, the maximum would continue to be indexed as it is now.) Implementing such a policy change would increase revenues by an estimated \$470 billion over the 2014–2023 period, according to the staff of the Joint Committee on Taxation. (The estimates include the reduction in individual income tax revenues that would result from a shift of some labor compensation from a taxable to a nontaxable form.)

Because Social Security benefits are tied to the amount of earnings on which taxes are paid, however, some of the increase in revenues from this option would be offset by the additional benefits paid to people with earnings above the maximum taxable amount under current law. On net, the option would reduce federal budget deficits by an estimated \$460 billion over the 10-year period.

An advantage of this option is that it would provide more revenue to the Social Security program, which, according to the Congressional Budget Office's projections, will not have sufficient income to finance the benefits that are due to beneficiaries under current law. If current law remained in place, spending for Social Security would rise from 4.9 percent of gross domestic product (GDP) in 2013 to 6.2 percent by 2038, CBO projects. But Social Security tax revenues, which already are less than spending for the program, would grow more slowly. CBO projects that, in combination, the Old-Age and Survivors Insurance and Disability Insurance trust funds will be exhausted in 2031. Under this option, exhaustion of the combined trust funds would be delayed until 2036.

In addition, this option would make the payroll tax less regressive. People with earnings above the ceiling now pay a smaller percentage of their total earnings in payroll taxes than do people whose total earnings are below the maximum. Making more earnings taxable would increase payroll taxes for those high earners. (That change would also lead to somewhat higher benefit payments for affected workers.)

A disadvantage of this option is that raising the earnings cap would weaken the link between the taxes that workers pay into the system and the benefits they receive (because the increase in benefits would be modest relative to the increase in taxes). That link has been an important aspect of Social Security since its inception. Another drawback is that people with earnings between the existing taxable limits and those under the option would earn less after taxes for each additional hour worked, which would reduce the incentive to work and encourage taxpayers to substitute tax-exempt fringe benefits for taxable wages. In contrast, people with earnings well above the limit established by this option would not see any reduction in the return on their additional work, but they would have less income after taxes, which would encourage them to work more.

RELATED CBO PUBLICATIONS: *The 2013 Long-Term Budget Outlook* (September 2013), www.cbo.gov/publication/44521; *The 2012 Long-Term Projections for Social Security: Additional Information* (October 2012), www.cbo.gov/publication/43648; and *Social Security Policy Options* (July 2010), www.cbo.gov/publication/21547

RELATED OPTIONS: Revenues, Options 19 and 21

Expand Social Security Coverage to Include Newly Hired State and Local Government Employees

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	0.7	2.2	3.9	5.5	7.0	8.7	10.4	12.3	14.2	16.3	19.3	81.1

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. The change in revenues would consist of an increase in receipts from Social Security payroll taxes (which would be off-budget), offset in part by a reduction in individual tax revenues (which would be on-budget). In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Nearly all private-sector workers and federal employees are covered by Social Security, but a quarter of workers employed by state and local governments are not covered. Under federal law, state and local governments can opt to enroll their employees in the Social Security program, or they can opt out if they provide a separate retirement plan for those workers instead. State and local governments may also have their employees participate in Social Security and be part of a separate retirement plan. In contrast, all federal employees hired after December 31, 1983, are covered by Social Security and pay the associated payroll taxes. Furthermore, all state and local government employees hired after March 31, 1986, and all federal government employees are covered by Medicare and pay payroll taxes for Hospital Insurance (Medicare Part A).

Under this option, Social Security coverage would be expanded to include all state and local government employees hired after December 31, 2013. Consequently, all newly hired state and local government employees would pay the Social Security payroll tax. That 12.4 percent tax on earnings, half of which is deducted from employees' paychecks and half of which is paid by employers, funds the Old-Age, Survivors, and Disability Insurance programs. If implemented, this option would increase revenues by a total of \$81 billion over the 2014– 2023 period, the staff of the Joint Committee on Taxation estimates. (The estimate includes the reduction in individual income tax revenues that would result from shifting some labor compensation from a taxable to a nontaxable form.)

Paying the Social Security payroll tax for 10 years generally qualifies workers (and their dependents) to receive Social Security retirement benefits; other work requirements must be met for employees to qualify for disability benefits or, in the event of their death, for their dependents to qualify for survivors' benefits. Although extending such coverage to all newly hired state and local employees would eventually increase the number of Social Security beneficiaries, that increase would have little impact on the federal government's spending for Social Security in the short term. Over the 2014–2023 period, outlays would increase only by a small amount because most people who would be hired by state and local governments during that period would not begin receiving Social Security benefits for many years. (The estimate does not include any effects on outlays.)

In the long term, the additional benefit payments for the expanded pool of beneficiaries would be only about half the size of the additional revenues. That is largely because most of the newly hired workers would receive Social Security benefits anyway under current law for one of two possible reasons: They might have held other covered jobs in the past, or they were covered by a spouse's employment. As a result, this option would slightly enhance the long-term viability of the Social Security program, which faces the prospect that income from Social Security payroll taxes will not be sufficient to finance the benefits that are due to beneficiaries under current law.

Another rationale for implementing the option concerns fairness. Social Security benefits are intended to replace only a percentage of a worker's preretirement earnings. That percentage (referred to as the replacement rate) is higher for workers with low career earnings than for workers with higher earnings. But the standard formula for calculating Social Security benefits does not distinguish between people whose career earnings are low and those who just appear to have low career earnings because they spent a portion of their career working in jobs that were not covered by Social Security. To make the replacement rate more comparable for workers with similar earnings histories, current law reduces the standard benefits for retired government employees who have worked a substantial portion of their career in employment that is not covered by Social Security. However, that adjustment is imperfect and can affect various public employees differently: Specifically, it can result in higher replacement rates for some public employees who were not covered by Social Security throughout their career and in lower replacement rates for other public employees. This option would eliminate those inequities.

Implementing this option would also provide better retirement and disability benefits for many workers who move between government jobs and other types of employment. By facilitating job mobility, the option would enable some workers-who would otherwise stay in state and local jobs solely to maintain their publicemployee retirement benefits-to move to jobs in which they could be more productive. Many state and local employees are reluctant to leave their jobs because pensions are structured to reward people who spend their entire careers in the same pension system. If their government service was covered by Social Security, there would be fewer disincentives to moving because they would remain in the Social Security system. State and local governments, however, might respond to greater turnover by reducing their investment in workers-by cutting training programs, for example-causing the productivity of state and local employees to decline.

An argument against such a policy change is that it might place an added burden on some state and local governments, which already face significant budgetary challenges. State and local pension plans are generally designed to be prefunded so that participants' contributions can be invested to pay future benefits. As long as the plans are fully funded, transferring new employees to the Social Security system would not cause any problems. However, many plans are underfunded and depend on contributions from new participants to make up the shortfall. Under this option, the affected state and local governments would probably restructure their plans

contributions from new participants to make up the shortfall. Under this option, the affected state and local governments would probably restructure their plans in one of two ways. They might exclude newly hired state and local employees from participation-thereby forgoing a possible source of new funding-which would place an additional burden on those governments. Or, they might choose to supplement the Social Security coverage for new employees by formulating a benefit package that, with Social Security included, was equivalent in value to their current plan. But such a package would increase costs to state and local governments because the cost per dollar of Social Security benefits for state and local government employees would probably exceed the cost per dollar for pensions provided by state and local governments. Social Security costs would be greater because that program initially paid benefits to recipients who had not contributed much to the system and because Social Security redistributes benefits to workers with low career earnings. Delaying implementation of the option for a few years would provide state and local governments time to restructure their pension plans. Nevertheless, costs to the affected governments would probably rise.

RELATED CBO PUBLICATIONS: *The 2013 Long-Term Budget Outlook* (September 2013), www.cbo.gov/publication/44521; *The 2012 Long-Term Projections for Social Security: Additional Information* (October 2012), www.cbo.gov/publication/43648; and *Social Security Policy Options* (July 2010), www.cbo.gov/publication/21547

RELATED OPTION: Revenues, Option 18

Increase the Payroll Tax Rate for Medicare Hospital Insurance by 1 Percentage Point

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	44	73	77	82	87	91	95	99	103	108	363	859
Source: Staff of the Jo	oint Comr	nittee o	n Taxatic	on.								

Note: This option would take effect in January 2014.

The primary source of financing for Hospital Insurance (HI) benefits provided under Medicare Part A is the HI payroll tax. The basic HI tax is 2.9 percent of earnings: 1.45 percent is deducted from employees' paychecks, and 1.45 percent is paid by employers. Self-employed individuals generally pay 2.9 percent of their net income in HI taxes. Unlike the payroll tax for Social Security, which applies to earnings up to an annual maximum (\$113,700 in 2013), the 2.9 percent HI tax is levied on total earnings.

Under the Affordable Care Act of 2010, a surtax on earnings above \$200,000 went into effect beginning in 2013. At that earnings threshold, the portion of the HI tax that employees pay increases by 0.9 percentage points—to a total of 2.35 percent. (For a married couple filing an income tax return jointly, the surtax applies to the couple's combined earnings above \$250,000.) The surtax does not apply to the portion of the HI tax paid by employers, which remains 1.45 percent of earnings, regardless of how much the worker earns.

In recent years, expenditures for the HI program have grown at a much faster pace than revenues derived from the payroll tax. Since 2008, expenditures for HI have exceeded the program's total income—including interest credited to the Hospital Insurance Trust Fund—so balances in the trust fund have declined. The Congressional Budget Office projects that the balances will continue to fall and that the HI trust fund will be exhausted in the mid-2020s.

This option would increase the basic HI tax on total earnings by 1.0 percentage point. The basic rate for both employers and employees would increase by 0.5 percentage points, to 1.95 percent, resulting in a combined rate of 3.9 percent. The rate paid by selfemployed people would also rise to 3.9 percent. For taxpayers with earnings above \$200,000 (\$250,000 for married couples filing jointly), the HI tax on earnings in excess of the surtax threshold would increase from 3.8 percent to 4.8 percent; employees would pay 2.85 percent, and employers would pay the remaining 1.95 percent.

If implemented, the option would increase revenues by \$859 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation projects. (The estimate includes the reduction in individual income tax revenues that would result from a shift of some labor compensation from a taxable to a nontaxable form.)

The main argument for the option is that receipts from the HI payroll tax are currently not sufficient to cover the cost of the program, and increasing that tax would shrink the gap between the program's costs and the revenues that finance it. A commonly used measure of the long-term financial status of Medicare Part A is the actuarial balance-that is, the present value of revenues (primarily from payroll taxes) plus the current trust fund balance minus the present value of outlays for the program and the desired trust fund outlays (one year's worth) at the end of a specified period.¹ CBO projects that, under current law, the actuarial imbalance for the HI trust fund over the next 75 years would be 3.3 percent of taxable payroll, which is the difference between projected income (3.6 percent of taxable payroll) and projected costs (6.9 percent of taxable payroll). Eliminating a gap of that size would require, for example, immediately increasing the basic HI payroll tax rate from its current 2.9 percent to 6.2 percent or immediately cutting spending on Part A by almost one-half. Raising the HI tax by 1 percentage point would delay the exhaustion of the HI trust fund by more than a decade and would reduce the long-term gap

^{1.} Present value is a single number that expresses a flow of current and future income, or payments, in terms of an equivalent lump sum received or paid today. Here, it is calculated over 75 years using a long-term 3 percent real (inflation-adjusted) discount rate.

between projected income and projected costs by almost a third. Another argument in support of the option is that an increase in the payroll tax rate would be simpler to administer than most other types of tax increases because it would require only relatively minor changes to the current tax system.

A drawback of the option is that it would encourage people to reduce the hours they work or to shift their compensation away from taxable earnings to nontaxable forms of compensation. When employees reduce the hours they work or change the composition of their earnings, economic resources are allocated less efficiently than would be the case in the absence of the higher tax rate. In addition, this option would increase the tax burden of lower-income workers relative to that of workers with higher income. That is because a larger share of the income of lower-income families is, on average, from earnings that are subject to the HI tax. As a result, a percentage point increase in the HI tax would represent a greater proportion of the income of lower-income taxpayers than would be the case for higher-income taxpayers. Moreover, because the option would not make any changes to the Medicare program, the increase in the tax burden would not be offset by greater Medicare benefits when people reached the age of 65.

RELATED OPTION: Revenues, Option 21

Tax All Pass-Through Busi	iness Owners Under SECA and
Impose a Material Particip	pation Standard

											То	tal
(Billions of dollars)	201 4	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	6	11	11	12	13	14	15	15	16	17	53	129

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014. Most of the revenues would be off-budget. In addition, the option would increase outlays for Social Security by a small amount. The estimates do not include those effects on outlays.

Under current law, workers with earnings from businesses owned by other people contribute to Social Security and Medicare Part A through the Federal Insurance Contributions Act (FICA) tax. The tax rate for Social Security is 12.4 percent of the tax base up to \$113,700, and that threshold increases each year with average wages. For Medicare Part A, the tax rate is 2.9 percent, and there is no ceiling on that base.¹ The tax bases for both programs are limited to labor income (specifically, wages and salaries), and the taxes are split equally between the employer and the employee.

In contrast, people with earnings from businesses they own themselves are taxed either through FICA or through the Self Employment Contributions Act (SECA) depending on whether the business is incorporated or not. Owners of unincorporated businesses are subject to the SECA tax, and their tax base is self-employment income (which, unlike the FICA base, generally includes some capital income.) The definition of self-employment income depends on whether one is classified as a sole proprietor, a general partner (that is, a partner who is fully liable for the debts of the firm), or a limited partner (a partner whose liability for the firm's debts is limited to the amount he or she invests). Sole proprietors pay SECA taxes on their net business income (that is, receipts minus expenses). General partners pay SECA taxes on their "guaranteed payments" (payments they are due regardless of the firm's profits) and on their share of the firm's net income. Limited partners pay SECA tax solely on any guaranteed payments they receive, and then only if those payments represent compensation for labor services.

The definition of limited partners is determined at the state level and, as a result, varies among states. Since the enactment of federal laws distinguishing between the treatment of general and limited partners under SECA, state laws have expanded eligibility for limited-partner status from strictly passive investors to certain partners who are actively engaged in the operation of businesses. Furthermore, state laws have recognized new types of entities, such as the limited liability company (LLC), whose owners do not fit neatly into either of the two partnership categories.

Unlike owners of unincorporated businesses, owners of privately held corporations pay FICA taxes as if they were employees. That treatment includes owners of S corporations, which are certain privately held corporations whose profits are subject to the individual income tax rather than the corporate income tax. Owners of privately held corporations are required to report their "reasonable compensation" for any services they provide and pay FICA tax on that amount. The net income of the firm, after deducting that compensation, is subject to neither the FICA nor the SECA tax.

This option would require owners of S corporations to pay the SECA tax instead of the FICA tax. In addition, the option would change the definition of self-employment income so that it would no longer depend on whether a taxpayer was classified as a general partner or a limited partner. That distinction would be replaced with a "material participation" standard in which the primary test would be whether the individual engaged in the operation of the business for more than 500 hours during a given year. Partners, LLC members, and S corporation owners categorized as material participants would pay SECA tax on both their guaranteed payments and their share of the firm's net income. Those not deemed to be

^{1.} If wages exceed certain thresholds (\$250,000 for married taxpayers filing joint returns, \$200,000 for everybody else), an additional 0.9 percent tax is levied on the amount above the threshold.

material participants would pay SECA tax on their reasonable compensation. All sole proprietors would be considered material participants.

The option would increase taxes on owners of S corporations and on limited partners who are material participants by subjecting their entire share of the firm's net income to the SECA tax instead of just their reasonable compensation or guaranteed payments. However, the option would lower taxes for general partners who are not material participants by excluding from SECA taxation their share of the firm's net income that is in excess of their reasonable compensation. On balance, federal revenues would increase by an estimated \$129 billion over the period from 2014 through 2023, according to the staff of the Joint Committee on Taxation. By increasing, on net, the earnings base from which Social Security benefits are calculated, the option also would increase federal spending for Social Security over the long term. (The estimates do not include that effect on outlays.)

An advantage of this option is that it would eliminate the ambiguity created by the emergence of new types of business entities that were not anticipated when the laws governing Social Security were last amended. The treatment of partners and LLC members under the SECA tax would be defined entirely by federal law and would ensure that owners who are actively engaged in the operation of a business could not legally exclude a portion of their labor compensation from the tax base. Moreover, because all firms not subject to the corporate income tax would be treated the same, businesses would be more likely to choose their form of organization on the basis of what allowed them to operate most efficiently rather than what minimized their tax liability. Other arguments in favor of the option are that it would improve compliance with the tax code and reduce complexity for some firms. Under current law, S corporations have a strong incentive to underreport reasonable compensation so as to minimize their FICA tax liability. By subjecting S corporation owners to the SECA tax, the option would eliminate the ability of material participants to reduce their tax liability by underreporting their reasonable compensation. In addition, the option would simplify recordkeeping for S corporations whose owners are all material participants because they would no longer have to estimate the reasonable compensation of those owners.

A disadvantage of the option is that it would subject additional income from capital to the SECA tax, making the tax less like FICA, which taxes virtually no income from capital. That could deter some people from starting a business and paying the SECA tax on the profits (opting instead to work for somebody else and pay the FICA tax on their wages). The option could also lead to new efforts to recharacterize business income as either rental income or interest income, neither of which is subject to the FICA or the SECA tax. It could also lead to the use of C corporations (businesses that are subject to the corporate income tax) as a tax shelter. For example, faced with a 15.3 percent SECA tax rate on top of the individual income tax, the owners of an S corporation might choose to pay the corporate income tax instead (even though profit distributions would be taxed again under the individual income tax). If the corporate income tax rate was lowered in the future, that incentive would be magnified. Finally, the option would place an additional administrative burden on many partnerships and LLCs: Those entities would be required to determine reasonable compensation for any members considered to be nonmaterial participants.

RELATED OPTIONS: Revenues, Options 18 and 20

RELATED CBO PUBLICATION: *The Taxation of Capital and Labor Through the Self-Employment Tax* (September 2012), www.cbo.gov/publication/43644

											Tot	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues												
Increase the net FUTA rate to 0.8 percent	1.0	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	6.8	14.4
Increase the FUTA base to \$14,000, index the base to future wage growth, and decrease the net FUTA rate to 0.33 percent	4.9	8.5	2.5	-1.4	-1.5	-2.3	-2.2	1.0	2.1	2.9	13.0	14.5

Notes: This option would take effect in January 2014.

FUTA = Federal Unemployment Tax Act.

The unemployment insurance (UI) system is a partnership between the federal government and state governments that provides a temporary weekly benefit consisting of a regular benefit and, often during economic downturns, extended and emergency benefits—to qualified workers who lose their job through no fault of their own. Funding for unemployment insurance is drawn from payroll taxes imposed on employers both by state governments and by the federal government.

The states administer the UI system, establishing eligibility rules, setting the regular benefit amounts, and paying out those benefits to eligible people. To finance benefits, states impose payroll taxes on employers. State payroll taxes vary, with each state setting a tax rate schedule and a maximum wage amount subject to tax. Revenues from state payroll taxes are deposited into dedicated state accounts within the federal budget.

The federal government sets broad guidelines for the UI system, pays a portion of the administrative costs that state governments incur, and makes advances to states that lack the money to pay UI benefits. In addition, during periods of high unemployment, the federal government has often funded, either fully or partially, supplemental benefits through the extended benefits program, temporary emergency benefits, or both.

Funding for the federal portion of the unemployment insurance system is drawn from payroll taxes imposed on employers under the Federal Unemployment Tax Act (FUTA). FUTA taxes are levied on each worker's wages up to \$7,000 and then deposited into several federal accounts. That amount is not adjusted, or indexed, for inflation and has remained unchanged since 1983. The FUTA tax rate is 6.0 percent, reduced by a credit of 5.4 percent for state taxes paid, for a net tax rate of 0.6 percent—or \$42 for each employee earning at least \$7,000 annually. On January 1, 1976, a surtax of 0.2 percent went into effect, raising the total FUTA tax rate, net of the state tax credits, to 0.8 percent—for a maximum of \$56 per employee. However, that surtax expired on July 1, 2011.

During and after the last recession, the funds in the federal accounts were insufficient to pay the emergency and extended benefits enacted by the Congress, to pay the higher administrative costs that states incurred because of the greater number of people receiving benefits, and to make advances to several states that did not have sufficient funds to pay regular benefits. That shortfall necessitated that advances be made from the general fund of the U.S. Treasury to the federal accounts. Some of those advances must be repaid, a process that the Congressional Budget Office projects will take several years under current law.

This option includes two alternative approaches that would increase revenues from unemployment insurance taxes by roughly the same amount over the 2014–2023 period. The first approach would leave the FUTA tax base unchanged but would raise the net FUTA tax rate by reinstating and permanently extending the 0.2 percent FUTA surtax. CBO estimates that this approach would generate a steady flow of additional revenues in each year between 2014 and 2023, for a total increase of \$14 billion.

The second approach would expand the FUTA tax base but decrease the tax rate. Specifically, the approach would raise the amount of wages subject to the FUTA tax from \$7,000 to \$14,000 in 2014 (and then index that threshold to the growth in future wages), and it would reduce the net FUTA tax rate, after the 5.4 percent credit for state taxes paid, to 0.33 percent. CBO estimates that this approach would raise revenues by \$15 billion over the 2014–2023 period.

The net increase in revenues from the second approach would be attributable to several factors. First, in 2014, the direct revenue gain that would result from expanding the FUTA tax base would roughly offset the revenue losses from lowering the FUTA tax rate; in future years, the growth in the tax base would cause that gain to exceed that loss. Second, revenues from state unemployment insurance taxes, which are counted as part of the federal budget, would rise as well. Because federal law requires that each state's UI taxes be levied on a taxable wage base that is at least as large as the federal taxable wage base, 27 states would have to increase their taxable wage base to \$14,000 under this approach. CBO expects that many states would reduce their UI tax rates in response but would leave those rates high enough to maintain some of the additional revenue. States with low UI account balances would be especially likely to retain some of the additional revenue.

The pattern of additional revenues generated by the second approach would be very irregular. In the initial years, revenues would rise substantially, mostly because expanding the tax base would increase state UI tax revenues. That extra revenue would allow some states to more quickly repay advances made by the federal government. Those repayments, in turn, would make more employers eligible for the full credit for state taxes paid than is the case under current law, causing revenues to fall in the middle years of the budget window. (Employers in states that received advances from the federal government but have yet to repay those funds do not receive the full credit for state taxes paid; in those instances the forgone credit is directed to the state UI account until the advances are repaid.) By the final years of the period, that effect would fade, and revenues would be higher again because of the expanded tax base.

The main advantage of both approaches is that they would improve the financial condition of the federal portion of the UI system. The additional revenue would allow the federal UI accounts to more rapidly repay the outstanding advances from the general fund and would better position those accounts to finance benefits during future recessions. Another argument in support of the second approach is that expanding the tax base would improve the financial condition of state UI tax systems.

Either approach would generally be simpler to implement—especially by employers—than many other proposed changes to the federal tax code. However, expanding the taxable wage base would impose some burden on state governments, requiring them to ensure that their tax bases conformed to the indexed federal tax base.

An argument against both approaches is that employers would generally pass on the additional FUTA taxes to workers in the form of reduced earnings. By reducing workers' after-tax pay, the tax might induce some people to choose not to enter the workforce. Both approaches would also increase marginal tax rates for some workers by a small amount. (The marginal tax rate is the percentage of an additional dollar of income from labor or capital that is paid in taxes.) On balance, the evidence suggests that increasing marginal tax rates reduces work relative to what would have occurred otherwise.¹ Given the small size of the tax changes in this option, however, the effects on employment would probably be quite small under either approach.

The combination of a single tax rate and low thresholds on the amount of earnings subject to the tax makes the FUTA tax regressive—that is, FUTA taxes measured as a share of earnings decrease as earnings rise. Even so, because workers with lower earnings receive, on average, UI benefits that are a higher fraction of their prior earnings than do workers with higher earnings, those benefits are progressive. If taxes and benefits are considered together, the unemployment insurance system is generally thought to be roughly proportional—neither progressive

That increase would have two types of effects. On the one hand, the higher marginal tax rates would reduce the share of the returns from additional work that people could keep, reducing their incentive to work. On the other hand, because higher marginal tax rates reduce after-tax income, they make it more difficult for people to attain their desired standard of living with a given amount of work, thus possibly causing people to work more.

nor regressive—under current law. Neither approach described in this option would affect UI benefits, and both approaches would raise revenues by nearly the same total amount over the 10-year period. However, the approaches would have different effects on the distribution of tax burdens: Reinstating the surtax would increase FUTA taxes proportionately for all income groups, while expanding the wage base and lowering the FUTA rate would reduce the regressivity of the FUTA tax.

RELATED OPTION: Revenues, Option 6

RELATED CBO PUBLICATION: Unemployment Insurance in the Wake of the Recent Recession (November 2012), www.cbo.gov/publication/43734

Increase Corporate Income Tax Rates by 1 Percentage Point												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	7	11	11	12	12	12	12	12	12	12	53	113
Source: Staff of the Joint Committee on Taxation.												

Note: This option would take effect in January 2014. Most corporations that are subject to the corporate income tax calculate their tax liability according to a

income tax calculate their tax liability according to a progressive rate schedule. The first \$50,000 of corporate taxable income is taxed at a rate of 15 percent; income of \$50,000 to \$75,000 is taxed at a 25 percent rate; income of \$75,000 to \$10 million is taxed at a 34 percent rate; and income above \$10 million is generally taxed at a rate of 35 percent.¹

Although most corporate income falls within the 35 percent tax bracket, the average tax rate on corporate income (corporate taxes divided by corporate income) is lower than 35 percent because of allowable deductions, exclusions, tax credits, and the lower tax rates that apply to the first \$10 million of income. For example, corporations can deduct business expenses, including interest paid to holders of the firm's bonds, from gross income to compute taxable income. (Dividends paid to shareholders, however, are not deductible.) Most income earned by the foreign subsidiaries of U.S. corporations is not subject to U.S. taxation until it is repatriated in the form of dividends paid to the parent corporation. To prevent income earned abroad from being subject to both foreign and U.S. taxation, the tax code gives U.S. corporations a credit that reduces their domestic tax liability on that income by the amount of income and withholding taxes they have paid to foreign governments. The foreign tax credit is subject to limits that are designed to ensure that the amount of credits taken does not exceed the amount of U.S. tax that otherwise would have been due.

This option would increase all corporate income tax rates by 1 percentage point. For example, the corporate income tax rate would increase to 36 percent for taxable income above \$10 million. The option would increase revenues by \$113 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation estimates.

The major argument in favor of the option is its simplicity. As a way to raise revenue, increasing corporate income tax rates would be easier to implement than most other types of business tax increases because it would require only minor changes to the current tax collection system.

The option would also increase the progressivity of the tax system to the extent that the corporate income tax is largely borne by owners of capital, who tend to have higher incomes than other taxpayers. But the extent to which the financial burden of the tax ultimately falls on the owners of corporations, owners of all capital assets, or workers is unclear. The United States is an open economy, in which many firms engage in international trade. Because labor tends to be less mobile than capital in open economies, some of the corporate income tax burden might be passed back to workers through reductions in their compensation over a number of years—making an increase in corporate tax rates somewhat less progressive.

An argument against the option is that it would further reduce economic efficiency. The current corporate income tax system already distorts firms' choices about how to structure the business (for example, whether to operate as a C corporation, an S corporation, a partnership, or a sole proprietorship) and whether to finance investment by issuing debt or by issuing equity. Increasing corporate income tax rates would make it even more advantageous for firms to expend resources to qualify as an S corporation solely as a way to reduce their tax liabilities. That is because net income from C corporations—

^{1.} Under current law, surtaxes are imposed on some amounts of corporate income. Income between \$100,000 and \$335,000 is subject to a surtax of 5 percent, and an additional 3 percent tax is levied on income between \$15 million and \$18.3 million. Those surtaxes effectively phase out the benefit of the three lower tax rates for corporations with income above certain amounts. As a result, a company that reports more than \$18.3 million in taxable income effectively faces a statutory rate equal to 35 percent of its total corporate taxable income.

those that are subject to the corporate income tax-is first taxed at the business level and then again at the individual level after it is distributed to shareholders or investors. By contrast, income from S corporations-which can have no more than 100 owners and are subject to other restrictions-is generally free from taxation at the business level but is taxed under the individual income tax, even if the income is reinvested in the firm. Raising corporate tax rates would also encourage companies to increase their reliance on debt financing because interest payments, unlike dividend payments to shareholders, can be deducted. Carrying more debt might increase some companies' risk of default. Moreover, the option would discourage businesses from investing, hindering the growth of the economy. An alternative to this option that would reduce such incentives would be to lower the tax rate while broadening the tax base by, for example, reducing or eliminating some exclusions or deductions. That modification, however, would also reduce-and possibly even eliminate-the revenue gains from the option.

Another concern that might be raised about the option is that it would increase the tax rate that corporations those based in the United States and those based in foreign countries—face when they earn income in the United States. Such an increase would cause the top marginal tax rate (that applied to an additional dollar of income) in the United States to be higher than the top marginal tax rates adopted by most other countries. Under current law, when the federal corporate tax is combined with state and local corporate taxes (which have a top rate averaging 4 percent), the U.S. tax rate on income in the highest bracket averages 39 percent-higher than that in any of the other 33 member countries of the Organisation for Economic Co-operation and Development. (The top statutory rates, however, do not reflect the differences in various countries' tax bases and rate structures and therefore do not represent the true average tax rates that multinational firms face.) Those higher rates in the United States influence businesses' choices about how and where to invest; to the extent that firms respond by shifting investment to countries with low taxes as a way to reduce their tax liability at home, economic efficiency declines because firms are not allocating resources to their most productive use. The current U.S. system also creates incentives to shift reported income to low-tax countries without changing actual investment decisions. Such profit shifting erodes the corporate tax base and leads to wasted resources for tax planning. Increasing the top corporate rate to 36 percent (40 percent when combined with state and local corporate taxes) would further accentuate those incentives to shift investment and reported income abroad. However, other factors, such as the skill level of a country's workforce and its capital stock, also affect corporations' decisions about where to incorporate and invest.

RELATED OPTION: Revenues, Option 30

RELATED CBO PUBLICATIONS: *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764; *Taxing Businesses Through the Individual Income Tax* (December 2012), www.cbo.gov/publication/43750; Jennifer C. Gravelle, *Corporate Tax Incidence: Review of General Equilibrium Estimates and Analysis*, Working Paper 2010-03 (May 2010), www.cbo.gov/publication/21486; William C. Randolph, *International Burdens of the Corporate Income Tax*, Working Paper 2006-09 (August 2006), www.cbo.gov/publication/18067; and *Corporate Income Tax Rates: International Comparisons* (November 2005), www.cbo.gov/publication/17501

Revenues—0	ption 24
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Repeal the	"LIFO" and	"Lower of Cost o	r Market" Inventory	Accounting Methods

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	13	25	25	25	14	2	2	2	2	2	101	112
Source: Staff of the Jo	int Comr	nittee o	n Taxatio	on.								

Note: This option would take effect in January 2014.

To compute its taxable income, a business must first deduct from its receipts the cost of purchasing or producing the goods it sold during the year. Determining those costs requires that the business identify and attach a value to its inventory. Most companies calculate the cost of the goods they sell in a year using the accrual method of accounting, adding the value of the inventory at the beginning of the year to the cost of goods purchased or produced during the year and then subtracting from that total the value of the inventory at the end of the year.

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The tax code allows firms to choose from among several approaches for identifying and determining the value of the goods included in their inventory. For itemizing and valuing goods in stock, firms can use the "specific identification" method. That approach, however, requires a very detailed physical accounting in which each item in inventory is matched to its actual cost (that is, the cost to produce or purchase the item). An alternative approach—"last in, first out" (LIFO)—also allows firms to value their inventory at cost but, in addition, permits them to assume that the last goods added to inventory were the first ones sold. Under that assumption, the cost of those more recently produced goods should approximate current market value (that is, the cost of replacing the inventory).

Yet another alternative approach—"first in, first out" (FIFO)—is based on the assumption that the first goods sold from a business's inventory have been in that inventory the longest. Like firms that adopt the LIFO method, firms using the FIFO approach can also value their goods at cost. But firms that use the FIFO approach have still another choice—the "lower of cost or market" (LCM) method. Instead of assessing their end-of-year inventory at cost, they can assess that inventory on the basis of its market value and use that valuation if it is lower than the cost. In addition, businesses that use the FIFO approach can qualify for the "subnormal-goods" method of

inventory valuation if their goods cannot be sold at market prices because they are damaged or flawed.

This option would eliminate the LIFO method of identifying inventory, as well as the LCM and subnormalgoods methods of inventory valuation. Businesses would be required to use the specific-identification or FIFO methods to account for goods in their inventory and to set the value of that inventory on the basis of cost. Those changes—which would be phased in over a period of four years—would increase revenues by a total of \$112 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation estimates.

The main rationale for this option is that it would align tax accounting rules with the way businesses tend to sell their goods. Under many circumstances, firms prefer to sell their oldest inventory first—to minimize the risk that the product has become obsolete or been damaged while in storage. In such cases, allowing firms to use alternative methods to identify and value their inventories for tax purposes allows them to reduce their tax liabilities without changing their economic behavior.

An argument for eliminating the LIFO method is that it allows companies to defer taxes on real (inflationadjusted) gains when the prices of their goods are rising relative to general prices. Firms that use LIFO can value their inventory on the basis of costs associated with newer—and more expensive—inventory when, in fact, the actual items sold may have been acquired or produced at a lower cost at some point in the past. By deducting those higher costs as the price of production, firms are able to defer paying taxes on the amount their goods have appreciated until those goods are sold.

An argument against disallowing the LIFO accounting method is that such a policy change could also result in the taxation of income that arises from inflation, which would not represent actual changes in a firm's resources and its ability to pay taxes. However, other elements of the corporate income tax do not correct for inflation and, therefore, gains attributable to inflation are taxed.

An argument for eliminating the LCM method of inventory valuation under FIFO is that, when prices are falling, it provides a tax advantage for goods that have not been sold. The LCM method allows a business to compare the market value of each item in its end-of-year inventory with the item's cost and then set the lower of the two as the item's value. The year-end inventory will have a lower total value under LCM than under the cost method if the market value of any item in the inventory is less than its actual cost. Using the LCM method when prices are falling allows the firm to claim a larger deduction for the costs of goods sold, causing the firm's taxable income to fall as a result. In effect, that method allows a firm to deduct from its taxable income the losses it incurred from the decline in the value of its inventory. (That deduction is allowed even though the firm has not sold the goods.) A firm, however, is not required to recognize gains in the value of its inventory when prices are rising, which means that gains and losses are taxed differently. Similarly, firms that use the subnormal-goods method of inventory valuation can immediately deduct the loss, even if the company later sells the good at a profit.

An argument for allowing firms to continue to use the LCM method for tax purposes is that it simplifies inventory valuations by those businesses. To the extent that firms find the LCM method a desirable method of inventory valuation for financial accounting, allowing them to use the same methodology for both financial accounting and tax purposes reduces complexity, particularly for small businesses.

Repeal Certain Tax Preferences for Extractive Industries

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues												
Repeal the expensing of exploration and development costs	2.2	3.2	2.9	2.6	2.4	1.9	1.2	0.7	0.5	0.6	13.3	18.3
Disallow the use of the percentage depletion allowance	1.0	1.5	1.5	1.5	1.5	1.6	1.7	1.7	1.7	1.8	7.0	15.5
Both of the above policies	3.2	4.7	4.4	4.1	3.9	3.5	2.9	2.4	2.2	2.4	20.3	33.8

Source: Staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2014.

When calculating their taxable income, firms in most industrial sectors in the United States are generally allowed to deduct a portion of the investment costs they incurred that year and in previous years. The portion of those costs that is deductible depends on prescribed rates of depreciation or, for certain natural resources, depletion.¹ Costs are deducted over a number of years to reflect an asset's rate of depreciation or depletion.

In contrast, the U.S. tax code treats extractive industries that produce oil, natural gas, coal, and hard minerals more favorably. Two tax preferences in particular give extractive industries an advantage over other industries:

One preference allows producers of oil, gas, coal, and minerals to "expense" some of the costs associated with exploration and development. Expensing allows companies to fully deduct such costs as they are incurred rather than waiting for those activities to generate income. For extractive companies, the costs that can be expensed include, in some cases, those related to excavating mines, drilling wells, and prospecting for hard minerals. Specifically, current law allows independent oil and gas producers and noncorporate coal and mineral producers to fully expense their costs, and it allows expensing of 70 percent of costs for "integrated" oil and gas producers (companies with substantial retailing or refining activity) and corporate coal and mineral producers, with the companies able to deduct the remaining 30 percent of their costs over 60 months.

■ A second preference allows extractive industries to use a "percentage depletion allowance." Through that allowance, certain extractive companies can deduct from their taxable income between 5 percent and 22 percent of the dollar value of material extracted during the year, depending on the type of resource and up to certain limits. For example, oil and gas companies' eligibility for the percentage depletion allowance is limited to independent producers who operate domestically; for those firms, only the first 1,000 barrels of oil (or, for natural gas, oil-equivalent) per well, per day, qualify, and the allowance is limited to 65 percent of overall taxable income. For each property they own, firms take a deduction for the greater of the percentage depletion allowance or the amount prescribed by the cost depletion system, which allows for recovery of investment costs as income is earned from those investments. Total deductions can be increased by the percentage depletion allowance because it is not limited to the cost of the property, as are the amount of deductions allowed under cost depletion.

This option includes two different approaches to limiting tax preferences for extractive industries. The first approach would replace the expensing of exploration and development costs for oil, gas, coal, and hard minerals

^{1.} One exception to this general rule allows firms with relatively small amounts of qualifying capital investments (primarily equipment) to expense the costs of those items. This exception is generally referred to as Section 179 expensing, after the section of the tax code that authorizes it.

with the rules for deducting costs that apply in other industries.² That approach would increase revenues by \$18 billion over the 2014–2023 period, according to estimates by the staff of the Joint Committee on Taxation (JCT). The second approach would eliminate the percentage depletion allowance. That approach would raise \$16 billion over that 10-year period, according to JCT. If the two approaches were combined, revenues would increase by \$34 billion over the 2014–2023 period.

The principal argument in favor of this option is that the two tax preferences for extractive industries distort the allocation of society's resources in several ways. First, for the economy as a whole, the preferences influence the allocation of resources between the extractive industries and other industries in an inefficient manner. Those incentives encourage some investments in drilling and mining that produce a smaller market value of output than the investments would produce elsewhere because, when making investment decisions, companies take into account not only the market value of the output but also the tax advantage that expensing and percentage depletion provide. Second, for the same reason, the preferences also lead to an inefficient allocation of resources within the extractive industries. Third, the preferences encourage producers to extract more resources in a shorter time. In the case of oil, for example, that additional drilling makes the United States less dependent on imported oil in the short run, but it accelerates the depletion of the nation's store of oil and causes greater reliance on foreign producers in the long run.

An argument against this option is that it treats expenses that might be viewed as similar in different ways. In particular, exploration and development costs for extractive industries can be seen as analogous to research and development costs, which can be expensed by all businesses. Another argument against this option is that encouraging producers to continue exploring and developing domestic energy resources may enhance the ability of U.S. households and businesses to accommodate disruptions in the supply of energy from other countries.

RELATED OPTION: Mandatory Spending, Option 1

RELATED CBO PUBLICATIONS: *Energy Security in the United States* (May 2012), www.cbo.gov/publication/43012; and *Reforming the Federal Royalty Program for Oil and Gas* (November 2000), www.cbo.gov/publication/12927

^{2.} The option still allows other costs unique to extractive industries, such as those associated with unproductive wells and mines, to be expensed.

Extend the Perio	od for	Depro	eciatir	ng the	Cost	of Cei	rtain I	nvest	ments			
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	6	18	28	33	37	39	35	29	25	23	122	272
Source: Staff of the Jona Note: This option wou												

When calculating their taxable income, companies can deduct the expenses they incurred when producing tangible goods or providing services for sale, including depreciation—the drop in the value of a productive asset over time. The tax code sets the number of years, or service life, over which the value of different types of investments can be deducted from taxable income.

In recent years, the tax code has permitted firms to accelerate depreciation deductions for equipment. Firms were allowed to expense—that is, immediately deduct from taxable income—100 percent of the costs of investment in equipment made between September 8, 2010, and December 31, 2011. For equipment acquired between January 1, 2012, and December 31, 2013, firms were able to immediately deduct 50 percent of the cost. After 2013, current tax law will revert to the typical rules, which allow no expensing (except in limited cases) and generally require firms to deduct their investments in equipment over a number of years.

This option would extend the lifetime of equipment and certain structures placed into service after December 31, 2013, for purposes of tax depreciation. Specifically, where the tax code currently stipulates a lifetime of 3, 5, 7, 10, 15, or 20 years for a given type of equipment, this option would increase those lifespans to 4, 7, 9, 13, 20, or 25 years, respectively.¹ If implemented, those changes would increase revenues by \$272 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation estimates.

An argument in favor of this option is that the current rates of tax depreciation overstate the decline in the economic value of assets because they do not accurately reflect the rate of inflation that is likely to occur over an asset's lifetime. Because rates of depreciation are set by the tax code and depreciation deductions are not adjusted, or indexed, for inflation, the real (inflation-adjusted) value of the depreciation allowed by tax law depends on the rate of inflation.

Most rates of depreciation in the tax code today were set in the Tax Reform Act of 1986 and, if the average rate of inflation since that time was 5.0 percent, they would approximate the rate of economic depreciation (the decline in an asset's economic value, including the impact of inflation over time). The Congressional Budget Office estimates, however, that inflation over the next decade will average about 2.3 percent annually. That difference of nearly 3 percentage points means that, if those rates of depreciation stay the same, businesses will be able to deduct larger amounts of depreciation from taxable income—and thus have a lower tax liability—than they could if the deduction accurately measured economic depreciation.

Another argument in favor of this option is that it would equalize effective tax rates on the income generated by different types of investment. (Effective tax rates measure the impact of statutory tax rates and other features of the tax code in the form of a single tax rate that applies over the life of an investment.) Equipment and structures are two of the main types of tangible capital for which businesses take depreciation deductions, and the effective tax rates are currently quite different. Under the law currently in effect for 2014, if inflation was 2.3 percent and the real discount rate (which adjusts for the change in the value of a dollar over time) for businesses was 6.2 percent, the average effective tax rates on income from corporate investment would be 26.4 percent for equipment and

Most structures, including residential and office buildings, have a lifetime that is greater than 20 years for the purposes of calculating tax depreciation and thus would be unaffected by this option. However, some structures, such as electric power plants and barns, have a shorter lifetime under current law; the option would extend the lifetime of those structures as well.

29.4 percent for structures. In contrast, under this option, those rates would be 30.1 percent for equipment and 30.4 percent for structures. That near parity would mitigate the incentive that exists in the tax code for companies to invest more in equipment and less in structures than they might if investment decisions were based on economic returns.

Those effective tax rates would differ if inflation was different, however. If the rate of inflation was a percentage point lower, the effective tax rate under this option would be 28.1 percent for equipment and 29.2 percent for structures. Conversely, if inflation was a percentage point higher, the rates for equipment and structures would be 31.9 percent and 31.4 percent, respectively. Therefore, if inflation differed from CBO's expectations, new distortions between investment in equipment and structures would emerge over the long run.

An argument against this option is that low tax rates on income generated by capital would encourage investment. From that perspective, effective tax rates might best be equalized by easing taxation on all forms of capital rather than by raising the effective tax rate all capital or on a type of capital that is now favored. Moreover, by raising effective tax rates on business investment, this option would exacerbate the current tax bias in favor of owner-occupied housing relative to business investment.

RELATED CBO PUBLICATIONS: *Computing Effective Tax Rates on Capital Income*, Background Paper (December 2006), www.cbo.gov/publication/18259; and *Taxing Capital Income: Effective Rates and Approaches to Reform* (October 2005), www.cbo.gov/publication/17393

Repeal the Deduction for Domestic Production Activities													
											То	tal	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Revenues	6	17	18	20	21	21	21	22	22	23	83	192	
Source: Staff of the J Note: This option wou													

The American Jobs Creation Act of 2004 allows businesses to deduct from their taxable income a percentage of what they earn from qualified domestic production activities. The deduction rose in steps to 9 percent for tax year 2010 and thereafter. The Emergency Economic Stabilization Act of 2008 reduced the deduction rate for oil-related qualified production activities to 6 percent for tax years after 2009.

Various activities qualify for the deduction:

- Lease, rental, sale, exchange, or other disposition of tangible personal property, computer software, or sound recordings, if they are manufactured, produced, grown, or extracted in whole or significant part in the United States;
- Production of films (other than those that are sexually explicit);
- Production of electricity, natural gas, or potable water;
- Construction or renovation of real property; and
- Performance of engineering or architectural services.

The list of qualified activities specifically excludes the sale of food or beverages prepared at retail establishments; the transmission or distribution of electricity, natural gas, or potable water; and many activities that would otherwise qualify except that the proceeds come from sales to a related business.

The deduction for domestic production activities was created in part to replace the tax code's extraterritorial income exclusion—which allowed businesses to exclude income from certain types of transactions that generate receipts from trade with foreign countries. According to the World Trade Organization, that exclusion violated its agreements by subsidizing exports. The deduction was intended to reduce the taxes on income from domestic production without violating the organization's rules.

This option would repeal the deduction for domestic production activities. Doing so would increase revenues by \$192 billion from 2014 through 2023, the staff of the Joint Committee on Taxation estimates.

One argument in favor of this option is that it would reduce economic distortions. Although the deduction is targeted toward investments in domestic production activities, it does not apply to all domestic production. Whether a business activity qualifies for the deduction is unrelated to the economic merits of the activity. Thus, the deduction gives businesses an incentive to invest in a particular set of domestic production activities and to forgo other, perhaps more economically beneficial, investments in domestic production activities that do not qualify.

In addition, to comply with the law, businesses must satisfy a complex and evolving set of statutory and regulatory rules for allocating gross receipts and business expenses to the qualified activities. Companies that want to take full advantage of the deduction may incur large tax-planning costs (for example, fees to tax advisers). Moreover, the complexity of the rules can cause conflict between businesses and the Internal Revenue Service regarding which activities qualify under the provision.

An argument against implementing this option is that simply repealing the deduction for domestic production activities would increase the cost of domestic business investment and could reduce the amount of such investment. Alternatively, the deduction could be replaced with a revenue-neutral reduction in the top corporate tax rate (a cut that would reduce revenues by the same amount that eliminating the deduction would increase them). That alternative would end the current distortions between activities that qualify for the deduction and those that do not. It also would reduce the extent to which the corporate tax favors noncorporate investments over investments in the corporate sector and foreign activities over domestic business activities.

Repeal the Low-	Repeal the Low-Income Housing Tax Credit												
											То	tal	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Revenues	0.2	0.7	1.4	2.4	3.5	4.5	5.5	6.6	7.6	8.9	8.2	41.3	
Source: Staff of the Jo	oint Comr	nittee o	n Taxatic	on.									

Revenues_Ontion 29

Note: This option would take effect in January 2014.

Real estate developers who provide rental housing for low-income households may qualify for the low-income housing tax credit (LIHTC), which is designed to encourage investment in affordable housing. The credit covers a portion of the costs incurred for the construction of new housing units, the substantial rehabilitation of existing units, and the purchase of land on which new housing units will be built.

Each year, the federal government allocates funding to the states for LIHTCs on the basis of a per-resident formula. State or local housing authorities review proposals submitted by developers and select those projects that will receive credits. To qualify for the credit, developers must agree to meet two requirements for at least 30 years: First, they must set aside either 20 percent of a project's rental units for households whose income is below 50 percent of the area's median income or 40 percent of the units for households whose income is below 60 percent of the median. Second, they must agree to limit the rent they charge on the units occupied by low-income households to 30 percent of the area's median income. (The calculations used to determine if those requirements are satisfied include adjustments for household size.) In addition, the buildings have to meet local health, safety, and building codes.

LIHTCs generally can be taken for projects for 10 years and can be worth up to 70 percent of the construction or rehabilitation costs allocable to the set-aside units, or up to 30 percent of those units' share of a building's purchase price. (The Housing and Economic Recovery Act of 2008 set a temporary floor on the annual credit equal to 9 percent of the capital costs of constructing a building placed in service before December 31, 2013; that floor has led to the issuance of some credits that exceed 70 percent of construction costs over 10 years.) Projects located in census tracts determined by the Department of Housing and Urban Development to have a large proportion

of low-income households can qualify for credits worth up to 130 percent of costs.

This option would repeal the low-income housing tax credit starting in 2014, although projects granted credits before 2014 could continue to claim them until their eligibility expired. Repealing the LIHTC would increase revenues by \$41 billion from 2014 through 2023, according to estimates by the staff of the Joint Committee on Taxation.

One argument for repealing the low-income housing tax credit is that other approaches are available to help lowincome households obtain safe, affordable housing, generally at less cost to the government. For instance, the Housing Choice Voucher program-sometimes referred to as Section 8 after the part of the legislation that authorized it-provides vouchers that allow eligible families to pay some or all of the rent for housing they choose, provided the dwelling meets minimum standards for habitation. Such vouchers are typically a less expensive way to provide housing assistance than the LIHTC primarily because the costs of constructing a new building or substantially renovating an existing building are higher than the costs of simply using an existing building in most housing markets where low-income households are situated. Further, because households with very low income often cannot afford even the reduced rents in the set-aside units of LIHTC projects without additional subsidies, vouchers are especially helpful to those households.

For that reason, policymakers might be interested in increasing housing vouchers if they reduced the value of or repealed the LIHTC. An increase in housing vouchers along with repeal of the LIHTC would, of course, result in less deficit reduction than repeal alone. The net effect on the deficit would depend on the extent of the expansion of the voucher program. One possible scenario is to expand the voucher program to cover the same number

of households currently served by the LIHTC; in that case, deficits would still be reduced, on balance. But the number of low-income households qualifying for housing assistance substantially exceeds the number supported through vouchers and the LIHTC. Therefore, another possible scenario is to use all of the savings from repeal of the LIHTC to expand the voucher program, which would increase the total number of households receiving housing support; in that case, deficits would be unaffected, on balance.

A rationale against implementing the option is that, unlike tenant-based vouchers, project-based LIHTCs support the construction of new buildings and the substantial rehabilitation of existing buildings, which can help turn around blighted neighborhoods. Vouchers would typically have a smaller impact on any one location than LIHTCs because recipients do not generally cluster very closely together. For example, one study found that, in New York City between 1987 and 2000, the use of LIHTCs to replace abandoned buildings and construct buildings on empty lots in blighted neighborhoods increased property values within a few blocks of the subsidized projects; those increased property values did not extend to neighborhoods that were farther away, however.¹ Because those benefits seem to be limited to the immediate neighborhoods, such projects might be more appropriately funded by local or state governments rather than the federal government.

RELATED CBO PUBLICATIONS: An Overview of Federal Support for Housing (November 2009), www.cbo.gov/publication/41219; and The Cost-Effectiveness of the Low-Income Housing Tax Credit Compared With Housing Vouchers (April 1992), www.cbo.gov/publication/ 16375

^{1.} Amy Ellen Schwartz and others, "The External Effects of Place-Based Subsidized Housing," *Regional Science and Urban Economics*, vol. 36, no. 6 (2006), pp. 679–707.

RELATED OPTION: Discretionary Spending, Option 23

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	0.4	0.8	0.8	0.8	0.8	0.7	0.5	0.5	0.5	0.6	3.6	6.4

To prevent the income that U.S. corporations earn abroad from being subject to both foreign and U.S. taxation, the federal government provides a credit that reduces those companies' domestic tax liability by the amount of taxes they have paid to foreign governments. Under the rules governing that tax credit, it cannot exceed the amount of U.S. tax those businesses otherwise would have owed on their foreign income, nor can it be used to reduce taxes on income earned in the United States. However, if tax rates are higher in a host country than they are in the United States, and a corporation consequently pays more in foreign taxes than it would owe to the U.S. government, it accrues what are known as excess foreign tax credits under the U.S. tax code. A business can then use those excess credits to offset U.S. taxes on income earned in low-tax countries.

To calculate the limit on foreign taxes—which would also affect the amount of excess credits—a firm's income must be allocated between foreign and domestic sources. For the purposes of determining the foreign tax credit, the U.S. tax code distinguishes between two categories of income derived from the sale of goods:

- Income resulting from the sale of goods that a U.S. firm buys from another business and then resells abroad; and
- Income resulting from the sale of goods that a U.S. firm manufactures and then sells directly to buyers in other countries.

Income in the first category is governed by the U.S. tax code's "title passage rule," which specifies that such earnings be "sourced" in the country where the sale occurs. However, for the second category of income, a special rule applies: When the goods are produced in the United States and then sold by that firm to foreign buyers, half of the resulting income is sourced in the United States; the rest of the income is subject to the title passage rule and allocated to the country where the sale took place.

The special rule for determining the source of income from the sales of goods that were manufactured domestically and then sold abroad by U.S. firms allows those firms to classify up to half of their exports as foreign sourced—even though the value of those goods was generally created or added in the United States. The result is that a business can classify more of its income from exports as foreign than could be justified solely on the basis of where the goods were produced. A multinational corporation can then use any excess foreign tax credits to offset U.S. taxes on that income. The income allocation rules give those companies an incentive to produce goods domestically for sale by their overseas subsidiaries.

Under this option, the title passage rule would no longer apply to income from the sale of goods manufactured in the United States and then sold abroad. Instead, all income from such transactions would be sourced to the United States. That change would increase revenues by \$6 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation estimates.

One rationale for the option is that export incentives, such as those embodied in the title passage rule, do not boost domestic investment and employment overall or affect the trade balance. They do increase profits—and thus investment and employment—in industries that sell substantial amounts of their products abroad. However, the value of the U.S. dollar is boosted as a result, making foreign goods cheaper and thereby reducing profits, investment, and employment for U.S. companies whose products compete with imported goods. Thus, export incentives distort the allocation of resources by misaligning the prices of goods relative to their production costs, regardless of where the goods are produced. Another argument in favor of the option is that it also would end a feature of U.S. tax law that allows businesses to avoid taxes on certain types of income earned abroad. Foreign tax credits were intended to prevent the income of U.S. businesses from being taxed twice. But the title passage rule allows domestic export income that is not subject to foreign taxes to be exempted from U.S. taxes as well, so the income escapes corporate taxation altogether.

A rationale against this option is that the application of the title passage rule to exports of goods manufactured in the United States reduces the amount of taxes that many U.S. multinational corporations pay, narrowing the gap between the total taxes paid by those firms and companies from lower-tax jurisdictions that operate in the same foreign markets. (However, U.S. multinational firms that do not have excess foreign tax credits receive no benefit from the title passage rule.) Another argument against the option is that allocating some income under the title passage rule would, to some extent, be less complicated than doing so under the normal rules for income allocation.

RELATED CBO PUBLICATIONS: *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764; William C. Randolph, *International Burdens of the Corporate Income Tax*, Working Paper 2006-09 (August 2006), www.cbo.gov/publication/18067; *Corporate Income Tax Rates: International Comparisons* (November 2005), www.cbo.gov/publication/17501; and *Causes and Consequences of the Trade Deficit: An Overview*, Memorandum (March 2000), www.cbo.gov/publication/12139

RELATED OPTION: Revenues, Option 30

Determine Foreign Tax Credits on a Pooling Basis												
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	0.9	2.4	3.3	4.4	4.9	4.3	4.1	5.3	6.8	7.6	15.9	43.9
Source: Staff of the Jo	oint Com	mittee o	n Taxatio	on.								

Note: This option would take effect in January 2014.

The U.S. government taxes both the domestic income and foreign income of businesses that are incorporated in the United States and operate abroad as well as in this country. Often, such corporations must also pay income taxes to their foreign host countries. The income that foreign subsidiaries of U.S. multinational corporations earn is not subject to U.S. taxation until it is paid to the U.S. parent company—that is, the tax is deferred until the income is repatriated. Once that income is repatriated, those companies are assessed U.S. corporate income taxes on income that exceeds their expenses. However, current law provides for a system of credits for taxes paid to foreign governments that generally allows those businesses some relief from what otherwise would amount to double taxation of that income.

Under current law, a company's foreign tax credit cannot exceed the taxes a company would pay to the United States on its income from that foreign country. Income that is repatriated from a country with a higher corporate tax rate than that in the United States generates "excess credits" (credits from foreign tax liabilities that cannot be used because they exceed the amount owed to the U.S. government). In contrast, income that is repatriated from a country with a lower tax rate generates credits that are not sufficient to offset the entire U.S. tax owed on that income. Under those circumstances, the company would face a residual tax in the United States, absent any further provisions of tax law.

However, U.S. tax law allows firms to combine the income and credits from high- and low-tax-rate countries on income tax returns. Thus, the excess credits arising from the taxes paid on income earned in high-tax countries can be applied to the income repatriated from lowtax countries, effectively offsetting some or all of the U.S. tax liability on income from low-tax countries. One consequence of this system is that, for any given amount of foreign income that it repatriates, a company can increase the size of its foreign tax credit by repatriating more income from countries with higher tax rates and less from countries with lower tax rates.

Under this option, a company's foreign tax credit would be determined by pooling the company's total income and taxes from all foreign countries. The total credit would equal the product of the total taxes paid to foreign governments and the percentage of total foreign income that was repatriated. The credit would not exceed the total amount of U.S. taxes owed on repatriated income. The staff of the Joint Committee on Taxation estimates that the option would increase revenues by \$44 billion over the 2014–2023 period.

A result of the option is that the overall credit rate—the credit as a percentage of total repatriated income—would not depend on the distribution of the repatriated income but would be the average tax rate on earnings in all foreign countries. In contrast, under current law, a company's overall credit rate is higher if a larger share of its repatriated income is from countries with higher tax rates. Hence, the foreign tax credit would be smaller under the pooling option than under current law for companies that repatriate a greater share of their earnings from countries with higher-than-average tax rates.

One argument in favor of this option is that it would restrict companies' ability to use excess credits from countries with high taxes to offset the U.S. corporate tax on income from countries with low taxes. The current method for computing excess credits makes it advantageous for firms to design and use accounting or other legal strategies to report income and expenses for their U.S. and foreign operations in ways that reduce their overall tax liabilities. By basing the credit on total foreign income and taxes, this option would reduce the incentive for companies to strategically choose subsidiaries from which to repatriate income so as to reduce the amount of taxes they owed—and thus also reduce the incentive for firms to devote resources to strategic tax planning rather than to more productive activities.

An argument against the option would be that it would increase incentives to invest in low-tax countries and to retain more of the resulting earnings abroad. Firms would be encouraged to shift investment from high-tax to low-tax countries because of the decline in the value of excess credits. The option would also increase incentives to keep profits from those investments abroad to avoid the higher U.S. taxes on repatriated income. However, many other factors—such as the skill level of a country's workforce and its capital stock—also affect corporations' decisions about where to invest.

RELATED OPTIONS: Revenues, Options 23 and 29 RELATED CBO PUBLICATION: *Options for Taxing U.S. Multinational Corporations* (January 2013), www.cbo.gov/publication/43764

Increase Excise	Taxes	on M	otor F	uels t	oy 35	Cents	and I	ndex	for In	flation	l	
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	30	42	44	45	46	47	48	49	50	51	207	452
Source: Staff of the Jo Note: This option wou												

Revenues from federal excise taxes on motor fuels are credited to the Highway Trust Fund to pay for highway construction and maintenance as well as for investment in mass transit. Those taxes currently are set at 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel produced.¹ (State and local excise taxes bring total average tax rates nationwide to about 49 cents per gallon of gasoline and about 55 cents per gallon of diesel fuel.)

This option would increase federal excise taxes on gasoline and diesel fuel by 35 cents per gallon, to 53.4 cents per gallon of gasoline and 59.4 cents per gallon of diesel fuel. In future years, those values would be adjusted to reflect changes in the price index for gross domestic product between 2014 and the most recent year for which data for that price index were available. According to the staff of the Joint Committee on Taxation, the option would increase federal revenues by \$452 billion over 10 years. (Because higher excise taxes would raise businesses' costs, they would reduce the tax base for income and payroll taxes. The estimates shown here reflect reductions in revenues from those sources.)

One rationale for increasing excise taxes on motor fuels is that the rates currently in effect are not sufficient to fully fund the federal government's spending on highways. A second rationale is that increasing excise taxes on motor fuels would have relatively low collection costs because such taxes are already being collected.

A further rationale for this option is that economic efficiency is promoted when users of highway infrastructure are charged according to the marginal (or incremental) costs of their use, including the "external costs" that are imposed on society. Because current fuel taxes do not cover all of those marginal costs, raising fuel taxes by the amount specified in this option would more accurately reflect the external costs created by the consumption of motor fuel. Some of those costs-including the costs of pollution, climate change, and dependence on foreign oil-are directly associated with the amount of motor fuel consumed. However, the larger fraction of those costs is related to the number of miles that vehicles travel, the road congestion that arises from driving at certain times and in certain locations, noise, accidents, and-primarily because of heavy vehicles-pavement damage. (As vehicles become more fuel efficient, the share of external costs attributable to the number of miles traveled will rise.) Various studies suggest that, in the absence of a tax on the number of vehicle miles traveled or on other factors that generate external costs, the external costs of motor fuels amount to at least \$1 per gallon, indicating that for drivers to cover the costs they impose on society, excise tax rates on motor fuels would have to be substantially higher than the current rates. If the cost of fuel was higher, people would drive less or purchase vehicles that used fuel more efficiently, thus reducing some of the external costs; in contrast, paying for highways and mass transit through general revenues provides no incentive for the efficient use of those transportation systems.

An argument against this option is that it would probably be more economically efficient to base a tax on the number of miles that vehicles travel or other measurable factors that generate external costs. For example, imposing tolls or implementing congestion pricing (charging fees for driving at specific times in given areas) would be better ways to alleviate congestion. Similarly, a levy on the number of miles driven could be structured to correspond more closely to the costs of repairing damaged pavement than could a tax on motor fuels. However, creating the systems necessary to administer a tax on the number of vehicle miles traveled would be much more complex than increasing the existing excise taxes on fuels. Moreover, because fuel consumption has some external

^{1.} A portion of the tax—0.1 cent—is credited to the Leaking Underground Storage Tank Trust Fund.

costs that do not depend on the number of miles traveled, economic efficiency would still require taxes on motor fuels even if other fees were assessed at their efficient levels.

Some other arguments against raising taxes on motor fuels involve issues of fairness. Such taxes impose a proportionately larger burden, as a share of income, on middle- and lower-income households (particularly those not well-served by public transit) than they do on upper-income households. Those taxes also impose a disproportionate burden on rural households because the benefits of reducing vehicle emissions and congestion are greatest in densely populated, mostly urban, areas. Finally, to the extent that the trucking industry passed on the higher cost of fuel to consumers—in the form of higher prices for transported retail goods, for instance those higher prices would further increase the relative burden on people in low-income and rural households who live some distance from manufacturers.

RELATED CBO PUBLICATIONS: *How Would Proposed Fuel Economy Standards Affect the Highway Trust Fund?* (May 2012), www.cbo.gov/publication/43198; *Alternative Approaches to Funding Highways* (March 2011), www.cbo.gov/publication/22059; *Spending and Funding for Highways* (January 2011), www.cbo.gov/publication/22003; *Using Pricing to Reduce Traffic Congestion* (March 2009), www.cbo.gov/publication/20241; and *Effects of Gasoline Prices on Driving Behavior and Vehicle Markets* (January 2008), www.cbo.gov/publication/41657

Increase All Tax	es on .	Alcoh	olic B	evera	ges to	\$16 j	per Pr	oof G	allon			
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	4.7	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.8	6.9	30.3	63.8
Source: Staff of the Jo	oint Comi	nittee o	n Taxatio	on.								

Note: This option would take effect in January 2014.

In 2012, the federal government collected \$9.7 billion in revenue from excise taxes on distilled spirits, beer, and wine. The different alcoholic beverages are taxed at different rates. Specifically, the alcohol content of beer and wine is taxed at a much lower rate than the alcohol content of distilled spirits because the taxes are determined on the basis of different liquid measures. Distilled spirits are measured in proof gallons (a standard unit for measuring the alcohol content of a liquid). The current excise tax levied on those spirits, \$13.50 per proof gallon, translates to about 21 cents per ounce of alcohol. Beer, by contrast, is measured by the barrel, and the current tax rate of \$18 per barrel translates to about 10 cents per ounce of alcohol (under the assumption that the average alcohol content of beer is 4.5 percent). The current levy on wine is \$1.07 per gallon, or about 8 cents per ounce of alcohol (assuming an average alcohol content of 11 percent). Last raised in 1991, current excise tax rates on alcohol are far lower than historical levels when adjusted for inflation.

This option would standardize the base on which the federal excise tax is levied by using the proof gallon as the measure for all alcoholic beverages. The tax would be raised to \$16 per proof gallon, thus increasing revenues by \$64 billion over the 2014–2023 period, the staff of the Joint Committee on Taxation estimates. (Because excise taxes reduce producers' and consumers' income, higher excise taxes would lead to reductions in revenues from income and payroll taxes. The estimates shown here reflect those reductions.)

A tax of \$16 per proof gallon would equal about 25 cents per ounce of alcohol. Under this option, the federal excise tax on a 750-milliliter bottle (commonly referred to as a fifth) of distilled spirits would rise from about \$2.14 to \$2.54. The tax on a six-pack of beer would jump from about 33 cents to 81 cents, and the tax on a 750-milliliter bottle of wine would increase by a similar amount, from about 21 cents to 70 cents. Experts agree that the consumption of alcohol creates costs for society that are not reflected in the pretax price of alcoholic beverages. Examples of those "external costs" include spending on health care that is related to alcohol consumption and covered by the public, losses in productivity stemming from alcohol consumption that are borne by others besides the consumer, and the loss of lives and property that results from alcohol-related accidents and crime. Calculating such costs is difficult. However, one study found that the external economic costs of alcohol abuse exceeded \$130 billion in 2006—an amount far greater than the revenues currently derived from taxes on alcoholic beverages.¹

One argument in favor of raising excise taxes on alcoholic beverages is that they would reduce alcohol use—and thus the external costs of that use—and make consumers of alcoholic beverages pay a larger share of such costs. Research has consistently shown that higher prices lead to less alcohol consumption, even among heavy drinkers.

Moreover, raising excise taxes to reduce consumption might be desirable, regardless of the effect on external costs, if lawmakers believed that consumers underestimated the harm they do to themselves by drinking. Heavy drinking is known to cause organ damage and cognitive impairment; and the links between highway accidents and drinking, which are especially strong among the young, are well-documented. Substantial evidence also indicates that the use of alcohol from an early age can lead to heavy consumption later in life. When deciding how much to drink, people—particularly young people—may not adequately consider such longterm risks to their health.

See Ellen E. Bouchery and others, "Economic Costs of Excessive Alcohol Consumption in the U.S.," *American Journal of Preventive Medicine*, vol. 41, no. 5 (November 2011), pp. 516–524, http:// dx.doi.org/10.1016/j.amepre.2011.06.045.

An increase in taxes on alcoholic beverages would have disadvantages as well. It would make a tax that is already regressive—one that takes up a greater percentage of income for low-income families than for middle- and upper-income families—even more so. In addition, it would affect not only problem drinkers but also drinkers who imposed no costs on society and who thus would be unduly penalized. Furthermore, higher taxes would reduce consumption by some moderate drinkers whose intake of alcohol is believed to have health benefits. (Moderate alcohol consumption, particularly of wine, has been linked to lower incidence of heart disease, obesity, and stroke and to increases in life expectancy in middle age.) With regard to the argument that some drinkers underestimate the personal costs of alcohol consumption, some opponents of raising taxes on alcohol argue that the government should not try to modify consumers' private behavior. Finally, as to effects on the federal budget, in the longer term, overall savings to the federal government from this tax would be at least partially offset by additional spending, as healthier people lived longer and relied more on federal health care, disability, and retirement programs. Those longevity-related offsets would grow over time.

RELATED OPTION: Health, Option 16

RELATED CBO PUBLICATION: *Raising the Excise Tax on Cigarettes: Effects on Health and the Federal Budget* (June 2012), www.cbo.gov/publication/43319

Revenues—Optic	on 33											
Impose a Tax or	n Finaı	ncial 7	[ransa	uction	S							
											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Revenues	0	12	18	19	20	21	21	22	23	24	68	180
Source: Staff of the J	oint Com	mittee o	n Taxatio	on.								

Note: This option would take effect in January 2015.

The United States is home to large financial markets, with hundreds of billions of dollars in stocks and bonds-collectively referred to as securities-traded on a typical business day. The total dollar value, or market capitalization, of U.S. stocks was roughly \$20 trillion in April 2013, and about \$250 billion in shares is traded on a typical day. The value of outstanding bond market debt was about \$38 trillion at the end of 2012, and average trading volume in debt, mostly concentrated in Treasury securities, amounts to over \$800 billion on a typical day. In addition, large volumes of derivatives-contracts that derive their value from another security or commodity and include options, forwards, futures, and swaps-are traded on U.S. financial markets every business day. None of those transactions are taxed in the United States, although most taxpayers who sell securities for more than they paid for them owe tax on their gains.

This option would impose a tax on the purchase of most securities and on transactions involving derivatives. For purchases of stocks, bonds, and other debt obligations, the tax generally would be 0.01 percent of the value of the security. For purchases of derivative contracts, the tax would be 0.01 percent of all payments to be made under the terms of the contract, including the price paid when the contract was written, any periodic payments, and any amount to be paid when the contract expires. Trading costs for institutional investors tend to be very low—in many cases less than 0.10 percent of the value of the securities traded—so this option would generate a notable increase in trading costs for those investors.

The tax would not apply to the initial issuance of stock or debt securities, transactions in debt obligations with fixed maturities of no more than 100 days, or currency transactions (although transactions involving currency derivatives would be taxed). The tax would be imposed on transactions that occurred within the United States and on transactions that took place outside of the country as long as any party to an offshore transaction was a U.S. taxpayer (whether a corporation, partnership, citizen, or resident). The tax would apply to transactions occurring after December 31, 2014. This option would be effective a year later than the other revenue options analyzed in this report to provide the government and firms with sufficient time to develop and implement the new reporting systems that would be necessary to accurately collect the tax.

The tax would increase revenues by \$180 billion from 2015 through 2023, according to estimates by the staff of the Joint Committee on Taxation. Those revenues would be lower if implementation of the option was phased in because of delays in developing the new reporting systems. (Because a financial transaction tax would reduce the tax base of income and payroll taxes, it would lead to reductions in revenues from those sources. The estimates shown here reflect those reductions.) The additional revenues from the option would depend importantly on the extent to which trading of securities fell in response to the tax.

One argument in favor of a tax on financial transactions is that it might reduce the amount of short-term speculation and computer-assisted high-frequency trading, and direct the resources now dedicated to those activities to more productive uses. Excessive speculation can destabilize markets and lead to disruptive events, such as the October 1987 stock market crash and the more recent "flash crash" that occurred when the stock market temporarily plunged on May 6, 2010.

However, the tax would discourage all short-term trading, not just speculation—including some transactions by well-informed traders and transactions that stabilize markets. Empirical evidence suggests that, on balance, a transaction tax could make asset prices less stable: In particular, a number of studies have concluded that higher transaction costs lead to more, rather than less, volatility in prices. (However, much of that evidence is from studies conducted before the rise of high-frequency trading programs, which now account for a significant share of trading in the stock market.)

The tax could have a number of negative effects on the economy stemming from its effects on trading and asset prices. However, because the tax would be only 0.01 percent of the value of the securities traded, most of those effects would probably be small. First, the tax could reduce private investment (leaving aside the effects of higher tax revenue on federal borrowing and thus on the funds available for investment). Specifically, the tax would raise the costs of financing investments to the extent that it made transactions more costly, financial markets less liquid, and financial risk management more expensive. Second, the transactions tax would reduce the value of existing financial assets because investors would not be willing to pay as much for assets that became more expensive to trade, lowering household wealth. And third, the cost to the Treasury of issuing federal debt would probably increase (again, leaving aside the effects of deficit reduction) because investors would pay less for Treasury securities that were less liquid.

In addition, traders would have an incentive to reduce the tax they must pay by moving their trading out of the country (although offshore trades by U.S. taxpayers would be taxed). Such effects would be mitigated if other countries enacted financial transaction taxes, as 11 members of the European Union are considering.

RELATED CBO PUBLICATION: Letter to the Honorable Orrin G. Hatch responding to questions about the effects of a tax on financial transactions that would be imposed by the Wall Street Trading and Speculators Tax Act, H.R. 3313 or S. 1787 (December 12, 2011), www.cbo.gov/publication/42690

RELATED OPTIONS: Revenues, Options 3 and 34

nevenues—optic														
Impose a Fee on	ı Large	e Fina	ncial	Institu	utions	;								
											То	tal		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023		
Change in Revenues	3.4	6.6	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	30.4	64.4		
Sourcos: Staff of the la	oint Com	mittoo o	n Tavatir	n: Cong	rocciona	l Pudaot	Office							

Revenues—Option 34

Sources: Staff of the Joint Committee on Taxation; Congressional Budget Office. Note: This option would take effect in January 2014.

During the financial crisis that occurred between 2007 and 2009, the federal government provided substantial assistance to major financial institutions, effectively protecting many uninsured creditors from losses but at great potential cost to taxpayers. (Ultimately, that assistance proved not to be very costly.) That action reinforced investors' perceptions that large financial firms are "too big to fail"—in other words, so important to the financial system and the broader economy that their creditors are likely to be protected by the government in the event of large losses.

In the wake of that crisis, legislators and regulators adopted a number of measures designed to prevent the failure of large, systemically important financial institutions and to resolve any future failures without putting taxpayers at risk. One of those measures, included in title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, established an orderly liquidation authority under the direction of the Federal Deposit Insurance Corporation (FDIC). That authority is intended to allow the FDIC to quickly and efficiently settle the obligations of a systemically important financial institution. Such institutions can include companies that control one or more banks (also known as bank holding companies) or firms that are predominantly engaged in lending, insurance, securities trading, or other financial activities. In the event that a large financial institution fails, the FDIC will be appointed to liquidate the company's assets in an orderly manner and thus maintain critical operations of the failed institution in an effort to avoid consequences throughout the financial system.

Despite the new safeguards, if one or more large financial institutions were to fail, particularly during a period of broader economic distress, the FDIC might need to borrow funds from the Treasury to implement its orderly liquidation authority. Title II mandates that those funds be repaid either through recoveries from the failed firm or through a future assessment on the surviving firms. As a result, individuals and businesses dealing with those firms could be affected by the costs of the assistance provided to the financial system. For example, if a number of large firms failed and substantial cash infusions were needed to resolve those failures, the assessment required to repay the Treasury would have to be set at a very high amount. Under some circumstances, the surviving firms might not be able to pay that assessment without making significant changes to their operations or activities. Those changes could result in higher costs to borrowers and reduced access to credit at a time when the economy might be under significant stress.

Under this option, an annual fee would be imposed beginning in 2014 on financial institutions covered by title II-that is, bank holding companies (including foreign banks operating in the United States) with \$50 billion or more in total assets and nonbank financial companies designated by the Financial Stability Oversight Council for enhanced supervision by the Federal Reserve Board of Governors. The annual fee would be 0.15 percent of firms' total liabilities as reported in their financial statements, subject to certain adjustments, such as excluding deposits insured by the FDIC and certain reserves required by insurance policies. The sums collected would be deposited in a fund that would be available for the FDIC's use in exercising its orderly liquidation authority. If implemented on January 1, 2014, such a fee would generate revenues totaling \$73 billion from 2014 through 2023, the staff of the Joint Committee on Taxation (JCT) estimates. (Such a fee would reduce the tax base of income and payroll taxes, leading to reductions in income and payroll tax revenues. The estimates shown here reflect those reductions.)

In its current-law baseline projections for the 2014–2023 period, the Congressional Budget Office incorporated the probability that the orderly liquidation authority would

have to be used and that an assessment would have to be levied on surviving firms to cover some of the government's costs. CBO's projections include \$9 billion in receipts from such an assessment over the 2014–2023 period. Implementing this option would reduce the likelihood that such an assessment would be needed during that period. Therefore, in estimating the budgetary impact of the option, the amount of revenues (\$9 billion) that the assessment was projected to generate was subtracted from the amount (\$73 billion) the new fee is projected to generate, yielding net additional revenues of \$64 billion from 2014 through 2023.

At 0.15 percent, the fee would probably not be so high as to cause financial institutions to significantly change their financial structure or activities. The fee could nevertheless affect institutions' tendency to take various business risks, but the net direction of that effect is uncertain; in some ways, it would encourage greater risk-taking, and in other ways, less risk-taking. One approach might be to vary the amount of the fee so that it reflected the risk posed by each institution, but it might be difficult to assess that risk precisely.

The main advantage of this option is that it would help defray the economic costs of providing a financial safety net by generating revenues when the economy is not in a financial crisis, rather than in the immediate aftermath of one. Another advantage of the option is that it would provide an incentive for banks to keep assets below the \$50 billion threshold, diminishing the risk of spillover effects to the broader economy from a future failure of a particularly large institution (although at the expense of potential economies of scale). Alternatively, if larger financial institutions reduced their dependence on liabilities subject to the fee and increased their reliance on equity, their vulnerability to future losses would be reduced. The fee also would improve the relative competitive position of small and medium-sized banks by charging the largest institutions for the greater government protection they receive.

The option would also have several disadvantages. Financial institutions might pass much of the cost of the fee to their customers, employees, and investors. In addition, unless the fee was risk-based, stronger financial institutions that posed less systemic risk—and consequently paid lower interest rates on their debt as a result of their lower risk of default—would face a proportionally greater increase in funding costs than would weaker financial institutions. Finally, the fee could reduce the profitability of larger institutions, which might create an incentive for them to take greater risks in pursuit of higher returns to offset their higher costs.

RELATED CBO PUBLICATIONS: *The Budgetary Impact and Subsidy Costs of the Federal Reserve's Actions During the Financial Crisis* (May 2010), www.cbo.gov/publication/21491; and letter to the Honorable Charles E. Grassley providing information on the President's proposal for a financial crisis responsibility fee (March 2010), www.cbo.gov/publication/21020

RELATED OPTION: Revenues, Option 33

Revenues—Option 35	
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Impose a Tax on	mpose a Tax on Emissions of Greenhouse Gases														
											То	tal			
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2012-2021			
Change in Revenues	63	98	100	103	107	111	114	118	121	125	471	1,060			

Sources: Staff of the Joint Committee on Taxation; and Congressional Budget Office. Note: This option would take effect in January 2014.

The accumulation of greenhouse gases (GHG) in the atmosphere—particularly carbon dioxide (CO₂) released as a result of burning fossil fuels (such as coal, oil, and natural gas) and because of deforestation-could generate damaging and costly changes in the climate around the world. Although the consequences of those changes are highly uncertain and would probably vary widely across the United States and the rest of the world, many scientists think there is at least a risk that large changes in global temperatures will trigger catastrophic damage. Among the less uncertain effects of climate change on humans, some would be positive, such as reduced deaths from cold weather and improvements in agricultural productivity in certain areas; however, others would be negative, such as declines in the availability of fresh water in areas dependent on snow melt and the loss of property from storm surges as sea levels rise. Reducing global emissions of greenhouse gases would decrease the extent of climate change and the expected costs and risks associated with it. The federal government has begun to regulate some of those emissions, but it does not directly tax them.

This option would place a tax of \$25 per metric ton on most emissions of greenhouse gases in the United States—specifically, on most energy-related emissions of CO_2 (for example, from electricity generation, manufacturing, and transportation) and some other GHG emissions from large manufacturing facilities. Emissions would be measured in CO_2 equivalents (CO_2e), which reflect the amount of carbon dioxide that would cause an equivalent amount of warming. The tax would increase at an annual real (inflation-adjusted) rate of 2 percent. During the first decade the tax was in effect, the Congressional Budget Office estimates, emissions from sources subject to the tax would fall by roughly 10 percent.

According to estimates by the staff of the Joint Committee on Taxation and CBO, federal revenues would increase by \$1.06 trillion over the same period. (The tax would increase businesses' costs, which would reduce the tax bases for income and payroll taxes. The estimates shown here reflect the resulting reductions in revenues from those sources.)

The size of the tax used for these estimates was chosen for illustrative purposes, and policymakers who wanted to pursue this approach might prefer a smaller tax or a larger one. The appropriate size of a tax on greenhouse gas emissions, if one was adopted, would depend on the value of limiting the magnitude of climate change and its associated costs, the way in which the additional revenues were used, the effect on emissions overseas, and the additional benefits and costs that resulted from the tax.

One argument in support of the option is that it would reduce emissions of greenhouse gases at the lowest possible cost per ton of emissions because each ton would be subject to the same tax. That uniform treatment would increase the cost of producing and consuming goods and services in proportion to the amount of greenhouse gases emitted as a result of that production and consumption. Those higher production costs, and corresponding increases in prices for final goods and services, would create incentives throughout the U.S. economy to undertake reductions of greenhouse gases that cost up to \$25 per metric ton of CO₂e to achieve. An alternative approach to reducing GHG emissions that is currently being pursued by the federal government is to issue regulations based on various provisions of the Clean Air Act (CAA). However, standards issued under the CAA (for example, specifying an emissions rate for a given plant or an energy-efficiency standard for a given product) would offer less flexibility than a tax and, therefore, would achieve any given amount of emission reductions at a higher cost to the economy than a tax.

Another argument in favor of a GHG tax is that such a program could generate "co-benefits." Co-benefits would occur when measures taken to reduce GHG emissionssuch as generating electricity from natural gas rather than from coal-also reduced other pollutants not explicitly limited by the cap, thereby reducing the harmful effects associated with those emissions. One study estimated that reductions in other pollutants that would occur as a byproduct of a \$29 tax per ton of CO₂ emissions could be worth between \$10 and \$20 per ton in terms of the benefits to human health.¹ However, measures taken to decrease CO₂ emissions could also create additional costs depending on how the emissions were reduced. For example, increased nuclear generation could exacerbate the problem of lack of adequate long-term storage capacity for nuclear waste.

An argument against a tax on GHG emissions is that curtailing U.S. emissions would burden the economy by raising the cost of producing emissions-intensive goods and services while yielding benefits for U.S. residents of an uncertain magnitude. For example, most of the benefits of limiting climate change might occur outside of the United States, particularly in developing countries that are at greater risk from changes in weather patterns and an increase in sea levels. Another argument against this option is that reductions in domestic emissions could be partially offset by increases in emissions overseas if carbon-intensive industries relocated to countries that did not impose restrictions on emissions or if U.S. reductions in energy consumption led to decreases in fuel prices outside of the United States. More generally, averting the risk of future damage caused by climate change would depend on collective global efforts to cut emissions. Most analysts agree that if other countries with high levels of emissions do not cut those pollutants substantially, reductions in emissions in this country would produce only small changes in the climate (although such reductions would still diminish the probability of catastrophic damage).

An alternative approach for reducing emissions of greenhouse gases would be to establish a cap-and-trade program that set caps on such emissions in the United States. Under such a program, allowances that conveyed the right to emit 1 metric ton of CO2e apiece would be sold at open auction, and the cap would probably be lowered over time. If the caps were set to achieve the same cut in emissions that was anticipated from the tax, then the program would be expected to raise roughly the same amount of revenue between 2014 and 2023 as the tax analyzed here. Both a tax on GHG emissions and a capand-trade program for those emissions would represent market-based approaches to cutting emissions and would achieve any desired amount of emissions reduction at a lower cost than the regulatory approach described above. In contrast with a tax, a cap-and-trade program would provide certainty about the quantity of emissions from sources that are subject to the cap (because it would directly limit those emissions), but it would not provide certainty about the costs that firms and households would face for the greenhouse gases that they continued to emit.

RELATED CBO PUBLICATIONS: Effects of a Carbon Tax on the Economy and the Environment (May 2013), www.cbo.gov/publication/44223; How Policies to Reduce Greenhouse Gas Emissions Could Affect Employment (May 2010), www.cbo.gov/publication/41257; The Costs of Reducing Greenhouse-Gas Emissions (November 2009), www.cbo.gov/publication/20933; The Economic Effects of Legislation to Reduce Greenhouse-Gas Emissions (September 2009), www.cbo.gov/publication/41266; and Potential Impacts of Climate Change in the United States (May 2009), www.cbo.gov/publication/41180

See Britt Groosman, Nicholas Z. Muller, and Erin O'Neill-Toy, "The Ancillary Benefits From Climate Policy in the United States," *Environmental and Resource Economics*, vol. 50, no. 4 (December 2011), pp. 585–603, http://dx.doi.org/10.1007/ s10640-011-9483-9. (The estimates in the study are expressed in 2006 dollars.)

Increase Federa	ncrease Federal Civilian Employees' Contributions to Their Pensions														
											То	tal			
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023			
Change in Revenues	0.6	1.4	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	8.5	19.3			
Note: This option wou	ıld take ef	fect in J	anuary 2	2014.											

Revenues—Option 36

Under this option, employees who enrolled in FERS or CSRS before 2013 would contribute an additional 1.2 percent of their salary toward their retirement annuities, while agency contributions would remain the same. (That increase in contributions would represent a larger share of employees' after-tax income because the contributions are subject to federal income and payroll taxes.) The rise in contributions would be phased in over the next three years. The amount of future annuities would not change under the option, and the option would not affect employees hired in 2013 or later who already make or will make larger contributions under the Middle Class Tax Relief and Job Creation Act. The option would increase federal revenues by \$19 billion from 2014 through 2023, the Congressional Budget Office estimates.

An argument in favor of this option is that federal employees receive, on average, more compensation—in terms of both wages and benefits—than private-sector workers with similar education and experience and in similar occupations. In fact, a substantial number of private-sector employers no longer provide health insurance for their retirees or defined benefit retirement annuities, choosing instead to offer only defined contribution retirement plans that are less costly; in contrast, the federal government provides a defined benefit retirement plan, a defined contribution retirement plan, and health insurance in retirement. Therefore, even if federal employees had to contribute somewhat more toward their annuities, their total compensation would, on average, still be higher than that available in the private sector.

Another argument in favor of the option is that, because it would not change the compensation of federal employees hired after 2012, it would probably not affect the quality of new recruits. Because new recruits are typically younger than other workers, and federal compensation compares less favorably to that available in the private sector for younger workers, some new recruits could be particularly susceptible to competition from privatesector employers.

An argument against this option is that it would reduce the number of highly qualified federal employees by motivating some of them to leave for the private sector and by encouraging some of them to retire earlier. Although federal employees receive more compensation, on average, than their private-sector counterparts, some highly qualified federal employees have more lucrative job opportunities in the private sector than in the federal government. More of those employees would leave for the private sector under this option.

Another argument against the option is that it would reduce the income of federal employees who have already forgone across-the-board pay increases for three consecutive years. Federal employees who have not received salary increases based on merit or length of service have seen the purchasing power of their pay fall by about 7 percent since 2010.

The option would also further accentuate the difference in the timing of compensation provided by the federal government and the private sector. Because many privatesector employers no longer provide health insurance for their retirees or defined benefit retirement annuities, a significantly greater share of total compensation in the private sector is paid to workers immediately, whereas federal employees receive a larger portion of their compensation in retirement. If that shift by private firms indicates that workers prefer to receive more of their compensation immediately, then shifting federal compensation in the opposite direction—which this option would do by reducing current compensation while maintaining retirement benefits—would be detrimental to the recruitment of federal employees. If lawmakers wanted to reduce the total compensation of federal employees while increasing the share of that compensation provided immediately, they could consider modifying the formula used to calculate federal annuities (Mandatory Spending Option 10 in this report) or making other changes.

RELATED OPTION: Mandatory Spending, Option 10

RELATED CBO PUBLICATIONS: Comparing the Compensation of Federal and Private-Sector Employees (January 2012), www.cbo.gov/publication/42921; and Justin Falk, Comparing Benefits and Total Compensation in the Federal Government and the Private Sector; Working Paper 2012-04 (January 2012), www.cbo.gov/publication/42923

CHAPTER

Options Related to Health

he federal government's net outlays for mandatory health care programs, combined with the subsidies for health care that are conveyed through reductions in federal taxes, exceeded \$1.0 trillion in fiscal year 2013, the Congressional Budget Office estimates. Net outlays for Medicare and Medicaid, the two largest federal health care programs, totaled an estimated \$760 billion, roughly one-quarter of all federal spending in 2013. Other mandatory health care programs include the Children's Health Insurance Program (CHIP), the Federal Employees Health Benefits program for civilian retirees, and the TRICARE for Life program for military retirees. In addition, the federal tax code gives preferential treatment to payments for health insurance and health care, primarily through the exclusion of premiums for employmentbased health insurance from income and payroll taxes. CBO estimates that the tax expenditure for that exclusion (accounting for income and payroll taxes together) was about \$250 billion in 2013. The federal government also supports many health programs that are funded through annual discretionary appropriations: Taken together, funding for public health activities, health and health care research initiatives, health care programs for veterans, and certain other health-related activities totaled about \$115 billion in 2013. (In addition, the federal government makes contributions for health insurance premiums for active civilian and military workers, but that funding is part of each agency's budget and is not included in that figure.)

Under current law, federal budgetary costs related to health will increase considerably starting in 2014, as some people become newly eligible for Medicaid and others qualify for tax subsidies to purchase coverage through new health insurance exchanges. Policy changes relating to health could reduce federal deficits by lowering outlays for mandatory health care programs and by limiting tax preferences for health care. Reductions in discretionary spending on health programs would reduce total appropriations if the statutory caps set by the Budget Control Act of 2011 were reduced as well, or if appropriations were provided at levels below those caps.

Trends in Spending and Revenues Related to Health

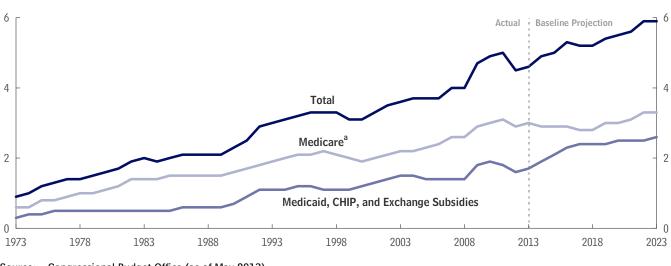
Spending for Medicare and Medicaid has grown quickly in recent decades, in part because of rising enrollment. Rising costs per enrollee also have driven spending growth in those programs-much like growth in private spending for health care. In 1975, a decade after the enactment of legislation creating the Medicare and Medicaid programs, federal spending on those programs, net of offsetting receipts, accounted for 1.2 percent of gross domestic product (GDP).¹ That share rose to 2.0 percent of GDP by 1985 and has more than doubled since then, as net federal spending for the two programs grew to 4.6 percent of GDP in 2013, by CBO's estimates. Between 1985 and 2013, the share of the population enrolled in Medicare rose from 13 percent to 16 percent, and average annual enrollment in Medicaid rose from 8 percent to 18 percent of the population. Including the smaller CHIP (which was established in 1997), 20 percent of the population was enrolled in either Medicaid or CHIP, on average, in 2013, according to CBO's estimates.

Per capita spending for health care in this country has been rising in recent decades. A key reason has been the emergence, adoption, and widespread diffusion of new medical technologies and services. Other factors contributing to the growth of health care spending include increases in personal income and the expanded scope of health insurance coverage. Altogether, health care spending per person has expanded more rapidly than the economy for a number of years, although the rate of increase in health care spending has slowed recently.

^{1.} Net Medicare spending includes the federal government's receipts from premium payments by beneficiaries and amounts paid by states from savings on Medicaid's prescription drug costs.

Figure 5-1.

Federal Spending on Major Health Care Programs, by Category, 1973 to 2023



(Percentage of gross domestic product)

Source: Congressional Budget Office (as of May 2013).

Note: CHIP = Children's Health Insurance Program.

a. Net Medicare spending (includes offsetting receipts from premium payments by beneficiaries and amounts paid by states from savings on Medicaid's prescription drug costs).

The tax expenditure stemming from the exclusion from taxable income of employers' contributions for health care and workers' premiums for health insurance and long-term-care insurance—described in this report as the exclusion for employment-based health insurance—also depends on health care spending per person. That tax expenditure equaled 1.5 percent of GDP in 2013, CBO estimates.

Discretionary spending related to health also has grown significantly in recent decades. From 1973 to 1998, it rose at an average annual rate of about 7 percent, and that rate increased to 10 percent between 1998 and 2004.² Since then, health-related discretionary spending has risen more slowly overall—at an average annual rate of about 5 percent—although spending in different program areas has grown at markedly different rates. For example, from 2004 to 2012, outlays for veterans' health care rose at an average annual rate of 8 percent, whereas spending for health research and training (mostly by the National Institutes of Health) grew by an average of about 3 percent per year.

Over the next decade, the government's health care programs will be a continuing source of budgetary pressure—primarily because of a sharp increase in the numbers of beneficiaries enrolled in those programs but also because of ongoing growth in health care costs per beneficiary. Assuming that current laws governing those programs generally do not change, net federal spending for Medicare, Medicaid, CHIP, and subsidies for premiums and cost sharing in the health insurance exchanges is projected by CBO to reach 5.9 percent of GDP in 2023, compared with 4.6 percent in 2013 (see Figure 5-1).³ By

Those growth rates apply to discretionary spending in budget function 550 (health), budget subfunction 703 (hospital and medical care for veterans), and budget subfunction 571 (administrative costs for Medicare). They do not include the government's cost for health insurance for federal civilian or military employees.

^{3.} Subsidies for health insurance coverage purchased through the exchanges will take two forms: tax credits to cover a portion of the premiums and additional subsidies to reduce cost-sharing payments. The premium subsidies are structured as refundable tax credits, and CBO expects that, in most cases, the amount of those credits will exceed the amount of federal income tax that recipients would otherwise owe; the amounts that offset those taxes are classified as revenue losses, and the amounts that exceed the taxes that would otherwise be owed are classified as outlays. Subsidies for the cost sharing of enrollees in exchange plans are also categorized as outlays.

comparison, outlays for Social Security are projected to be 5.3 percent of GDP in 2023. The tax expenditure for employment-based insurance (including income and payroll taxes) will remain close to 1.5 percent of GDP during the coming decade, CBO projects. Although health care costs per person are expected to continue to grow faster than the economy, which will tend to push up the tax expenditure relative to GDP, an excise tax on high-cost employment-based plans (set to begin in 2018) will work in the opposite direction.

The projected rise in the number of beneficiaries of federal health care programs has two main causes. First is the aging of the population-particularly the retirement of the baby-boom generation-which, over the next 10 years, will result in an increase of about one-third in the number of people who receive benefits from Medicare. Second is the expansion of federal support for health insurance under current law, which will boost the number of Medicaid recipients and make other people eligible for subsidies as they purchase health insurance through exchanges. Despite the significant expansion of federal support for health care for lower-income people over the next 10 years, only about one-fifth of federal spending for the major health care programs in 2023 will finance care for able-bodied, nonelderly people. CBO projects that roughly another one-fifth will fund care for people who are blind or disabled, and about three-fifths will go toward care for people who are 65 or older.

Projecting the growth of per capita spending for health care is particularly challenging in light of the recent slowdown in that growth. A key question is the extent to which the slowdown can be attributed to temporary factors such as the recession and the slow recovery, and the extent to which it instead reflects more enduring developments in the health care system. In CBO's judgment, per capita health care spending will continue to grow slowly over the next decade.⁴ Accordingly, during the past few years, CBO has substantially reduced its projections of spending on Medicare and Medicaid for the coming decade and slightly lowered its estimate of the underlying rate of growth for health care spending per person for the country as a whole.

Methodology Underlying Estimates Related to Health

CBO and the staff of the Joint Committee on Taxation (JCT) estimated the budgetary effects of the options in this chapter related to mandatory spending and revenues relative to CBO's projections of spending and revenues if current laws generally remained unchanged. Those baseline projections incorporate estimates of future economic conditions, demographic trends, and other developments that reflect the experience of the past several decades and the effects of broad, ongoing changes to the nation's health care and health insurance systems that are occurring under current law. In particular, the projections incorporate the effects of several provisions of law that will constrain the rates that Medicare pays health care providers, among them the following:

- Payment rates for physicians' services, which are governed by the sustainable growth rate mechanism, are set to decline by about 24 percent in January 2014. CBO projects that, if current law remains in place, those payment rates will increase by small amounts in most subsequent years but will remain below 2013 levels throughout the 2014–2023 period.
- Annual updates to payment rates for health care providers other than physicians in Medicare's fee-forservice program will be restrained by a number of provisions in current law. Other provisions will slow the growth in payment rates for beneficiaries enrolled in the private insurance plans that provide Medicare benefits.
- Most Medicare payments to providers for services furnished from April 2013 to March 2022 will be reduced as a result of the automatic procedures (known as sequestration, or the cancellation of funding) in the Budget Control Act.⁵

^{4.} Studies have generally concluded that a portion of the observed reduction in growth cannot be linked directly to the weak economy, and CBO's own analysis has found no link between the recession and slower growth in spending for Medicare. For additional discussion, see Michael Levine and Melinda Buntin, *Why Has Growth in Spending for Fee-for-Service Medicare Slowed*? Working Paper 2013-06 (Congressional Budget Office, August 2013), www.cbo.gov/publication/44513.

The annual effects of the sequestration on Medicare spending are described in Congressional Budget Office, "Medicare—May 2013 Baseline" (May 2013), www.cbo.gov/publication/44205.

Savings for options related to discretionary spending were estimated relative to CBO's baseline projections for such programs, as described in Chapter 3.

Options in This Chapter

Most of the 16 options in this chapter would either decrease federal spending on health programs or increase revenues (or equivalently, reduce tax expenditures) as a result of changes in tax provisions related to health care. Some options would result in a reallocation of health care spending—from the federal government to businesses, households, or state governments, for example—and most would give parties other than the federal government stronger incentives to control costs while exposing them to more financial risk.

Eleven of the options are similar in scope to others in this report and in previous volumes. For each of those options, the text provides background information, describes the possible policy change or changes, presents the estimated effects on spending or revenues, and summarizes arguments for and against the changes.

The other five options address broad approaches to changing federal health care policy, all of which would offer lawmakers a variety of alternative ways to alter current law. For each of those options, the amount of federal savings and the consequences for stakeholders—beneficiaries, employers, health care providers, insurers, and states—would depend crucially on which of the alternatives were chosen. The five broad approaches are the following:

- Impose caps on federal spending for Medicaid,
- Convert Medicare to a premium support system,
- Change the cost-sharing rules for Medicare and restrict medigap insurance,
- Bundle Medicare's payments to health care providers, and
- Reduce tax preferences for employment-based health insurance.

Another option for reducing federal spending on health care would be to repeal the provisions of the Affordable Care Act that expand Medicaid coverage and provide subsidies for health insurance purchased through exchanges, along with other related changes in law. That option is not included in this volume, but the budgetary savings from repealing those coverage provisions would be close to their net costs, which CBO and JCT estimated most recently to be about \$1.4 trillion over the 2014–2023 period.⁶ In addition to the budgetary effects, the repeal of those provisions would greatly increase the number of people who would be uninsured over the next decades compared with the number under current law, and would have many other effects as well. Repeal of the entire law, which includes provisions that will reduce other spending and boost revenues, would, on net, increase budget deficits, CBO and JCT estimate.

In addition to their effects on the federal budget, the 16 options examined in this chapter would have a variety of other consequences. Some options are designed to affect people's behavior as they participate in the health care system. Some focus on influencing the actions of health care providers or health care plans. Still others would change the ways the government paid providers or alter the role of the federal government or the states in paying for health care services. One option would have major consequences for health researchers around the country, and one would promote better health in the population-along with increasing federal revenuesthrough an increase in the excise tax on cigarettes. A number of the options could shift the sources or types of health insurance coverage or cause different types of health care to be sought and delivered. Whether that care was delivered more efficiently or was more appropriate or of higher quality than it would be otherwise would hinge on the responses of those affected.

CBO and JCT estimated the budgetary impact of each option independently of the others, without consideration of potential interactions among them. The agencies accounted for the time that would be required to implement each policy and for the time needed for the effects

^{6.} See Congressional Budget Office, "Effects on Health Insurance and the Federal Budget for the Insurance Coverage Provisions in the Affordable Care Act—May 2013 Baseline" (May 2013), www.cbo.gov/publication/44190. CBO and JCT made a small update to those estimates a few months later; see Congressional Budget Office, letter to the Honorable Paul Ryan providing an analysis of the Administration's announced delay of certain requirements under the Affordable Care Act (July 30, 2013), www.cbo.gov/publication/44465.

to fully phase in. If an option would be straightforward and could be implemented fairly rapidly, it was assumed to take effect in 2014 or 2015 (depending on the specific features of the option). If a policy would take longer to implement, then few effects, if any, on federal spending or revenues were estimated for the early part of the 10-year projection period.

Subsequent cost estimates by CBO or revenue estimates by JCT for legislative proposals that resemble the options in this chapter could differ from the estimates shown here because the policy proposals forming the basis of those later estimates might not precisely match the options. In addition, although the estimates in this chapter rely on CBO's and JCT's current analysis of and judgment about the responses of individuals, businesses, and health care providers to changes in the health care system, more detailed future analyses—or the availability of new data or research results—could result in different estimates. Moreover, the baseline budget projections against which such proposals ultimately would be measured might differ because of legislative or administrative actions or because of other changes in CBO's estimates. Finally, in some cases, CBO has not yet developed specific estimates of secondary impacts for some options that would primarily affect mandatory or discretionary spending or revenues but that also could have other, less direct, effects on the budget.

Health—Option 1

Function 550

Impose Caps on Federal Spending for Medicaid

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
						Caps	on Over	all Spen	ding			
Change in Mandatory Outlays												
Base growth of caps on the CPI-U	0	0	-10	-25	-36	-48	-61	-74	-90	-106	-71	-450
Base growth of caps on per capita NHE	0	0	*	-9	-13	-14	-15	-16	-18	-20	-22	-105
						Caps on	Spendi	ng per E	nrollee			
Change in Mandatory Outlays												
Base growth of caps on the CPI-U	0	0	-28	-45	-57	-69	-81	-94	-108	-124	-130	-606
Base growth of caps on per capita NHE	0	0	-16	-28	-34	-37	-38	-40	-43	-46	-78	-282

Notes: This option would take effect in October 2015.

* = between -\$500 million and zero; CPI-U = consumer price index for all urban consumers; NHE = national health expenditures.

Overview of the Issue

The Medicaid program covers acute and long-term care for low-income families with dependent children, elderly people, people with disabilities, and, at states' option starting in January 2014, all nonelderly adults with family income up to 138 percent of the federal poverty guidelines. Under current law, the federal and state governments share in the administration of Medicaid. The federal government is responsible for establishing broad statutory, regulatory, and administrative parameters for state Medicaid programs to operate within, including determining which individuals and medical services must be covered and which may be covered at a state's discretion. The federal government also monitors states' compliance with the parameters it sets. For their part, states decide which of the eligibility and service options to adopt and are responsible for administering the daily operations of the program. Because of the discretion that states have, their Medicaid programs vary widely in terms of the optional eligibility groups and services covered, the rates used for paying health care providers, and other program elements.

Medicaid is also financed jointly by the federal and state governments; in 2012, states received \$251 billion from the federal government for Medicaid and also spent \$181 billion of their own funds on the program. Under current law, almost all of the federal funding is provided on an open-ended basis, meaning that increases in the number of enrollees or in costs per enrollee automatically generate more federal payments to states. For people now enrolled in Medicaid, the federal government pays about 57 percent of program costs, on average (that share varies by state from 50 percent to a current high of 73 percent). For the optional Medicaid expansion beginning in 2014, the federal share of costs will start at 100 percent in all states and phase down to 90 percent by 2020.

Spending on the Medicaid program has grown rapidly over time, consuming an increasing share of the federal budget and representing a growing percentage of gross domestic product (GDP)—trends that the Congressional Budget Office projects will continue in the future. Over the past 20 years, federal Medicaid spending has risen at an average rate of a little over 6 percent a year, because of general growth in health care costs, mandatory and optional expansions of program eligibility and covered services, and states' efforts to increase federal payments for Medicaid. CBO expects federal Medicaid spending to grow at a higher rate over the next decade, an average of 8 percent a year, largely because of the optional coverage expansion authorized by the Affordable Care Act (in which many, though not all, states are expected to participate). By comparison, GDP is projected to increase by about 5 percent a year over the next decade, and general inflation is expected to average about 2 percent a year. Under current law, CBO projects, Medicaid will go from accounting for 8 percent of the federal government's noninterest spending in 2013 to accounting for 11 percent in 2023.

Lawmakers could make various structural changes to Medicaid to decrease federal spending for the program. Those changes include reducing the scope of covered services, eliminating eligibility categories, repealing the Medicaid expansion due to start in 2014, lowering the federal government's share of total Medicaid spending, or capping the amount that each state receives from the federal government to operate the program. This option focuses on that last approach, although the other approaches' effects on federal and state spending or on enrollees could be similar to the effects of caps on federal Medicaid payments, depending on how states were allowed to, and decided to, respond to such a policy change.

Capping federal payments for Medicaid could have several advantages relative to current law. It could generate savings for the federal budget if the caps were set below current projections of federal Medicaid spending. (Caps that were significantly lower than current projections could produce large savings.) Setting an upper limit on spending would also make federal costs for Medicaid more predictable. In addition, federal spending caps would reduce states' current ability to increase federal Medicaid funds-an ability created by the open-ended nature of federal financing for the program and by the relatively high share of costs paid by the federal government. Because the relative benefit of state spending on an open-ended program such as Medicaid is higher than the relative benefit of state spending on other programs that do not receive federal funds, states have considerable incentive to devote more of their budgets to Medicaid than they would otherwise and to shift activities that had been funded entirely by the states themselves to Medicaid. Finally, if spending limits were accompanied by significant new flexibility for states-as many proposals for Medicaid caps envision-such flexibility might give states the opportunity to develop their own strategies for reducing program costs.

Caps on federal Medicaid spending could also have several disadvantages relative to current law. If the limits on federal payments were set low enough, they would shift additional costs—perhaps substantial costs—to states and cause state Medicaid budgets to become less predictable. In response, states would have to commit more of their own revenues to Medicaid or reduce services, restrict eligibility or enrollment, cut payment rates for health care providers, or (to the extent feasible) develop ways to deliver services more efficiently, each of which would raise various concerns. Moreover, depending on the structure of the caps, Medicaid might no longer serve as a countercyclical source of federal funds for states during economic downturns (meaning that a state might not automatically receive more federal funding if a downturn caused more state residents to enroll in Medicaid). In addition, because states differ significantly in the size of their Medicaid programs-and because spending varies widely (and grows at varying rates) for different types of enrollees within a state-policymakers could find it difficult to set caps at levels that accurately reflect states' costs. Finally, it might be difficult to set caps that balanced the competing goals of creating incentives for program efficiency and generating federal budgetary savings, on the one hand, and providing enough funding that states could generally maintain the size of their current Medicaid programs, on the other hand.

Key Design Choices That Would Affect Savings

A wide variety of design specifications could significantly affect the amount of savings that caps on federal Medicaid spending would produce. The key specifications include the following: whether the caps would be set on an overall or a per-enrollee basis; what portions of Medicaid spending and what eligibility categories would be included in the spending limits; what year's spending the initial caps would be based on and what percentage rate (or growth factor) would be used to increase the caps over time; how much new flexibility states would be given to make changes to Medicaid; and whether the optional coverage expansion authorized by the Affordable Care Act (ACA) would be subject to the caps (which would create some special complexities because that expansion has not yet been implemented). Those various design choices could interact in complicated ways.

Overall Cap or per-Enrollee Cap. Two principal ways to limit federal Medicaid spending through caps would be to cap overall federal spending for the program or to cap spending per enrollee. In general, overall spending caps would consist of a maximum amount of funding that the federal government would give each state to operate Medicaid. Once established, those caps would generally not change in response to changes in enrollment or (depending on how the caps were set to increase over time) in response to changes in the cost of providing medical services.

Per-enrollee spending caps—sometimes referred to as per capita caps—would consist of an upper limit on the amount that states could spend per Medicaid enrollee, on average. Under that type of cap, the federal government would provide funds for each person enrolled in the program but only up to a specified amount per enrollee. As a result, total federal funding for each state would be limited to the number of enrollees multiplied by the perenrollee spending limit. (Individual enrollees who incurred high costs could still generate additional federal payments, as long as the total average cost per enrollee was less than the per capita cap.) Unlike overall spending caps, this approach would provide additional funding to states if Medicaid enrollment rose (as it does when states choose to expand eligibility or during an economic downturn) and would provide less funding to states if Medicaid enrollment fell (as it does when states restrict enrollment or when the economy is strong).

Overall caps on federal Medicaid spending could be structured in two main ways. The federal government could provide states with fixed block grants that, in general, would not increase if states' costs rose or decrease if states' costs fell. Alternatively, the federal government could maintain the current financing structure of Medicaid, in which it pays for a specific share of total spending, but it could set a limit on the amount of federal funding that could be sent to the states. In that case, states would bear all of the additional costs for any spending that exceeded the federal caps, but both the states and the federal government would share the savings if spending was less than the caps. However, if caps were lower than current projections of federal Medicaid spending, such savings would be unlikely, in CBO's view. Given states' incentives to maximize federal funding, CBO expects that states would generally structure their Medicaid programs so as to qualify for all of the available federal funds up to the amount of the caps.

Per-enrollee spending caps could also be structured in different ways. One method would be to establish fixed federal payments per enrollee per month, similar to the capitation payments that managed care companies receive from public or private payers for each enrollee. Another method would be to base caps on average federal spending per enrollee for each of the four principal categories of people eligible for Medicaid: the elderly; the blind or disabled; children; and nonelderly, nondisabled adults. To determine the spending limit for each eligibility category, the federal government would count the number of enrollees in a category and multiply it by the specified per-enrollee spending amount for that category. In effect, the overall limit on Medicaid spending for each state would be the sum of the four limits for the four groups. A similar but more flexible approach would be to set one total limit based on the sum of the limits for the four groups as above, but allow states to cross-subsidize groups (spend more than the cap for some eligibility groups and less than the cap for others) as long as a state's overall cap was maintained.

Spending Categories Included Under the Caps. Policy options to cap federal Medicaid spending could target all of that spending or spending for specific types of services. In Medicaid, most federal spending covers acute care (\$152 billion in 2012) and long-term care (\$71 billion in 2012), both of which could be broken into various subcategories. Other types of federal Medicaid spending include payments to hospitals that serve a disproportionate share of Medicaid enrollees and uninsured patients (known as DSH payments); spending under the Vaccines for Children (VFC) program; and administrative costs. (Together, those three categories totaled \$28 billion in 2012.) In general, the more spending categories included under the caps, the greater the potential for savings to the federal government.

Eligibility Categories Included Under the Caps. Besides determining what types of Medicaid spending to cap, policymakers would face choices about which groups of enrollees to include. In general, the more eligibility categories covered by spending limits, the greater the potential for savings to the federal government. For example, caps could limit federal Medicaid spending on children and certain adults (either on an overall or on a perenrollee basis) but could leave spending on the elderly and the disabled uncapped. However, because the elderly and the disabled currently account for about 65 percent of Medicaid spending—and are projected to account for about 50 percent in 2023, after the ACA's expansion of coverage for nonelderly, nondisabled adults—caps that did not apply to those two groups would save far less than

caps that covered all eligibility groups (assuming that the other characteristics of the two sets of caps were the same).

Base-Year Spending. Establishing caps on federal spending for Medicaid would generally begin with selecting a recent year of Medicaid outlays—the base year—and calculating that year's total spending for the service categories and eligibility groups to be included in the caps. Those spending totals would then be inflated (as described in the next section) to calculate the spending limits in future years. Thus, for both overall and perenrollee spending caps, the selection of the base year is important because the level of spending in that year would help determine future spending caps: A higher base-year amount would lead to higher caps (and lower federal savings) than a lower base-year amount would.

Another important choice in selecting a base year is whether to use a past or future year. Most cap proposals that include base years use a past year for which Medicaid expenditures are known. The main reason for using a past year is that states cannot raise payment rates for providers, make additional one-time supplemental payments, or move payments for claims from different periods into the base year to maximize Medicaid spending and thereby boost their future spending limits. However, policymakers might want to choose a future base year in situations in which a past year would not adequately reflect an upcoming program change, such as the implementation of the optional coverage expansion starting in 2014.

Another consideration is that using a prior base year would essentially lock in states' past choices about their Medicaid programs and perpetuate those choices. (As an example of the differences among state Medicaid programs, in 2010, federal spending per disabled enrollee ranged from a low of about \$5,000 in Alabama to a high of about \$17,600 in the District of Columbia.) Once caps were set on the basis of states' prior choices, it would be increasingly difficult over time for states to significantly raise their payment rates or voluntarily add covered services because, unlike under current law, such changes would not lead to higher federal payments. (One way to address that issue would be to add supplemental amounts to base-year spending levels for states defined as "low spending," which would give them more room to expand their programs over time. That approach would reduce the savings from the caps, however.)

Growth Factor. The growth factor is the annual rate of growth that would be applied to base-year spending to determine the caps on (and rate of increase for) federal Medicaid spending in future years. The growth factor could be set to achieve different purposes and different levels of savings. For example, a growth factor that was roughly equal to the growth rate that CBO projects for Medicaid under current law would result in little or no budgetary savings relative to CBO's spending projections, but it could achieve other policy aims. Alternatively, a growth factor could be set to make the increase in federal Medicaid spending-overall or per enrollee-consistent with the general rate of inflation (as measured by the consumer price index for all urban consumers, or CPI-U, for example), consistent with the growth rate of health care costs per person (as measured by the increase in national health expenditures, or NHE, per person, for example), or consistent with the rate of economic growth per person (as measured by the increase in per capita GDP). However, growth factors tied to price indexes or overall economic growth would not generally account for increases in the average quantity or intensity of medical services of the sort that have occurred in the past.

For overall spending caps, which would not provide additional funds automatically if Medicaid enrollment rose, the growth factor could include a measure of population growth (such as the Census Bureau's state population estimates) to account for increases in enrollment. The growth factor could also be any legislatively specified rate designed to produce a desired amount of savings.

In general, the lower the growth factor relative to CBO's projected growth rate for federal Medicaid spending under current law, the greater the federal budgetary savings. But the lower the growth factor, the greater the possibility that it would not keep pace with increases in costs per Medicaid enrollee and (in the case of overall caps) with increases in Medicaid enrollment, thus raising the likelihood that states would not be able to maintain their current levels of services or coverage.

Using a growth factor that incorporated the annual change in the CPI-U or in per capita NHE would mean that changes in federal Medicaid funding for states could vary considerably from year to year—although such funding could still vary less than it does under current law. As inflation, overall economic growth, or the growth of health care costs changed over time, growth factors based on those measures would cause federal Medicaid

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payments to rise and fall in tandem with those changes. Policymakers could address that potential volatility by using a three-year or five-year average of the growth factor in question, or they could limit the amount of annual fluctuation by allowing the growth factor to change by no more than a certain percentage.

Efforts to reduce the degree of variability in the growth factor, however, would diminish the factor's responsiveness to changes in economic conditions. For example, if a period of low inflation, which caused only modest increases in a growth factor based on the CPI-U, gave way to a period of higher inflation, using a multiyear average for the growth factor or limiting annual changes in that factor would delay the full increase in federal Medicaid payments to states that would otherwise occur when inflation picked up. That delay would leave states with higher costs but not commensurately higher federal payments. Conversely, during a period when inflation declined-as it did in the most recent recession-mechanisms to dampen the volatility of the growth factor would slow the decrease in federal payments that would otherwise occur with per-enrollee caps. Overall, a range of adjustments are possible to mitigate those effects, but none would completely counter the effect of increased volatility without some loss of responsiveness to current economic conditions.

New Flexibility for States. Another important consideration in capping federal funding for Medicaid is how much new flexibility states would be granted. States have considerable flexibility under current Medicaid law to choose among optional services and eligibility groups; set payment rates for providers; and establish methods for delivering care, such as managed care and home- and community-based long-term care. However, states' flexibility under current law is limited in significant ways, and obtaining waivers from certain program rules can be cumbersome and time-consuming even if the waivers are ultimately granted. In principle, the structure of Medicaid's financing and the degree of state flexibility are separate issues: With a federal spending cap, the flexibility available under current law could remain the same or be altered to give states more or fewer options, and states' flexibility could be increased or decreased under the current financing structure. Nonetheless, some proponents of caps consider additional state flexibility an essential feature of proposals to limit Medicaid spending.

If spending caps were coupled with new state flexibility, states could be given more discretion over a number of program features, such as administrative requirements, ways to deliver health care, cost-sharing levels, and covered eligibility categories and medical services. New flexibility would make it easier for states to adjust their Medicaid spending in response to a limit on federal funds. The degree of new flexibility that states received would be particularly important if the federal spending caps were significantly lower than CBO's projection of Medicaid spending under current law.

Alternatively, federal spending caps could include a "maintenance of effort" requirement that would prevent states from changing the eligibility categories and medical benefits they covered before the caps took effect. That approach would ensure that key characteristics of the program in the base year—such as eligibility criteria, covered services, and the amount, duration, and scope of those services—would continue, preventing states from significantly curtailing their Medicaid programs after caps had been set.

Although the degree of new state flexibility included with caps could have a significant impact on states' ability to adjust their programs in response to the caps, it would affect federal savings on Medicaid only if three things happened: states had enough flexibility to scale back their programs to the point where federal spending was less than the caps; federal funding remained linked to the level of state funding, as under current law; and some states chose to do such scaling back. If, instead, all states drew federal payments up to the amount of the caps—as CBO expects would generally happen—the degree of state flexibility would not affect the federal savings from the caps (although it might alter the scale and effectiveness of the Medicaid program, as discussed below).

The Optional Medicaid Expansion. Beginning in 2014, states have the option to expand eligibility for Medicaid to most individuals with income below 138 percent of the federal poverty guidelines. The federal government will cover a much higher share of the cost for those people than for other types of Medicaid enrollees: 100 percent initially, phasing down to 90 percent by 2020. That optional expansion creates added complexities for federal spending caps. Data from a past base year would reflect spending only for current eligibility groups, which, when increased using the growth factor, would fail to account for future spending for the expansion group (in states that adopt the optional expansion). Average per capita amounts also could differ for new eligibility groups.

In designing Medicaid caps, lawmakers could address those issues in several ways:

- Select a base year far enough in the future to allow time for states to adopt the expansion (if they choose to) and for enrollment to reach a fairly stable level. Using a future base year, however, would give states the opportunity to inflate spending in that year, thus increasing their federal spending limits and reducing federal savings.
- Leave spending attributable to the optional expansion group uncapped and limit spending only for nonexpansion enrollees. That approach would remove most of the complications created by the optional coverage group; however, it would not account for future spending for people already eligible for Medicaid who are not enrolled now but who are expected to enroll starting in 2014 (either because of the ACA's mandate to obtain health insurance coverage or because of publicity about the Medicaid expansion). One way to account for the enrollment of that group would be to add an amount to the growth rate in the early years of the expansion. Another way would be to adjust the cap levels after several years of experience to account for the additional enrollees who were previously eligible but not enrolled, although knowing how much spending was attributable to that group would be difficult.
- Cap spending for all enrollees but add a large enough amount to the growth factor to account for the enrollment of both newly eligible people and those who were previously eligible but not enrolled. Determining the size of those add-on factors would be challenging, however, and would be unlikely to provide the precise amounts of additional cap room needed to match those enrollees' costs (the caps could end up being too low or too high).

Another issue related to the optional expansion is that capping federal Medicaid spending might cause some states that would otherwise expand coverage to reject the option instead. Limits on federal Medicaid payments represent a potential shifting of costs to states, which would affect their budget processes and decisions. One of the ways in which states could lower their Medicaid costs and reduce their financial risks would be to drop the optional expansion or fail to adopt it in the future (if not already implemented). CBO anticipates that the more that caps reduced federal funding below the level projected under current law, the greater the likelihood that states would turn down the optional expansion.

To the extent that states responded to caps by declining the optional expansion, some people would lose access to Medicaid coverage, although some of them would gain access to the health insurance exchanges as a result. Specifically, people with income between 100 percent and 138 percent of the federal poverty guidelines who lost their Medicaid eligibility would qualify for premium assistance tax credits to buy coverage through the exchanges. Of the people with income below the federal poverty guidelines who no longer had access to Medicaid, most would become uninsured, and the rest would enroll in other types of coverage, principally employment-based insurance. The net budgetary effect would be to increase the federal savings from the cap policy, CBO estimates, because the savings from the reduction in Medicaid coverage would be larger than the increase in spending for exchange subsidies for the share of people who would qualify for those subsidies.

Specific Alternatives and Estimates

CBO analyzed two types of limits on federal Medicaid spending: overall spending caps and per-enrollee caps. For both types, CBO assumed that the caps would take effect in October 2015 and would be based on spending in 2013 (excluding Medicaid's DSH and VFC spending because the former is already capped and the latter provides vaccines for some children who may not be enrolled in Medicaid). In addition, for both types of caps, CBO excluded projected spending for the optional Medicaid expansion beginning in 2014 to avoid the complications discussed above. To illustrate a range of possible savings, CBO used two alternative growth factors for each type of cap: the annual change in the CPI-U or in per capita NHE. Other than the caps on spending, financing for the program would remain the same as under current law, with the federal government basing its share of total Medicaid spending on states' expenditures (up to the caps). Under all of the alternatives, states would not receive any new programmatic flexibility but would retain the flexibility they have now to make decisions about optional benefits, optional enrollees, and payment rates for providers.

For the overall spending caps, CBO added 1 to 3 percentage points per year to the growth factors in 2014 through 2016 to account for previously eligible people who were not enrolled but would be induced to enroll by the changes introduced by the ACA. (CBO anticipates that most such effects would be fully in place by 2016.) Those add-on factors represent the percentage of Medicaid program growth under CBO's baseline attributable to enrollment by that group. Those overall caps would save the federal government \$450 billion between 2016 and 2023 using the CPI-U growth factor or \$105 billion using the per capita NHE growth factor, CBO estimates. Those amounts represent savings of about 12 percent and 3 percent, respectively, of CBO's projection of total federal Medicaid spending in that period under current law. By 2023, annual savings from the two varieties of overall caps would represent about 19 percent and 4 percent, respectively, of projected federal Medicaid spending in 2023 under current law.

For the per-enrollee spending caps, CBO assumed that separate spending limits would be set for each state for each of the four main Medicaid eligibility groups: the elderly; the blind or disabled; children; and nonelderly, nondisabled adults. States would not be permitted to cross-subsidize groups. CBO used the same growth factors as for the overall caps but did not include add-on factors for the previously eligible but not enrolled because per-enrollee caps would allow for additional payments on behalf of those enrollees. With those design parameters, the per-enrollee caps would save the federal government \$610 billion through 2023 using the CPI-U growth factor or \$280 billion using the per capita NHE growth factor, CBO estimates. Those amounts represent savings of about 17 percent and 8 percent, respectively, of total projected federal spending for Medicaid between 2016 and 2023 under current law. By 2023, the savings would represent about 23 percent and 8 percent, respectively, of projected federal Medicaid spending in that year under current law.

CBO's estimate that per-enrollee caps would save more than overall caps on Medicaid spending (holding other factors equal) reflects some unusual economic circumstances. Under more typical economic conditions, overall caps would save more than per-enrollee caps because, with overall caps, Medicaid spending would increase only by the specified growth factor, whereas with per-enrollee caps, spending would rise by both the growth factor and increases in Medicaid enrollment. In its baseline forecast for the 2014–2023 period, however, CBO projects that Medicaid enrollment by nonexpansion adults and children will decline in some years because of the relatively rapid economic growth that is expected to occur as the U.S. economy recovers from its recent weakness. Those projected declines in enrollment lead to less Medicaid spending under per-enrollee caps but do not alter CBO's estimate of federal payments under overall caps, thus increasing the relative savings from per-enrollee caps.

Other Considerations

Limits on federal Medicaid spending would affect not only the federal budget but also the operations of the Centers for Medicare & Medicaid Services (CMS), states' role in the Medicaid program, and, potentially, enrollees' Medicaid eligibility and the extent of covered services.

Implementation Issues. For both the overall and perenrollee spending caps, CMS would have to establish new enforcement mechanisms to ensure compliance with the spending limits. The nature of those enforcement mechanisms would depend on the way in which authorizing legislation directed CMS to establish the caps.

If the caps were based on the actual values of the CPI-U or per capita NHE, CMS would not know the final spending limits until after the end of the fiscal year, when the growth rates for those measures were finalized. In addition, for per-enrollee caps, CMS would need to wait until final Medicaid enrollment for the year was known to determine the spending limits for Medicaid's four main eligibility groups. Because it currently takes up to two years to finalize states' reports of enrollment, CMS would need to establish more timely reporting of enrollment to avoid large adjustments well after the close of the year. Regardless of how long it took to determine the final spending limits, CMS would need to adopt a reconciliation process to enforce compliance with the caps, either disallowing expenditures over the caps or lowering the following year's caps by the same amount.

As an alternative to waiting to finalize a given year's caps until after the end of the year, the caps could be based on projections of the CPI-U or per capita NHE. That way, states would know their cap amounts well before the end of the fiscal year and could plan accordingly, although then the caps would not account for changes to those measures that might occur later in the year. **Effects on States.** Capping federal Medicaid spending would fundamentally change the federal-state financial relationship in the program. A capped federal commitment would mean that the responsibility for any growth in the program's costs that exceeded the growth factor (in this case, the increase in the CPI-U or per capita NHE) would be shifted to the states. CBO expects Medicaid costs to grow faster than the CPI-U or per capita NHE between 2015 and 2023, so the federal payments to states under this option would be lower than the payments projected under current law. Those savings to the federal government would represent lost revenues to states, and the losses would increase over time as the gap between federal payments under a capped program and under the current program grew larger.

Besides shifting some of the federal government's existing financial responsibility to the states, caps on federal payments would leave states at greater risk than they are now for changes in the health care marketplace and in the broader economy-elements over which they have limited control. In the case of overall spending caps, if the economy went into a recession, the growth of federal Medicaid payments would fail to keep pace with the rising need for services. (Between 2007 and 2010, for example, Medicaid enrollment increased by a total of about 14 percent.) With per-enrollee caps whose growth was based on the CPI-U, federal payments would rise in response to increases in enrollment, but payments would not respond when the growth of health care costs exceeded the growth of the CPI-U. With per-enrollee caps whose growth was based on per capita NHE, payments would adjust to average changes in the nationwide health care system but not to idiosyncratic changes in states' health care systems-and the federal savings from that alternative would be much smaller than from the approach examined here that would use the CPI-U.

With less federal funding and more budgetary uncertainty, states would have a stronger incentive than under current law to lower the cost of their Medicaid programs. To help states reduce costs, some proponents of Medicaid caps consider new programmatic flexibility for states to be an essential feature of such a policy. That flexibility could take several forms. States could be permitted to run their programs without having to meet some or all of CMS's current administrative requirements, they could be given more autonomy to experiment with new ways to deliver health care to Medicaid enrollees, and they could be granted discretion to reduce coverage of mandatory services and eligibility groups.

Proponents of caps point to several ways in which additional administrative flexibility could enable states to operate their Medicaid programs more efficiently. Depending on the nature of the flexibility provided, states might be able to implement administrative procedures that would require fewer employees or reduce the number of reports submitted to CMS for oversight purposes. However, administrative costs accounted for only about 5 percent of states' total Medicaid spending in 2012, which suggests that even significant administrative efficiencies would save only modest amounts relative to total state spending on Medicaid. Proponents of caps also argue that giving states more flexibility could help them create incentives for Medicaid enrollees to use fewer services, such as through the use of increased cost sharing or of higher deductibles coupled with health savings accounts. In addition, some states might use extra flexibility to adjust the level of benefits provided to some enrollees so that, instead of receiving comprehensive benefits, as required under current law, those enrollees would receive a smaller set of targeted services to meet critical needs.

Under alternatives that would lead to significant reductions in federal funding, many states would find it difficult to offset the losses solely through the potential efficiencies described above. Such states would have three potential approaches open to them: raise additional revenues, cut other state programs to devote a greater share of their resources to Medicaid, or produce additional savings by lowering payment rates to providers, reducing covered services, or decreasing the number of enrollees. States already have some ability to adjust those elements of their Medicaid programs, but more flexibility would give them the opportunity to offset the larger losses of federal funding estimated under this option without having to raise additional revenues or cut other state programs. CBO expects that states would adopt a mix of those various approaches. Whether states would have enough flexibility to prevent declines in the number of people served by Medicaid or in the services that people received would depend largely on the size of the spending cuts that states would have to make to stay below the caps.

Effects on Enrollees. The ways in which Medicaid spending caps would affect individual enrollees would depend greatly on how an enrollee's state responded to the caps.

In states that chose to leave their Medicaid programs unchanged by finding other ways to offset the loss of federal funds, enrollees would experience little or no noticeable change in their Medicaid coverage. By contrast, in states that opted to reduce payment rates for providers, covered services, or Medicaid eligibility within the parameters of current law—or to a greater extent, if given the flexibility—enrollees would probably face several consequences. If states reduced payment rates, enrollees might find fewer providers willing to accept Medicaid patients, especially given that Medicaid already pays significantly lower rates than Medicare or private insurance in many cases. If states reduced the optional benefits they covered, some enrollees might pay out of pocket for those services or might forgo them entirely. And if states reduced the optional eligibility categories they covered (including the optional expansion slated to begin in 2014), those optional enrollees would lose access to Medicaid coverage.

RELATED OPTION: Mandatory Spending, Option 13

RELATED CBO PUBLICATION: Federal Grants to State and Local Governments (March 2013), www.cbo.gov/publication/43967

Function 550

Health—Option 2

											Total		
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
Change in Mandatory Outlays	0	0	1	-2	-4	-5	-6	-6	-7	-8	-5	-37	
Change in Revenues	0	0	3	10	14	16	18	19	21	21	27	121	
Net Effect on the Deficit	0	0	-3	-12	-17	-21	-23	-26	-27	-29	-32	-158	

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2016.

Under current law, individuals and families will be able to purchase private health insurance coverage for 2014 and later years through the newly established health insurance exchanges. Certain participants in the exchanges will be eligible for federal subsidies, in the form of tax credits to cover a portion of their premiums and additional subsidies to reduce cost-sharing amounts (out-of-pocket payments under their insurance policies). To qualify for the tax credits, people generally must have household income between 100 percent and 400 percent of the federal poverty guidelines and not have access to certain other sources of health insurance coverage (such as "affordable" coverage through an employer, as defined in the Affordable Care Act, or coverage from a government program, such as Medicaid or Medicare). The size of the tax credit (or premium subsidy) that someone will receive will be based in part on the premium of the second-lowest-cost "silver" plan—a plan that pays about 70 percent of the costs of covered benefits-offered through the exchange in the person's area. To qualify for the cost-sharing subsidies, people must have household income below 250 percent of the federal poverty guidelines.

Small employers that provide health insurance have the option to let their workers buy that insurance through the exchanges; beginning in 2017, states may grant large employers that option as well. Such workers will still be considered to have employment-based health insurance and thus will not be eligible for exchange subsidies. However, their employers' contributions for their insurance, and typically their own payments, will be excluded from income when calculating income and payroll taxes (as is the case for other employment-based health insurance).

Under this option, the Secretary of Health and Human Services would establish and administer a public health insurance plan that would be offered through the exchanges, alongside private plans, starting in 2016. The public plan would have to charge premiums that fully covered its costs, including administrative expenses. The plan's payment rates for physicians and other individual practitioners would be set 5 percent higher than Medicare's rates in 2013 and would rise in later years to reflect estimated increases in physicians' costs; those payment rates would not be subject to the future reductions required by Medicare's sustainable growth rate formula. The public plan would pay hospitals and other providers the same amounts that would be paid under Medicare, on average, and would set payment rates for prescription drugs through negotiations with drug manufacturers. Health care providers would not be required to participate in the public plan in order to participate in Medicare or Medicaid.

In the Congressional Budget Office's estimation, premiums for the public plan would be between 7 percent and 8 percent lower, on average, during the 2016-2023 period than premiums for private plans offered in the exchanges-mainly because the public plan's payment rates for providers would generally be lower than those of private plans. In addition, the public plan would be likely to have lower administrative costs than private plans. However, CBO expects that the public plan would be less inclined than private plans to use benefit management techniques (such as narrow provider networks, utilization review, and prior-approval requirements) to control spending. The public plan would also tend to cover people who were, on average, less healthy-and therefore more costly-than the average enrollee in a private plan. (The effects of that difference would be partly offset, however, by the risk-adjustment mechanism established by the Affordable Care Act, which will transfer funds from plans with healthier enrollees to plans with less healthy enrollees.) The extent to which premiums for the

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public plan differed from average premiums for private plans would vary across the country, largely because differences between the plans' payment rates for providers would be likely to vary geographically.

Adding a public plan to the exchanges in the manner described in this option would reduce federal budget deficits by \$158 billion through 2023, according to estimates by CBO and the staff of the Joint Committee on Taxation (JCT). That figure reflects a \$37 billion reduction in outlays (mostly from a decrease in exchange subsidies) and a \$121 billion increase in revenues (mainly from changes in employment-based health insurance coverage). Those estimates include the option's effects on other spending and revenues related to health insurance coverage, such as outlays for Medicaid and penalty payments by large employers who do not offer "affordable" health insurance and by people who do not obtain insurance.

Exchange subsidies would be an estimated \$39 billion lower between 2016 and 2023 under this option than under current law. Although the premium subsidies are structured as refundable tax credits, in most cases the amounts of those credits will exceed the total amount of federal income tax that recipients owe, and the amounts above the tax owed by recipients are classified as outlays. The cost-sharing subsidies for enrollees in exchange plans are also categorized as outlays. The \$39 billion estimated reduction in subsidies consists of a \$35 billion reduction in outlays and a \$4 billion increase in revenues.

The decline in exchange subsidies would stem from several factors. CBO estimates that in many parts of the country, premiums for the public plan would be lower than the second-lowest premium among private "silver" plans, so introducing the public plan in those areas would reduce federal subsidies that are tied to that benchmark. In addition, the existence of a public plan with substantial enrollment would tend to increase the competitive pressure on insurers selling plans through the exchanges to lower their premiums, which would further reduce federal subsidies. Some of the savings from those two factors would be offset by an increase in subsidy payments caused by higher enrollment in exchange plans overall.

Revenues would be higher under this option than under current law mainly because two changes would cause a greater share of employees' compensation to take the form of taxable wages and salaries rather than nontaxable health benefits, thereby boosting tax revenues. First, because the public plan would make the exchanges more attractive to individual purchasers, some employers would forgo offering coverage, thus reducing their spending on employment-based health insurance and increasing the share of compensation devoted to taxable wages and salaries. Second, the availability of a relatively inexpensive public plan would lead some other employers to buy lower-cost coverage for their workers through the exchanges, further increasing the percentage of total compensation paid as taxable wages and salaries. Revenues would also increase under this option because, as noted above, a portion of the savings on exchange subsidies would take the form of higher revenues rather than lower outlays. Further, because fewer employers would offer health insurance to their workers under this option, penalty payments by large employers that did not offer coverage would increase. Those effects would be slightly offset by a reduction in revenues from two factors: people newly enrolling in health insurance plans would no longer pay a penalty for not having insurance, and more small employers would take advantage of the tax credits available when buying coverage through the exchanges.

The number of people who would enroll in the public plan under this option would depend on several things, including the difference between the plan's premiums and those of private plans and the number and types of providers who decided to participate in the public plan. Taking all of the relevant factors into account, CBO estimates that about 35 percent of the people who would get insurance through the exchanges—either individually or through an employer—would enroll in the public plan.

In all, about 2 million more people would obtain individually purchased coverage under this option than under current law, CBO estimates, and about 2 million fewer people would have employment-based coverage in each year. Small employers offering health insurance to their workers would be more likely to obtain it through the exchanges than they would under current law. The option would have minimal effects on the number of people with other sources of coverage and on the number of people who would be uninsured.

The current estimate of savings from this option is higher than the savings that CBO and JCT estimated for the same option in the previous version of this report (published in 2011). The change in the estimate primarily reflects two factors. First, CBO now estimates a larger reduction in the number of people receiving health insurance coverage through their employers under this option. As a result, CBO and JCT project that adding a public plan to the exchanges would lead to larger increases in tax revenues, as well as bigger increases in penalty payments by large employers that did not offer insurance, compared with the previous estimate. Second, since the 2011 estimate was published, preliminary tax data have shown that small businesses have been slower than expected to take advantage of the Affordable Care Act's smallemployer tax credits to reduce the cost of health insurance. Therefore, although CBO estimates that a similar number of people would newly obtain employmentbased coverage through the exchanges, it expects a smaller share of employers to apply for the tax credits than previously estimated. Both factors increase savings compared with CBO and JCT's 2011 estimate.

One rationale for adding a public plan to the exchanges is that it would help reduce premiums for some individuals, families, and employers who would buy insurance through the exchanges but would not qualify for subsidies. Premiums would be reduced both because the public plan would be one of the lowest-cost plans available in many areas and because adding a low-cost option would increase the competitive pressure on private plans, leading them to decrease their premiums.

A potential drawback of this option is that the public plan's payment rates to providers might be much lower than the rates paid by private plans in many parts of the country, which could lead some providers who participated in the public plan to reduce the quality of the care they furnished. Although providers' participation in the public plan would be voluntary, enrollment in the plan could be large enough that providers would face substantial pressure to participate.

Another possible drawback of this option is that if the public plan attracted high-cost enrollees and could not collect enough in premiums to cover its costs, the federal government would have to pay for the plan's losses (although the plan would be required to build up a contingency fund). More generally, adding a public plan to the exchanges would imply a greater federal role in providing health insurance.

RELATED OPTION: Health, Option 3

Health—Option 3

Eliminate Exchange Subsidies for People With Income Over 300 Percent of the Federal Poverty Guidelines

											Total	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Mandatory Outlays	0	-6	-14	-18	-20	-21	-22	-23	-24	-25	-59	-173
Change in Revenues	0	-1	-5	-7	-8	-8	-8	-8	-9	-10	-21	-64
Net Effect on the Deficit	0	-5	-9	-11	-12	-13	-14	-15	-15	-15	-37	-109

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2015.

Under current law, individuals and families will be able to purchase private health insurance coverage for 2014 and later years through the newly established health insurance exchanges. Certain participants in the exchanges will be eligible for federal subsidies, in the form of tax credits to cover a portion of their premiums and additional subsidies to reduce cost-sharing amounts (out-of-pocket payments under their insurance policies). To qualify for the tax credits, people generally must have household income between 100 percent and 400 percent of the federal poverty guidelines (commonly known as the federal poverty level, or FPL) and not have access to certain other sources of health insurance coverage (such as "affordable" coverage through an employer, as defined in the Affordable Care Act, or coverage from a government program, such as Medicaid or Medicare). To qualify for the cost-sharing subsidies, people must have household income below 250 percent of the FPL.

The size of the tax credit (or premium subsidy) that someone will receive will be based in part on the premium of the second-lowest-cost "silver" plan-a plan that pays about 70 percent of the costs of covered benefits-offered through the exchange in the person's area. The premium subsidy is designed to keep the cost to an enrollee of that second-lowest-cost silver plan at or below a specified percentage of the enrollee's income. For example, in 2014, the subsidy will be calculated so that people with income between 100 percent and 133 percent of the FPL will pay no more than 2 percent of their income to enroll in the second-lowest-cost silver plan; people with higher income will pay a larger share of their income, up to 9.5 percent for enrollees with income between 300 percent and 400 percent of the FPL. (The poverty guidelines vary by family size. In 2013, 300 percent to 400 percent of the FPL represents income of \$34,470 to

\$45,960 for an individual, \$46,530 to \$62,040 for a family with two members, and \$70,650 to \$94,200 for a family with four members.)

This option would cap the income level at which premium subsidies were available in the exchanges at 300 percent of the FPL beginning in 2015. Accordingly, starting in that year, people with income between 300 percent and 400 percent of the FPL who bought insurance through the exchanges would no longer qualify for those subsidies. Eligibility for cost-sharing subsidies would remain capped at 250 percent of the FPL.

Under current law, roughly 1 million exchange enrollees in 2015 will have income between 300 percent and 400 percent of the FPL, according to estimates by the Congressional Budget Office and the staff of the Joint Committee on Taxation (JCT), and about 70 percent of them will receive premium subsidies. The remaining 30 percent are not expected to receive subsidies, either because the premium for the second-lowest-cost silver plan in their area will not exceed the percentage of their income specified in the Affordable Care Act or because they will not qualify for subsidies for other reasons. This option would have no direct effect on enrollees who would be unsubsidized under current law.

Lowering the income ceiling for premium subsidies to 300 percent of the poverty guidelines would reduce federal budget deficits by \$109 billion between 2015 and 2023, CBO and JCT estimate. That budgetary impact would stem partly from the direct effect of not providing subsidies to people with income between 300 percent and 400 percent of the FPL and partly from a reduction in the number of people with income below that range who would obtain insurance (and subsidies) through the

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exchanges. Specifically, employers who are deciding whether to offer health insurance generally weigh the attractiveness to their workers of alternative sources of coverage, and a lower income ceiling for premium subsidies would make the exchanges less appealing for some workers. As a result, CBO and JCT expect that this option would increase the number of employers who offer health insurance to their workers, relative to the number expected to do so under current law, and thus would reduce the number of people at all income levels who would obtain insurance through the exchanges or other programs.

By CBO and JCT's estimates, this option would increase the number of people covered by employment-based health insurance in years after 2015 by about 4 million. During those years, the option would reduce the number of people enrolled in exchange plans by about 3 million to 4 million, reduce the number of people enrolled in Medicaid or the Children's Health Insurance Program (CHIP) by about half a million, and decrease the number of uninsured people by less than half a million. That slight decline in the number of people without insurance is the net effect of two factors: On the one hand, more employers would be likely to offer health insurance under this option, so some people who would otherwise be uninsured would have the chance to obtain employmentbased coverage. On the other hand, some of the people with income between 300 percent and 400 percent of the FPL who would no longer get premium subsidies would become uninsured instead of enrolling in an unsubsidized plan.

The estimated \$109 billion in savings from this option through 2023 is the net effect of a \$173 billion reduction in outlays, largely stemming from a decrease in exchange subsidies, and a \$64 billion reduction in revenues, mainly resulting from a decline in taxable income because of the increase in employment-based insurance coverage.

Exchange subsidies would be \$182 billion lower between 2015 and 2023 under this option than under current law, CBO and JCT estimate. Although the premium subsidies are structured as refundable tax credits, in most cases the amounts of those credits will exceed the total amount of federal income tax that recipients owe, and the amounts above the tax owed by recipients are classified as outlays. The cost-sharing subsidies for enrollees in exchange plans are also categorized as outlays. The estimated \$182 billion reduction in subsidies consists of a

\$161 billion decrease in outlays and a \$21 billion increase in revenues.

Reductions in the number of people enrolled in Medicaid and CHIP and other small effects on spending would reduce federal outlays by a further \$12 billion, on net.

Revenues would be lower under this option than under current law mainly because the increase in the number of people who would enroll in employment-based plans would cause a greater share of employees' compensation to take the form of nontaxable health benefits rather than taxable wages and salaries, thereby lowering tax revenues. At the same time, because more employers would offer health insurance to their workers, payments of penalties by large employers that did not offer insurance would decrease; and because slightly fewer people would be uninsured, individuals' payments of penalties for not having health insurance would also fall. Those declines in revenues would be partly offset by an increase in revenues from the reduction in exchange subsidies discussed above.

The main advantage of this option is that capping exchange subsidies at 300 percent of the FPL would reduce the deficit without increasing the number of people without health insurance. Because this option would lead to greater availability of employment-based health insurance, higher enrollment in such insurance among people in various income groups would more than offset the number of people with income between 300 percent and 400 percent of the FPL who would choose not to have insurance coverage if it was not subsidized.

One argument against this option is that most family policyholders who would lose exchange subsidies would receive smaller tax subsidies for obtaining employmentbased health insurance instead. Employment-based insurance is excluded from income and payroll taxes, and the tax subsidy created by those exclusions increases with taxpayers' marginal tax rates-and thus generally with taxpayers' income. By contrast, premium subsidies in the exchanges decrease with income. CBO estimates that in 2015, a family of four with income equal to 350 percent of the FPL that was enrolled in a plan purchased through an exchange would receive an average premium subsidy of \$7,000. If that family instead received a comparably priced health plan through a family member's employer, the average tax subsidy would be worth roughly \$5,500. (The premiums and benefits of employment-based

insurance could differ, however, from those of insurance sold in the exchanges.)

Another argument against this option is that most people would face a substantial drop in premium subsidies at exactly 300 percent of the FPL. Under current law, a single policyholder enrolled in a second-lowest-cost silver plan costing \$5,000 a year who sees his or her income rise from just below 400 percent of the FPL to just above that amount will lose an exchange subsidy of about \$500. Under this option, by comparison, a single policyholder enrolled in a similar plan whose income rose from just below 300 percent of the FPL to just above that amount would lose a much larger exchange subsidy: about \$1,600. That larger "cliff" would reduce the incentive for people with income near 300 percent of FPL to work more and would lead to greater efforts to reduce reported taxable income in other ways as well.

At the same time, exchange subsidies have their own disincentive effects: The fact that they are tied to a percentage of income creates an effective tax on additional income equal to the percentage threshold—9.5 percent in 2014 for people with income between 300 percent and 400 percent of the FPL. Eliminating exchange subsidies for that group would remove the current disincentive effects of the subsidies for those workers.

RELATED OPTION: Health, Option 2

RELATED CBO PUBLICATION: CBO and JCT's Estimates of the Effects of the Affordable Care Act on the Number of People Obtaining Employment-Based Health Insurance (March 2012), www.cbo.gov/publication/43082

Health—Option 4

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Limit Medical Malpractice Torts

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Mandatory Outlays ^a	-0.1	-1.1	-3.5	-5.3	-6.4	-7.1	-7.5	-8.0	-8.8	-9.3	-16.4	-57.1
Change in Revenues ^b	*	0.1	0.3	0.5	0.8	0.9	1.0	1.0	1.1	1.1	1.6	6.7
Change in Discretionary Outlays	*	*	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.5	-1.8

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Notes: This option would take effect in January 2014.

- * = between -\$50 million and \$50 million.
- a. Estimates include potential savings by the Postal Service, whose spending is classified as off-budget.
- b. Estimates include the effects on Social Security payroll tax receipts, which are classified as off-budget.

Individuals may pursue civil claims against physicians, hospitals, and other health care providers for alleged torts, which, in the medical field, primarily include breaches of duty that result in personal injury. That system of tort law has twin objectives: deterring negligent behavior on the part of providers and compensating claimants for losses they incur (such as lost wages, medical expenses, and pain and suffering) because of an injury caused by negligence. Malpractice claims are generally pursued through state courts, and states have established various rules by which those claims are adjudicated.

To protect against the risk of having to pay a very large malpractice claim, nearly all health care providers obtain malpractice insurance. The cost of that insurance results in higher medical costs because providers charge their patients higher fees to pay for their insurance premiums. In addition, providers' efforts to reduce the risk of malpractice claims lead to greater use of health care than would be the case in the absence of that risk.

This option would limit medical malpractice torts nationwide in several ways:

- Capping awards for noneconomic damages (also known as pain and suffering) at \$250,000.
- Capping awards for punitive damages at \$500,000 or at two times the value of awards for economic damages (such as for lost income and medical costs), whichever is greater.

- Shortening the statute of limitations to one year from the date of discovery of an injury for adults and to three years for children.
- Establishing a fair-share rule (in which a defendant in a lawsuit is liable only for the percentage of a final award that is equal to his or her share of responsibility for the injury) to replace the current rule of joint-andseveral liability (in which all of the defendants are individually responsible for the entire amount of the award).
- Allowing evidence of income from collateral sources (such as life insurance payouts and health insurance) to be introduced at trial.

Many states have enacted some or all of those limits, whereas other states have very few restrictions on malpractice claims.

Limiting malpractice torts nationwide would reduce total health care spending in two ways. First, tort limits would lower premiums for malpractice insurance by decreasing the average size of malpractice awards (which would also have the effect of decreasing the number of tort claims filed). That reduction in the cost of malpractice insurance paid by providers would flow to health plans and patients in the form of lower prices for health care services. Second, research suggests that placing limits on malpractice torts would decrease the use of health care services to a small extent because providers would prescribe slightly fewer services if they faced less pressure from potential malpractice claims. Together, those two factors would cause this option to reduce total health care spending by about 0.5 percent, the Congressional Budget Office estimates. (For this option, CBO expects that changes enacted in January 2014 would take four years to have their full impact, as providers gradually modified their practice patterns.) Spending for Medicare would decline by a larger percentage than spending for other federal health care programs or national health care spending, CBO projects. That difference is based on empirical evidence that states' restrictions on malpractice torts have had a greater impact on the use of health care system.

The changes in this option would reduce mandatory spending—for Medicare, Medicaid, the Children's Health Insurance Program, subsidies for coverage purchased through health insurance exchanges, and health insurance for retired federal employees—by \$57 billion between 2014 and 2023, CBO estimates. Savings in discretionary spending, such as for health insurance for current federal employees, would amount to \$2 billion over that 10-year period, if the amounts appropriated for federal agencies were reduced accordingly.

By decreasing spending on health care in the private sector, this option would also affect federal revenues. Much private-sector health care is provided through employment-based health insurance, which is a nontaxable form of compensation. Because the premiums that employers pay for that insurance are excluded from employees' taxable income, lowering those premiums would increase the share of employees' compensation that was taxable. That shift would increase federal tax revenues by an estimated \$7 billion over the next 10 years. A rationale for tort limits is the reduction in national health care spending that they would bring about. Another rationale is that, by leading to lower premiums for malpractice insurance, tort limits could help alleviate shortages of certain types of physicians in some parts of the country. For example, annual malpractice premiums for obstetricians exceed \$200,000 in some areas.¹ Such high premiums may deter some obstetricians from practicing in those areas or from practicing at all.

An argument against this option is that limits on torts could make it harder for people to obtain full compensation for injuries caused by medical negligence. Another argument against tort limits is that reducing the amount of money that could be collected in the case of a medical injury might cause health care providers to exercise less caution, which could increase the number of medical injuries attributable to malpractice. However, the evidence is mixed about whether tort limits have an adverse effect on health outcomes. Some researchers found that when the risk of litigation declined, the use of health care services decreased and mortality rates increased. Another study found that changes to joint-and-several liability had positive effects on health but that caps on noneconomic damages had negative effects. Other studies concluded that tort limits had no impact on mortality or other measures of health.

RELATED CBO PUBLICATIONS: Letter to the Honorable Bruce L. Braley responding to questions on the effects of tort reform (December 29, 2009), www.cbo.gov/publication/41881; letter to the Honorable John D. Rockefeller IV providing additional information on the effects of tort reform (December 10, 2009), www.cbo.gov/publication/41812; and letter to the Honorable Orrin G. Hatch about CBO's analysis of the effects of proposals to limit costs related to medical malpractice (October 9, 2009), www.cbo.gov/publication/41334

Premiums charged by Physicians' Reciprocal Insurers for obstetricians practicing in certain counties in New York State, as reported in "Annual Rate Survey," *Medical Liability Monitor*, vol. 38, no. 10 (October 2013).

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Health—Option 5

Total 2014-2018 2014-2023 (Billions of dollars) 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 Change in Mandatory Outlays MERHCF 0 -1.4 -2.0 -2.2 -2.4 -2.5 -2.7 -2.8 -3.0 -3.2 -8.0 -22.2 Medicare 0 -0.2 -0.5 -0.9 -1.0 -1.2 -1.3 -2.6 -1.1 -1.1 -1.3 -8.6 0 -1.6 -2.5 -3.1 -3.4 -3.6 -3.8 -4.0 -4.5 -10.6 -30.7 Total -4.3

Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life

Notes: This option would take effect in January 2015.

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund.

TRICARE for Life (TFL) was introduced in 2002 as a supplement to Medicare for military retirees and their family members who are eligible for Medicare. The program pays nearly all medical costs not covered by Medicare and requires few out-of-pocket fees. Because the Department of Defense (DoD) is a passive payer in the program—it neither manages care nor provides incentives for the cost-conscious use of services-it has virtually no means of controlling the program's costs. In contrast, most public and private programs that pay for health care either manage the care or require people receiving care to pay deductibles or copayments up to a specified threshold. In 2012, DoD spent \$8.7 billion for the care delivered through TFL by both military treatment facilities and civilian providers (in addition to the amount spent for those beneficiaries through Medicare).

This option would introduce minimum out-of-pocket requirements for TFL beneficiaries. For calendar year 2015, TFL would not cover any of the first \$550 of an enrollee's cost-sharing payments under Medicare and would cover only 50 percent of the next \$4,950 in such payments. Because all further costs would be covered by TFL, enrollees would not be obligated to pay more than \$3,025 in 2015. Those dollar limits would be indexed to growth in average Medicare costs (excluding Part D drug benefits) for later years. Currently, military treatment facilities charge very small or no copayments for hospital services provided to TFL beneficiaries. To reduce beneficiaries' incentives to avoid out-of-pocket costs by switching to military facilities, this option would require TFL beneficiaries seeking care from those facilities to make payments that would be roughly comparable to the charges they would face at civilian facilities.

This option would reduce spending for Medicare as well as for TRICARE for Life because higher out-of-pocket costs would lead beneficiaries to use somewhat fewer medical services. Altogether, this option would reduce the federal spending devoted to TFL beneficiaries by \$31 billion between 2015 and 2023, the Congressional Budget Office estimates. About one-third of those savings would come from reduced spending for medical services because of reduced demand for those services; the rest would represent a shift of spending from the federal government to military retirees and their families.

An advantage of this option is that greater cost sharing would increase TFL beneficiaries' awareness of the cost of health care and promote a corresponding restraint in their use of medical services. Research has generally shown that introducing modest cost sharing can reduce medical expenditures without causing measurable increases in adverse health outcomes for most people.

A disadvantage would be that the change could discourage some patients (particularly low-income patients) from seeking preventive medical care or from managing their chronic conditions under close medical supervision, which might negatively affect their health.

RELATED OPTIONS: Health, Options 7 and 12

RELATED CBO PUBLICATIONS: Approaches to Reducing Federal Spending on the Defense Health System (forthcoming); Long-Term Implications of the 2014 Future Years Defense Program (forthcoming); and The Effects of Proposals to Increase Cost Sharing in TRICARE (June 2009), www.cbo.gov/publication/41188

NOVEMBER 2013

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Health—Option 6

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
					W	ithout a	Grandfa	athering	Provisi	on		
Change in Mandatory Outlays												
Second-lowest-bid alternative	0	0	0	0	-31	-43	-45	-48	-52	-56	-31	-275
Average-bid alternative	0	0	0	0	2	-8	-14	-15	-16	-17	2	-69
					,	With a G	irandfat	hering F	Provisio	ı		
Change in Mandatory Outlays												
Second-lowest-bid alternative	0	0	0	0	-1	-4	-8	-12	-16	-20	-1	-61
Average-bid alternative	0	0	0	0	*	-1	-3	-4	-6	-7	*	-22

Convert Medicare to a Premium Support System

Notes: This option would take effect in January 2018. It would not apply to dual-eligible beneficiaries (people who are jointly enrolled in Medicare and Medicaid).

* = between zero and \$500 million.

Overview of the Issue

Nearly 30 percent of Medicare beneficiaries are enrolled in the Medicare Advantage program, or Part C, under which private health insurers assume the responsibility for, and the financial risk of, providing Medicare benefits. Almost all other Medicare beneficiaries receive care in the traditional fee-for-service (FFS) program, which pays providers a separate amount for each service or related set of services covered by Part A (Hospital Insurance) or Part B (Medical Insurance). Federal payments to Medicare Advantage plans depend in part on the bids that the plans submit (indicating the per capita payment they will accept for providing the benefits covered by Parts A and B) and in part on how those bids compare with predetermined "benchmarks." Under a method that will be fully phased in by 2017, Medicare Advantage benchmarks depend on per capita spending in the FFS program at the county level. (Private insurers also participate in a separate bidding process that is used to determine payments under Part D, Medicare's prescription drug benefit program.)

The current system ties federal payments for Medicare Advantage enrollees to spending in the FFS program, limits the degree of competition among plans, and does not require the FFS program and private insurers to compete on the same terms. Some policymakers and analysts have proposed replacing the current Medicare system with a premium support system, in which Medicare beneficiaries would buy insurance coverage from one of a number of competing plans—potentially including the FFS program—and the federal government would pay part of the cost of the coverage.

Key Design Choices That Would Affect Savings

The effects of a premium support system on federal spending and on beneficiaries' total payments (premiums and out-of-pocket costs for medical care) would depend crucially on how the system was designed. Important choices include setting the formula for the federal contribution, determining whether the traditional FFS program would be included as a competing plan, setting eligibility rules for the premium support system, and designing the features of the system that would influence beneficiaries' choices among plans.

This discussion assumes that a premium support system would retain certain features of the current Medicare program—namely, insurers could not refuse to enroll a Medicare beneficiary because of the person's health, age, or other characteristics; federal payments to insurers would be adjusted to account for differences in enrollees' health; and all enrollees in a given plan and geographic area would pay the same premium for the same coverage (except that, as under current law, higher-income beneficiaries would pay more to enroll in Part B). Changes to any of those features could have major consequences for federal spending and for beneficiaries' total payments under a premium support system.

The Federal Contribution. Two general approaches are possible for determining how much of the cost of health insurance coverage the federal government would pay for under a premium support system: The amount could be derived either from the bids of participating health plans or through a mechanism designed to achieve a specified path for federal spending on Medicare. Either approach could be applied in many different ways. Some recent proposals would base the federal contribution on the second-lowest bid or on the average bid in a region, although many other possibilities exist. Setting the federal contribution to achieve a specific path for Medicare spending would require setting an initial amount per person and increasing it over time based on the growth of some particular economic or budgetary measure, such as per capita gross domestic product. In some cases, a hybrid of those two general approaches has been proposed: The federal contribution would be set on the basis of insurers' bids but its growth would be capped on the basis of some broader economic measure.

If the federal contribution was based on insurers' bids (but its growth was not capped), the contribution could be set to keep pace with insurers' costs of providing the benefits covered by Medicare. The contribution would therefore be sufficient in future years for beneficiaries to buy coverage from at least one health plan in each region at a premium that represented the same percentage of the total cost of coverage that was chosen at the outset. Setting the federal contribution to achieve a specific path for federal Medicare spending would give the government greater control over its spending, but beneficiaries might face much higher premiums if insurers' costs grew faster than the federal contribution did. The same issue could arise if the federal contribution was determined from insurers' bids but its growth was capped.

The Fee-for-Service Program. A key choice in designing a premium support system is whether Medicare's FFS program would be eliminated or retained as an option for beneficiaries, competing alongside private insurers. In the Congressional Budget Office's assessment, eliminating the FFS program and the rates that it would pay health care providers under current law would cause the rates that private insurers paid providers for their premium support enrollees to be much higher—with a concomi-

tant increase in the costs of providing Medicare coverage—than if a premium support system included the FFS program as a competing plan. That assessment is based on the observation that although Medicare Advantage plans generally pay providers about the same rates as Medicare's FFS program, private insurers generally pay substantially higher rates for services provided to enrollees with private coverage. CBO expects that the presence of the FFS program as a competing plan would constrain the rates that private insurers paid for services provided to premium support enrollees, whereas eliminating the FFS program would cause those rates to rise toward the rates paid for enrollees with private coverage.

In a system in which the federal contribution was based on insurers' bids, eliminating the FFS program would result in higher bids, which would reduce federal savings and could even cause federal spending to be higher under a premium support system than under current law. CBO also expects that in some regions, the FFS program's bid would be among the lower bids, so getting rid of that program could directly reduce federal savings by raising the federal contribution in those regions. By contrast, in a premium support system in which the federal contribution was set to achieve a specific path for federal spending, eliminating the FFS program would not affect that spending, although the resulting increase in the cost of coverage for private plans would lead to higher premiums for beneficiaries.

Eligibility. Federal savings from a premium support system would depend partly on which beneficiaries were included in the new system. Some proposals include a "grandfathering" provision, under which all beneficiaries who became eligible for Medicare before the premium support system took effect would remain in the currentlaw Medicare program and only people who became eligible after that time would enroll in the new system. Although a grandfathering provision would keep current beneficiaries from having to adjust to a premium support system, it would reduce federal savings greatly, because only a small portion of the Medicare population would be covered by the new system initially, and that portion would increase only gradually over many years. Savings would be even more limited because average health care costs for newly eligible people entering the premium support system would be lower than the average for Medicare beneficiaries as a group (since those new entrants would be younger and, therefore, generally in better health).

Another key choice is whether and how dual-eligible beneficiaries-people who are jointly enrolled in Medicare and Medicaid-would be included in a premium support system. (CBO estimates that in 2009, those beneficiaries made up 19 percent of the Medicare population and accounted for 29 percent of total spending for Part A and Part B benefits.) Medicare covers some services for dual-eligible beneficiaries and Medicaid covers others, thus creating conflicting financial incentives for the federal and state governments (which jointly fund Medicaid) and for health care providers. Recent federal and state efforts have focused on integrating the two programs' funding streams and coordinating the often-complex care that many dual-eligible beneficiaries receive. Including that group in a premium support system would pose substantial additional challenges. For instance, it would be difficult to give dual-eligible beneficiaries incentives to choose low-bidding plans in a premium support system while also minimizing their total payments for medical care. Nevertheless, excluding such beneficiaries would reduce the potential savings that a premium support system could achieve.

Features of the System That Could Affect Enrollment

Choices. Many features of a premium support system would influence beneficiaries' sensitivity to differences in plans' premiums, thus affecting insurers' incentives to reduce their bids. Two features of particular importance are how enrollees would initially select a plan and how much standardization would be required of the various plans.

One possible approach to structuring enrollment would be to have beneficiaries affirmatively choose a plan (possibly including the FFS program) when they entered the premium support system or else be assigned to a plan whose bid was at or below the benchmark. A second approach would be to allow beneficiaries who did not choose a plan when they entered the new system to remain in their current plan-or the FFS program, if that was their current source of coverage-or be assigned to a similar plan or to the FFS program if their current plan was unavailable. (An option for beneficiaries who were just entering Medicare and did not choose a plan would be to assign them to the FFS program.) The first approach would probably give insurers a greater incentive to lower their bids because they would anticipate that enrollments would rise more as a result. Under the second approach, beneficiaries would generally have less risk

of being assigned to a plan that excluded their current providers from its network, but, depending on the region, some beneficiaries could unwittingly remain in plans that would require much higher premiums than they had paid before.

Another key question concerns the degree of standardization that would be required for benefit packages. Possible approaches include making all plans cover the same services and impose identical cost-sharing requirements; requiring all plans to cover the same services but allowing them to vary their cost-sharing requirements, as long as the benefit packages were actuarially equivalent (that is, each package covered the same percentage of total expenses for a given population); or letting plans vary both their covered services and cost-sharing requirements, as long as the benefits were actuarially equivalent. Federal costs under any of those approaches would depend crucially on whether the standard package had the same actuarial value as Medicare's current benefits or some different value. In general, greater standardization of benefits would make it easier for people to compare plans on the basis of price, thus enhancing competition and lowering bids. However, standardization would prevent plans from offering benefit packages that some people might prefer to a standard package specified by the federal government. It could also limit the extent to which insurers developed innovative cost-sharing arrangements that might result in lower costs, higherquality care, or both.

Specific Alternatives and Estimates

CBO examined four alternatives for converting Medicare to a premium support system. In all of the alternatives, the federal government's contribution would be determined from insurers' bids, and Medicare's FFS program would be a competing plan. The nation would be divided into regions within which competing private insurers would submit bids indicating the amounts they would accept to provide Medicare benefits to a beneficiary of average health. The FFS program's bid would be based on projected FFS spending in a given region for a beneficiary of average health. Insurers would bid on a benefit package that would cover the same services as Parts A and B of Medicare (with a few exceptions, as noted below) and that would have the same actuarial value as Parts A and B combined. (Medicare's prescription drug benefit, which is delivered through a competitive system under Part D, would be administered separately.)

The four alternatives would differ by whether they included a grandfathering provision and by which of two approaches they used to determine the benchmarks for setting the federal contribution:

- Under the second-lowest-bid approach, the benchmark in a region would be the lower of a pair of bids—the region's second-lowest bid submitted by a private insurer and Medicare's FFS bid.
- Under the average-bid approach, the benchmark in a region would be the weighted average of all bids, including the FFS bid. Each bid would be weighted by the proportion of beneficiaries enrolled in that plan in the preceding year.

For each enrollee of average health, the federal government would pay insurers an amount equal to the benchmark for the region minus the standard premium paid by enrollees (explained below); insurers would receive larger or smaller government payments for beneficiaries whose health was worse or better than average. Neither the amount nor the growth rate of the federal payment would be capped.

Beneficiaries who enrolled in a plan with a bid that equaled the benchmark would pay a standard premium directly to the insurer; the standard premium would equal one-quarter of the estimated per capita cost of providing Part B benefits for all Medicare beneficiaries and would be the same across the nation (which corresponds to the formula used under current law for Part B premiums). Beneficiaries who chose a plan with a bid less than the benchmark would pay the insurer a premium that was lower by the full amount of the difference between the bid and the benchmark, and those who chose a plan with a bid greater than the benchmark would pay a premium that was correspondingly higher. The income-related Part B premiums specified in current law for higherincome beneficiaries would continue and would be withheld from Social Security benefits.

Beneficiaries would choose a plan during an annual enrollment period and would be required to remain in that plan for a year. They would automatically continue to be enrolled in the plan in subsequent years unless they chose a different one. (When the premium support system went into effect, however, Medicare beneficiaries would not remain in their previous plan automatically.) Beneficiaries who did not select a plan when they entered the premium support system would be assigned (with equal probability) to a limited number of plans that presented bids at or below the benchmark, including the FFS program if it met that criterion.

CBO assumed that the premium support system would not affect certain portions of federal spending for Medicare. For example, dual-eligible beneficiaries would be excluded from the system under these alternatives, and CBO assumed that Medicare's spending for those beneficiaries would continue at the amounts projected under current law-as would spending for Part D (which would operate separately) and spending for certain items and services that are not covered by the bids that Medicare Advantage plans submit under current law. Those items and services include Medicare's additional payments to hospitals whose share of low-income patients exceeds a specified threshold and spending for medical education, hospice benefits, and certain benefits for patients with end-stage renal disease. CBO excluded those categories of spending from the premium support system to simplify the analysis. In 2012, those excluded categories made up about 35 percent of net federal spending for Medicare (total Medicare spending, including spending on dualeligible beneficiaries and on prescription drugs under Part D, minus beneficiaries' premiums and other offsetting receipts).

For this option, CBO assumed that legislation establishing a premium support system would be enacted early in fiscal year 2014. To allow time for the federal government to develop the necessary administrative structures and for beneficiaries and insurers to learn about and prepare for the new system, CBO assumed that the system would be implemented in calendar year 2018. CBO also made many other detailed assumptions for these alternatives, which are described in Congressional Budget Office, *A Premium Support System for Medicare: Analysis of Illustrative Options* (September 2013). Some specifications were chosen to illustrate the potential for savings from a highly competitive system; others were chosen for feasibility of implementation or to simplify the analysis.

Unlike the other options in this report, whose budgetary effects are measured against CBO's May 2013 currentlaw baseline projections, estimates of the effects of these alternatives over the next 10 years are based on analyses that were largely conducted using CBO's March 2012 baseline projections of Medicare spending. Analysis of the longer-term effects of the alternatives is based on CBO's June 2012 long-term projections of Medicare spending. (Those two sets of projections were the most recent ones available when much of the analysis was performed.) To estimate the budgetary effects of the alternatives over the next 10 years in dollar terms, CBO applied the estimated percentage changes in federal spending derived from the analyses based on its March 2012 baseline projections to its most recent projections of Medicare spending, which were released in May 2013.

Estimates of the budgetary impact of these alternatives over the next 10 years are highly uncertain, given the substantial changes to the Medicare program that a premium support system would entail, the government's lack of experience with similar systems, the rapid evolution of health care and health insurance, and the significant changes occurring in the Medicare program under current law. Estimates are even more uncertain for the period after 2023.

Budgetary Effects Without a Grandfathering Provision.

If the premium support system covered people who were already eligible for Medicare as well as future beneficiaries (but excluded dual-eligible beneficiaries), the secondlowest-bid alternative would reduce net federal spending for Medicare by \$275 billion between 2018 and 2023, CBO estimates, and the average-bid alternative would reduce net federal spending over that period by \$69 billion. By 2020 (an illustrative year shortly after the premium support system would be implemented), the second-lowest-bid alternative would reduce net federal spending for Medicare by 6 percent, compared with projected spending under current law, and the average-bid alternative would reduce that spending by 2 percent.

Another way to measure the effects of these alternatives is to examine their impact on the federal government's net spending for affected beneficiaries—everyone, other than dual-eligible beneficiaries, who would have enrolled in Medicare under current law—for the benefits that would be included in the premium support system. (That measure consists of federal spending for affected beneficiaries—excluding spending for Part D benefits and the items and services noted above that are not covered by the bids of Medicare Advantage plans under current law minus beneficiaries' premiums and other offsetting receipts.) With no grandfathering provision, the secondlowest-bid alternative would reduce net spending for affected beneficiaries in 2020 by 11 percent, and the average-bid alternative would reduce such spending by 4 percent, CBO estimates. Those percentages are larger than are the percentage reductions in total Medicare spending because these savings are measured relative to the portion of Medicare spending that would be covered under the premium support system, rather than relative to total Medicare spending.

Under either alternative, the savings to Medicare between 2018 and 2023 would be similar in percentage terms to the savings estimated for 2020, with one main exception. Under the average-bid alternative, federal spending for 2018 would be higher than under current law, CBO estimates. The main reason for that difference is that the FFS program's bid would receive a greater weight in constructing benchmarks in the first year of the new system than it would in later years (because CBO assumed that the weight would equal the proportion of beneficiaries enrolled in the FFS program under current law in 2017). Thus, under the average-bid option, most regions would have higher benchmarks in 2018 than they would later.

Looking beyond the next 10 years, CBO expects that, under either alternative, annual federal savings in percentage terms would remain roughly stable from 2023 through 2032, although the dollar amount of the savings would increase. Over the long term, the increase in price competition from the premium support system specified here would probably reduce the growth of Medicare spending by decreasing the demand for expensive new technologies and treatments and by increasing the demand for cost-reducing technologies. However, the potential for a premium support system to produce additional savings would be limited by provisions of current law that are designed to restrain the growth of Medicare spending. In particular, CBO anticipates, private insurers would not be able to hold down payments to health care providers to the extent required in the FFS program by the sustainable growth rate mechanism for physicians and by other current-law provisions that will limit payment increases for other providers.

Budgetary Effects With a Grandfathering Provision.

Federal savings would be much smaller under a premium support system that excluded people already eligible for Medicare. CBO estimates that if the system applied only to people who turned 65 (or qualified for Medicare before age 65) in 2018 or later, and all other beneficiaries (including dual-eligible beneficiaries) remained in the current-law Medicare program, the system would cover only about 15 percent of the Medicare spending from 2018 through 2023 that it would cover if it did not have a grandfathering provision. With that system, the secondlowest-bid alternative would reduce net federal spending for Medicare by \$61 billion through 2023, and the average-bid alternative would reduce such spending by \$22 billion, CBO estimates.

Thus, modifying the second-lowest bid alternative to include a grandfathering provision would yield savings between 2018 and 2023 that are 22 percent of the savings that would be achieved without grandfathering. Under the average-bid alternative, the estimated savings over that period with a grandfathering provision are 32 percent of the savings that would be achieved without grandfathering. Those percentages are greater than the percentage of Medicare spending that would be covered by the premium support system because of a number of factors. Both with and without grandfathering, some factors would cause private insurers' bids under a premium support system to be lower than their bids under the Medicare Advantage program, and other factors would cause those bids to be higher (see CBO's September 2013 report for details). However, the factors that would cause bids to be higher would be relatively weaker with a grandfathering provision.

Grandfathering would also reduce, for an extended period, the incentives created by a premium support system to modify the development and adoption of new medical technologies. Thus, the restraints on the growth of Medicare spending that would probably occur under a premium support system would be substantially smaller for many years.

Other Considerations

The premium support alternatives would affect the premiums that Medicare beneficiaries paid for Part A and Part B benefits, their total payments for those benefits (premiums plus out-of-pocket spending), and the combined payments of the federal government and beneficiaries. CBO analyzed those effects in 2020, focusing on affected beneficiaries in the two alternatives without grandfathering—that is, on everyone enrolled in Medicare other than dual-eligible beneficiaries. (The agency has not yet completed such an analysis for the two alternatives with grandfathering.) The alternatives could also affect beneficiaries' access to care and the quality of care they receive; CBO does not have the tools to study such effects, however, and does not anticipate having them in the near future. Effects on Beneficiaries' Premiums. CBO estimates that the premiums paid by affected beneficiaries for Medicare Part A and B benefits under the second-lowest-bid alternative in 2020 would be about 30 percent higher, on average, than the current-law Part B premium projected for that year. (Medicare beneficiaries generally do not pay premiums for Part A under current law.) In contrast, under the average-bid alternative, affected beneficiaries would pay premiums that were about 6 percent lower, on average, than the current-law Part B premium in 2020. The premiums paid by beneficiaries under each alternative would depend on the premiums charged by the available plans (which would vary by region) and on beneficiaries' choices of plans.

Under either of the alternatives without grandfathering, beneficiaries in each region would be offered at least one plan with a premium at or below the standard premium (given the manner in which benchmarks would be calculated), and in most cases, at least one plan with a premium below the standard premium would be offered. CBO expects that, depending on how bidding regions were defined, there might be some regions in which no private insurers would participate in the premium support system. In those places, the FFS program would be the only plan available, and enrollees would pay the standard premium.

The standard premium under either of those alternatives would be lower than the current-law Part B premium, CBO estimates, because both alternatives would reduce total Medicare spending, and the standard premium would equal the same share of spending that the Part B premium equals under current law. That reduction in the standard premium is the main reason that the average premium paid by beneficiaries under the average-bid alternative would be lower than the projected current-law Part B premium; the additional premiums paid by beneficiaries who enrolled in plans with bids above the benchmark would roughly offset the premium reductions for beneficiaries who enrolled in plans with bids below the benchmark. Under the second-lowest-bid alternative, however, the regional benchmarks would generally be lower than they would be under the average-bid alternative, so CBO expects that many beneficiaries would enroll in plans with bids above the relevant benchmark, resulting in a much higher average premium than under current law.

Most beneficiaries who wished to remain in the FFS program would pay much higher premiums, on average, under either alternative than they would for Part B under current law. The difference would be greatest in regions where FFS spending per beneficiary was highest. Beneficiaries in regions where such spending was lowest would pay a premium for the FFS program that was, on average, close to the projected current-law Part B premium.

Effects on Beneficiaries' Total Payments. CBO estimates that affected beneficiaries' total payments for benefits from Parts A and B in 2020 would be about 11 percent higher, on average, under the second-lowest-bid alternative without grandfathering than under current law. In general, the premiums paid by beneficiaries would increase under that option, but out-of-pocket costs for medical care would decline (because more beneficiaries would enroll in lower-bidding private plans, which would tend to reduce the total costs of care while maintaining the required actuarial value). The reduction in out-ofpocket costs would offset part, though not all, of the increase in premiums.

Under the average-bid alternative without grandfathering, beneficiaries' total payments for Part A and B benefits in 2020 would be about 6 percent lower, on average, than under current law. That reduction results from both lower average premiums and lower out-of-pocket costs for medical care. As in the previous alternative, the difference in out-of-pocket costs would be attributable primarily to increased enrollment in lower-bidding private plans.

The change in total payments for particular beneficiaries could differ markedly from the national average under either alternative. For example, people who chose to remain in the FFS program would generally face much higher premiums and would not see a reduction in their out-of-pocket costs.

Effects on Combined Spending by the Government and by Beneficiaries. The sum of net federal spending for Medicare and beneficiaries' total payments would be about 5 percent lower in 2020 under the second-lowest-bid alternative than under current law, CBO estimates, and about 4 percent lower under the average-bid alternative than under current law. (Those effects are measured as a percentage of projected net federal spending and beneficiaries' total payments, in each case focusing on affected beneficiaries and spending for benefits that would be covered by the premium support system.) The estimated reduction in total spending is slightly greater under the second-lowest-bid alternative because the federal contribution would be smaller under that alternative, which would increase competitive pressure, resulting in lower bids by private plans and causing a larger share of beneficiaries to enroll in low-bidding plans. The federal savings would be much larger under that alternative than under the average-bid alternative, but beneficiaries' payments would be higher.

RELATED CBO PUBLICATIONS: A Premium Support System for Medicare: Analysis of Illustrative Options (September 2013), www.cbo.gov/ publication/44581; The Long-Term Budgetary Impact of Paths for Federal Revenues and Spending Specified by Chairman Ryan (March 2012), www.cbo.gov/publication/43023; Long-Term Analysis of a Budget Proposal by Chairman Ryan (attachment to a letter to the Honorable Paul Ryan, April 5, 2011), www.cbo.gov/publication/22085; Designing a Premium Support System for Medicare (December 2006), www.cbo.gov/publication/18258; and Dual-Eligible Beneficiaries of Medicare and Medicaid: Characteristics, Health Care Spending, and Evolving Policies (June 2013), www.cbo.gov/publication/44308

Function 570

Health—Option 7

Total 2014-2018 2014-2023 (Billions of dollars) 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 Change in Mandatory Outlays Establish uniform cost -7 sharing for Medicare 0 -3 -5 -5 -6 -6 -6 -7 -7 -19 -52 0 -7 -7 -9 Restrict medigap plans -4 -5 -6 -6 -6 -8 -21 -58 Both of the above policies^a 0 -11 -12 -13 -42 -8 -11 -14 -14 -15 -16 -114

Change the Cost-Sharing Rules for Medicare and Restrict Medigap Insurance

Note: This option would take effect in January 2015.

a. If both policies were enacted together, the total effects would be greater than the sum of the effects for each policy because of interactions between the approaches.

Overview of the Issue

For people who have health insurance, including Medicare and other types of coverage, payments for health care fall into two broad categories: premiums and cost sharing. A premium is a fixed, recurring amount paid in advance for an insurance policy (which then limits enrollees' financial risk by covering some or all of the costs they incur if they use health care services or goods). Cost sharing refers to out-of-pocket payments that enrollees are required to make when they receive health care. In general, premiums spread the cost of medical care across all enrollees, whereas cost sharing concentrates costs on people who use more medical care. To determine the cost-sharing obligations of their enrollees, insurance plans typically vary three basic parameters:

- The deductible, or initial level of spending below which an enrollee pays all costs;
- The catastrophic cap, or limit on an enrollee's total out-of-pocket spending; and
- The share of costs an enrollee pays between the deductible and the catastrophic cap (which may vary by type of service).

Deductibles and catastrophic caps typically apply on an annual basis. The portion of the cost borne by the enrollee is usually specified as a percentage of the total cost of an item or service (in which case it is referred to as coinsurance) or as a fixed dollar amount for each item or service (in which case it is referred to as a copayment). If other aspects of an insurance plan are the same, lower cost-sharing requirements translate into higher premiums—because insurers must charge more to cover their higher share of medical spending—and higher costsharing requirements translate into lower premiums.

Research has shown that people who are not subject to cost sharing use more medical care than do people who are required to pay some or all of the costs of their care out of pocket. The RAND health insurance experiment, which was conducted from 1974 to 1982, examined a nonelderly population and found that health care spending was about 45 percent higher for participants without any cost sharing than for those who effectively faced a high deductible; average spending for people with intermediate levels of cost sharing fell in between those points.¹ A variety of later studies also concluded that higher cost sharing led to lower health care spendingincluding a 2010 study that found that Medicare beneficiaries responded to increases in their cost sharing by reducing visits to physicians and use of prescription drugs to a degree roughly consistent with the results of the RAND experiment.²

Those findings have driven interest in using additional cost sharing as a tool to restrain the growth of health care spending. However, increases in cost sharing expose

See Joseph Newhouse, Free for All? Lessons From the RAND Health Insurance Experiment (Harvard University Press, 1993).

See Amitabh Chandra, Jonathan Gruber, and Robin McKnight, "Patient Cost-Sharing and Hospitalization Offsets in the Elderly," *American Economic Review*, vol. 100, no. 1 (March 2010), pp. 193–213, http://dx.doi.org/10.1257/aer.100.1.193.

people to additional financial risk and may deter some enrollees from obtaining valuable care, including preventive care that could limit the need for more expensive care in the future. In the RAND experiment, cost sharing reduced the use of effective care and less effective care (as defined by a team of physicians) by roughly equal amounts. Although the RAND study found that cost sharing had no effect on health in general, among the poorest and sickest participants, those with no cost sharing were healthier by some measures than those who faced some cost sharing. In theory, to address the concern that patients might forgo valuable care, insurance policies could be designed to apply less cost sharing for services that are preventive or unavoidable and more cost sharing for services that are discretionary or that provide limited health benefits. In practice, however, that distinction can be difficult to draw, so trade-offs often occur between providing insurance protection and restraining total spending on health care.

Medicare's Current Cost Sharing. In the traditional feefor-service portion of the Medicare program (Parts A and B), the cost sharing that enrollees face varies significantly depending on the type of service provided. Under Part A, which primarily covers the services of hospitals and other facilities, enrollees are liable for a separate deductible for each "spell of illness" or injury for which they are hospitalized; in 2015, that deductible will be \$1,240, the Congressional Budget Office estimates. In addition, enrollees are subject to substantial daily copayments for extended stays in hospitals and skilled nursing facilities. Under Part B, which mainly covers outpatient services (such as visits to a doctor), enrollees face an annual deductible that is projected to be \$142 in 2015. Once their spending on Part B services has reached that deductible amount, enrollees generally pay 20 percent of allowable costs for most Part B services, although cost sharing is higher for some outpatient hospital care. Certain services that Medicare covers-such as preventive care, hospice services, home health visits, and laboratory tests-require no cost sharing. Because of those variations, enrollees lack consistent incentives to weigh relative costs when choosing among options for their treatment. Moreover, if Medicare patients incur extremely high medical costs, they may be obligated to pay significant amounts because the program does not have a catastrophic cap on cost sharing.

Medicare's cost sharing differs in two significant ways from that of private plans, which provide health insurance for the majority of people under age 65. First, most private health insurance plans have a single, annual deductible that includes all or most medical costs, rather than the separate deductibles for hospital and outpatient services in fee-for-service Medicare. Second, unlike feefor-service Medicare, most private health insurance plans include a catastrophic cap on out-of-pocket costs that limits enrollees' annual spending. Because of those differences, fee-for-service Medicare's benefit design is more complicated and provides less protection from financial risk than many private insurance plans do. Medicare is not unique, however, in charging different cost sharing for different types of services; many private insurance plans do that as well.

Although proposals to change Medicare's cost sharing generally focus on the traditional fee-for-service program, roughly a quarter of Medicare enrollees choose private insurance plans (known as Medicare Advantage plans) over the fee-for-service program. Medicare requires Medicare Advantage plans to provide a catastrophic cap on cost sharing but gives insurers some flexibility in structuring other cost-sharing requirements, as long as the overall value of the benefit is at least equal to the benefit that feefor-service Medicare provides. In general, cost-sharing requirements in Medicare Advantage plans are lower than those in the fee-for-service program and more closely resemble requirements in private insurance plans.

Part D of Medicare, which provides coverage for prescription drugs, is also administered by private insurers, who set each plan's cost-sharing requirements (subject to certain statutory and regulatory requirements). Once recently enacted changes are fully phased in, the standard Part D benefit will include a deductible, a range of spending over which enrollees face 25 percent coinsurance, and a catastrophic threshold above which enrollees are liable for 5 percent of their drug costs. Beyond those required cost-sharing parameters, Part D insurers have some ability to specify which drugs they cover and what cost sharing enrollees must pay, requiring more cost sharing for expensive, higher-tier brand-name drugs and less cost sharing for lower-tier generic drugs. Because private insurers administering Medicare Advantage and Part D plans have the freedom to specify cost-sharing requirements (within limits) and Medicare enrollees can choose between plans on the basis of cost sharing and other factors, proposals to redesign Medicare's cost sharing generally do not focus on those parts of the program. Consequently, policies that would affect cost sharing in

Medicare Advantage or Part D are not included in this discussion.

Supplemental Insurance for Medicare Enrollees. About 85 percent of people who enroll in fee-for-service Medicare have some form of supplemental insurance coverage that reduces or eliminates their cost-sharing obligations and protects them from high medical costs. (Such supplemental coverage of cost sharing is uncommon outside fee-for-service Medicare and thus is another difference between that program and typical private insurance.) About 15 percent of enrollees in fee-for-service Medicare receive coverage of Medicare's cost sharing from Medicaid, which is available to Medicare enrollees with low income and assets. About 40 percent of fee-for-service enrollees have supplemental coverage through a current or former employer, which tends to reduce, though not eliminate, their cost-sharing liabilities.³ About 25 percent of enrollees buy medigap policies-individual insurance policies designed to cover most or all of Medicare's costsharing requirements-and 5 percent of enrollees have various other forms of supplemental coverage.

Federal law requires that medigap plans conform to one of 10 standard plan types. (There are also numerous discontinued plan types; plans of those types may keep their existing enrollees but cannot enroll new members.) The current plan types vary in the extent to which they cover Medicare's cost sharing, and one type offers only catastrophic coverage (which covers cost sharing only after a deductible of \$2,110 has been reached). Even so, 60 percent of people with medigap insurance chose plans that offer "first-dollar" coverage—which pays for all deductibles, copayments, and coinsurance—and most other medigap enrollees chose plans that provide first-dollar coverage for Part A and cover all cost sharing above the deductible for Part B.

According to a recent study done for the Medicare Payment Advisory Commission, Medicare spends 33 percent more per person on enrollees who have medigap coverage, and 17 percent more per person on enrollees who have supplemental coverage from a former employer, than it does on enrollees without supplemental coverage.⁴ Those estimates are largely consistent with the results of older studies of the relationship between supplemental coverage and Medicare spending, and they take into account various ways in which medigap policyholders and other Medicare enrollees may differ. The study also concluded that those differences in spending were mainly attributable to higher use of discretionary or preventive services by people with supplemental coverage, particularly those with first-dollar coverage. Another recent study concluded that spending by Medicare enrollees with supplemental coverage was growing at a faster rate than spending by enrollees without supplemental coverage.⁵ Neither of those recent studies investigated the effects of supplemental coverage on enrollees' health.

Raw differences in spending between groups with and without supplemental coverage partly reflect differences in their health status, but studies have generally found that the differences in spending were still large after researchers attempted to account for enrollees' health status. Even so, people who have medigap policies may differ from other Medicare enrollees in other ways because medigap coverage is not assigned randomly, as it might be in a scientific experiment or trial. The 2010 study of how Medicare beneficiaries respond to increases in their cost sharing makes an important contribution because it more closely resembles such an experiment. That study also found that about 20 percent of the gross savings generated by higher cost sharing for physician visits and prescription drugs-stemming from reduced use of those services-was offset by increases in hospital spending, perhaps because people delayed treatment until their condition worsened.⁶

Collectively, those studies provide considerable evidence that Medicare enrollees who are subject to less cost sharing—because of more generous supplemental

^{3.} Some Medicare enrollees are currently employed and have health insurance through their employer, in which case Medicare generally supplements that coverage. As a result, those workers might not benefit from enrolling in Part B of Medicare, so they are typically enrolled only in Part A.

See Christopher Hogan, Exploring the Effects of Secondary Coverage on Medicare Spending for the Elderly (submitted by Direct Research, LLC, to the Medicare Payment Advisory Commission, June 2009), http://go.usa.gov/WrcY (290 KB).

See Ezra Golberstein and others, "Supplemental Coverage Associated With More Rapid Spending Growth for Medicare Beneficiaries," *Health Affairs*, vol. 32, no. 5 (May 2013), pp. 873–881, http://dx.doi.org/10.1377/hlthaff.2012.1230.

See Amitabh Chandra, Jonathan Gruber, and Robin McKnight, "Patient Cost-Sharing and Hospitalization Offsets in the Elderly," *American Economic Review*, vol. 100, no. 1 (March 2010), pp. 193–213, http://dx.doi.org/10.1257/aer.100.1.193.

insurance—use more medical services than other enrollees do. Enrollees with supplemental coverage are liable for only a portion of the costs of any additional services they use (through any remaining cost sharing and through the effect on their premiums for supplemental coverage); taxpayers (through Medicare) bear most of the cost for the additional services.

Key Design Choices That Would Affect Savings

Policymakers could alter Medicare's cost sharing and restrict medigap coverage in various ways to produce savings for the federal government, reduce total health care spending, and create greater uniformity in cost sharing for Medicare enrollees. Those different ways would also alter how health care costs were distributed between healthier and less healthy enrollees.

In particular, four main sets of rules governing Medicare's cost sharing could be modified: deductibles could be increased, decreased, or combined; coinsurance rates and copayments could be changed; a catastrophic cap could be added; and limits could be imposed on supplemental insurance coverage of Medicare's cost-sharing obligations. Such changes would interact in important ways: for example, higher deductibles or coinsurance rates would cause enrollees to reach a given catastrophic cap more quickly (and at a lower level of total spending), and limits on supplemental insurance would expose more enrollees to changes in Medicare's cost-sharing rules and thus increase the impact of those changes on Medicare spending. Policymakers could also "grandfather" current enrollees by maintaining existing rules for them and applying changes only to new enrollees.

Deductibles. In general, raising the Part A and Part B deductibles would generate savings for the federal government in two ways. First, higher deductibles would increase the initial cost borne by enrollees, leading to a corresponding reduction in the cost borne by the government. Second, some enrollees would choose to forgo some care because of its higher cost, decreasing the amount of health care for which the federal government pays. The Part A and Part B deductibles could be increased separately, or they could be combined into a single yearly deductible for all services provided by traditional fee-for-service Medicare. Depending on the dollar value of that combined deductible, federal spending would decrease, increase, or remain the same.

Proposals for a combined deductible generally call for setting it between the levels of the current Part A and Part B deductibles. That approach would tend to increase cost sharing for the roughly 70 percent of enrollees who use only outpatient care in a given year and decrease cost sharing for the roughly 20 percent of enrollees who are hospitalized. (About 10 percent of enrollees use no Part A or Part B services in a given year.) In principle, a combined deductible could also encompass drug spending under Part D, but doing that would be complicated because Part D is administered separately by private insurance plans.

Coinsurance and Copayments. Raising coinsurance rates and copayments would reduce federal spending in the same manner as higher deductibles, shifting some costs from the federal government to Medicare enrollees and causing enrollees to forgo some care because of their higher out-of-pocket costs. Applying higher coinsurance or copayments to types of care that patients are likely to forgo at higher prices, such as elective surgery, would tend to emphasize that effect, decreasing the amount of care provided with little increase in patients' costs. Conversely, applying higher cost sharing to types of care for which patients are particularly insensitive to price, such as emergency surgery, would tend to increase costs for enrollees with little effect on the amount of care provided. Some proposals envision making wide-ranging changes to Medicare's cost-sharing rules, whereas other proposals would introduce coinsurance or copayments for specific services that do not currently require cost sharing, such as home health care, laboratory tests, or the first 20 days of a stay in a skilled nursing facility. In general, copayments can give patients more certainty about their costs for treatment than coinsurance does, but copayments can also insulate patients from differences in the total cost of each service.

Catastrophic Caps. Most private insurance plans include a catastrophic cap that limits how much enrollees have to spend out of pocket, but Parts A and B of Medicare have no catastrophic cap on cost sharing. Thus, in the absence of other changes to Medicare's cost-sharing rules, establishing a catastrophic cap would increase Medicare spending—by requiring the program to pay the entire cost of care above the cap, and possibly by increasing the amount of care sought by enrollees who exceed the cap because they would no longer face any cost for additional care. Generally, a higher cap would produce a smaller increase

in federal spending; past proposals have called for caps of more than \$5,000 to limit their impact on federal costs.

For enrollees in fee-for-service Medicare who have supplemental coverage, adding a catastrophic cap to Medicare would reduce the costs paid by their supplemental policies, resulting in lower premiums for those policies but little change in enrollees' financial risk. For enrollees without supplemental coverage, establishing a cap would reduce financial risk and decrease out-of-pocket costs if enrollees' spending exceeded the cap. Imposing modest cost sharing above the catastrophic cap (as in Part D) could preserve some incentive for enrollees who exceeded the cap to use medical care judiciously (although supplemental coverage of that additional cost sharing would eliminate that incentive).

Supplemental Coverage of Medicare's Cost Sharing.

About 25 percent of enrollees in fee-for-service Medicare purchase medigap policies, and about 40 percent have retiree coverage through a former employer. By reducing or eliminating enrollees' cost-sharing obligations, those policies can mute the incentives for prudent use of medical care that cost sharing is designed to generate. Lawmakers could impose three types of restrictions on supplemental coverage of Medicare's cost-sharing obligations:

- Supplemental policies could be barred from paying for care until an enrollee's out-of-pocket spending reached a specified dollar limit, thus prohibiting medigap plans from offering first-dollar coverage. That limit could be set at the same amount as Medicare's deductibles, which would force all enrollees with medigap plans to pay for costs out of pocket until they reached those deductibles.
- The percentage or dollar amount of cost sharing above the deductible that medigap plans pay could be limited. Such limits could allow for a catastrophic cap above which a medigap policy could cover all cost sharing—to reduce enrollees' financial risk. Both that and the previous restriction could be applied to retiree coverage as well as to medigap plans, but regulations on retiree coverage would be more complex to administer than those on medigap insurance.
- A surcharge could be imposed on enrollees who buy medigap policies with first-dollar coverage. (Retiree policies generally do not provide first-dollar coverage.)

That surcharge, which could be a flat fee or a percentage of the policy's premium, could be designed to reflect the impact of such coverage on Medicare's costs. To the extent that enrollees continued to buy first-dollar policies, however, total spending on health care would be higher than it would be if such policies were prohibited.

Grandfathering. Another design choice for policymakers is whether changes to the rules for cost sharing and supplemental insurance would apply to all Medicare enrollees or only to new enrollees-in other words, whether existing enrollees and medigap policyholders would be grandfathered. One rationale for grandfathering medigap policyholders is that changing the terms of medigap policies that have already been purchased could be considered unfair or unduly burdensome. Medicare enrollees who do not buy medigap insurance when they turn 65 may be charged much higher premiums for such insurance if they wait to purchase it until they develop health problems. Thus, many Medicare enrollees pay medigap premiums for years to ensure that they will have access to the financial protection of supplemental insurance if their health deteriorates. In the near term, however, the effects on Medicare spending would be smaller if current enrollees were exempt from changes to cost sharing or restrictions on medigap plans, and operating multiple sets of rules would add to the program's administrative complexity.

Specific Alternatives and Estimates

CBO examined three alternative ways to reduce federal spending on Medicare by modifying the cost sharing that enrollees face. The alternatives would apply to all enrollees, with no grandfathering.

■ The first alternative would replace Medicare's current mix of cost-sharing requirements with a single annual deductible of \$550 covering all Part A and Part B services, a uniform coinsurance rate of 20 percent for amounts above that deductible (including inpatient expenses), and an annual cap of \$5,500 on each enrollee's total cost sharing. (Prescription drug coverage under Part D would not be changed.) If those changes took effect on January 1, 2015, and the dollar amounts of the various thresholds were indexed to increase in later years at the same rate as average feefor-service Medicare costs per enrollee, that approach would reduce federal outlays by \$52 billion between 2015 and 2023, CBO estimates.

- The second alternative would leave Medicare's costsharing rules unchanged and would not affect employment-based supplemental coverage but would restrict current and future medigap policies. Specifically, it would bar those policies from paying any of the first \$550 of an enrollee's cost-sharing obligations for calendar year 2015 and would limit their coverage to 50 percent of the next \$4,950 of an enrollee's cost sharing. (Medigap policies would cover all further cost sharing, so policyholders would not pay more than \$3,025 in cost sharing in 2015.) If this option took effect on January 1, 2015, and the various dollar thresholds were indexed as specified in the first alternative, federal outlays would be reduced by \$58 billion from 2015 through 2023, CBO estimates.
- The third alternative combines the changes from the first two. Thus, all medigap plans would be prohibited from covering any of the new \$550 combined deductible for Part A and Part B services, and the annual cap on an enrollee's out-of-pocket obligations (including payments by supplemental plans on an enrollee's behalf) would be limited to \$5,500 in 2015. For spending that occurred after meeting the deductible but before reaching the cap, medigap policyholders would face a uniform coinsurance rate of 10 percent for all services, whereas Medicare enrollees without supplemental coverage would face a uniform coinsurance rate of 20 percent for all services. Those provisions would limit the out-of-pocket spending of medigap enrollees (excluding medigap premiums) to \$3,025 and the out-of-pocket spending of Medicare enrollees without supplemental coverage to \$5,500 in 2015.

If, like the other options, this combined alternative went into effect on January 1, 2015, and the various thresholds were indexed to the growth of per-enrollee Medicare costs thereafter, federal outlays would be \$114 billion lower from 2015 through 2023 than they would be under current law, CBO estimates. (Those savings exceed the sum of the savings from the first two alternatives because medigap enrollees would not be entirely insulated by their supplemental coverage from the cost-sharing changes, as they would be in the first alternative, which would reduce their use of care and their cost to the federal government.)

The budgetary effects of changing Medicare's costsharing rules depend significantly on the specific parameters chosen. To illustrate the impact of varying some of those parameters, CBO estimated the effect on federal spending of modestly changing the deductible and catastrophic cap in the third alternative. Raising the 2015 deductible by \$100 (to \$650), while keeping the catastrophic cap at \$5,500, would increase federal savings between 2015 and 2023 by an estimated \$22 billion. Raising the catastrophic cap in 2015 by \$500 (to \$6,000), while keeping the deductible at \$550, would add an estimated \$31 billion to federal savings through 2023. Making both of those changes together would yield \$53 billion in additional savings from 2015 through 2023, compared with the budgetary effects of the third alternative.

Other Considerations

Substantial changes to the cost-sharing structure of fee-for-service Medicare and the coverage provided by medigap plans would not only reduce costs to the federal government but also have an impact on Medicare enrollees, on supplemental insurance, and on the administration of the Medicare program.

Effects on Enrollees. The cost-sharing and medigap changes included in this option would affect total health care spending for Medicare enrollees (by changing the amount of health care services they use) and the way in which that spending is divided between the federal government and enrollees and among enrollees themselves. The restrictions on medigap coverage would also affect how much of enrollees' cost-sharing obligations medigap plans would cover, as well as the premiums that enrollees would pay for those plans.

Under current law, the average fee-for-service enrollee will cost Medicare \$10,250 in 2015 and will be obligated to pay \$1,700 in cost sharing, CBO estimates.⁷ (Costsharing obligations may be paid by the enrollee directly out of pocket, by a supplemental insurer, or by some combination of the two.) Those averages mask substantial variation in individuals' cost-sharing obligations, stemming from differences in health and the use of medical care. For example, CBO estimates that one-quarter of

^{7.} That estimate of the average cost per enrollee is based on gross outlays by the Medicare program, so it excludes enrollees' costsharing obligations and does not account for offsetting premium payments. The average net per-enrollee cost to Medicare, which accounts for premium payments, would be lower than that gross measure.

enrollees will have cost-sharing obligations of more than \$1,900 in 2015; their obligations will average about \$5,250, compared with an average of about \$550 for the other three-quarters of fee-for-service enrollees.

Under the full set of changes included in this option (the third alternative), the average fee-for-service enrollee would cost Medicare \$10,100 in 2015, CBO estimates, \$150 less than under current law. However, under the specific cost-sharing changes and medigap restrictions in that alternative, enrollees' average cost-sharing obligations would not change-because the higher fraction of total health care costs that enrollees would pay as cost sharing would be offset, on average, by savings from the resulting reduction in their use of health care services. (Different combinations of deductibles, coinsurance rates, catastrophic caps, and medigap restrictions could increase or decrease the average cost-sharing obligations of enrollees.) Even so, that alternative would alter the distribution of cost-sharing obligations among enrollees. One-quarter of enrollees would face cost-sharing obligations of more than \$2,300 in 2015; their obligations would average about \$4,550, while the other threequarters of enrollees would have average obligations of about \$750. (Roughly 10 percent of enrollees would reach the option's \$5,500 cap on cost-sharing obligations.) Those changes reflect a relatively large average decrease in obligations for enrollees who have serious illnesses that require extended care or hospitalization and a relatively small average increase in obligations for healthier enrollees who use less care.

The medigap restrictions in this option would increase the average amount of cost sharing that a medigap policyholder paid out of pocket and would decrease, to roughly the same extent, the average amount that a medigap plan paid on an enrollee's behalf. Because medigap insurers must compete for business and are subject to state insurance regulations, they would most likely reduce premiums to reflect that reduction in their costs. Overall, most medigap policyholders would have lower health care expenses under this option because their medigap premiums would decrease more than their out-of-pocket payments would increase (mainly because most of a medigap plan's liabilities are generated by a small share of policyholders). However, in any given year, some enrollees would face higher combined costs for medigap premiums and out-of-pocket payments under this option.

Beyond altering how and how much Medicare enrollees pay for care, the changes included in this option could have other effects on enrollees. Those changes would give people stronger incentives to use medical services more prudently. However, as noted above, studies have shown that people who are subject to higher cost sharing reduce their use of both effective and ineffective health care. To avoid reductions in effective care, enrollees' costs could be selectively reduced or eliminated for high-value services-an approach known as "value-based insurance design." In practice, defining such services can be challenging, and the use of value-based design in private insurance plans has been limited. Furthermore, restricting medigap coverage would prevent Medicare enrollees from buying policies with the low levels of cost sharing that they have shown a preference for in the past. Although most medigap enrollees would have lower overall health care costs under this option, some enrollees would prefer the financial certainty and simplicity of a medigap plan that covered all of their cost-sharing obligations. Those enrollees would object to any legislation or regulation that denied them access to full supplemental coverage for their cost sharing.

Effects on Supplemental Insurance. Altering Medicare's cost-sharing structure and limiting supplemental coverage could lead to changes in medigap premiums and in enrollees' demand for medigap policies. If medigap plans were barred from paying the first \$550 of an enrollee's cost-sharing liabilities and then from fully covering all cost-sharing requirements up to a catastrophic cap—as in the second and third alternatives—the costs borne by medigap plans would decrease; as a result, so would premiums for those plans. On the one hand, lower premiums would make medigap policies more appealing. On the other hand, the restrictions on medigap benefits would reduce the value of such policies to enrollees.

A key reason that people buy medigap coverage today is to be protected against high out-of-pocket costs. Adding a catastrophic cap to Medicare would reduce financial risk for enrollees in the traditional fee-for-service program who lack supplemental coverage. Therefore, adding a catastrophic cap to Medicare and restricting the coverage provided by medigap plans could cause some enrollees to not purchase supplemental insurance—especially healthier enrollees, who might expect to consume less health care, and thus spend less on cost sharing, than sicker enrollees. A decrease in medigap enrollment by relatively healthy people would increase average per-enrollee costs for medigap plans, leading to higher policy premiums (if everything else was equal).

Altering the cost-sharing structure of Medicare, as in the first and third alternatives, would also affect costs for employers that provide supplemental coverage for retirees. A unified deductible would tend to increase costs for employers, but the introduction of a catastrophic cap would decrease their costs, particularly for very expensive enrollees. The net effect on an employer's costs for retiree coverage would depend on the extent of the coverage and the health of the employer's retirees. Additionally, the creation of a catastrophic cap in Medicare might cause some employers to scale back or discontinue supplemental coverage for current or future retirees, on the theory that their retirees would be sufficiently protected from financial risk by Medicare alone.

The unified deductible and catastrophic cap in the first and third alternatives would have similar effects on federal spending for Medicaid, which provides supplemental coverage for low-income Medicare enrollees. Those dualeligible beneficiaries have a relatively high prevalence of expensive chronic conditions. Consequently, the introduction of a catastrophic cap would shift some of the cost for those expensive enrollees from Medicaid to Medicare. At the same time, the unified deductible and uniform coinsurance rate would shift some costs from Medicare to Medicaid.

Whether those effects would, on balance, increase or decrease Medicaid's spending on cost sharing for dualeligible beneficiaries is unclear. Medicaid avoids paying some cost sharing for those beneficiaries by paying providers on the basis of its own rates, which in many cases are lower than rates paid by Medicare. Specifically, state Medicaid programs often limit the amount they pay for dual-eligible beneficiaries' cost sharing to the difference

RELATED OPTION: Health, Option 5

(if any) between what Medicare already paid and what Medicaid would pay for the same service—meaning that Medicaid often pays none or only a portion of the costsharing obligation. Consequently, a change in costsharing obligations for Medicare would not necessarily result in a corresponding change in cost-sharing payments by Medicaid. In addition, Medicare's payments to providers for bad debt (unpaid cost-sharing obligations) cover much of the cost-sharing obligations that Medicaid avoids, so a fraction of Medicaid's obligations is ultimately shifted back to the Medicare budget. For those reasons, CBO believes that the estimates shown here include the full federal budgetary effects of this option. (The estimates do not include the option's effects on states' Medicaid outlays, however.)

Administrative Issues. Altering the cost-sharing rules for Medicare and medigap plans would raise myriad administrative issues. Health care providers might experience some confusion about how much to collect from a Medicare enrollee during an office visit because it might be difficult to track whether the enrollee's cost sharing payments had reached the deductible or exceeded the catastrophic cap. Moreover, administering the new costsharing structure would require coordination that currently does not exist among the organizations that review and process Medicare claims, insurers who provide supplemental coverage, and Medicare. In addition, changes to Medicare's cost-sharing structure could affect the total amount of bad debt from unpaid cost-sharing obligations owed to service providers and the distribution of that debt among different types of providers, who are reimbursed by Medicare for bad debt in different ways. At the same time, lower enrollment in supplemental plans and reduced use of medical care by some enrollees with supplemental coverage would decrease the amount of billing paperwork for some supplemental insurers.

Health—Option 8

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Mandatory Outlays												
Medicare	0	0	-1.1	-2.6	-4.2	-6.1	-8.3	-10.6	-13.6	-17.1	-7.8	-63.5
Other	<u>0</u>	<u>0</u>	<u>0.8</u>	<u>1.9</u>	<u>3.1</u>	<u>4.4</u>	<u>5.7</u>	<u>7.2</u>	<u>8.0</u>	<u>9.5</u>	<u>5.7</u>	<u>40.5</u>
Total	0	0	-0.3	-0.7	-1.1	-1.6	-2.6	-3.4	-5.6	-7.6	-2.1	-23.0
Change in Revenues	0	0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.7	-0.8	-0.9	-0.6	-3.9
Net Effect on the Deficit	0	0	-0.2	-0.5	-0.8	-1.2	-2.1	-2.8	-4.8	-6.7	-1.5	-19.1

Raise the Age of Eligibility for Medicare to 67

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Note: This option would take effect in January 2016.

The usual age of eligibility for Medicare benefits is 65, although certain people qualify for the program earlier. (Medicare is available, after a waiting period, to people under age 65 who are eligible for Social Security disability benefits or who have end-stage renal disease.) Because of increases in life expectancy, the average length of time that people are covered by Medicare has risen significantly since the program was created, in 1965. That trend, which increases the program's costs, will almost certainly continue.

This option would raise the age of eligibility for Medicare by two months every year, beginning with people who were born in 1951 (who will turn 65 in 2016), until the eligibility age reached 67 for people born in 1962 (who will turn 67 in 2029). Thereafter, the eligibility age would remain at 67. Those changes are similar to the ongoing increases in Social Security's full retirement age (FRA)—the age at which workers become eligible for full retirement benefits-except that scheduled increases in the FRA include a 12-year period during which the FRA remains at 66. (Unlike Medicare, which has a single eligibility age, Social Security allows workers to receive reduced retirement benefits as early as age 62, and the majority of eligible people choose to claim Social Security benefits before reaching the FRA.) Under this option, the eligibility age for Medicare would remain below Social Security's FRA until 2029, when both would be 67 for people born in 1962; from that point on, the two eligibility ages would be identical.

A change in the eligibility age for Medicare would affect people's sources of health insurance coverage, including Medicaid. States have the option under current law to expand their Medicaid programs to people with income below 138 percent of the federal poverty guidelines. Although that optional Medicaid expansion applies only to people under age 65, for this option, the Congressional Budget Office assumed that the age limit would increase in tandem with Medicare's eligibility age.

Implementing this option would reduce federal budget deficits by \$19 billion between 2016 and 2023, according to estimates by CBO and the staff of the Joint Committee on Taxation. That figure represents the net effect of a \$23 billion decrease in outlays and a \$4 billion decrease in revenues over that period. The decrease in outlays includes a reduction in federal spending for Medicare as well as a slight reduction in outlays for Social Security retirement benefits. However, those savings would be substantially offset by increases in federal spending for Medicaid and for subsidies to purchase health insurance through the new insurance exchanges and by the decrease in revenues.

Outlays for Medicare would be lower under this option because fewer people would be eligible for the program than the number projected under current law. In addition, outlays for Social Security retirement benefits would decline slightly because raising the eligibility age for Medicare would induce some people to delay applying for retirement benefits. One reason is that some people apply for Social Security at the same time that they apply for Medicare; another reason is that this option would encourage some people to postpone retirement to maintain their employment-based health insurance coverage until they became eligible for Medicare. CBO expects that latter effect would be fairly small, however, because of two considerations: First, the proportion of people who currently leave the labor force at age 65 is only slightly larger than the proportion who leave at slightly younger or older ages, which suggests that maintaining employment-based coverage until the eligibility age for Medicare is not the determining factor in most people's retirement decisions. Second, with the opening of the health insurance exchanges, workers who give up employment-based insurance by retiring will have access to an alternative source of coverage (and may qualify for subsidies if they are not eligible for Medicare). This option could also prompt more people to apply for Social Security disability benefits so they could qualify for Medicare before reaching the usual age of eligibility. However, in CBO's view, that effect would be quite small, and it is not included in this estimate.

Other effects of this option would add to budget deficits, but by smaller amounts. Federal spending for Medicaid would increase for two groups of people whose age was between 65 and the new eligibility age for Medicare: those who, under current law, will be dual-eligible beneficiaries (Medicare beneficiaries who also qualify, on the basis of income and assets, to receive benefits from Medicaid), and those who will be beneficiaries of Medicaid before turning 65 and will lose that eligibility under current law once they qualify for Medicare. This option would cause Medicaid to remain the primary source of coverage for members of both groups until they reached the new eligibility age for Medicare.

Subsidies for health insurance coverage purchased through the exchanges would also increase under this option because some of the people whose eligibility for Medicare would be delayed would instead obtain insurance through the exchanges and would qualify for subsidies. (Those subsidies take two forms: tax credits to cover a portion of the premiums for policies bought through the exchanges and additional subsidies to reduce costsharing payments under those policies. The premium subsidies are structured as refundable tax credits, and CBO estimates that, in most cases, the amounts of those credits will exceed the total amount of federal income tax that recipients owe; the amounts that offset the taxes that recipients owe are classified as revenue losses, and the amounts that exceed the taxes owed are classified as outlays. Subsidies for the cost sharing of enrollees in exchange plans are also categorized as outlays.)

This option would also affect federal revenues, decreasing them by an estimated \$4 billion between 2016 and 2023. That decline is the net result of several partly offsetting effects, the largest of which would be a reduction in federal revenues because of the increase in exchange subsidies. A small portion of those additional subsidies would take the form of reduced revenues rather than outlays, as discussed above.

Looking farther into the future, CBO estimates that by 2038, spending on Medicare would be about 3 percent less under this option than it would be under current law—4.7 percent of gross domestic product rather than 4.9 percent. On the basis of its estimates for 2016 through 2023, CBO projects that roughly two-thirds of those long-term savings from this option would be offset by the increases in federal spending for Medicaid and exchange subsidies and the reduction in revenues described above.

Although CBO anticipates that most people who would lose eligibility for Medicare under this option would continue their existing health insurance coverage or switch to other forms of coverage, the number of people without health insurance would increase slightly. For example, CBO estimates that of the 5.5 million people who would be affected by this option in 2023, about 50 percent would obtain insurance from their (or their spouse's) employer or former employer, about 15 percent would continue to qualify for Medicare on the basis of their eligibility for disability benefits, about 15 percent would buy insurance through the exchanges or in the nongroup market, about 10 percent would receive coverage through Medicaid, and about 10 percent would become uninsured. To develop those estimates, CBO examined data on the patterns of health insurance coverage among people a few years younger than Medicare's current eligibility age. CBO then adjusted those figures to account for changes in sources of health insurance coverage and in participation in the labor force as people age.

The estimate of savings to Medicare under this option is much lower than CBO's earlier estimates for proposals to raise Medicare's eligibility age, including for a similar option in the previous version of this report (published in 2011). That change in the estimate primarily reflects a new assessment by CBO that some of the people whose eligibility for Medicare would be delayed under this option would not cost Medicare as much, under current law, as CBO previously projected. CBO's current estimate incorporates a detailed analysis of the cost of 65- and 66-year-old Medicare beneficiaries.

CBO's analysis highlighted two points. First, at ages 65 and 66, beneficiaries who enrolled in Medicare when they turned 65 tend to be in much better health-and thus are substantially less expensive, on average-than beneficiaries who were already enrolled upon turning 65 (because of disability or end-stage renal disease). Second, the many 65- and 66-year-old beneficiaries who are workers (or workers' elderly spouses) with employmentbased health insurance are less costly to Medicare, on average, than other beneficiaries at those ages. For most of those workers, employment-based health insurance is the primary source of coverage, and Medicare is a secondary payer-meaning that Medicare's payments are limited to the cost-sharing obligations that beneficiaries face under their employment-based health insurance policies. Moreover, most beneficiaries for whom Medicare is a secondary payer wait to enroll in Parts B and D of Medicare until they (or their spouses) stop working. As a result, Medicare spends much less on Part A services for those beneficiaries than it does for beneficiaries for whom Medicare is the primary payer, and it does not pay for services covered under Parts B and D.

Taking into account both of those factors—differences in health status between beneficiaries who enroll in Medicare at age 65 and those already enrolled by 65, and the effect of secondary-payer status—caused a significant reduction in CBO's estimate of Medicare spending under current law for beneficiaries who would be affected by the increase in the eligibility age. Mostly as a result of those changes, CBO's present estimate of the net costs to Medicare of those beneficiaries under current law is roughly 60 percent lower than CBO's previous estimates.

By contrast, CBO's estimate of the extent to which this option would increase federal spending for Medicaid and

exchange subsidies has not changed significantly. Compared with previous estimates, a similar proportion of beneficiaries who would lose Medicare eligibility under this option are estimated to enroll in Medicaid or the health insurance exchanges.

The much smaller reduction in Medicare spending, combined with a similar increase in non-Medicare spending, results in a net change in projected outlays that is much smaller than previously estimated. Additionally, the figures shown here include an estimate of the option's effects on federal revenues, which was not included in the previous version of this report.

A rationale for this option is that it would raise the eligibility age for Medicare to accompany increases in life expectancy. In 1965, a 65-year-old man could be expected to live another 12.9 years, on average, and a 65-year-old woman another 16.3 years. Since then, life expectancy for 65-year-olds has risen to 17.9 years for men and 20.2 years for women. CBO projects that by 2038, those figures will increase to 20.2 years and 22.5 years, respectively. Therefore, a commitment to provide people with a certain benefit in 2038 beginning at age 65 will be significantly more costly than is the same commitment made to today's beneficiaries. Another rationale for this option is that it would reinforce the incentive to delay retirement created by increases in Social Security's full retirement age.

An argument against this option is that it would shift costs that are now paid by Medicare to individuals and to employers that offer health insurance for their retirees. Some people would end up without health insurance under this option and as a result might receive lower quality care and pay more for care than they would have as Medicare beneficiaries. Many, though not all, of the people who would end up with a different source of insurance would pay higher premiums than they would have for Medicare and would spend more on copayments for medical care. In addition, states' spending on Medicaid would increase under this option.

RELATED OPTION: Mandatory Spending, Option 16

RELATED CBO PUBLICATION: Raising the Ages of Eligibility for Medicare and Social Security (January 2012), www.cbo.gov/publication/42683

Health—Option 9

Increase Premiums for Parts B and D of Medicare

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Mandatory Outlays												
Increase basic premiums	0	-4	-10	-16	-25	-35	-40	-44	-49	-52	-55	-274
Freeze income thresholds for income-related premiums	0	0	0	0	0	0	-3	-4	-6	-7	0	-20
Both of the above policies ^a	0	-4	-10	-16	-25	-35	-42	-46	-52	-56	-55	-287

Note: The first and third alternatives would take effect in January 2015; the second alternative would take effect in January 2020.

a. If both policies were enacted together, the total effects would be less than the sum of the effects for each policy because of interactions between the approaches.

All enrollees in Part B of Medicare (which covers physicians' and other outpatient services) or Part D (which covers prescription drugs) are charged basic premiums for that coverage. Those premiums are currently \$104.90 per month for Part B and \$31.17 per month for Part D.¹ When the Part B program began, in 1966, the basic premium was intended to cover 50 percent of Part B costs per enrollee over age 65, with the rest of those costs funded by general revenues. Later legislation reduced that share, however, and collections of Part B premiums declined to less than 25 percent of those costs. The Balanced Budget Act of 1997 set the Part B premium at about 25 percent of Part B costs per enrollee over age 65. Part D, which began in 2006, covers prescription drugs not covered by Part B; the Part D benefit is delivered by private insurers. On average, premiums cover 25.5 percent of the per capita costs of the basic Part D benefit.² Enrollees with low income and few assets receive subsidies to cover some of their Part D premiums and cost-sharing payments.

Enrollees in Parts B and D who have relatively high income pay a higher premium known as the incomerelated premium (IRP). The amount of the IRP depends on an enrollee's modified adjusted gross income, or MAGI (the total of adjusted gross income and taxexempt interest). The MAGI thresholds established for income-related premiums create four income brackets and premiums that correspond to them. For enrollees who pay IRPs, total monthly premiums in 2013 range from \$146.90 to \$335.70 for Part B and from \$42.80 to \$97.80 for Part D.³ Those amounts are set to cover 35 percent to 80 percent of costs per enrollee in Part B and in Part D.

Changes over time in the thresholds for income-related premiums affect the number of Medicare enrollees who pay IRPs and the premiums they pay. Between 2008 and 2011, the thresholds for the Part B IRPs rose in line with increases in the consumer price index for urban consumers. The Affordable Care Act established IRPs for Part D beginning in 2011, and it froze through 2019 the income

3. For Part B, the basic premium is the same for all enrollees, and income-related premiums are derived from the basic premium. For Part D, income-related premiums are also derived from the basic premium, but that basic premium depends on the plan in which a beneficiary enrolls. As a result, the total premium for a higher-income enrollee in Part D varies not only among but also within the income brackets, because enrollees in the same bracket may enroll in different plans with different basic premiums. (The figures reported here are based on averages across all Part D plans.)

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^{1.} The Part D figure is an average amount; the actual premiums that enrollees face are higher or lower depending on the drug plan they choose (and how much that plan's bid for covering the costs of prescription drugs differs from the average bid submitted by all plans).

^{2.} The basic Part D benefit refers to a standard level of prescription drug coverage. For 2013, the basic benefit includes no coverage for the first \$325 of drug spending (the deductible); coverage for 75 percent of drug costs between the deductible and an initial coverage limit of \$2,970; some coverage for generic and brand-name drugs between the initial coverage limit and a catastrophic limit on out-of-pocket costs of \$4,750 (the difference between those limits is referred to as the coverage gap, or "doughnut hole"); and coverage for 95 percent of drug spending above the catastrophic limit. The coverage gap is being closed so that, by 2020, the basic benefit will cover 75 percent of all drug costs between the deductible and catastrophic limit.

thresholds at which IRPs begin for both Parts B and D at \$85,000 for single beneficiaries and \$170,000 for married couples who file joint tax returns. Under current law, the income thresholds will revert in 2020 to the levels they would have reached had they been indexed for inflation since 2007. The Congressional Budget Office projects that the percentage of enrollees subject to income-related premiums will increase from 5 percent now to 10 percent in 2019, as income growth pushes more enrollees' income above the fixed thresholds. That percentage is projected to drop to 7 percent in 2020 (as the thresholds revert to the amounts they would have reached with indexing) and then increase gradually over time, reaching 8 percent in 2023, as the growth of income outpaces the overall growth of prices.

This option would raise the premiums for Parts B and D of Medicare in various ways:

- The first alternative would increase the basic premiums from 25 percent of Part B costs per enrollee and 25.5 percent of Part D costs per enrollee to 35 percent of both programs' costs; that increase would occur gradually over a five-year period beginning in 2015. For Part B, the percentage of costs per enrollee covered by the basic premium would rise by 2 percentage points a year through 2019 and then remain at 35 percent. For Part D, that percentage would increase by 1.5 percentage points in the first year and 2 percentage points a year from 2016 through 2019 and then remain at 35 percent. By 2023, basic premiums would rise to \$200 a month for Part B and \$63 a month for Part D under this alternative. Those changes would have no effect on the total premiums of enrollees paying income-related premiums.⁴ In all, this alternative would decrease net Medicare spending (total Medicare spending minus beneficiaries' premiums and other offsetting receipts) by \$274 billion between 2015 and 2023, CBO estimates.
- The second alternative would freeze through 2023 all of the income thresholds for income-related premiums, extending the current freeze by four years. Under this alternative, CBO estimates, net Medicare spending would be reduced by \$20 billion between 2020

and 2023, and the share of enrollees paying incomerelated premiums would rise from 10 percent in 2019 to 13 percent in 2023.

The third alternative would combine the changes in the first two: increasing basic premiums for Parts B and D to 35 percent of costs per enrollee and freezing the income thresholds for income-related premiums. Those changes would reduce net Medicare spending by \$287 billion through 2023, CBO estimates (slightly less than the sum of the savings from each alternative alone because of the ways in which the two policies would interact). The combined changes would raise premiums for most enrollees in Parts B and D and would increase the share of enrollees paying IRPs to 9 percent in 2023.⁵

One rationale for raising premiums is that it would shift some costs currently borne by all taxpayers to Medicare enrollees. Another rationale is that higher premiums for Part D would increase competitive pressure in the market for prescription drug plans by absorbing a larger share of enrollees' income and thus giving enrollees a stronger incentive to choose less expensive plans. Such pressure could cause prescription drug plans to lower their bids, which would generally lead to reductions in the premiums for those plans, in the federal government's costs, and in the total cost of drugs for elderly people. (Such effects, however, are not included in the estimates shown here.)

A disadvantage of this option is that it would reduce disposable income for most Medicare enrollees—although not for low-income enrollees whose Medicare premiums are paid by Medicaid or for higher-income enrollees who pay income-related premiums. However, state Medicaid programs would face higher costs for those Medicare enrollees whose premiums are paid by Medicaid, such as enrollees in the Part D low-income subsidy program (22 percent of Medicare beneficiaries) and certain low-income Part B enrollees with limited assets (about 17 percent of Medicare beneficiaries). Also, because people's income tends to rise over time, freezing all of the income thresholds (as in the second and third alternatives) would cause a growing share of enrollees to become subject to income-related premiums in later years.

^{4.} The increases in the basic premiums under this approach would lead to corresponding reductions in the additional premiums paid by people with higher income, leaving their total premiums unchanged. Because the income-related premium for enrollees in the lowest IRP bracket equals 35 percent of costs per enrollee, this alternative would effectively phase out the first IRP for both Parts B and D.

^{5.} Fewer enrollees would be subject to an income-related premium under the third alternative than under the second because (as in the first alternative) the increase in the basic premium to 35 percent of costs per enrollee would effectively phase out the first IRP bracket for both Parts B and D.

Health Option 10

Bundle Medicare's Payments to Health Care Providers

										То	tal
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
0	0	0	-0.4	-1.1	-1.9	-2.8	-3.2	-3.5	-3.6	-1.5	-16.6
0	0	0	-1.2	-3.1	-5.4	-7.8	-9.1	-9.8	-10.2	-4.3	-46.6
	0	0 0	0 0 0	0 0 0 -0.4	0 0 0 -0.4 -1.1	0 0 0 -0.4 -1.1 -1.9	0 0 0 -0.4 -1.1 -1.9 -2.8	0 0 0 -0.4 -1.1 -1.9 -2.8 -3.2	0 0 0 -0.4 -1.1 -1.9 -2.8 -3.2 -3.5	0 0 0 -0.4 -1.1 -1.9 -2.8 -3.2 -3.5 -3.6	2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2014-2018 0 0 0 -0.4 -1.1 -1.9 -2.8 -3.2 -3.5 -3.6 -1.5

Overview of the Issue

Although some steps have been taken to move toward other payment methods, most payments for health care—under the Medicare program and other forms of insurance—are made on a fee-for-service basis. In a feefor-service system, separate payments are generally made for each office visit, lab test, surgical procedure, or other service that is delivered by doctors, hospitals, or other health care providers. The fee-for-service payment method tends to create incentives for providers to deliver more services (and more expensive services) but not to coordinate the care that patients receive. Many experts thus believe that the widespread use of fee-for-service payment has contributed significantly to the high costs and uneven quality of health care in the United States.

Those concerns have prompted considerable interest in the idea of bundling payments, in which single payments would be made for groups of related services. The broad concept of bundling could be applied in various ways, but one commonly discussed approach is to make fixed payments for each "episode of care"-that is, for all or most of the services that patients receive from various providers that are related to a particular disease or treatment over a defined period. Episode-based payment does not always involve multiple providers. For example, obstetricians often receive a fixed payment (or "case rate") for all of the care they provide to a pregnant patient; that payment does not cover the costs of hospital care for a birth or prenatal care delivered by other providers. However, this discussion focuses on episode-based bundled payments that encompass services delivered by a range of individuals and organizations during the course of a patient's treatment-an approach that offers more

opportunities for savings but is more difficult to implement successfully.

In any system of bundled payments, the amount of the payments would differ depending on the diseases or treatments involved and would reflect the average costs of providing those treatments. In most proposals for bundling, however, payments would not vary with the number or mix of services provided to a particular patient. As a result, providers of care covered by a bundled payment would have an incentive both to limit the cost or reduce the number of services they provide and to coordinate care so as to avoid costly complications and the delivery of unnecessary services. At the same time, bundling payments could give providers an incentive to stint on care that is medically beneficial. And as with fee-for-service payment, episode-based payment would not encourage providers to keep patients healthy or to prevent episodes of care from occurring in the first place.

Medicare already bundles some of its payments, but they typically cover services provided by a single individual or organization. For example, hospitals generally receive a fixed payment for each admission to cover all of the discrete goods and services they provide during a patient's stay. Likewise, home health care agencies receive a fixed payment to cover all of the visits they provide to a patient during a 60-day episode of care, and skilled nursing facilities (SNFs) are paid a per diem rate that covers all of the services they furnish to a resident in a day.

Nevertheless, a patient undergoing surgery typically generates a range of separate Medicare payments before, during, and after his or her hospital stay: to the hospital in which the procedure takes place; to the surgeon performing the operation; to the anesthesiologist; to other doctors providing care while the patient is in the hospital; to doctors and labs for follow-up visits and tests after the patient is discharged; and to SNFs, home health care agencies, or other organizations providing postacute care (recuperation and rehabilitation services after a hospital stay). All told, CBO estimates, Medicare spent more than \$170 billion in 2013 on services provided during a hospital stay or within 90 days of discharge. That total accounts for at least half of all nondrug spending in Medicare's fee-for-service program.

One rationale for bundling payments for those services is that Medicare's current costs often vary significantly for a given type of episode, and in many cases that variation does not seem related to differences in patients' illness or outcomes. One recent study found that Medicare's average payments for several common surgical episodes (hip replacement, heart bypass, back surgery, and colon surgery) frequently varied among hospitals by 10 percent to 40 percent, even after accounting for disparities in patients' health and for geographic differences in the prices that Medicare pays for specific services.¹ A large share of that variation in costs stemmed from spending on postacute care, but in many cases differences in total payments for the initial hospitalization and for readmissions were notable as well.

Similarly, an analysis by the Medicare Payment Advisory Commission (MedPAC) concluded that the extent and types of postacute care that patients receive after being discharged from a hospital "vary widely for reasons not explained by differences in beneficiaries' health status, indicating that, in aggregate, fewer services could be furnished to Medicare beneficiaries without necessarily compromising patient outcomes."² Examining 10 types of episodes that frequently involve postacute care, MedPAC found that spending on such care within 90 days of a hospital discharge commonly varied more than fourfold between higher-cost and lower-cost cases—a gap that averaged about \$13,000 per case during the 2007–2008 period.³ Several demonstration projects to experiment with bundling Medicare payments have been launched over the years-most recently, the Bundled Payments for Care Improvement initiative, which the Centers for Medicare & Medicaid Services (CMS) began developing in 2011 under provisions of the Affordable Care Act and which has just started to operate. That initiative is exploring four models of episode-based bundled payments; the models differ in their scope and payment methods, but in all four, an episode of care is triggered by a hospital admission. Participation in the initiative is voluntary, and so far more than 300 organizations (mostly hospitals) have expressed interest in taking part. Results from that initiative will not be available for some time, and the voluntary nature of the initiative raises questions about how broadly applicable those results will prove to be. Earlier (but more limited) demonstration projects about bundling yielded some estimated savings for Medicare, at least on a preliminary basis, but they were also voluntary. The main problem in evaluating such voluntary initiatives is that the hospitals that opted to participate were probably more capable of changing the ways they deliver care, and more likely to succeed financially, than hospitals that decided not to take part. Thus, participants' experience with bundling seems likely to overstate the savings that would probably be achieved if all providers were required to adopt bundled payments.

In addition to Medicare's demonstration projects, private insurers and state Medicaid programs are exploring episode-based payment. However, their efforts are generally at an early stage as well.

Key Design Choices That Would Affect Savings

Payment bundling is a broad concept that could take many forms. The federal savings that could result from greater bundling would depend on many design specifications, such as the types of bundles constructed and their scope, the duration of the services covered by a bundle, the levels at which bundled payments were set and the mechanisms used to set them, the method of payment used, the schedule for implementing the bundling policy, and the terms of participation (in particular, whether bundling would be voluntary or mandatory).

David C. Miller and others, "Large Variations in Medicare Payments for Surgery Highlight Savings Potential from Bundled Payment Programs," *Health Affairs*, vol. 30, no. 11 (November 2011), pp. 2107–2115, http://dx.doi.org/10.1377/hlthaff.2011.0783.

^{2.} Medicare Payment Advisory Commission, *Report to the Congress: Medicare and the Health Care Delivery System* (June 2013), p. 59, http://go.usa.gov/WatW.

^{3.} CBO's analysis of numbers generated by MedPAC (published in *Report to the Congress: Medicare and the Health Care Delivery System*), which compared the 25th and 75th percentiles of the distribution of costs per case.

In general, more extensive bundles encompass more spending and may provide more opportunities to generate savings. But they also expose health care providers to more financial risk, particularly when the total costs of the bundle depend on services delivered by a variety of providers who are not affiliated. Bundling payments for different providers can also raise significant administrative challenges, and some solutions to those challenges may weaken incentives to control costs. In addition, aggregating payments while giving doctors, hospitals, and other providers greater leeway to share savings among themselves could encourage those providers to generate more episodes of care.

Among the many design issues that arise, the levels of bundled payments and the rate-setting and payment mechanisms are perhaps the most important. Fundamentally, reducing federal spending through bundled payments would require providers to be paid less overall than they are under current law—either because they would be delivering fewer or less complex services to enrollees or because they would be receiving less money per service.

Types and Scope of Bundles Constructed. Recent proposals for bundling payments generally involve grouping services that are provided during an episode of care, either to treat a patient with a particular disease or to provide a particular treatment (such as a surgery) and its related care. In principle, nearly all of the services that patients receive could be grouped into episodes of care, but in practice, the wholesale adoption of episode-based payment would face many obstacles. For example, ongoing efforts to create all-encompassing "grouper" software that assigns each of the services received by Medicare patients to specific episodes have been hampered by the fact that Medicare patients are more likely than younger people to suffer from multiple health problems at the same time, which makes it harder to determine which services should be assigned to which episodes.

A more feasible approach to bundling may be to group only those payments that are related to a hospital admission—the approach being taken in CMS's demonstration project and in several private-sector initiatives. Under the demonstration, the scope of the bundles varies: One model (labeled "Model 4" by CMS) covers services that physicians and hospitals provide during an inpatient stay, another model ("Model 3") covers only postacute care provided after a hospital discharge, and yet another model ("Model 2") includes all care provided during an admission as well as postacute care.⁴ Even with those distinctions, defining which services provided after a discharge are "related" to a hospital admission can be difficult. Excluding certain services from the bundle could give providers an incentive to deliver more of those services. But including more services and more types of providers in the bundle would add to the administrative complexity of the payment system.

Duration of Each Bundle. The amount of spending encompassed by a bundle-and the financial risk that providers would face under a bundled-payment policywould also depend on the length of time that the bundled payment would cover. For chronic health problems that generally are not cured, such as diabetes or hypertension, episodes of care may extend for a full year. With episodebased bundles that center on a hospital admission, proposals that include postacute care generally cover services provided over periods that range from 30 days to 90 days after discharge. According to MedPAC's analysis of 10 common episodes that usually involve extensive postacute care, 84 percent of the spending that would be included if a bundled payment covered 90 days of services would also be included in a 30-day bundle. Similarly, CBO's analysis of payment data for a broader set of episodes, which CMS generated for the bundled-payment demonstration, found that about three-fourths of the spending incurred during a 90-day episode was captured by a 30-day episode. (Both findings reflect the fact that hospital payments usually constitute a majority of costs for such episodes.) Thus, extending the duration of bundles from 30 days to 90 days would capture more spending, but far less than three times as much.

MedPAC also examined the variability of the resources used to care for patients. That variability indicates the extent to which providers' costs for delivering care might deviate from the fixed payment they would receive and thereby sheds light on the degree of financial risk that providers might face under a bundled-payment policy. MedPAC found that the variability of resources used per episode of care was only slightly greater for 90-day

^{4.} Model 1 of the CMS demonstration is more limited in scope. Under that model, Medicare pays participating hospitals a discounted amount for each admission, and the hospitals have more flexibility than they do under current law to share savings from changes in care delivery with the physicians who provide inpatient care. Otherwise, however, that model does not alter Medicare's methods for paying physicians or other providers.

episodes than for 30-day episodes—and was comparable to the variability of hospitals' own costs per admission under Medicare's current payment system for hospitals. (That system generally makes a fixed payment per admission that is based on the diagnosis-related group to which the patient is assigned.) Those findings suggest that providers would not bear undue financial risk under such a bundled-payment policy. But the degree of risk would also depend on how the rates for bundled payments were determined and on whether the payment system incorporated additional mechanisms to limit providers' financial exposure.

Payment-Setting Mechanism and Level. Once the scope and duration of bundles had been defined, a central question would be how to set the payment rate for each bundle. The federal savings generated by a bundling policy would largely depend on how those rates compared with Medicare's total payments to treat the same medical conditions under current law.

Two broad alternatives for rate setting are administered pricing and competitive bidding. Under the former approach, CMS could set payment rates for bundles using information about past Medicare costs or other factors (an approach that is common in fee-for-service Medicare). Such administered prices could be set below currently projected spending levels to generate savings for the federal budget, but those prices might initially overstate or understate the average savings that providers could actually achieve. Prices would need to be rebased periodically to keep payments in line with the costs of efficient providers. However, if the bundled payment rates for each group of providers reflected their average costs per episode (rather than a national or regional average of those costs), rebasing could undercut incentives to control costs per episode because providers would know that higher current costs would translate into higher bundled payment rates in the future.

Under a competitive bidding system, hospitals might submit bids in advance indicating the payment they would accept for each type of episode. CMS could then exclude high bidders from Medicare or use an average of the bids to set its payment rate. In theory, bidding systems can quickly reveal the costs that efficient providers incur. In practice, however, providers that are not already integrated to deliver the full spectrum of patients' care during an episode might have trouble determining an appropriate bid. As experience with bundled payments grew, those challenges could become more manageable; thus, one option might be for the payment-setting mechanism to evolve over time from administered pricing to competitive bidding. Even then, however, many hospitals and some medical specialists might not have strong incentives to bid their true costs, partly because of limited competition in their markets.

Method of Payment. The concept behind bundling payments is generally to make a fixed payment per bundle, so that providers collectively bear all of the excess costs if total spending exceeds the fixed payment and get to keep all of the savings if their costs are lower than that payment. One way to implement that approach would be to make a single, prospective payment to one individual or organization-such as the hospital responsible for the initial admission-and require that recipient to arrange payments to other providers delivering the care covered by the bundle. For bundles that applied only to services provided during a hospital stay (including physicians' services), that approach would seem relatively easy to administer; it is the payment method that CMS adopted for Model 4 of its current demonstration. For bundles that included services provided after discharge from a hospital, however, a single prospective payment to the hospital could prove complex to administer: The hospital would need to have payment arrangements with-and oversee-all of the various providers that might be involved in delivering care after a patient was discharged.

As an alternative to prospective payments, CMS could continue to make fee-for-service payments to providers (perhaps with a portion withheld) and later reconcile those total payments with the target payment rate for each bundle. In that case, CMS would have to distribute bonus payments or recoup overpayments if the total costs of the bundle were below or above the target. (A similar approach is being used in Model 2 of the current demonstration, which includes both inpatient and postacute care.) CMS would probably have to prorate the bonus payments and recoupments for all of the providers delivering services that were covered by the bundled payment, because the agency could not determine which providers were responsible for generating any savings or excess costs. Providers could develop selective arrangements among themselves to reallocate those bonuses and penalties (a process called "gain sharing"), but they would not be required to do so. (As with other provisions of a

bundled-payment system, payments could evolve over time—in this case, from a prorated system to prospective payment.)

For a simplified example of how that prorated method might work, suppose that a given episode of care typically cost Medicare \$20,000 per patient (\$12,000 for services provided by a hospital and \$8,000 for postacute care) and that CMS set the spending target for that episode at \$19,000. If the payments to the hospital remained unchanged but the payments for postacute care fell by half, to \$4,000-perhaps by reducing the length of a stay in a skilled nursing facility or shifting to home health care instead-the episode would initially cost Medicare \$16,000. In that case, the hospital and the postacute care provider would divide a bonus payment of \$3,000, the difference between the initial cost and the \$19,000 target. Of that bonus payment, \$2,250 would go to the hospital (because it would account for three-fourths of the \$16,000 cost) and \$750 would go to the organization that provided postacute care. The outcome would be different if Medicare's fee-for-service payments rose instead of fell. If the hospital's payments remained at \$12,000 but payments for postacute care increased from \$8,000 to \$12,000, the episode would initially cost Medicare \$24,000. In that case, the hospital and the postacute care provider would each account for half of the episode's initial cost and thus would each owe Medicare \$2,500, or half of the \$5,000 difference between that initial cost and the \$19,000 target.5

As the example illustrates, the way in which bundled payments, bonuses, and penalties were distributed would affect both providers' incentives to reduce costs per episode and the extent of financial risk that providers faced. In particular, prorating bonuses and penalties would mean that savings on payments to one provider might be shared by other providers and that higher initial payments to one provider might translate into penalties for other providers. Those features would weaken each individual provider's incentive to control costs per episode, but they might also reduce the risk that providers would face if their patients used above-average levels of care. Whether higher or lower costs incurred by providers would translate into changes in Medicare's initial payments would depend on the types of services involved. For example, higher costs for hospitals to coordinate patients' care would not trigger higher Medicare payments initially (although they could generate bonus payments if the use of other services for which Medicare pays individually, such as days in a skilled nursing facility, was reduced as a result). Similar issues can arise with bundled payments that are made prospectively, depending on how those payments are subsequently allocated among the providers delivering care during an episode.

Proposals for bundling payments may also include features designed to compensate providers for costs that are beyond their control or to encourage providers to treat high-cost cases (which they might otherwise be reluctant to do); such features would influence both the incentives and risks for providers. For example, payment targets could be risk adjusted to reflect predictable differences in the costs of treating patients who were healthier or sicker than average. Also, episodes that were extremely costly could generate additional "outlier" payments (as happens for Medicare's hospital payments under the current payment system). Finally, some proposals would have Medicare and providers share savings and losses when initial payments were below or above the payment target (for example, with a 50-50 split) rather than having providers keep all savings and bear all excess costs.

Implementation Schedule. Savings from a bundledpayment system would depend partly on how soon the new system began, how quickly it was phased in, and how comprehensive it ultimately became. Implementing a bundled-payment system and preparing to operate under it would probably take the government and health care providers a few years following enactment of the policy—in part because CMS would still be in the midst of implementing and learning from the current demonstration.

In that demonstration, CMS has designated 48 types of episodes encompassing treatments that seem most amenable to bundling and that together span about 25 percent of Medicare's diagnosis-related groups (DRGs). (Because the DRGs included are more common than other DRGs, those bundles would encompass about twothirds of all DRG payments in fee-for-service Medicare if

^{5.} If Medicare had withheld a portion of the initial payments, the withheld funds would be paid to providers who were involved in episodes with costs at or below the targets, and they would offset the penalties owed by providers who were involved in episodes with costs exceeding the targets. Although such calculations would be made for each individual episode of care, actual reconciliation of payments between CMS and a given provider could occur on a periodic basis using total net amounts of bonuses and penalties incurred.

they were applied nationwide.) Most participants in Models 2 and 4 of the demonstration are adopting bundled payments for only a few of the 48 types of episodes, which suggests that broader implementation should proceed gradually. However, adopting such bundling for only a limited set of episodes could expose providers to random fluctuations in costs if they delivered services for relatively few episodes of care, whereas with a larger range of episodes, random variations in costs would be more likely to average out. Those considerations might argue for implementing bundled payments in a more rapid and extensive way.

Terms of Participation. The budgetary effects of bundling would depend significantly on whether participation was voluntary or mandatory and on which providers (if any) were required to participate. Indeed, if participation was voluntary and the bundled payment was set to equal the national average of Medicare's costs, federal spending would probably rise because providers that expected to increase their total payments under that system would be much more likely to participate than providers that faced a cut in payments. In its demonstration, CMS avoids that problem by basing the payment targets for each participating hospital on Medicare's past costs for episodes of care initiated at that hospital; as a result, hospitals with below-average costs per episode would have to reduce their costs further to gain financially. Still, because the CMS demonstration might be expanded if it proves successful, some of the savings from bundling payments may be generated under current law-so enacting a bundling program under Medicare that was similar and voluntary might not save the federal government additional money. Legislation specifying a mandatory shift to episode-based bundled payment over the next several years, however, could generate federal savings because such a shift would probably represent a more aggressive approach than CMS will pursue under its current authority.

Another factor affecting federal savings is whether hospitals that Medicare currently pays on the basis of their own costs (rather than making fixed payments) would have to participate in the bundling policy. Such hospitals, which are designated "critical access hospitals," account for about 5 percent of Medicare's hospital payments.

Specific Alternatives and Estimates

To illustrate the budgetary effects of bundling Medicare payments, CBO examined two alternative approaches. In OPTIONS FOR REDUCING THE DEFICIT: 2014 TO 2023 229

sion. The two approaches differ in several ways:
 In the first alternative, a bundled payment would cover services provided by hospitals and physicians during a patient's initial hospital stay and any related hospital readmissions occurring within 30 days of discharge. For each admission, the hospital would receive a prospective payment that was 3 percent lower than Medicare's projected average payments per episode for

those services under current law.

■ In the second alternative, the bundled payment would cover the same inpatient and physicians' services but would also include any postacute care (such as SNF, home health, or rehabilitation services or outpatient physical therapy) that was delivered within 90 days of discharge. Other services provided after discharge, including physician visits and lab tests, would be excluded from the bundle (on the grounds that payments for those services would generally constitute a small share of the total payments for each bundle and might represent unrelated services). In this alternative, CMS would pay claims on a fee-for-service basis, withholding 10 percent pending reconciliation of actual payments with the spending targets. Those targets would be 5 percent lower than Medicare's projected average payments per episode under current law.

The savings target of 3 percent in the first alternative equals the discount required of participants in Model 4 of the CMS bundling demonstration. Nationwide, less than 10 percent of hospitals chose to participate in any of those bundling models, which indicates that many hospitals and associated health care providers would face challenges in meeting such a target. The larger savings target of 5 percent in the second alternative reflects CBO's judgment that more opportunities would exist to economize on spending if postacute care was included. That judgment partly reflects the findings that spending on postacute care varies widely for reasons not explained by differences in patients' health, as well as studies indicating that the transition period after a hospital discharge presents substantial opportunities to improve the quality and efficiency of care. According to MedPAC's analysis of 10 common episodes, reducing spending on postacute care and on hospital readmissions within 90 days of discharge

by an average of 10 percent would decrease the overall costs of those bundles by 5 percent.

In both alternatives, the bundled-payment system would apply to all short-term acute care hospitals beginning in 2017 and would be phased in over four years, at which point it would cover the 48 types of episodes specified in the CMS demonstration. Admissions for other DRGs would remain exempt from bundling. CMS would have discretion about which bundles to implement first but would have to phase in the policy so that roughly equal increments of affected Medicare spending were added each year (thus covering 25 percent of that spending in 2017, 50 percent in 2018, 75 percent in 2019, and 100 percent in 2020). Once bundling began, the capitation amount or target payment-which would initially be based on an extrapolation of Medicare's past payment levels—would be updated using a weighted mix of the update factors that apply to the types of services included in each bundle. (Medicare's payment rates are generally updated each year to reflect increases in providers' input costs, which can vary for different services, and those updates may also be modified by statute.) Medicare's extra payments for graduate medical education and for hospitals that treat a disproportionate share of lowincome patients would not be included in the target payment (or counted as part of the bundle's costs) and would continue as under current law.

CBO estimates that the first alternative—bundling payments only for inpatient care—would reduce Medicare spending by \$17 billion through 2023. The second alternative—bundling payments for inpatient and postacute care—would produce larger savings: \$47 billion through 2023. By that year, with the changes fully phased in, the savings from the first alternative would represent 0.5 percent of Medicare's net outlays for all nondrug services, and the savings from the second alternative would represent 1.4 percent of those outlays.

A primary factor determining the savings under this option is that the spending that would be bundled accounts for about one-fifth (for the first alternative) or one-third (for the second alternative) of gross nondrug outlays in Medicare's fee-for-service program. Savings would be greater if all DRGs were included; limiting bundling to the 48 types of episodes specified by CMS excludes about one-third of spending connected to hospital admissions. Savings would also be greater if the reductions used to determine the payment targets were larger than 3 percent and 5 percent, respectively, but achieving greater savings by economizing on services would become increasingly difficult for most providers.

Another factor affecting the estimated savings from both alternatives is that a bundled-payment policy would overlap or interact with several initiatives being pursued under current law, including CMS's latest bundling demonstration; penalties for hospitals with high rates of readmission for certain conditions (which would, in this option, be phased out for affected DRGs as bundled payments were phased in); and accountable care organizations, or ACOs (groups of providers that accept responsibility for managing the quality and total costs of patients assigned to them). ACOs are allowed to share savings with Medicare if the total costs of treating their patients are below certain targets; thus, those organizations might capture some of the savings generated by the broader application of bundling. CBO's estimates for the two bundled-payment alternatives take those overlaps into account. In addition, savings under Medicare's feefor-service program would translate into lower federal payments for Medicare Advantage plans (private insurance plans that provide Medicare benefits); that effect is also included in the estimates above.

The way in which savings targets were set would affect the amount of savings that particular hospitals and other providers would need to achieve under a bundledpayment system. Those effects can be seen by comparing two approaches to implementing the second alternative that would yield roughly the same overall savings to Medicare but that would have very different implications for different providers. One approach-used in CMS's bundling demonstration—would set the payment target for a given episode of care at a different level for each hospital, reflecting Medicare's average historical payments for that type of episode initiated in *that* hospital. Another approach-which would more closely resemble the DRG payment system—would set the payment for each bundle of services using the national average of Medicare's payments for that bundle, adjusted only for geographic differences in Medicare's payment rates (which reflect geographic differences in providers' input costs, but not differences in the average quantity or intensity of services delivered).

The first approach (using hospital-specific targets) might make it easier for providers with high-cost practice patterns to achieve the target level of savings but might make it harder for providers that were already operating at a lower cost to achieve the specified savings goal. The second approach (using national-average targets) would create greater challenges for high-cost providers, whereas low-cost providers could receive bonus payments even if they did not change their practice patterns under the new system. Specifically, data from one of the studies cited above indicate that, with national-average targets, about one-fourth of hospitals and associated providers would have to reduce their costs to Medicare for specific episodes of care by more than 10 percent to achieve a target that was 5 percent below the national average.⁶ At the same time, about 40 percent of hospitals and associated providers would not have to reduce their average costs to Medicare at all to meet that target (and could see their payments increase). By contrast, with hospital-specific targets, all providers would need to reduce their average costs per episode by 5 percent to keep their costs in line with their payments. (As with other parameters of the option, a transition process could be specified that would shift the targets over time from hospital-specific to national-average amounts.)

Other Considerations

Bundling Medicare's payments for episodes of inpatient or postacute care, or both, would represent a significant change to the program's current payment system. That change would have myriad effects on health care providers, on Medicare beneficiaries, and on patients and programs outside Medicare. Many of those effects are difficult to predict precisely.

Effects on Medicare Providers. Adapting to a bundledpayment system would create both challenges and opportunities for affected health care providers. If Medicare's payments encompassed services delivered by a range of providers, those providers would probably want to enter into new organizational arrangements to manage patients' care and to allocate payments equitably. Prospective payments would effectively require the affected providers to contract with each other about payment terms and responsibilities, and providers would need to structure those contracts carefully so that participants' incentives were properly aligned with the overall goal of delivering high-quality care at a lower total cost. Making fee-for-service payments, reconciling them afterward, and distributing bonuses or penalties on a proportional basis would not *require* such arrangements to exist and thus would be easier to implement nationwide than prospective payments. But, as noted above, those payments might not match well with each provider's costs, and the proportional sharing of bonuses or penalties among participants would weaken their individual incentives to control the total cost of an episode of care. Consequently, hospitals would still be encouraged to make selected arrangements with doctors and postacute care providers to coordinate care and reallocate its financing.

Given those complexities, the effects of broadly bundling Medicare payments for services delivered by a range of individuals and organizations are uncertain. Under the first alternative described above, hospitals and physicians might collaborate to reduce input costs (for example, by consolidating purchases of medical devices and seeking volume discounts from their manufacturers) and then share the gains from doing so. Under the second alternative, hospitals would probably aim to reduce the quantity and intensity of postacute care that their patients received and to economize on the use of physicians' services during a hospital stay, but they would have flexibility about how to pursue those efforts.

The extent to which hospitals and other providers would be ready to undertake such changes, and ways in which they would react to a bundled-payment system, would naturally vary. Providers that were able to reduce their costs per episode could see meaningful improvements in their profit margins, whereas providers that were not able to reduce costs could see those margins decline significantly. In some cases, providers might respond by increasing the number of admissions and episodes of care that occurred; doctors and hospitals might have stronger incentives to do so than under current law because they could share savings on low-cost cases. Providers might also change their coding practices or take other steps to deliver more services that would be paid for outside the bundled payments.

Effects on Medicare Beneficiaries. The effects of payment bundling on Medicare beneficiaries are also uncertain. With an episode-based payment system, beneficiaries who were hospitalized could benefit from greater coordination of their care, particularly during the

CBO analysis based on David C. Miller and others, "Large Variations in Medicare Payments for Surgery Highlight Savings Potential from Bundled Payment Programs," *Health Affairs*, vol. 30, no. 11 (November 2011), pp. 2107–2115, http://dx.doi.org/ 10.1377/hlthaff.2011.0783, and on additional data provided by the authors.

transition from the hospital to postacute care. The incentive to avoid hospital readmissions would exist under both of the alternatives described above, but the incentive to limit other costs for postacute care would clearly be stronger under the broader bundling alternative. At the same time, hospitals might reduce the use of physicians' services or postacute care that was medically beneficial, which could have a negative effect on beneficiaries' health (although providers would still want to keep their patients from developing complications that generated additional costs for which they would not ultimately be reimbursed).

To address those concerns, implementation of a bundledpayment system could be accompanied by greater monitoring of the quality of patients' care, or the payment of any bonuses could be made conditional on achieving certain standards for care quality. Currently available measures of care quality are limited, however: They focus mostly on specific processes of care or on whether patients develop certain complications or need to have a surgery redone, but they generally do not reflect patients' health outcomes (such as improvements in health or avoidance of new medical problems). Although quality measurement is improving over time, developing new quality measures is generally a multiyear process. Achieving agreement about outcome-based measures can be especially challenging because poor outcomes may reflect both the performance of providers and the severity of patients' health problems-and disentangling those effects is difficult.

Beneficiaries' cost-sharing requirements would not change under this option, but their out-of-pocket costs could decline if episode-based payments reduced the use of services that require cost sharing (such as visits with physicians or stays in skilled nursing facilities that last longer than 20 days). Reductions in Medicare's payments for physicians' and outpatient services covered by Part B of the program would translate into lower Part B premiums for enrollees.

Broader Effects. Widespread application of a bundledpayment policy in Medicare could have a range of spillover effects on care and spending for other patients, but those effects could work in different directions. On the one hand, because Medicare is such a large payer, changing its payment methods could lead providers to adopt lower-cost practice patterns for all of their patients. (Medicare currently accounts for about one-fifth of national health expenditures and about one-fourth of all payments to hospitals.) In turn, those changes could reduce federal spending on the Medicaid program and the costs of federal tax subsidies for private health insurance. Moreover, private insurers and state Medicaid programs could find it easier to implement bundling policies of their own, which would tend to reinforce providers' incentives to limit the cost of episodes of care.

On the other hand, if providers could not reduce the cost of their care for Medicare patients to the target amounts, the policy change would hurt their financial situation, which they might respond to by trying to shift some of their costs to other payers. Similarly, payment bundling could lead to greater consolidation of providers-in an effort to deliver more integrated care and control the full range of episode costs more directly-which in turn could give providers more bargaining power to secure higher payments from private insurers. Higher private payment rates would translate into higher insurance premiums and would raise the costs of federal tax subsidies for health insurance. And if other payers did not adopt similar payment models, it might not be feasible for providers to change their practice patterns, because reducing the use of services would harm their finances overall.

More broadly, a concern about bundling payments for episodes of care is that-as with fee-for-service payment-providers would still lack clear financial incentives to prevent episodes from occurring and would have only limited incentives to provide less intensive forms of treatment. The amount of the bundled payment would depend mainly on the type of treatment provided; thus, it would be much larger for, say, a heart bypass operation than for an angioplasty to treat a blocked coronary artery. By itself, then, adopting a bundled-payment policy might not slow the development and spread of new medical treatments and technologies, which have historically been key drivers of the overall growth of health care costs. For those reasons, some experts question whether bundledpayment policies are a useful bridge to broader reform of health care payments or instead are a diversion from the efforts needed to develop broader payment models.

Incentives to keep patients healthy and to control total costs for care would be stronger with even broader bundles that encompassed all of the services that a patient receives during a month or a year—such as capitation payments or shared-risk arrangements with accountable care organizations or similar entities. (In shared-risk arrangements, ACOs not only retain part of the savings if they reduce their patients' total costs for health care below a target amount but also are penalized for part of the added costs if total spending for their patients exceeds the target amount.) Many providers are not ready to accept such degrees of financial risk, however, so bundling payments for episodes of care and encouraging providers to control the costs of those episodes might constitute a useful step, at least for the interim.

RELATED CBO PUBLICATION: Lessons from Medicare's Demonstration Projects on Disease Management, Care Coordination, and Value-Based Payment (January 2012), www.cbo.gov/publication/42860

NOVEMBER 2013

Function 570

Require Manufacturers to Pay a Minimum Rebate on Drugs Covered Under Part D of Medicare for Low-Income Beneficiaries

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Mandatory Outlays	*	-5	-13	-15	-15	-15	-15	-15	-14	-16	-48	-123
Notes: This option would take effect in January 2015.												

* = between zero and \$500 million.

Medicare's voluntary outpatient drug benefit, known as Part D, is delivered by private drug plans; federal subsidies for that coverage, net of the premiums that enrollees pay, totaled about \$58 billion in calendar year 2012. (Those subsidies include payments to stand-alone prescription drug plans as well as to prescription drug plans associated with Medicare Advantage plans, but they exclude subsidies paid to employers for prescription drug coverage provided by their health plans for retirees.) One way that private drug plans limit the cost of providing Part D benefits is by negotiating rebates from the manufacturers of brand-name drugs in return for favorable coverage of those drugs, such as lower copayments for preferred drugs. That strategy is generally most effective for drugs that face competition from other drugs to treat the same medical condition. The Congressional Budget Office estimates that in 2011, manufacturers' rebates amounted to about 15 percent of gross spending on all brand-name drugs in Part D.

Before the establishment of Part D in 2006, Medicare beneficiaries who were also eligible for full benefits from Medicaid—known as "dual-eligible beneficiaries" received drug coverage through Medicaid. That program requires drug manufacturers to pay state and federal governments a significant rebate on their sales to Medicaid enrollees. The rebate amount, which is set in statute, was raised in 2010 from 15.1 percent to 23.1 percent of the price that manufacturers receive for sales to retail pharmacies (known as the average manufacturer price, or AMP). Additional rebates are required if a drug's price rises faster than overall inflation. (Those inflation-based rebates can be significant; in 2011, for example, the average statutory rebate under Medicaid, weighted by the dollar amount of drug purchases, was 58 percent of the AMP, with about half of that amount coming from the inflation-based rebate.)

When Part D of Medicare was established, dual-eligible beneficiaries were enrolled automatically in a lowincome-subsidy (LIS) program in Part D, which typically covers the premiums and most of the cost sharing required under the basic Part D benefit. LIS enrollees most of whom are dual-eligible beneficiaries—account for about 35 percent of Part D enrollees and about 55 percent of Part D spending. Currently, the rebates for drugs used by LIS enrollees are established in the same way as those for drugs used by other Part D enrollees: through negotiations between private Part D plans and drug makers.

This option would require manufacturers of brand-name drugs to pay the federal government a rebate on drugs purchased by enrollees in the Part D LIS program, starting in 2015. As with the current rebate system for Medicaid, manufacturers would have to pay a total rebate of at least 23.1 percent of a drug's average manufacturer price, plus an additional rebate for price increases that exceeded the rate of inflation since the drug's introduction.¹ If a drug manufacturer already provides discounts or rebates to Part D plans that apply equally to all Part D enrollees, any difference between those discounts or rebates and the total rebate amount that the manufacturer would

^{1.} Unlike with the current Medicaid rebate, however, this option would not have a "best price" feature (which requires manufacturers to pay a rebate that exceeds 23.1 percent of the AMP if the difference between the AMP and the best price obtained by a private purchaser, net of certain private rebates, is larger than 23.1 percent of the AMP).

owe under this option would be paid to the federal government.² If, however, the average Part D rebate for a drug already exceeded 23.1 percent of the AMP plus the inflation-based rebate, no rebate would be paid to the federal government for that drug. Manufacturers would be required to participate in this rebate program in order to have their drugs covered by Parts B and D of Medicare, by Medicaid, and by the Veterans Health Administration.

The rebates in this option would change the incentive for manufacturers to offer rebates to drug plans in exchange for preferred coverage of brand-name drugs and thus could change the average amount of rebates paid to drug plans. However, the impact on those rebates would be small because those rebates would count toward the total rebate amount owed to the federal government. Drug makers would also be expected to set higher "launch" prices for new drugs to limit the impact of the new rebate, particularly for new drugs that did not have close substitutes. Those higher launch prices would have varying effects on other drug purchasers: Employment-based health insurance plans would probably negotiate for larger rebates to offset some of the increase in launch prices, but state Medicaid programs would pay a higher price for new drugs, which in turn would raise federal spending for Medicaid. Even after accounting for such offsets, CBO estimates that this option would produce substantial savings for the federal government—a total of \$123 billion through 2023.

The main advantage of this option is that Medicare would pay less for drugs used by beneficiaries of the Part D LIS program. A disadvantage is that the net reduction in the prices paid for drugs under Part D might lead manufacturers to reduce the amount of funds they invest in researching and developing new products. The development of "breakthrough" drugs would be least affected, however, because those drugs could be launched at prices that would offset much of the new rebate.

Because manufacturers paid rebates to Medicaid for drugs purchased by the dual-eligible population before 2006, when those beneficiaries were still enrolled in Medicaid's drug benefit, there is a recent precedent for requiring such rebates for that population. However, the new rebate would also apply to LIS enrollees who were not dualeligible beneficiaries, so the total required rebate would be larger than when dual-eligible beneficiaries received their drug coverage through Medicaid (all else being equal). In addition, because the size of Medicaid's statutory rebate was increased in 2010, the adverse impact on manufacturers' incentives would probably be larger under this option than it was under the Medicaid rebate that applied to dual-eligible beneficiaries before the creation of Part D.

RELATED CBO PUBLICATIONS: Costs Under Medicare's Prescription Drug Benefit and a Comparison with the Cost of Drugs Under Medicaid Fee-for-Service (June 2013), www.cbo.gov/publication/44366; and Spending Patterns for Prescription Drugs Under Medicare Part D (December 2011), www.cbo.gov/publication/42692

^{2.} Drug makers are currently required to pay a 50 percent discount on purchases of brand-name drugs by non-LIS Part D enrollees whose total drug spending has reached specific thresholds. That discount would not reduce the rebates owed to the federal government under this option because the discount is provided only to the subgroup of Part D enrollees not eligible for the low-income subsidy program.

Health—Option 12

Function 050

Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees

											То	tal	
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023	
	Modify TRICARE Enrollment Fees, Deductibles, and Copayments												
Change in Mandatory Outlays	0	*	*	*	*	*	*	*	*	*	-0.1	-0.3	
Change in Revenues ^a	0	*	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.4	-1.6	
Change in Discretionary Spending													
Budget authority	0	-1.0	-1.5	-2.0	-2.2	-2.4	-2.6	-2.8	-3.0	-3.3	-6.8	-21.0	
Outlays	0	-0.8	-1.3	-1.9	-2.1	-2.3	-2.5	-2.7	-2.9	-3.1	-6.1	-19.7	
					Make	Retirees	Ineligib	le for TF	RICARE F	Prime			
Change in Mandatory Outlays	0	*	*	*	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	
Change in Revenues ^a	0	-0.2	-0.6	-1.0	-1.2	-1.3	-1.4	-1.5	-1.6	-1.6	-3.0	-10.5	
Change in Discretionary Spending													
Budget authority	0	-3.7	-5.7	-7.8	-8.3	-8.8	-9.4	-9.9	-10.6	-11.2	-25.5	-75.4	
Outlays	0	-3.0	-5.1	-7.1	-7.9	-8.4	-9.0	-9.6	-10.2	-10.8	-23.1	-71.0	

Notes: This option would take effect in October 2014.

* = between -\$50 million and \$50 million.

a. Negative numbers denote a reduction in revenues.

Nearly 10 million people are eligible for military health care, including 1.5 million members of the active military and the other uniformed services (such as the Coast Guard), certain reservists, retired military personnel, and their qualified family members. The costs of that health care have been among the fastest-growing portions of the defense budget over the past decade, more than doubling in inflation-adjusted terms since 2001; the Department of Defense (DoD) spent about \$50 billion in 2012 for health care. About 30 percent of that total was spent on working-age retirees (in general, those who are under age 65 and thus not yet eligible for Medicare) and their family members-a total of 3.5 million beneficiaries. Some 1.6 million (or about 45 percent of that group) were enrolled in TRICARE Prime, a plan that operates like a health maintenance organization. Its enrollees pay an annual fee of \$274 (for single coverage) or \$548 (for family coverage). Military retirees who do not enroll in TRICARE Prime may receive benefits under TRICARE Extra (a preferred provider network) or Standard (a traditional fee-for-service plan) without paying an enrollment

fee. (When beneficiaries choose an in-network provider for a given medical service they are covered under the Extra plan; if they choose an out-of-network provider for a different medical service—even within the same year they are covered under TRICARE Standard.)

The Congressional Budget Office projects that DoD's health care costs will increase by 25 percent from 2013 to 2023 (after an adjustment for inflation). This option comprises two alternatives that would reduce future growth in military health care spending by requiring working-age retirees and their families to pay more for TRICARE.

The first alternative would raise the enrollment fees, deductibles, and copayments for working-age military retirees who want to use TRICARE, as follows:

 Beginning in 2015, beneficiaries with single coverage could enroll in TRICARE Prime by paying a \$550 annual fee.

- For families, the enrollment fee would be \$1,100 per year, which is approximately equivalent to the \$460 fee first instituted in 1995 (after adjusting for the nationwide growth in health care spending per capita).
- The copayments for medical treatments under TRICARE Prime would increase.
- Single retirees (or surviving spouses) who used TRICARE Standard or Extra would have an annual deductible of \$350; the annual deductible for families would be \$700.
- In addition—and for the first time—users of TRICARE Standard or Extra would be required to enroll and pay an annual fee of \$50 (for single coverage) or \$100 (for family coverage).
- All of those new or increased fees, deductibles, and copayments would be indexed in the future to reflect the nationwide growth in per capita spending for health care.

The second alternative would make working-age military retirees and their families ineligible for TRICARE Prime, which is the most costly of the three programs for DoD. Those people could instead enroll in TRICARE Standard or Extra during the annual open-enrollment period or when a life event occurred (for example, a change in marital status). Enrollees in Standard or Extra would pay a monthly premium that would be set at 28 percent of the average cost of providing benefits for that group. In addition, the catastrophic cap (maximum out-of-pocket expenses) for military retirees and their dependents would be raised from the current \$3,000 per family to \$7,500 per family, the amount at which it was set before January 2002. That catastrophic cap would be indexed in the future to reflect the nationwide growth in per capita spending for health care.

CBO estimates that if TRICARE's fees, deductibles, and copayments were modified according to the first alternative, discretionary outlays would be reduced by \$20 billion between 2015 and 2023, under the assumption that appropriations would be reduced accordingly. Under the second alternative, discretionary outlays would be reduced by \$71 billion from 2015 to 2023. The budgetary impact of the second alternative would be substantially larger because it would affect more TRICARE Prime users. Under the first alternative, higher out-ofpocket costs would cause about 200,000 retirees and their family members to leave Prime, CBO estimates, many of them switching to other TRICARE plans that are less costly to the government. But under the second alternative, all 1.6 million retirees and their family members who are currently using Prime would be disenrolled from that program.

Both alternatives would also affect mandatory spending. Certain mandatory spending would increase because some retirees would rely more heavily on other federal health care programs, such as Medicaid (for those with low income) or the Federal Employees Health Benefits program (FEHB, for those who complete a career in the federal civil service after their military retirement). However, mandatory spending on retirees' health care costs would decrease for the Coast Guard, the uniformed corps of the National Oceanic and Atmospheric Administration, and the Public Health Service. (Health care costs for retired members of those three branches of the uniformed services are paid from mandatory appropriations. By contrast, DoD pays for the health care of its retirees out of its annual discretionary appropriations.) Overall, in CBO's estimation, mandatory spending would decline by \$300 million between 2015 and 2023 under the first alternative (because spending for people in those three uniformed services would decrease by more than spending on Medicaid and FEHB retirees would rise) but increase by \$500 million under the second alternative (because spending on Medicaid and FEHB retirees would increase by more than spending for the three uniformed services would fall).

CBO and the staff of the Joint Committee on Taxation estimate that, under the first alternative, federal tax revenues would drop by \$2 billion between 2015 and 2023, because some military retirees would sign up for employment-based health care plans in the private sector and therefore experience a shift in compensation from taxable wages to nontaxable fringe benefits. Under the second alternative, because more retirees would be affected by this change, federal tax revenues would decrease by \$11 billion over the same period.

One rationale for this option is that TRICARE coverage and space-available care at military treatment facilities were originally set up to supplement other health care for military retirees and their dependents (to ensure they had a safety net), not to replace benefits offered by postservice civilian employers. The migration of retirees from civilian coverage to TRICARE is one factor behind the rapid increase in TRICARE spending since 2000. This option would begin to curtail the growth in DoD's health care costs, freeing up resources for other defense priorities, such as purchasing and maintaining weapon systems and other equipment.

An argument against changing access to TRICARE coverage for military retirees and their dependents is that those retirees initially joined the military and remained for their entire careers with the understanding that they would receive medical care for free or at a very low cost after retiring. Significantly limiting TRICARE coverage for military retirees and their dependents would impose a financial cost on many of those beneficiaries and could adversely affect military retention. Another potential disadvantage of this option is that the health of users who remained in TRICARE might suffer if they did not seek health care or treat their illnesses in a timely manner because of higher copayments. However, their health might not be affected significantly if the higher copayments fostered more disciplined use of medical resources and primarily discouraged the use of low-value health care.

RELATED OPTION: Health, Option 5

RELATED CBO PUBLICATIONS: Approaches to Reducing Federal Spending on the Defense Health System (forthcoming); Long-Term Implications of the 2014 Future Years Defense Program (forthcoming); and The Effects of Proposals to Increase Cost Sharing in TRICARE (June 2009), www.cbo.gov/publication/41188

Health—Option 13

Function 550

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
	Restrict the Growth of Funding to 1 Percent a Year											
Change in Discretionary Spending												
Budget authority	0	-0.2	-0.6	-1.0	-1.4	-1.8	-2.3	-2.7	-3.1	-3.6	-3.1	-16.7
Outlays	0	*	-0.2	-0.6	-1.0	-1.4	-1.8	-2.3	-2.7	-3.1	-1.9	-13.1
				Reduce	2015 Fi	Inding a	nd Allow	Growth	at the F	Rate of Inf	lation	
Change in Discretionary Spending												
Budget authority	0	-3.2	-3.3	-3.3	-3.4	-3.5	-3.6	-3.7	-3.7	-3.8	-13.2	-31.5
Outlays	0	-0.8	-2.6	-3.1	-3.3	-3.4	-3.5	-3.6	-3.6	-3.7	-9.8	-27.6

Reduce or Constrain Funding for the National Institutes of Health

Notes: This option would take effect in October 2014.

* = between -\$50 million and zero.

The budget of the National Institutes of Health (NIH) has grown significantly over the past 15 years, primarily because of the large increases in NIH's appropriations (or budget authority) during the 1998–2003 period, when funding nearly doubled. In addition, NIH received \$10 billion in supplemental funding provided in the American Recovery and Reinvestment Act of 2009. In 2012, NIH accounted for nearly half of all nondefense discretionary spending for research and development.

This option consists of two alternatives that would reduce NIH's appropriations relative to the amounts in the baseline budget projections of the Congressional Budget Office. One alternative would restrict the rate of growth in appropriations to 1 percent per year. That alternative would reduce projected appropriations by \$17 billion from 2015 through 2023, thereby decreasing federal outlays by \$13 billion, CBO estimates. The other alternative would reduce NIH's 2015 appropriation to the amount provided in 2003, the last year in which NIH had a large increase in its appropriation; after 2015, funding would grow at the rate of inflation assumed in CBO's baseline projections. That one-time cut of about 11 percent would decrease projected appropriations by \$32 billion from 2015 through 2023, thus reducing federal outlays by \$28 billion over that period.

An argument in support of this option is that such reductions would encourage increased efficiencies throughout NIH and more careful focus on priorities that will provide the greatest benefits. NIH has 27 institutes and centers that fund research on a wide array of health-related topics. In addition, it supports more than 300,000 scientists and research personnel affiliated with more than 3,100 organizations worldwide. Furthermore, spending by NIH nearly tripled from 1997 to 2010. With such a broad range of personnel and activities and a large increase in funding, inefficiencies and duplicative or wasteful efforts are likely. In a 2009 report, the Government Accountability Office "found gaps in NIH's ability to monitor key aspects of its extramural funding process."¹ Thus, some costs could probably be reduced or eliminated without harming high-priority research.

An argument against this option is that much of NIH's funding supports research that may improve people's health, thus enhancing people's well-being and providing economic benefits as well. NIH is a major source of funding for academic biomedical research (more than 80 percent of NIH's funding supports extramural

See Government Accountability Office, National Institutes of Health: Completion of Comprehensive Risk Management Program Essential to Effective Oversight, GAO-09-687 (September 11, 2009), p. 25, www.gao.gov/products/GAO-09-687.

research activities, which are not conducted by NIH staff or on the main NIH campus). Consequently, deep cuts to its budget could disrupt funding for programs already under way, both on and off the campus, and could discourage future researchers from doing academic biomedical research. Furthermore, although having more focused priorities is beneficial, it is difficult to know in advance which projects will yield the most useful results. Large cuts to the NIH budget could discourage innovation in agency-supported medical technologies that have the potential to improve people's health.

Function 700

Health—Option 14

Total 2014-2018 2014-2023 (Billions of dollars) 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 Change in Discretionary Spending Budget authority 0 -4.7 -4.9 -5.1 -5.2 -5.4 -5.6 -5.7 -5.9 -6.1 -19.9 -48.5 Outlays 0 -4.2 -4.8 -5.0 -5.2 -5.3 -5.5 -5.7 -5.8 -6.0 -19.2 -47.6 Change in Mandatory Outlays 0 2.3 2.4 2.5 2.6 2.6 2.7 2.8 2.9 3.0 9.7 23.8

End Enrollment in VA Medical Care for Veterans in Priority Groups 7 and 8

Notes: This option would take effect in October 2014.

Discretionary savings accrue to the Department of Veterans Affairs; increases in mandatory outlays are projected for the Medicare and Medicaid programs and for federal subsidies to purchase health insurance through exchanges.

Veterans who seek medical care from the Department of Veterans Affairs (VA) are enrolled in one of eight priority groups that are defined on the basis of income, disability status, and other factors. The highest priority for access to health care is given to veterans who have serviceconnected disabilities (priority groups 1 through 3); the lowest priority is given to higher-income veterans who have no conditions that are disabling to the degree that VA provides compensation. Veterans in priority group 8 do not have compensable service-connected disabilities, and their annual income exceeds both VA's national income threshold and the (generally higher) geographic income threshold that pertains to the veteran's place of residence. Veterans enrolled in priority group 7 also have no compensable service-connected disabilities; either their income lies between the national and geographic thresholds, or their net worth exceeds VA's national threshold. As of 2012, about 2.3 million veterans who were enrolled in VA's health care system had been assigned to priority groups 7 and 8. In any given year, not all of the veterans in those groups seek medical care from VA.

Although veterans in priority groups 7 and 8 pay no annual enrollment fees, they make copayments for their care; if they have private health insurance, VA may bill those insurance plans for reimbursement. Copayments and private-plan billings cover about 18 percent of the cost of care for those veterans. In 2012, VA incurred \$4.3 billion in net costs for those patients, or about 8 percent of the department's total spending for medical care (excluding spending from the medical care collections fund, in which amounts collected or recovered from first- or third-party payers are deposited and used for medical services for veterans). When the priority system was established, in 1996, the Secretary of the Department of Veterans Affairs was given the authority to decide which priority groups VA could serve each year. By 2003, VA could no longer adequately serve all enrollees, prompting the department to cut off new enrollment of veterans in priority group 8. Veterans who were already enrolled were allowed to remain in the program. VA eased that restriction in 2009 to allow some additional enrollment of priority group 8 veterans.

This option would end enrollment of veterans in priority groups 7 and 8 and cancel enrollment of all veterans currently in those two groups. Such action would curtail VA's health care spending for veterans who do not have service-related medical needs and who are not poor. To be eligible for VA's medical services under this option, a veteran would have to qualify for a higher priority group by demonstrating a service-connected disability, by documenting income and assets that are below the thresholds, or by qualifying under other criteria (such as having been exposed to Agent Orange, receiving a Purple Heart, being a former prisoner of war, qualifying for Medicaid, or having a catastrophic disability not connected to military service).

Canceling enrollment for all veterans in priority groups 7 and 8 would reduce discretionary outlays, on net, by \$48 billion from 2015 through 2023, the Congressional Budget Office estimates. That estimate reflects the assumption that appropriations would be reduced accordingly. However, because this option would result in greater use of other government health care programs, implementing it would increase mandatory spending for Medicare and Medicaid and for federal subsidies provided through the health insurance exchanges by \$24 billion between 2015 and 2023.

An advantage of this option is that it would refocus VA's attention and services on its traditional group of patients—those with the greatest needs or fewest financial resources. Higher-income veterans gained access to the VA system only in the mid-1990s, when the federal budget was under less strain and experiencing less demand for services by higher-priority veterans. In 2012, nearly 90 percent of enrollees in priority groups 7 and 8 had other health care coverage, most notably Medicare and private health insurance. As a result, the vast majority of the veterans who would lose VA coverage under this option would continue to have access to other sources of coverage, and veterans without other health insurance options could qualify for coverage through the health insurance exchanges.

A disadvantage of the option is that veterans enrolled in priority groups 7 and 8 who have come to rely on VA for at least part of their medical care might find their health care disrupted by the change in enrollment rules. Some of those veterans—particularly those with income just above the thresholds—might have difficulty finding other affordable sources of care. In addition, because of the relatively low out-of-pocket cost to veterans for VA health care, veterans switching to alternative sources of care might pay more than they would have paid at VA facilities.

RELATED CBO PUBLICATIONS: Testimony of Heidi L. W. Golding, Analyst, before the Senate Committee on Veterans' Affairs, *Potential Costs of Health Care for Veterans of Recent and Ongoing U.S. Military Operations* (July 27, 2011), www.cbo.gov/publication/41585; and *Potential Costs of Veterans' Health Care* (October 2010), www.cbo.gov/publication/21773

Health—Option 15

											То	tal
(Billions of dollars)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
				Acce	lerate ar	nd Expar	d the Ex	cise Tax	on High	-Cost Pl	ans	
Change in Outlays	0	*	1	3	3	3	3	4	4	4	8	26
Change in Revenues	0	11	20	25	24	25	31	37	43	50	79	266
Net Effect on the Deficit	0	-10	-19	-21	-21	-22	-28	-34	-39	-46	-72	-240
	R	eplace t	he Excis	e Tax W	ith a Lim	it on the	e Tax Exc	lusions	for Emp	loyment-	Based Health Ins	surance
Change in Outlays	0	2	6	8	9	10	10	10	11	11	25	77
Change in Revenues	0	21	42	51	58	66	76	88	100	112	173	613
Net Effect on the Deficit	0	-19	-36	-44	-49	-55	-66	-78	-89	-101	-147	-537

Reduce Tax Preferences for Employment-Based Health Insurance

Sources: Staff of the Joint Committee on Taxation; Congressional Budget Office.

Notes: This option would take effect in January 2015.

* = between zero and \$500 million.

Overview of the Issue

The federal tax system provides preferential treatment for health insurance that people buy through their employer. Employers' payments for health insurance are a form of compensation, but unlike cash compensation, those payments are exempt from income and payroll taxes. In most cases, the amounts that workers pay for their own share of health insurance premiums are also excluded from income and payroll taxes. In all, that favorable tax treatment costs the federal government about \$250 billion in forgone revenues each year.

The subsidies provided by those tax preferences encourage firms to offer employment-based health insurance and encourage workers to enroll in such insurance. By pooling risks within groups of workers and their families, and by reducing the administrative costs of marketing insurance policies and collecting premiums, employment-based health insurance is a relatively efficient way to provide coverage-even apart from the tax preferences. Those preferences, however, give employment-based insurance an additional advantage. As a result, in 2012, 85 percent of private-sector employees worked for an employer that offered health insurance coverage; 78 percent of those employees were eligible for their employer's coverage (the rest were ineligible for various reasons, such as working only part time); and 76 percent of the eligible workers chose to enroll.

At the same time, the open-ended nature of the tax exclusions has increased health care spending by encouraging the provision of more comprehensive health insurance than would be the case if there were no tax preferences. In addition, the value of the tax exclusions is generally larger for workers with higher income, even though such workers are more likely to purchase coverage anyway.

A new excise tax that will reduce the tax subsidy for employment-based health insurance is scheduled to begin in 2018. It will be levied on employment-based health benefits whose value exceeds certain thresholds, curtailing the open-ended nature of the current tax exclusions. Even when the new excise tax is in effect, however, employment-based health insurance will still receive a significant tax subsidy, and that subsidy will still be larger for higher-income people.

Reducing the tax subsidy for employment-based health insurance would raise federal revenues and would also affect people's sources of health insurance coverage decreasing the number of people with employment-based coverage, boosting enrollment in the new health insurance exchanges, and increasing the number of people without insurance. In addition, policies to reduce the tax subsidy would lower total spending on health care relative to what it would be otherwise. Current Law. The federal tax system subsidizes employment-based health insurance both by exempting employers' premium payments from income and payroll taxes and by letting employees at firms that offer "cafeteria plans" (which allow workers to choose between taxable cash wages and nontaxable fringe benefits) pay their share of premiums with pretax earnings. The tax system also subsidizes health care costs not covered by insurance by exempting from income and payroll taxes the contributions made to other types of employee accounts that can be used to pay for those costs. Examples include employers' contributions to health reimbursement arrangements (HRAs), employees' contributions to flexible spending arrangements (FSAs), and both employers' and employees' contributions to health savings accounts (HSAs).

The favorable tax treatment of employment-based health insurance is the largest single tax expenditure by the federal government. (Tax expenditures are exclusions, deductions, preferential rates, and credits in the tax system that resemble federal spending by providing financial assistance to specific activities, entities, or groups of people.) Excluding employment-based health insurance from both income and payroll taxes will cost the government \$248 billion in 2013, CBO estimates. In addition, the federal government incurs a tax expenditure of about \$6 billion a year by allowing self-employed people to deduct the costs of health insurance from their taxable income for the individual income tax (though not for payroll taxes).

The excise tax due to start in 2018 will be imposed on employment-based health benefits whose total valueincluding employers' and employees' tax-excluded contributions for health insurance premiums and contributions made through HRAs, FSAs, or HSAs for other health care costs-is greater than specified thresholds. The staff of the Joint Committee on Taxation (JCT) and CBO project that those thresholds will be \$10,200 for single coverage and \$27,500 for family coverage in 2018 (with slightly higher thresholds for retirees ages 55 to 64 and for workers in certain high-risk professions, and with further adjustments for the age, sex, and other characteristics of an employer's workforce). The excise tax will be equal to 40 percent of the difference between the total value of tax-excluded contributions and the applicable threshold. If employers and workers did not change their coverage in response to the tax, roughly one out of every five people enrolled in an employment-based health plan in

2018 would have some tax-excluded contributions in excess of the thresholds, JCT and CBO estimate. (However, JCT and CBO expect people's responses to the tax to reduce that share, as discussed below.)

In 2019, the thresholds for the excise tax will be indexed to the growth rate of the consumer price index for all urban consumers (CPI-U) plus 1 percentage point. In subsequent years, the thresholds will be indexed solely to the growth of the CPI-U. Because health insurance premiums will probably continue to rise faster than inflation, the excise tax will probably affect a growing number of people over time. As a result, revenues stemming from the tax are projected by JCT and CBO to rise from \$5 billion in 2018 to \$22 billion in 2023.

Effects of the Current Tax Treatment. The tax subsidy for employment-based health insurance reduces the problem of "adverse selection," in which less healthy people are more likely to buy health insurance (or to buy specific types of plans) than healthier people are. Adverse selection can cause health insurance markets to break down or to operate inefficiently. Most people would be willing to pay an insurance premium that was somewhat higher than their expected costs for health care in order to avoid the financial risks from unexpected and costly health problems. However, it is difficult and expensive for insurers to determine, and tailor their premiums to, an individual's expected health care costs.

In markets where everyone pays the same premium, health insurance tends to attract enrollees with aboveaverage costs, for whom insurance provides more benefit, and to be less attractive to people with below-average costs, for whom insurance provides less benefit. Thus, in the absence of subsidies or a mandate to purchase coverage, markets for health insurance usually end up offering limited coverage (which less healthy people do not find as appealing), denying coverage to people with high expected costs (to the extent that insurers can determine them), charging high premiums (to cover the costs of less healthy enrollees), or some combination of those outcomes. That situation tends to occur today in markets for individually purchased health insurance, although states' regulations matter crucially for those markets.

Employment-based health insurance limits those market problems in several ways. Employers generally select a workforce on the basis of criteria other than health care costs, so most workforces consist of a mix of healthier and less healthy people. Therefore, pooling risks across a workforce (and its family members) reduces the variability of average health care spending for the group. The current tax exclusions encourage employers to offer health insurance; in turn, when employers pay a large share of premiums, employees' share tends to be small relative to their expected health care costs, which encourages them to buy insurance and thereby reduces adverse selection. The tax exclusions also mitigate increases in premiums that might occur because of adverse selection by directly reducing the after-subsidy price of insurance.

The Affordable Care Act made several changes to health insurance markets that, together, will substantially reduce the traditional problems in individual markets discussed above, thus weakening the rationale for subsidizing employment-based insurance:

- The new insurance exchanges will enable individuals and families to buy insurance if they lack other sources of coverage that are deemed affordable. Depending on their income, people may receive refundable tax credits to limit the amount they pay for that coverage. (With a refundable tax credit, if the amount of the credit exceeds the amount of income tax owed before the credit is applied, the taxpayer receives the excess as a payment.)
- Most legal U.S. residents will be required to obtain insurance coverage or potentially be liable for a penalty tax.
- Insurance purchased individually (through the exchanges or directly from insurers) will be available on a guaranteed-issue basis—meaning that policies will be offered to all applicants regardless of their health status—and premiums will not be allowed to vary according to policyholders' health status or sex. In addition, variation in premiums by age will be limited. (Without the subsidies and the requirement to obtain insurance, those provisions alone would increase adverse selection in the market for individually purchased insurance.)

Although the current tax preferences for employmentbased health insurance reduce adverse selection, those preferences also encourage workers to favor health care over other goods and services they could purchase and thus contribute to the growth of health care spending. That outcome occurs because the tax exclusions encourage employers to compensate their workers with a combination of health insurance coverage and cash wages rather than entirely with cash wages. And because the value of the tax subsidy increases with an insurance plan's premium (up to the threshold for the excise tax in 2018 and beyond), enrollment is especially encouraged in plans that cover a greater number of services, cover more expensive services, or require enrollees to pay a smaller share of the costs of the services they receive. As a result, people use more health care—and health care spending is higher—than would otherwise be the case.

Concern about that effect has lessened somewhat in recent years because employment-based health insurance has shifted toward plans that require workers to pay a higher share of health costs (notwithstanding the incentive created by the exclusions for premium payments). For example, almost one-third of people under age 65 with employment-based coverage reported enrolling in a high-deductible health plan in 2013, up from about one-sixth in 2008.

Another concern about the tax exclusions arises from how their subsidy is distributed among workers at different income levels. The value of the exclusions is generally larger for workers with higher income, partly because those workers face higher income tax rates (although they may face lower rates of payroll taxation) and partly because they are more likely to work for an employer that offers coverage. Because larger subsidies go to higherincome workers, who are more likely to buy insurance even without the tax exclusions, and smaller subsidies go to lower-income workers, who are less likely to purchase coverage, the exclusions do not yield the maximum gains in insurance coverage for the tax dollars forgone. Thus, the tax exclusions are an inefficient means of increasing the number of people who have health insurance, and they are regressive in the sense of giving larger benefits to people with higher income.

The forthcoming excise tax will be levied on insurers and on self-insured employers, but economic theory and empirical evidence suggest that it will be passed on to employers who purchase or provide insurance that is subject to the tax—and then ultimately passed on to workers. JCT and CBO expect that many employers and workers will shift to health plans with premiums below the thresholds to avoid paying the tax, resulting in higher taxable wages for affected workers or higher taxable profits for employers. Workers will pay income and payroll taxes on any additional wages they receive, and because workers with higher income will pay higher marginal tax rates on those wages, the regressive nature of the tax exclusions will be somewhat lessened.

For employers and workers who do not shift to lower-cost health plans to avoid the excise tax, the costs of the tax will be spread equally among workers, JCT and CBO expect. However, workers with higher income are more likely to be enrolled in high-cost plans and thus are more likely to have their subsidy reduced (either by being subject to the tax or by changing to a lower-cost plan).

Thus, the new excise tax will decrease the net tax subsidy for workers with health benefits whose value exceeds the thresholds—with the reduction slightly greater for higher-income workers, on average. However, the majority of workers will have health benefits whose value is below the thresholds and therefore will be largely unaffected by the excise tax. Consequently, the net impact of the existing tax preferences and the new excise tax will be to continue subsidizing employment-based health insurance and providing larger subsidies to higherincome people, who would be more apt to purchase coverage even without the subsidy.

Key Design Choices That Would Affect Savings

Lawmakers who wanted to reduce the tax subsidy for employment-based health insurance could take several approaches, which would have differing effects on federal revenues, on the amount of taxes owed by people at various income levels, and on employers' and employees' choices about health insurance plans and their resulting health care costs. Two broad approaches would involve modifying the excise tax on high-cost plans that is due to begin in 2018 and modifying the current tax exclusions. The parameters of both the new tax and the current exclusions could be adjusted to yield larger or smaller amounts of additional revenues or to alter the impact on different types of people, employers, and health insurance plans. A third approach would be to replace the current tax exclusions with an income tax credit for employmentbased health insurance, which could also be designed to generate specific amounts of revenues or to have other specific effects.

In general, reducing the tax subsidy for employmentbased health insurance would tend to lower the number of people with such insurance and increase cost sharing, which in turn would decrease spending on health care and increase the financial burden on people with substantial health problems. The precise impact, however, would depend on the specific features of any policy change.

Timing and Scope of the Excise Tax on High-Cost Plans.

While keeping the current design of the excise tax, lawmakers could increase its impact by moving up the starting date or by slowing the indexing of the threshold amounts. For example, the tax could take effect as soon as 2015, or the specified thresholds could be frozen in nominal terms (that is, not indexed to rise with inflation) so that a larger share of health insurance plans would become subject to the tax over time than would be the case under current law. Lowering the amounts of the thresholds at which contributions begin to be taxed or raising the 40 percent tax rate would also increase the impact of the tax.

In addition, the design of the excise tax could be modified in various ways. Current law allows for different thresholds based on characteristics of an employer's workforce but does not explicitly vary the thresholds by the extent to which an insurance plan encourages health care spending. One alternative to setting a threshold value for premium contributions would be to apply the excise tax to certain types of health insurance plans and exempt others. For example, lawmakers could exempt plans whose actuarial value (the percentage of health care spending for a given population that the plan would pay for) was below a certain amount. Such exemptions, however, would require additional reporting of information by insurers and employers and would be difficult to administer. Moreover, the relationship between a health plan's actuarial value and the extent to which it encourages health spending is not direct. For instance, plans offered by health maintenance organizations often have higher actuarial values than other types of insurance plans, but they may have lower overall costs and result in less health care spending because they manage the use of care more tightly or contract with lower-cost doctors and hospitals.

Scope of the Tax Exclusions. Alternatively, lawmakers could remove the excise tax scheduled to take effect under current law and instead subject contributions for health insurance premiums that are currently tax-preferred to income taxes, payroll taxes, or both. On average, enrollees in employment-based plans face slightly higher federal income tax rates than payroll tax rates. Specifically, JCT and CBO estimate that the average marginal income tax

rate (the rate that applies to the last dollar of someone's earnings) for workers with employment-based coverage is about 16 percent, whereas the average marginal payroll tax rate (including both the employer's and employee's shares of payroll taxes) is about 14 percent. Thus (if everything else stayed the same), including contributions to health insurance premiums in taxable income for income tax purposes would raise slightly more revenue than including them in taxable income for payroll tax purposes, and doing both would raise the most revenue.

Whether to include only some, rather than all, of those contributions in employees' taxable income would be a key design issue. For example, the exclusions could be capped for all taxpayers, or they could be phased out for higher-income people. Such caps or thresholds could also be allowed to vary according to other characteristics of employees, such as age, sex, or occupation. The forthcoming excise tax includes several adjustments of that sort, including assigning higher thresholds to some groups of people with higher average health care costs.

Tax Credit Versus Tax Exclusions. Yet another approach to reducing the tax subsidy for employment-based health insurance would be to replace the current income tax exclusion (or income and payroll tax exclusions) with an income tax credit. If the credit was a fixed dollar amount and was refundable-so that people for whom the credit exceeded the amount of federal income tax owed could receive money back from the government-all workers would receive the same value from the credit, regardless of their tax bracket or their health care costs. If the credit was a fixed dollar amount but was nonrefundable, lowincome workers, who have little or no income tax liability, would benefit much less. As an alternative to fixing the dollar amount of the credit, its size could be phased down for people at higher income levels. With any of those designs, the credit would have a set dollar value for a given worker, so that person could not increase his or her tax subsidy by purchasing more extensive or more costly insurance.

In setting the value or rate schedule for a tax credit, lawmakers would face various trade-offs. For example, a larger credit would increase the number of people who obtained health insurance but would reduce the amount of tax revenues collected. As another example, phasing down the credit for people at higher income levels would focus the tax preference on people who would be less likely to obtain insurance in the absence of a tax subsidy, but that approach would also raise effective tax rates on income in the phase-out range.

Specific Alternatives and Estimates

CBO and JCT analyzed two alternatives for reducing the tax subsidy for employment-based health insurance: accelerating and expanding the excise tax on high-cost plans or replacing that tax with a limit on the current tax exclusions. Both of those policy changes would increase the tax liability and affect the behavior of people with large before-tax contributions for employment-based health plans, but the specific increases in taxes and changes in behavior would be different under the two approaches.

In the first alternative, implementation of the excise tax would be sped up by three years, to 2015, and the thresholds at which contributions would become subject to the tax would be lower in 2018 and beyond than they would be under current law. Specifically, the thresholds in 2015 would be set at \$7,970 for individual coverage and \$19,910 for family coverage-which represent JCT and CBO's estimate of the 75th percentile for health insurance premiums to be paid by or through employers in that year. After 2015, the thresholds would be indexed for inflation as measured by the CPI-U. In 2019, they would be \$8,700 for individual coverage and \$21,750 for family coverage, compared with \$10,550 and \$28,400, respectively, under current law. As in current law, the tax would equal 40 percent of the difference between total taxexcluded contributions and the applicable threshold. Similar to the provisions of current law, the thresholds would be 10 percent higher for retirees ages 55 to 64 and for workers in designated high-risk professions, but other adjustments provided under current law (such as those for age and sex) would be eliminated to simplify administration.

That alternative would reduce federal deficits by \$240 billion between 2015 and 2023, JCT and CBO estimate. Like the excise tax in current law, the modified tax would generate revenues in two ways. First, it would produce additional excise tax revenues for employmentbased plans whose premiums remained above the thresholds. Second, it would generate additional income and payroll tax revenues because of people's responses to the tax: Many employers and workers would probably change to lower-cost insurance plans, and some employers would be discouraged from offering health insurance to their workers. The resulting reduction in payments of health insurance premiums would lead to higher taxable wages for those employees or higher taxable profits for their employers.

The increase in excise tax collections and the tax's indirect effects on tax receipts would boost revenues by \$266 billion from 2015 to 2023. However, outlays would also rise over that period, by \$26 billion, primarily because more people would receive subsidies for insurance coverage purchased through the exchanges (as discussed below). Although premium subsidies for exchange plans are structured as refundable tax credits, in most cases the amounts of those credits will exceed the amount of federal income tax that recipients owe, and the amounts above the tax owed by recipients are classified as outlays. Cost-sharing subsidies for enrollees in exchange plans are also categorized as outlays.

By decreasing the tax subsidy for employment-based health insurance, that alternative would result in about 2 million fewer people with employment-based insurance in 2019 than the number projected under current law. In that year, roughly one and a half million more people would buy coverage through the exchanges, and about half a million more people would be uninsured. After 2019, the tax subsidy for employment-based insurance would decline further, so fewer people would have such insurance. By 2023, about 3 million fewer people would have employment-based coverage, and about 1 million more people would be uninsured, than under current law.

The second alternative would eliminate the excise tax and instead impose a limit on the extent to which employerpaid health insurance premiums and contributions to FSAs, HRAs, and HSAs could be excluded from income and payroll taxation. Specifically, starting in 2015, any contributions that employers or workers made for health insurance and for health care costs (through FSAs, HRAs, and HSAs) that together exceeded \$6,420 a year for individual coverage and \$15,620 for family coverage would be included in employees' taxable income for both income and payroll taxes. Those limits, which are based on the estimated 50th percentile for health insurance premiums paid by or through employers in 2015, would be indexed in subsequent years for inflation using the CPI-U. The same limits would apply to the deduction for health insurance available to self-employed people. Capping the tax exclusions at lower thresholds than the ones scheduled to take effect for the excise tax would reduce

federal tax subsidies. For example, in 2019, the caps for individual and family coverage under that alternative would be \$7,000 and \$17,000, respectively, whereas the current-law thresholds for the excise tax would be \$10,550 and \$28,400, respectively, in that year.

That alternative would decrease federal deficits by \$537 billion between 2015 and 2023, JCT and CBO estimate. The reduction in the tax subsidy for employment-based health insurance would cause about 6 million fewer people to have employment-based coverage in 2019 than under current law. In that year, about 4 million more people would buy coverage through the exchanges, about half a million more people would enroll in Medicaid or the Children's Health Insurance Program (CHIP), and an additional one and a half million people would be uninsured.

The reduction in the deficit from that alternative stems from several, partly offsetting, changes in revenues and outlays. Income and payroll tax revenues would rise by \$681 billion through 2023 because the number of people with employment-based coverage would decline and because many of those who kept such coverage would receive a smaller tax subsidy. (For example, the capped tax exclusions would reduce the combined federal income and payroll tax liability of people with individual coverage by an average of \$1,827 in 2019, compared with an average reduction of \$2,330 for such people under the current exclusions.) However, other effects of that alternative would also affect revenues. Additional tax credits for coverage purchased through the exchanges and the repeal of the excise tax would reduce revenues, whereas additional penalty payments by certain employers and individuals resulting from changes in health insurance coverage would increase revenues by a small amount. In all, revenues would be \$613 billion higher through 2023 than under current law. The policy changes would boost federal outlays by \$77 billion through 2023, primarily because of increased spending on exchange subsidies and Medicaid.

Other Considerations

Reducing the tax subsidy for employment-based health insurance would affect many aspects of the U.S. health care sector, including the growth of health care costs, the health of the population, the coverage choices of employers and workers, and the number of people without health insurance. Effects on Health Care Costs. Expanding the forthcoming excise tax on high-cost insurance plans or replacing that tax with a limit on the current tax exclusions would reduce health care spending relative to what it will be under current law. As discussed above, the current tax preferences for employment-based insurance encourage overconsumption of health care relative to other goods and services. Those tax preferences give health insurance plans an incentive to cover a greater number of services, cover more expensive services, and require enrollees to pay a smaller share of the costs of the services they receive. The excise tax will effectively scale back those tax preferences to some degree. Under both of the alternatives examined here, the tax increases would start sooner and would apply to a larger share of employment-based plans than the excise tax will under current law. As a result, employers and their workers would have less incentive to buy expensive health insurance, which would reduce upward pressure on the price of health care and use of health care services and would encourage greater use of cost-effective types of care. The effects on health care spending would be larger in areas with higher health care costs.

Effects on People's Health. By reducing the incentive to purchase expensive health insurance coverage, both of the policy alternatives analyzed here would probably limit some people's access to health care and cause them to forgo some care. In a health insurance experiment conducted by the RAND Corporation from 1974 to 1982, nonelderly participants were randomly assigned to health insurance plans. The experiment found that greater cost sharing—which is a key mechanism through which insurance plans can lower their premiums-reduced the use of effective care and less effective care (as defined by a team of physicians) by roughly equal amounts. Although the study found that cost sharing had no effect on health in general, among the poorest and sickest participants, those with no cost sharing were healthier by some measures than those who faced some cost sharing. Thus, the reduction in health care spending prompted by these alternatives could be accompanied by worse health for some people.

Effects on Employers and Workers. By raising the tax liability of people enrolled in high-cost employment-based plans, the alternatives considered here would probably increase the financial burden on some people with substantial health problems. In particular, some employers and workers would avoid the new taxes by shifting to plans with lower premiums and higher cost-sharing requirements, which would increase out-of-pocket costs the most for those workers (and their dependents) who used the most services.

Under both alternatives, employees of firms that had a less healthy workforce or that operated in an area with above-average health care costs would be more likely to see their tax liability increase. In higher-cost areas, those increases in people's tax liability might exert pressure on health care providers and insurers to reduce prices or decrease unnecessary care. In addition, because the alternative to expand the excise tax would not adjust the thresholds for workers' age, firms would be more likely to face the tax if they had an older workforce. That situation might decrease employers' willingness to hire older workers or cause employers to reduce other forms of compensation for older workers, such as cash wages or contributions to pension plans.

Effects on the Number of Uninsured People. The tax increases envisioned in this option would lead fewer employers to offer health insurance, thus increasing the number of uninsured workers. Most people whose employers stopped offering health insurance coverage would purchase it in the individual market, including in the health insurance exchanges. The federal subsidies available through the exchanges would give many lowincome people an affordable alternative to employmentbased coverage, and the tax penalty for lacking insurance would give many high-income people who lost employment-based coverage an incentive to buy insurance in the exchanges even without a subsidy. Nevertheless, some workers whose employers ceased to offer health insurance under this option would forgo coverage, CBO and JCT expect.

RELATED CBO PUBLICATION: The Distribution of Major Tax Expenditures in the Individual Income Tax System (May 2013), www.cbo.gov/publication/43768

		U				-						
											То	tal
(Billions of dollars)	201 4	2015	2016	2017	2018	2019	2020	2021	2022	2023	2014-2018	2014-2023
Change in Outlays	*	*	*	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.6
Change in Revenues	3.3	4.0	3.9	3.7	3.7	3.7	3.6	3.6	3.6	3.6	18.6	36.8
Net Effect on the Deficit	-3.3	-4.0	-3.9	-3.8	-3.8	-3.8	-3.7	-3.7	-3.7	-3.7	-18.8	-37.4

Health—Option 16

Increase the Excise Tax on Cigarettes by 50 Cents per Pack

Sources: Staff of the Joint Committee on Taxation; Congressional Budget Office.

Notes: This option would take effect in January 2014.

* = between -\$50 million and zero.

Both the federal government and state governments tax tobacco products. Currently, the federal excise tax on cigarettes is \$1.01 per pack, and the average state excise tax on cigarettes is \$1.51 per pack. In addition, settlements that the major tobacco manufacturers reached with state attorneys general in 1998 require the manufacturers to pay fees (which are passed on to consumers) that are equivalent to an excise tax of about 60 cents per pack. Together, those federal and state taxes and fees boost the price of a pack of cigarettes by \$3.12, on average.

This option would raise the federal excise tax on cigarettes by 50 cents per pack beginning in 2014. That rate increase would also apply to small cigars, which are generally viewed as a close substitute for cigarettes and are currently taxed by the federal government at the same rate as cigarettes. The staff of the Joint Committee on Taxation (JCT) and the Congressional Budget Office estimate that the option would reduce deficits by \$37 billion from 2014 to 2023: Revenues would rise by \$37 billion, and outlays would decline by almost \$1 billion, mainly as a result of reduced spending for Medicaid and Medicare. (Because excise taxes reduce the income base for income and payroll taxes, an increase in excise taxes would lead to reductions in revenues from those sources. The estimates shown here reflect those reductions.)

Extensive research shows that smoking causes a variety of diseases, including many types of cancer, cardiovascular diseases, and respiratory illnesses. Tobacco use is considered to be the largest preventable cause of early death in the United States. CBO estimates that a 50 cent increase in the excise tax would cause smoking rates to fall by roughly 3 percent, with younger smokers being especially responsive to higher cigarette prices. Smoking rates would remain lower in the future than will be the case under current law because a smaller share of future generations would take up smoking. As a result, the higher tax would lead to improvements in health, not only among smokers themselves but also among nonsmokers who would no longer be exposed to secondhand smoke. Those improvements in health would, in turn, increase longevity.

Although the budgetary impact of raising the excise tax on cigarettes would stem largely from the additional revenues generated by the tax (net of the reductions in income and payroll taxes noted above), the changes in health and longevity would also affect federal outlays and revenues. Improvements in the health status of the population would reduce the federal government's perbeneficiary spending for health care programs, which would initially reduce outlays for those programs. But that reduction in outlays would erode over time because of the increase in longevity; a larger elderly population would place greater demands on federal health care and retirement programs in the future. The effect of greater longevity on federal spending would gradually outweigh the effect of lower health care spending per beneficiary, and federal outlays would be higher after that than they are under current law. In addition to the direct effect of the excise tax, revenues would also rise as a result of the improvements in health, which would lower premiums for private health insurance. The corresponding reduction in employers' contributions for health insurance premiums, which are not subject to income or payroll taxes,

would ultimately be passed to workers in the form of higher taxable compensation, raising federal revenues.¹

One rationale for raising the excise tax on cigarettes is that tobacco consumers may underestimate the addictive power of nicotine and the harm that smoking causes. Teenagers in particular may not have the perspective necessary to evaluate the long-term effects of smoking. Raising the tax on cigarettes would reduce the number of smokers, thereby reducing the damage that people would do to their long-term health. However, studies differ on how people view the risks of smoking, with some research concluding that people underestimate those risks and other research finding the opposite.

Another rationale for raising the excise tax on cigarettes is that smokers impose costs on nonsmokers that are not reflected in the pretax cost of cigarettes. Those costs, which are known as external costs, include the damaging effects that cigarette smoke has on the health of nonsmokers and the higher health insurance premiums and greater out-of-pocket expenses that nonsmokers incur as a result. However, other approaches—aside from taxes can reduce the external costs of smoking or make individual smokers bear at least some of those costs. For example, many local governments prohibit people from smoking inside restaurants and office buildings.

An argument against raising the tax on cigarettes is the regressive nature of that tax, which takes up a larger percentage of the earnings of lower-income families than of middle- and upper-income families. The greater burden of the cigarette tax on people with lower income occurs partly because lower-income people are more likely to smoke than are people from other income groups and partly because the amount that smokers spend on cigarettes does not rise appreciably with income.

Some observers also object to using the cigarette tax as a mechanism for changing people's behavior regarding smoking. In particular, some observers argue that consumer protection is a specious justification for cigarette taxes when many other choices that people make—for example, to consume some types of food or engage in risky sports—can also cause health damage.

RELATED OPTION: Revenues, Option 32

RELATED CBO PUBLICATION: Raising the Excise Tax on Cigarettes: Effects on Health and the Federal Budget (June 2012), www.cbo.gov/publication/43319

When estimating legislative proposals and policy options that would reduce budget deficits, CBO and JCT generally assume that gross domestic product would not change. CBO relaxed that assumption in its 2012 report *Raising the Excise Tax on Cigarettes: Effects on Health and the Federal Budget.* Thus, the budgetary effects shown in that report also included the revenues from the increase in labor force participation that would result from the healthier population.

CHAPTER

6

The Budgetary Implications of Eliminating a Cabinet Department

The past few decades have seen various proposals to eliminate one or more Cabinet departments. One of the goals of those proposals has been to terminate activities thought to be better performed by state and local governments or the private sector; another has been to increase programs' effectiveness through reorganization. This chapter focuses on a third goal: achieving budgetary savings. How much could be saved by shuttering one of the 15 current departments depends crucially on whether its programs would be terminated or transferred to a new department or agency-and, if they were transferred, on whether they would continue in altered form or without significant change. In general, achieving substantial savings would require eliminating or significantly reducing programs, perhaps in some of the ways discussed throughout this volume of budget options.

Eliminating a department could result in considerable budgetary savings to the federal government if some or all of the programs operated by that department were also terminated. The amount of savings would eventually be equal to the department's full budget for the canceled programs, minus any income that the department had received through its operation of those programs. Initially, however, the government could incur one-time costs for terminating programs or activities, such as paying the cost of accrued annual leave and unemployment benefits to federal employees whose jobs had been eliminated or paying penalties for canceling leases for office space.

In contrast, eliminating a department while transferring its programs in essentially unchanged form to other departments or agencies would probably result in little or no budgetary savings, because most of the costs incurred by departments are the costs of the programs themselves. At best, simply transferring programs to another department might reduce administrative support costs, but in most cases, such costs are much smaller than the costs of direct program activities. In particular, 66 percent of the combined budgets of the 15 departments provides individuals, state and local governments, businesses, and organizations with grants, subsidies, insurance benefits, and interest payments-which all, or nearly all, constitute program costs; excluding the Department of Defense and interest payments on the public debt, that share rises to 86 percent. That collection of payments includes, for example, payments for individuals' health care, grants and loans for postsecondary education, grants to state governments for highway projects, and payments to farm producers for crop insurance claims. In contrast, only 12 percent of the combined budgets of the 15 departments is for personnel, an area that is likely to include more administrative costs. For some departments, such as the Department of Education, personnel costs are only a small percentage of their total budget because their primary responsibility is to administer grants or other activities that primarily provide money to state and local governments, individuals, or other entities. For other departments, such as the Department of Homeland Security (DHS), personnel costs are a much larger share of their budget because they are producing a service themselves, such as providing airport security screeners.

Transferring programs and reducing them, altering them, or combining them with other programs could yield larger savings than simply transferring them if lawmakers chose to reduce total funding for the newly combined programs. In some cases, the funding reductions might be implemented without reducing total payments or services provided to beneficiaries. That result would require that the combined programs were operated more efficiently than they were in their old organizational structure and that the funding reductions were smaller than the efficiency gains. Such efficiency gains might arise from reducing overlap or duplication of effort among programs; for example, aid might reach intended recipients at lower cost if the number of field offices could be reduced. (Consolidation might also increase a program's effectiveness if it made participation easier for

the intended beneficiaries, but that would not tend to reduce federal costs.) However, combined programs might operate less efficiently than in their old organizational structure if the cultures of different operating units were difficult to reconcile or if reduced staffing led to inadequate oversight, thereby increasing the potential for waste, fraud, and abuse.

In deciding whether to eliminate one or more of the current departments and whether to terminate, move, or reorganize its programs and activities, lawmakers would confront a variety of questions about the appropriate role of the federal government. In particular, lawmakers would face decisions about whether the activities of a department should be carried out by the public sector at all, and if so, whether the federal government was the most effective level of government to conduct them. Even if lawmakers concluded that state and local governments were best positioned to operate a program or activity, they would still have to decide whether the federal government should coordinate particular activities that crossed state borders and whether programs administered by different states should meet national standards. In addition, lawmakers would face choices about how to organize most efficiently the activities of the federal government. Those choices would involve such considerations as effective management capacity and Congressional oversight.

Although each of those choices would reflect lawmakers' judgments about the role and operation of the federal government, each would also have consequences for the federal budget. To provide information about those consequences, this chapter provides an overview of the budgets of the Cabinet departments; information on the cost of programs operated by three of the departments most frequently proposed for elimination (Commerce, Education, and Energy); and policy and implementation issues that would arise if lawmakers were to consider eliminating a department.

An Overview of the Budgets of the Cabinet Departments

Since the creation of the Department of Homeland Security in 2002, the Cabinet has included 15 departments. Together, those departments account for the majority of the federal government's budget. (The rest is allocated to independent agencies, such as the Social Security Administration and the Office of Personnel Management; to the legislative and judicial branches; and to a number of public corporations and other entities.) Individually, the departments' budgets vary widely in size and composition.

The Size of Departmental Budgets

The size of individual departments' budgets, as measured by their net expenditures (or outlays) in fiscal year 2012, ranged from \$848 billion for the Department of Health and Human Services (HHS) to \$10 billion for the Department of Commerce. The departments with the three largest budgets—HHS, Defense, and the Treasury—accounted for about three-fourths of the spending by all the departments. The next three largest departments were Agriculture, Labor, and Veterans Affairs.

Departments' budgets can also be measured by their obligations, which are their financial commitments. Obligations in a given year typically differ from outlays in that year because some obligations are never spent, and some are spent after the year in which they were made.¹ As discussed below, some information about obligations is useful in analyzing departments' budget allocations.

The Composition of Departmental Budgets

Information on the composition of a particular department's budget-in particular, its balance of program and administrative costs-helps to show what kinds of changes would have to be made to attain significant budgetary savings if that department was eliminated and some or all of its programs were transferred to new homes. To the extent that the department's funding is for program costs, savings could be realized by making changes in how the programs operate or in how much money is provided for them. To the extent that the department's funding is for administrative costs, savings might be realized if the receiving agency could absorb some portion of the administrative costs within its existing budget-particularly if its existing workforce assumed some responsibility for administering the transferred program. However, such savings would not necessarily happen-for example, if the transferred program overtaxed the management capacity of the receiving agency.

Obligations also differ from budget authority, which is the authority provided by law to incur obligations. Budget authority can differ from obligations for the same reasons that obligations can differ from outlays: Some budget authority is never obligated, whereas some is obligated in a year other than the one in which it was provided.

Unfortunately, the available data do not fully identify administrative costs. Certain costs can be identified as primarily administrative by the name of the budget account or office that incurs them, but that method does not yield comparable results across departments because they structure their accounts and offices differently.

Another way to shed light on a department's balance of direct program costs and administrative support costs is through the "object classification" system of the Office of Management and Budget. That system classifies the budgets of federal agencies into categories and subcategories, some of which are likelier than others to be dominated either by program costs or by administrative costs. However, the federal budget does not provide detailed annual data about those object classes for agencies' outlays. Rather, such details are provided for agencies' obligations.

Data on obligations can overstate the budgetary savings that could be realized by eliminating a department, however. For one thing, some obligations are reimbursable, meaning that they are financed by fees or other charges that are collected in payment for goods and services provided by the government.² A program's reimbursable obligations do not represent budgetary savings that would be achieved if that program was eliminated, because in that case, the fees or charges that finance the obligations would also be eliminated.³ For example, the Patent and Trademark Office's obligations-which are all reimbursable, because its operations are funded entirely by fees charged to patent applicants-do not indicate savings that would be achieved if the office was eliminated, because once it was gone, the patent application fees would be gone as well. The discussion here therefore

excludes reimbursable obligations and considers only the remaining obligations, which are known as "direct."

But even direct obligations overstate potential budgetary savings. One reason is that some direct obligations are intragovernmental transfers, which budgets may count more than once because they affect multiple budget accounts. For example, the direct obligations of HHS were \$1.2 trillion in 2012, a considerably larger sum than the \$848 billion of outlays cited above, mainly because \$230 billion of intragovernmental transfers were counted as obligations once when they were paid to Medicare's trust funds and again when money was drawn from those funds to pay for Medicare benefits.

Another reason that direct obligations can overstate potential savings is that some of them are financed by excise taxes, which might be eliminated along with an eliminated program. For example, most of the obligations paid by the Transportation Department's Highway Trust Fund and Airport and Airway Trust Fund are financed by specific excise taxes. In 2012, those taxes yielded \$52 billion. If lawmakers terminated the department's highway and airport grant programs, they might also eliminate the taxes—so savings in 2012 would have been \$52 billion less than the amount of direct obligations suggested.

Notwithstanding their limitations as indicators of potential budgetary savings, this chapter focuses on direct obligations because the budget provides object-class data for them. Those object classes consist of four primary categories—grants and fixed charges, contractual services and supplies, personnel compensation and benefits, and acquisition of assets—each of which is divided into subcategories that provide more detail (see Figure 6-1).⁴

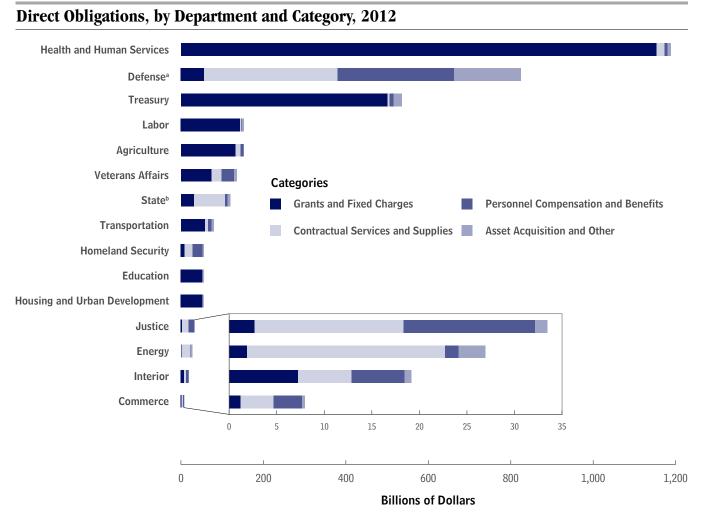
Grants and Fixed Charges. This category of departmental obligations encompasses grants, subsidies, and predetermined payments for insurance claims, interest payments (largely on the federal debt), and refunds. For the 15 departments combined, the category is dominated by payments to individuals (or to third parties on their behalf)—primarily for health care (through Medicare, Medicaid, veterans' medical care, and various smaller

^{2.} In total, the 15 departments had about \$300 billion in reimbursable obligations in 2012, representing 9 percent of their total obligations. Two-thirds of that total was obligated by the Defense Department; in percentage terms, however, reimbursable obligations were equally or more important in the budgets of the Departments of Commerce, Energy, and the Interior.

^{3.} Reimbursable obligations can also reflect goods or services that the federal government provides to itself, such as costs incurred by a department's central administrative office for procurement or security that are reimbursed by an originating office in the same department or in another one. In such cases, the obligations by the administrative office are classified as reimbursable, but the obligations by the originating office are not. Reducing the originating office's obligations would result in budgetary savings, and such obligations are included in the figures presented here.

^{4.} The object classification system also includes a category called "Other," which accounts for 0.6 percent of direct obligations by the Cabinet departments in 2012. Almost all of the obligations reported in that category are financial transfers to or from trust funds, such as the Hospital Insurance Trust Fund and the Airport and Airway Trust Fund.

Figure 6-1.



Source: Congressional Budget Office based on data from the Office of Management and Budget (OMB).

Notes: Amounts shown are net of budgetary savings recorded in 2012 for new loans and loan guarantees. Those savings were \$27 billion for the Department of Education (from the student loan program), \$6 billion for the Department of Housing and Urban Development (from mortgage insurance programs), and less than \$0.3 billion each for the Departments of Agriculture, Veterans Affairs, Commerce, and Transportation.

The categories are from the object classification system of OMB. "Grants and Fixed Charges" includes grants, subsidies, insurance claims, interest payments, and refunds. "Other" represents 0.6 percent of direct obligations by the Cabinet departments in 2012; it consists almost entirely of financial transfers to or from trust funds.

- a. Includes direct obligations reported under three headings in the budget: Department of Defense—Military Programs (\$682 billion); Other Defense—Civil Programs (\$131 billion); and Corps of Engineers—Civil Works (\$8 billion).
- b. Includes direct obligations reported in the budget under the heading Department of State and Other International Programs. Half of the total obligations shown were for the Military Sales Program.

programs), but also for military pensions, the Supplemental Nutrition Assistance Program, tuition assistance for postsecondary education, refundable tax credits, and many other purposes.⁵ The category also includes payments to state and local governments to fund a wide variety of activities, including elementary and secondary education and the construction of highways and wastewater treatment systems. The rest of the category consists of payments to businesses and organizations,

Obligations for benefits from the Military Retirement Fund are classified as insurance claims and indemnities, although contributions to the fund from the Treasury and the Defense Department are classified as personnel compensation and benefits.

such as farmers, researchers at universities, small businesses, and hospitals. Complete data on the distribution of grants and fixed charges are not readily available, but 2012 outlay data show that, once interest payments are omitted, individuals received more than eight times as much from the 15 departments as state and local governments did.

Grants and fixed charges accounted for 66 percent of all direct obligations by the Cabinet departments in 2012, and they represented the majority of the obligations made by 8 of the 15 departments (see Table 6-1). They are largely or entirely program costs, not administrative costs; to reduce them, the government would have to reduce funding for agencies' substantive programs and activities.

Contractual Services and Supplies. Some agencies of the federal government carry out substantial portions of their work through contracts with third parties for various services and supplies. Such contracts accounted for 16 percent of obligations by the Cabinet departments in 2012. Relative to its size, the Department of Energy made the greatest use of contracts, which represented more than 75 percent of its total 2012 obligations. In the combined budgets of the State Department and related international programs, contracts—mostly in the Military Sales Program—represented 62 percent of 2012 obligations. Contracts also accounted for over one-third of the budgets of the Commerce, Defense, Homeland Security, and Justice Departments.

The contractual services and supplies category includes a range of subcategories, some of which are likelier than others to include relatively large shares of administrative costs. In particular, contracts for travel and transportation and for rent, communications, and utilities are likelier to represent administrative costs than are contracts for research and development, the operation and maintenance of equipment, and the operation and maintenance of facilities.

The departments vary in their distribution of obligations among the subcategories. Particularly worth attention are the Department of Defense, because it accounts for more than half of the 15 departments' total direct obligations for contracts, and the Department of Energy, because it relies more heavily on contracts than any other department does. Contracts for travel and transportation and for rent, communications, and utilitiesthe subcategories that are likely to include larger shares of administrative costs—were a negligible share (less than 1 percent) of the direct obligations for contracts in 2012 made by the Energy Department, but about 10 percent of those made by the Defense Department and by the other 13 departments taken as a group (see Table 6-2 on page 260). In contrast, contracts for research and development, the operation and maintenance of equipment, and the operation and maintenance of facilities accounted for 76 percent of 2012 direct obligations for contracts by the Energy Department, and just 5 percent of those by the other departments taken as a group.

The extent to which funds in the remaining subcategories—such as supplies, other goods and services from federal sources, and other services from nonfederal sources—are used for administrative purposes cannot be determined without more detailed analysis of each department. For example, some supplies are used primarily for administrative purposes; however, the Defense and Veterans Affairs Departments account for 88 percent of obligations for supplies, and much of that spending is more directly mission-oriented.

Personnel Compensation and Benefits. Of the Cabinet departments' 2012 obligations, 12 percent was for personnel compensation and benefits. Three departments—Defense, Veterans Affairs, and Homeland Security—accounted for 70 percent, 7 percent, and 6 percent, respectively, of the 15 departments' 2012 direct obligations in the category. The departments that obligated the largest shares of their budgets for personnel costs were Homeland Security (45 percent), Justice (41 percent), and Commerce (37 percent). Eliminating a department and transferring its programs elsewhere could yield savings in this category if total federal employment fell as a result of the transfer.

Acquisition of Assets. The smallest of the object classification system's four main categories, accounting for 6 percent of 2012 departmental obligations, is acquisition of assets—mostly equipment, but also land, structures, investments, and loans. The department with the largest proportion of such spending was the Department of Defense, which obligated 19 percent of its budget to acquire aircraft, ships, weapon systems, and other military equipment. The share of such obligations was also above average at the Energy Department, which

Table 6-1.

Direct Obligations for Grants and Fixed Charges, by Department, 2012

Department	Percentage of Direct Obligations Allocated to Grants and Fixed Charges	Direct Obligations for Grants and Fixed Charges (Billions of dollars)	Total Direct Obligations (Billions of dollars)	Primary Activities or Programs Funded by Grants and Fixed Charges
Health and Human Services	97	1,153	1,189	Medicare; Medicaid
Education	96	53	55	Grants to public school districts; aid to postsecondary students
Housing and Urban Development	95	52	55	Public housing; housing assistance
Treasury	94	501	536	Interest paid on the federal debt; refundable tax credits, such as the earned income tax credit
Labor	93	143	153	Unemployment Trust Fund
Agriculture	87	133	153	Food and nutrition assistance programs, such as the Supplemental Nutrition Assistance Program
Transportation	74	59	80	Grants to state and local governments for highways and transit systems
Veterans Affairs	55	74	135	Compensation, pension, and readjustment benefits for veterans
Interior	38	7	19	Mineral lease payments to states; funds and programs for Native Americans; grants for fish and wildlife restoration
				Continued

obligated 10 percent of its budget for assets, primarily for land and structures used for nuclear weapons programs and environmental cleanup. Assets can be acquired for use in direct program activities, as those examples illustrate; they can also be acquired for administrative support, as in the case of software systems for payroll management.

Commerce, Education, and Energy: Departmental Budgets by Program

The Departments of Commerce, Education, and Energy are among those most frequently mentioned in comments about eliminating Cabinet departments. In 1982, for example, the Reagan Administration proposed eliminating the Department of Energy, which had been created just five years earlier; and in 1995, the House of Representatives passed a budget resolution that recommended doing away with all three departments.⁶ This section examines how those departments' direct obligations were allocated in fiscal year 2012, both by office and program and by object class.

The funds of the three departments were obligated in sharply different ways. A large share of the Commerce Department's budget was allocated to personnel costs, the Education Department's budget was obligated almost entirely for grants, and the Energy Department's budget was dominated by contractual services and supplies (see Table 6-3 on page 261). Achieving substantial budgetary savings from eliminating one of these departments (or any other) would require reducing or eliminating the programs operated by that department. Smaller savings might be realized without cutting back on payments or services provided to beneficiaries if the programs were

House Committee on the Budget, Concurrent Resolution on the Budget—Fiscal Year 1996: Report to Accompany H. Con. Res. 67, House Report 104-120 (May 15, 1995), http://go.usa.gov/ WKNB.

Table 6-1.

Continued

Department	Percentage of Direct Obligations Allocated to Grants and Fixed Charges	Direct Obligations for Grants and Fixed Charges (Billions of dollars)	Total Direct Obligations (Billions of dollars)	Primary Activities or Programs Funded by Grants and Fixed Charges
State ^a	27	32	120	Global health programs; Foreign Military Financing; Economic Support Fund; development assistance
Homeland Security	16	9	56	Disaster Relief Fund; grants to state and local governments for emergency management programs
Commerce	15	1	8	Grants for economic development, management of coastal and ocean resources, and research
Justice	8	3	33	Assistance to state and local law enforcement agencies; Crime Victims Fund
Defense ^b	7	56	824	Pensions for military retirees
Energy	7	2	27	Grants for research and demonstration projects and for energy-efficiency projects

Direct Obligations for Grants and Fixed Charges, by Department, 2012

Source: Congressional Budget Office based on data from the Office of Management and Budget (OMB).

Notes: Amounts shown are net of budgetary savings recorded in 2012 for new loans and loan guarantees. Those savings were \$27 billion for the Department of Education (from the student loan program), \$6 billion for the Department of Housing and Urban Development (from mortgage insurance programs), and less than \$0.3 billion each for the Departments of Agriculture, Veterans Affairs, Commerce, and Transportation.

"Grants and fixed charges," a category from the object classification system of OMB, includes grants, subsidies, insurance claims, interest payments, and refunds.

- a. Includes direct obligations reported in the budget under the heading Department of State and Other International Programs. Half of the total obligations shown were for the Military Sales Program.
- Includes direct obligations reported under three headings in the budget: Department of Defense—Military Programs (\$682 billion);
 Other Defense—Civil Programs (\$131 billion); and Corps of Engineers—Civil Works (\$8 billion).

combined with programs at other departments, but only if the programs were managed more efficiently than they had been; the combination might also result in less efficient management.

Department of Commerce

The Department of Commerce has the smallest budget of any Cabinet department, with direct obligations of \$8 billion in fiscal year 2012. Its 11 agencies have a variety of missions, which means that the benefits and costs of various proposals to eliminate the department could differ greatly, depending on which of the agencies, if any, were retained and on the changes that were made to programs in those retained agencies. The Commerce Department is also the department with the largest share of reimbursable obligations; in fiscal year 2012, they represented a full third of the department's total obligations of \$12 billion. Indeed, two of the department's agencies are funded entirely by fees and other offsetting collections. The Patent and Trademark Office, with \$2.4 billion in reimbursable obligations, represented more than half of those obligations in the department in 2012, and the National Technical Information Service accounted for another \$66 million.⁷

^{7.} Most of the rest of the department's reimbursable obligations were for the Bureau of the Census, the National Oceanic and Atmospheric Administration, and overall department management.

Table 6-2. Direct Obligations of Selected Departments for Contractual Services and Supplies. 2012

	Contract	ect Obligati ual Services Billions of de	and Supplies	Percentage of Department Direct Obligations for Contractual Services and Supp		
	Defense ^a	Energy	Other Departments	Defense	Energy	Other Departments
Supplies	52	0	17	16	0	9
Research and Development	57	1	3	18	5	2
Operation and Maintenance of Equipment	39	0	4	12	0	2
Operation and Maintenance of Facilities	17	15	2	5	71	1
Travel and Transportation	20	0	5	6	0	3
Rent, Communications, and Utilities	10	0	12	3	0	6
Other Goods and Services from Federal Sources	70	0	82	22	0	42
Other Services from Nonfederal Sources	19	4	50	6	19	26
Other ^b	41	1	20	13	5	10
Total	325	21	195	100	100	100

Source: Congressional Budget Office based on data from the Office of Management and Budget.

a. Includes direct obligations reported under three headings in the budget: Department of Defense—Military Programs (\$682 billion); Other Defense—Civil Programs (\$131 billion); and Corps of Engineers—Civil Works (\$8 billion).

b. Includes advisory and assistance services, medical care, subsistence and support of persons, and printing and reproduction.

Eliminating either of those offices would yield no net savings to the federal budget, because cutting the spending would also mean forgoing the income.

National Oceanic and Atmospheric Administration. Of the nine Commerce Department agencies with direct obligations in 2012, by far the largest, in budgetary terms, was the National Oceanic and Atmospheric Administration (NOAA), accounting for \$5 billion in fiscal year 2012, or 63 percent of the departmental total (see Figure 6-2, as well as Table 6-4 on page 271). Almost all of NOAA's budget was obligated for five offices and for program support:

- The National Environmental Satellite, Data, and Information Service, which operates geostationary and polar orbiting satellites and manages a global environmental database;
- The National Weather Service, which provides weather forecasts and alerts;

- The National Marine Fisheries Service, which addresses issues related to fish stocks, marine mammals, and endangered species within the waters of the United States Exclusive Economic Zone;
- The National Ocean Service, which provides maps and other products and services related to navigation, supports state and territorial programs to manage coastal resources, responds to oil spills and hazardous materials releases, and manages marine sanctuaries;
- Program support, which provides maintenance and repair of NOAA's aircraft and marine fleet through the Office of Marine and Aviation Operations, as well as more general management and administrative support; and
- The Office of Oceanic and Atmospheric Research, which conducts and funds research related to climate, weather, air chemistry, the oceans, and coastal and marine resources.

Table 6-3.

(Millions of dollars)					
		Contractual	Personnel		
	Grants and	Services and	Compensation	Acquisition	
	Fixed Charges	Supplies	and Benefits	of Assets	Total ^a
		Depar	tment of Commer	ce ^b	
National Oceanic and Atmospheric Administration	670	2,554	1,593	226	5,043
Bureau of the Census	0	392	577	10	979
National Institute of Standards and Technology	185	200	309	50	744
Other	333	363	489	14	1,200
Total	1,188	3,509	2,968	300	7,966
		Depar	tment of Education	on ^c	
Office of Elementary and Secondary Education	21,813	63	0	0	21,876
Office of Special Education and Rehabilitative Services	15,469	14	0	0	15,483
Office of Federal Student Aid	8,965	1,076	177	3	10,221
Office of Postsecondary Education	2,544	9	0	0	2,553
Office of Vocational and Adult Education	1,721	15	0	0	1,736
Office of Innovation and Improvement	1,653	33	0	0	1,686
Office of English Language Acquisition	722	4	0	0	726
Departmental Management	0	199	411	3	614
Institute of Education Sciences	256	342	2	0	601
Total	53,143	1,755	590	6	55,496
		Dep	artment of Energy	у	
National Nuclear Security Administration	58	9,222 ^d	409	1,154	10,843
Energy Programs	1,720	7,056 ^d	477	686	9,939
Environmental and Other Defense Activities	59	4,431 ^d	363	934	5,788
Departmental Administration	10	119	135	0	264
Power Marketing Administrations ^e	3	42	20	51	119
Total	1,850	20,870	1,404	2,825	26,953

Direct Obligations of Selected Departments, by Object Class, 2012

Source: Congressional Budget Office based on data from the Office of Management and Budget.

a. Includes funds obligated under the object class called "Other."

b. Amounts shown are net of \$6 million in budgetary savings recorded in 2012 for new loans made in the Fisheries Finance Program.

c. Amounts shown are net of \$27.1 billion in budgetary savings recorded in 2012 for new student loans.

d. These obligations were dominated by contracts for operations and maintenance of facilities, which made up 88 percent of the total for this category for the National Nuclear Security Administration, 67 percent for energy programs, and 50 percent for environmental and other defense activities.

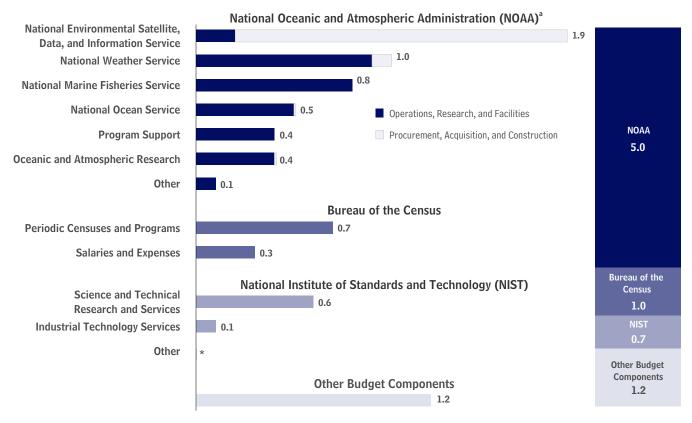
e. The power marketing administrations had total obligations of more than \$4 billion; however, all but \$119 million was reimbursable.

In terms of object classes, contractual services and supplies dominated NOAA's 2012 obligations, representing half of the total (see Table 6-3). Roughly half of the obligations in that category were for purchases of satellites from the National Aeronautics and Space Administration, or NASA (classified as contracts for "other goods and services from federal sources"). Personnel costs accounted for about one-third of NOAA's obligations, grants (primarily to university scientists for research and to states for purposes that included management of coastal zones and fisheries) for 13 percent, and asset acquisition for 4 percent.

Figure 6-2.

Direct Obligations of the Department of Commerce, by Major Component, 2012

(Billions of dollars)



Source: Congressional Budget Office based on data from the Office of Management and Budget.

Note: * = between zero and \$50 million.

a. Amounts shown are net of \$6 million in budgetary savings recorded in 2012 for new loans made in the Fisheries Finance Program.

Bureau of the Census. The agency with the second-largest budget in 2012 was the Bureau of the Census, which had direct obligations of \$1 billion. Its budget from year to year is strongly influenced by the decennial census cycle; for example, direct obligations in 2010, the year the latest decennial census was conducted, were \$6 billion. The bureau conducts decennial and five-year censuses, the annual American Community Survey, and other annual, quarterly, and monthly surveys that collect economic and demographic data.

National Institute of Standards and Technology. The third-largest agency in the Commerce Department in 2012 was the National Institute of Standards and Technology (NIST), which had direct obligations of \$0.7 billion. The institute funds laboratories where researchers from NIST and elsewhere in government, academia, and industry investigate issues relating to measurement and standards—what measurements

producers of nanoparticles can use to monitor quality, for example, or methods for testing electronic systems of health records. It also provides funding for 60 Hollings Manufacturing Extension Partnership centers around the country, which support local manufacturers by giving them access to technology, resources, and industry experts.

Other Components of the Commerce Department's

Budget. The rest of the department's budget covers six other agencies and departmental management, with collective obligations of \$1.2 billion in 2012. The largest of the six is the International Trade Administration, which promotes exports by U.S. businesses and is responsible for enforcing U.S. laws against imports deemed to be unfairly traded. The second-largest, the Economic Development Administration, differs from other agencies in the department in that most of its budget—more than 90 percent in 2012—is spent on grants, which are awarded to economically distressed communities on the basis of competitive applications. The other agencies and departmental management accounted for less than \$100 million each in direct obligations.

Department of Education

More than 95 percent of the total 2012 budget of the Department of Education, which covers seven offices, an institute, and departmental management, was obligated for grants to students pursuing postsecondary education or to state and local governments. Loans made to post-secondary students in 2012 were recorded as saving \$27 billion for the federal government, because the gov-ernment's cost of borrowing is projected to be well below the interest rates charged on the loans, and because that factor outweighed the expected cost of defaults.⁸ Excluding those savings, the department had direct obligations of \$83 billion in 2012; including them, the total came to \$55 billion (see Figure 6-3, Table 6-3 on page 261, and Table 6-5 on page 273).

Office of Elementary and Secondary Education. The office that deals with elementary and secondary education had direct obligations of \$22 billion in 2012. The funds were spent almost entirely on grant programs authorized in the Elementary and Secondary Education Act of 1965, as amended by the No Child Left Behind Act of 2001 and other acts. Most of the programs allocate grants to states on the basis of specified formulas, and the states in turn distribute the funds to school districts on the basis of formulas or, in some cases, competitions.

Obligations in 2012 were largest for the following programs:

- Education for the Disadvantaged grants to school districts, which are based on the number of students from low-income families;
- Grants to improve the quality of teachers, which cover the recruitment, retention, and professional development of teachers and principals;
- Impact Aid, which compensates school districts for the cost of educating "federally connected children," such as those who live on military bases;
- 21st Century Community Learning Center grants, which support learning opportunities for school-age children outside school hours; and
- School Improvement Grants, which states allocate to help schools that have not demonstrated "adequate yearly progress" (as defined by the No Child Left Behind Act) for two consecutive years.

Office of Special Education and Rehabilitative Services.

The Office of Special Education and Rehabilitative Services had direct obligations of \$15 billion in 2012. The largest amounts were obligated for special education (almost entirely for grants to states for special education and related services for children with disabilities) and rehabilitation services and disability research (almost entirely for grants to states to fund vocational rehabilitation services).

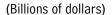
Office of Federal Student Aid. The office that is responsible for federal student aid had direct obligations of \$34 billion for Pell grants, \$2 billion for campus-based activities (supplemental educational opportunity grants and federal work-study assistance), and \$1 billion for administration of student aid, mostly for the cost of contractual services. The office also had the estimated budgetary savings of \$27 billion from new student loans that were noted above.

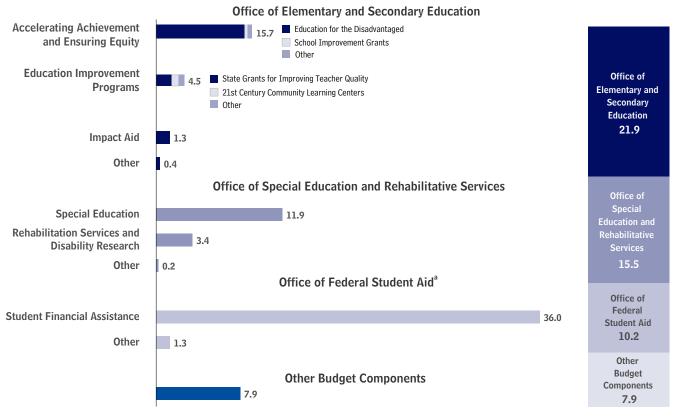
Other Components of the Education Department's Budget. The rest of the department consists of the Office of Postsecondary Education, the Office of Vocational and Adult Education, the Office of Innovation and Improvement, the Office of English Language Acquisition, and the Institute of Education Sciences. Those entities, along with the department's management, accounted for \$8 billion in direct obligations in 2012.

^{8.} Under the Federal Credit Reform Act, the budgetary cost of loans made in a given year is not the dollar volume of the loans but their expected subsidy cost to the government. The expected subsidy cost is defined as the present value of the net cash outlays expected over the life of the loans, calculated using a discount rate determined by the government's cost of borrowing. Under an alternative measure of the cost of credit programs, called fair-value accounting, the estimated cost to the government of the student loan program would be less negative (that is, savings would be lower) or positive. See Congressional Budget Office, Options to Change Interest Rates and Other Terms on Student Loans (June 2013), www.cbo.gov/publication/44318, Costs and Policy Options for Federal Student Loan Programs (March 2010), www.cbo.gov/ publication/21018, and Estimating the Value of Federal Subsidies for Loans and Loan Guarantees (August 2004), www.cbo.gov/ publication/15923.

Figure 6-3.

Direct Obligations of the Department of Education, by Major Component, 2012





Source: Congressional Budget Office based on data from the Office of Management and Budget.

a. Not shown is \$27.1 billion in budgetary savings recorded in 2012 for new student loans; with those savings, the Office of Federal Student Aid had net obligations of \$10.2 billion.

Department of Energy

The operations of the Energy Department are different from those of the Commerce and Education Departments in two important ways. First, much of the department's spending is for programs related to national defense, so policymakers weighing the costs and benefits of eliminating the department would have to take national security considerations into account. Second, a uniquely large share of the Energy Department's budget is allocated to contractual goods and servicesparticularly contracts for the operation and maintenance (O&M) of facilities. That subcategory alone represented 56 percent of the department's 2012 obligations; in contrast, it accounted for only 2 percent of the Defense Department's obligations that year and less than 0.1 percent of the combined budgets of the other 13 Cabinet departments. Sixteen of the Energy

Department's 17 national laboratories, plus five other sites controlled by the National Nuclear Security Administration (NNSA), are operated entirely by contractors.

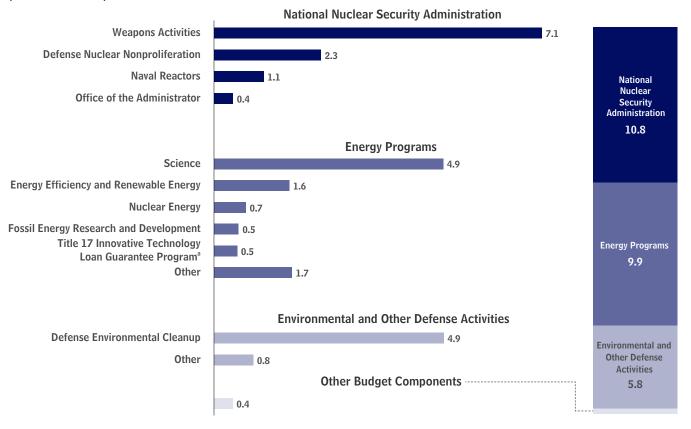
The Energy Department's budget is presented in four broad categories plus management (see Figure 6-4, as well as Table 6-6 on page 275). The three largest of the four the NNSA, energy programs, and environmental and other defense activities—accounted for more than 98 percent of the department's direct obligations in 2012.

National Nuclear Security Administration. The largest component of the Energy Department's budget is the NNSA, which had direct obligations of \$11 billion in 2012, 40 percent of the departmental total. Of that sum, \$7 billion was obligated for weapons activities, including management of the stockpile of nuclear weapons; scientific and technical studies to maintain the safety and

Figure 6-4.

Direct Obligations of the Department of Energy, by Major Component, 2012

(Billions of dollars)



Source: Congressional Budget Office based on data from the Office of Management and Budget.a. Obligations shown are for the expected subsidy costs of loan guarantees, as defined under the Federal Credit Reform Act.

reliability of those weapons; stewardship of the sites where the weapons and other nuclear materials were housed; processing and management of spent nuclear materials; and efforts to provide security for NNSA personnel and facilities, as well as for the transportation of nuclear weapons and materials. Another \$2 billion was obligated for defense nuclear nonproliferation; it funded efforts to create a plutonium reprocessing facility, keep nuclear weapons materials at vulnerable sites secure, and monitor the proliferation of nuclear weapons and materials. For the NNSA as a whole, facilities O&M contracts accounted for 75 percent of the \$11 billion total; acquisition of land and structures accounted for another 9 percent (see Table 6-3 on page 261).

Energy Programs. The second-largest component of the department's budget, energy programs, had direct obligations of \$10 billion in 2012. Half of its budget was

obligated for the Science account, which primarily supported research at the national laboratories in a wide portfolio of areas: basic energy sciences, high-energy physics, nuclear physics, biological and environmental research, advanced scientific computing, fusion energy, and others. Also relatively large was the budget account for Energy Efficiency and Renewable Energy, which funded a variety of programs, including those focusing on vehicle and building technologies, solar energy, alternative fuels, and weatherization.⁹

For more detailed information on the energy programs of the Department of Energy, see the testimony of Terry M. Dinan, Senior Advisor, Congressional Budget Office, before the Subcommittee on Energy of the House Committee on Science, Space, and Technology, *Federal Financial Support for Fuels and Energy Technologies* (March 13, 2013), www.cbo.gov/publication/ 43993.

Environmental and Other Defense Activities. This component of the Energy Department's budget accounted for \$6 billion of direct obligations in 2012. Most of the obligations were for cleanup efforts at sites contaminated by the production of nuclear weapons, particularly the Hanford Site in the state of Washington and the Savannah River Site in South Carolina. Of the \$6 billion in obligations, 38 percent were for facilities O&M contracts, 34 percent for contracts for other nonfederal services, and 16 percent for acquisition of land and structures.

Other Components of the Energy Department's Budget.

The other two components of the Energy Department's budget are departmental administration and the power marketing administrations (PMAs). Together, they accounted for direct obligations of \$383 million in 2012. That figure excludes more than \$4 billion in reimbursable obligations by the PMAs, which are offset by sales of electricity from hydropower facilities.

Policy and Implementation Issues

The advantages and disadvantages of various possible changes to federal programs are presented in the preceding chapters of this report. But in considering whether to close a Cabinet department—and if so, which of its programs to terminate, move unchanged to a new department or agency, or move in a reduced, altered, or combined form-lawmakers would face a number of questions beyond those directly relating to the programs' merits. This section discusses three. First, if a program was moved, what would be the transition costs and the long-term costs or benefits? Second, if a program was terminated, to what extent would it be replaced by efforts by the private sector or by state or local governments? And third, what steps would be legally required to terminate a program, and what types of termination costs would be incurred?

Costs and Benefits of Moving a Program

Programs may be moved from one administrative home to another for reasons other than the pursuit of budgetary savings. Indeed, the four Cabinet departments created since the 1970s—Energy in 1977, Education in 1980, Veterans Affairs in 1989, and Homeland Security in 2002—were formed primarily to facilitate coordination and communication within the government or to provide greater prominence to certain activities or policy areas.

Whatever policymakers' motivations for moving a program, doing so would probably entail significant transition costs in the short run and might increase or decrease costs in the long run. The transition costs would include physical moving expenses, rental payments on offices at two locations until the lease on the original space expired, and costs to integrate administrative systems for acquisitions, asset management, human resources, budgeting and planning, and financial management. Costs that are less visible in budgets could be incurred as well; moving could disrupt an agency's operations, for instance, or lead to conflicts and coordination problems because of differences in organizational culture. The creation of the Department of Homeland Security serves as an example of the challenges that arise from integrating many existing governmental units. Ten years after the department's creation, a former commandant of the Coast Guard (which had been transferred from the Transportation Department to DHS) noted that budget presentations by various departmental agencies reflected the different appropriation structures that they had used before the department existed, making it "difficult to clearly differentiate, for example, between personnel costs, operations and maintenance costs, information technology costs, and capital investment."10

In the long run, spending on a transferred program would be determined by the amount of appropriations it receives (for a discretionary program) or eligibility rules and formulas (for a mandatory program)—but the cost of achieving a given level of program outputs could go up or down as a result of a transfer. Costs for administrative support activities could decrease if a transferred program was administered more efficiently—with fewer people or less office space, for example—in its new home. In addition, costs for direct program activities, such as interactions with beneficiaries, could decrease if the transfer allowed a reduction in efforts that were redundant or at cross-purposes with those of other programs. The Government Accountability Office has issued a series of reports on "fragmentation, overlap, and duplication"

Testimony of Thad W. Allen, Admiral, U.S. Coast Guard (retired), before the Senate Committee on Homeland Security and Government Affairs (July 12, 2012), http://go.usa.gov/WK7j.

in federal programs, noting, for example, that the Small Business Administration and the Departments of Commerce, Housing and Urban Development, and Agriculture collectively administer 80 economic development programs, including 21 that focus on supporting efforts of entrepreneurs.¹¹ However, overlap among programs is not necessarily inefficient, and simply reducing spending on overlapping programs may reduce the total output of the programs-for example, total benefits to recipients, in the case of grant programs. Lawmakers might or might not view that result as desirable. Further, administrative and program costs of a transferred program per unit of output could be higher if the administrative structure in the new location was more unwieldy, if the cultures of different operating units were difficult to combine, or if waste, fraud, or abuse increased because management capacity was overtaxed.

The benefits and costs of shifting a program might depend on the agency or department selected as its new home. Two relevant factors are the compatibility of organizational cultures and the availability of suitable infrastructure, such as field offices and data systems. The choice of a new administrative home may not be clear-cut. For example, the Defense Department would seem to be an appropriate new home for the defenserelated activities currently conducted by the Energy Department, but the separation of responsibility for nuclear weapons themselves and for the systems and personnel that would deliver those weapons has been a feature of federal policy since 1946. As another example, making the Internal Revenue Service (IRS) the new home for the Education Department's student financial aid programs would also present both advantages and disadvantages. On the one hand, the IRS already collects financial data from households (much of the same data that the Free Application for Federal Student Aid requires, in fact) and both collects and disburses funds. On the other hand, a significant fraction of students and families who want financial aid might be unwilling to submit additional financial information to the IRS. The advantages and disadvantages would need to be weighed and compared with those of moving the

financial aid programs elsewhere—for instance, to the Department of Health and Human Services, which was originally the Department of Health, Education, and Welfare.

Responses by the Private Sector and State and Local Governments

If the federal government eliminated or significantly reduced one or more federal programs, the private sector and state and local governments might increase their own activities in the affected areas. However, the extent and nature of those responses would differ substantially across programs. In many cases, the responses of the private sector and of state and local governments would replace only a small share of the eliminated federal benefits or services, primarily because of differences in priorities and constraints on resources.

The Private Sector. The nature of the goods or services previously provided by a terminated federal program would greatly affect the extent to which the private sector would step in to replace that program. In cases in which a program's goods and services were primarily commercial, in the sense that others would voluntarily pay enough to cover the cost of producing them, the private sector might fully replace the federal role. One example is electricity generation. Generating facilities owned by the Tennessee Valley Authority or by the various power marketing administrations in the Energy Department could be transferred or sold to private firms or to the states. However, selling assets that generate income would not necessarily improve the government's long-term financial position, although it would generally improve the budget deficit in the years when sales occurred.

Conversely, in cases in which users (or some users) would not voluntarily pay enough to cover the cost of producing a program's goods and services, the private sector would be unlikely to fill the federal role if the program was eliminated. Some such cases involve goods or services that are produced most efficiently by a single provider and then can be shared by many consumers at little incremental cost—the collection and dissemination of data of broad public interest, for example. A private firm might not find it worthwhile to conduct the surveys underlying the consumer price index if it could not restrict the results to those who paid for access. Also, such information would be most efficiently collected by a single entity, rather than

Government Accountability Office, Government Operations: Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue, GAO-11-318SP (March 1, 2011), p. 43, www.gao.gov/products/GAO-11-318SP.

competing ones, so if that entity was private, policy issues regarding regulation of monopolists would arise.

Other cases in which the private sector would probably not fill the role of a terminated federal activity involve goods or services whose value depends on the government's sovereign power. For example, no one would pay for a license from one private provider to use a portion of the electromagnetic spectrum if a second private provider could issue the same license to someone else.

Still other cases in which it could be hard for the private sector to fully replace federal programs involve activities that serve noncommercial purposes along with commercial purposes. Consider federal insurance products, such as the flood insurance offered by the Department of Homeland Security and the crop insurance sold by the Agriculture Department. The flood insurance program includes a substantial effort to map flood risks, which would be costly for private insurers to continue; indeed, they might be less willing to offer flood insurance in the absence of that effort.¹² Federal crop insurance is heavily subsidized, serving not only to reduce the variability in farm producers' incomes but also to raise those incomes, on average. How large a market would exist for private crop insurance in the absence of the federal coverage is unclear-and because such insurance would not be subsidized, it would not raise average incomes.

In some cases in which federal programs mix commercial and noncommercial purposes, the private sector would probably replace part of a federal program if it was terminated. Student loans are an example. The federal government's sovereign powers allow it to enforce loan contracts in ways that private lenders cannot; for instance, it can garnish the income tax refunds of a borrower who defaults. Private lenders therefore concentrate on students whose risk of default is thought to be lower, such as those attending law or medical schools. If the federal loan programs were eliminated, the private lenders would expand the scope of their lending, but they probably would not serve all students who would have borrowed from federal loan programs. **State and Local Governments.** Eliminating a department while restructuring, scaling back, or abolishing its programs might prompt stronger responses from state and local governments than from the private sector, because the bulk of federal spending is associated with programs that seek to achieve noncommercial purposes rather than commercial purposes. In particular, some state and local governments might want to provide benefits or services within their jurisdictions that were formerly provided by federal programs. Several factors would probably determine the extent to which state and local governments replaced the federal role.

First, the greater the local, as opposed to national, benefits of federally funded activities, the more that state and local governments would tend to replace lost federal funding. In contrast, state and local governments would do less to replace reduced or terminated programs that had primarily provided benefits beyond their boundaries. For instance, programs that fund basic research, such as the research conducted at the Energy Department's national laboratories, provide benefits that fall outside any particular state.

Second, state and local governments would probably do more to replace lost federal funding in program areas that already had substantial involvement by those governments than in areas that did not. Examples of areas where state and local governments currently play large roles include primary and secondary education and transportation infrastructure.¹³

Third, state and local governments would step into roles being vacated by federal programs more vigorously when their own fiscal situations were stronger than when they were weaker. State and local governments would face their own trade-offs in deciding whether to offset forgone federal benefits or services, and if so, how to reduce spending elsewhere or raise additional taxes or other

^{12.} Another aspect of the National Flood Insurance Program that the private sector could not readily provide would be its minimum standards for building codes and land-use restrictions in floodplains.

^{13.} Indirect evidence that states would increase their spending on highways if the federal government reduced its own spending on them comes from a 2004 report by the Government Accountability Office, which found that the availability of federal funding for highways encouraged state and local governments to reallocate their own funds for other purposes. See Government Accountability Office, *Federal-Aid Highways: Trends, Effects on State Spending, and Options for Future Program Design*, GAO-04-802 (August 31, 2004), www.gao.gov/products/GAO-04-802.

revenues.¹⁴ (Similar choices among policy priorities arise when state and local governments receive federal block grants with few restrictions on the use of the funds.) Those trade-offs could be particularly difficult for state and local governments that had previously received federal grants that significantly redistributed income to their jurisdictions from elsewhere in the country. Another challenge is that most states have balanced-budget requirements, which would make it particularly hard for them to replace federal programs whose spending increases during economic downturns, because such downturns reduce state revenues.

Fourth, state and local governments whose policy preferences regarding certain benefits and services were more closely aligned with the preferences of the federal government would tend to replace a larger share of any step-down in federal support. Having the preferences of state and local governments play a larger role in determining policies would allow those governments to design programs differently, which could be more efficient when the benefits and costs of a program were confined to individual states or when experimentation and variation from state to state yielded valuable information for the nation as a whole. Conversely, it could be less efficient when the decisions made in one jurisdiction had significant consequences elsewhere. Moreover, greater flexibility in designing programs at the state level could undermine a federal objective of uniform standards for all states.

Legality of Program Termination

Eliminating a federal program would involve a complex set of policy choices but generally would not pose insuperable legal obstacles. The Congress could terminate some programs simply by not appropriating funds for them. To end other programs, the Congress would have to modify related laws. In either case, costs would continue for existing contracts and other legal requirements, and certain new costs would be incurred, such as the cost of paying for accrued annual leave and unemployment benefits to federal employees whose work had ended.

Constitutional Requirements. Only a few programs fulfill one of the federal government's constitutional requirements, but terminating such a program could violate the Constitution, unless the Constitution was amended or the requirement was assigned to another entity. For instance, the Constitution requires that the government conduct a decennial census; eliminating the Department of Commerce would require the federal government to make alternative plans to meet that requirement.

A second kind of constitutional obstacle involves the effect that eliminating certain federal programs could have on the protection of constitutional rights. For example, the Sixth Amendment guarantees the accused in a criminal prosecution the right "to have the Assistance of Counsel for his defence," which courts have subsequently interpreted to require the provision of counsel to the indigent. Eliminating the public defender program could therefore lead to violations of the Sixth Amendment.

Requirements of International Treaties and Agreements. Some federal programs are responsible for implementing

obligations under treaties or agreements that the United States has entered into with other countries. International treaties typically have weak legal enforcement mechanisms or none at all; however, eliminating programs that fulfill treaty obligations could have consequences for U.S. citizens. For example, a determination by the World Trade Organization that the United States had failed to comply with its treaty obligations could result in the imposition of tariffs by other governments against U.S. exports.

Statutory Requirements. Most spending programs could be eliminated by modifying one or more laws, such as those that directly established and financed the programs. Terminating some federal activities, however, would require changes to other programs with which they interact. To eliminate the Bureau of Labor Statistics, for instance, lawmakers would need either to reassign the responsibility for calculating certain statistics, such as the consumer price index, or to amend the tax code and federal programs that are currently indexed to those statistics.

Contractual Requirements. The Congress could eliminate programs involving contracts that imposed requirements on the federal government, but doing so would probably entail costs for canceling or renegotiating the contracts or for litigating or settling lawsuits for breach of contract. In some cases, the federal government

^{14.} See Congressional Budget Office, *Federal Grants to State and Local Governments* (March 2013), www.cbo.gov/publication/43967.

might be able to achieve savings by terminating a contract or otherwise renegotiating with the other parties to the contract, though it would probably avoid only a fraction of the remaining costs owed under the contract. In other cases, including legal settlements that the government had already made, the costs would probably be unavoidable. In the 1980s, for example, the Department of Energy entered into contracts with utilities to dispose of their nuclear waste, but it missed the 1998 deadline for accepting such waste. The federal government has entered into settlement agreements requiring that it reimburse dozens of those utilities; the reimbursements would have to be made even if the Department of Energy was closed. **Tort Liability.** Some federal programs have generated legal obligations that the government cannot easily dismiss without incurring tort liability.¹⁵ For example, eliminating the Department of Energy's cleanup efforts at sites contaminated by the production of nuclear weapons could lead to liability for environmental damage. Some of the liability (and litigation) costs might be avoided if lawmakers changed the relevant environmental laws and immunized the federal government from lawsuits.¹⁶

^{15.} A tort is a wrongful act or an infringement of a right (other than under contract) leading to civil legal liability.

^{16.} Ending the Energy Department's defense cleanup programs could also raise issues of domestic or international security.

Table 6-4.

Direct Obligations of the Department of Commerce, 2012

	(Millions of dollars)
National Oceanic and Atmospheric Administration	
Operations, research, and facilities ^a	3,165
Procurement, acquisition, and construction ^a	1,786
Pacific coastal salmon recovery	65
Limited Access System Administration Fund	10
Environmental Improvement and Restoration Fund	10
Fisheries Enforcement Asset Forfeiture Fund	4
Medicare-Eligible Retiree Health Fund contribution, NOAA	2
Promote and develop fishery products and research pertaining to American fisheries	1
Fisheries Finance Program account ^b	0
Total	5,043
Bureau of the Census	
Periodic censuses and programs	695
Salaries and expenses	284
Total	979
National Institute of Standards and Technology	
Scientific and technical research and services	575
Industrial technology services	135
Construction of research facilities	34
Total	744
International Trade Administration	
Operations and administration	464
Grants to manufacturers of worsted wool fabrics	5
Total	469
Economic Development Administration	
Economic development assistance programs	297
Salaries and expenses	39
Total	336
	Conti

Table 6-4.

Direct Obligations of the Department of Commerce, 2012

	(Millions of dollars)
Bureau of Industry and Security	105
Departmental Management	
Salaries and expenses	59
Office of the Inspector General	31
Renovation and modernization	5
Gifts and bequests	4
Total	99
Economics and Statistics Administration	97
National Telecommunications and Information Administration	
Salaries and expenses	46
Digital Television Transition and Public Safety Fund	18
Public telecommunications facilities, planning, and construction	1
Public Safety Trust Fund	1
Total	66
Minority Business Development Agency	28
Total, Department of Commerce	7,966

Source: Congressional Budget Office based on data from the Office of Management and Budget. Source: Congressional Budget Office based on data from the Office of Management and Budget.

Note: Two other departmental components had only reimbursable obligations: the Patent and Trademark Office and the National Technical Information Service.

a. The National Oceanic and Atmospheric Administration's budgetary accounts for operations, research, and facilities and for procurement, acquisition, and construction fund the agency's programs in the National Environmental Satellite, Data, and Information Service; the National Weather Service; the National Marine Fisheries Service; the National Ocean Service; and Oceanic and Atmospheric Research, as well as program support activities.

b. The Fisheries Finance Program had direct obligations of \$6 million and budgetary savings of \$6 million from new loans.

Continued

Table 6-5.

Direct Obligations of the Department of Education, 2012

Office of Elementary and Secondary Education Accelerating achievement and ensuring equity Education for the Disadvantaged grants to school districts School improvement grants	
Education for the Disadvantaged grants to school districts	
School improvement grants	14,490
	534
State agency programs for education of migrant students and	
neglected and delinquent children and youth	444
Other	249
Subtotal	15,717
Education improvement programs	
State grants for improving teacher quality	2,450
21st Century Community Learning Centers	1,150
Other	925
Subtotal	4,525
Impact Aid	1,275
Supporting student success	228
Native American student education	131
Total	21,876
Office of Special Education and Rehabilitative Services	
Special education	11,851
Rehabilitation services and disability research	3,416
Gallaudet University	126
National Technical Institute for the Deaf	65
American Printing House for the Blind	25
Total	15,483
Office of Federal Student Aid	
Student financial assistance	36,032
Student aid administration	1,253
Teacher education assistance	34
Student financial assistance debt collection	3
Federal direct student loan program account	-27,101
Total	10,221

Continued

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Table 6-5.	Continued
Direct Obligations of the Department of Education, 2012	
Office of Postsecondary Education	
Higher education	2,281
Howard University	235
College housing and academic facilities loans program account	33
College housing and academic facilities loans liquidating account	4
Total	2,553
Office of Vocational and Adult Education	1,736
Office of Innovation and Improvement	1,686
Office of English Language Acquisition	726
Departmental Management	
Program administration	447
Office for Civil Rights	103
Office of the Inspector General	64
Total	614
Institute of Education Sciences	601
Total, Department of Education	55,496

Source: Congressional Budget Office based on data from the Office of Management and Budget.

Source: Congressional Budget Office based on data from the Office of Management and Budget.

Table 6-6.

Direct Obligations of the Department of Energy, 2012

	(Millions of dollars)
National Nuclear Security Administration	7.072
Weapons activities	7,063
Defense nuclear nonproliferation	2,302
Naval reactors	1,070
Office of the Administrator	408
Total	10,843
Energy Programs ^a	
Science	4,937
Energy efficiency and renewable energy	1,619
Nuclear energy	682
Fossil energy research and development	527
Title 17 Innovative Technology Loan Guarantee Program ^b	496
Uranium Enrichment Decontamination and Decommissioning Fund	472
Advanced Research Projects Agency—Energy	297
Nondefense environmental cleanup	227
Strategic Petroleum Reserve	194
Northeast Home Heating Oil Reserve	156
Electricity delivery and energy reliability	143
Energy Information Administration	106
Ultra-deepwater and Unconventional Natural Gas and Other Petroleum Research Fund	50
Naval petroleum and oil shale reserves	16
Advanced Technology Vehicles Manufacturing Loan Program account ^b	8
Nuclear waste disposal	6
Payments to states under Federal Power Act	3
Total	9,939
Environmental and Other Defense Activities	
Defense environmental cleanup	4,946
Other defense activities	841
Defense nuclear waste disposal	1
Total	5,788
Departmental Administration	010
Departmental administration	218
Office of the Inspector General	46
Total	264
Power Marketing Administrations ^a	
Construction, rehabilitation, operation, and maintenance, Western Area Power Administration	103
Operation and maintenance, Southwestern Power Administration	12
Operation and maintenance, Southeastern Power Administration	3
Western Area Power Administration, borrowing authority, Recovery Act	1
Total	119
Total, Department of Energy	26,953

Source: Congressional Budget Office based on data from the Office of Management and Budget. Source: Congressional Budget Office based on data from the Office of Management and Budget.

- a. Two other budget accounts in energy programs—the Federal Energy Regulatory Commission and the Isotope Production and Distribution Program Fund—had only reimbursable obligations, as did the Bonneville Power Administration Fund. The power marketing administrations as a group had more than \$4 billion in reimbursable obligations.
- b. Obligations shown are for the expected subsidy costs of loans or loan guarantees, as defined under the Federal Credit Reform Act.

APPENDIX

Some Options for Deficit Reduction Not Included in This Report

Some options for changing federal spending and revenues that the Congressional Budget Office (CBO) has analyzed in the past were not included in the current volume. CBO and the staff of the Joint Committee on Taxation did not prepare new estimates of their budgetary impact either because the potential savings were comparatively small or the option has appeared in a recently published CBO report.¹ Nevertheless, they represent approaches that policymakers might take toward reducing deficits. Table A-1 lists more than 100 options and the reports in which they were presented. Other options that CBO has analyzed in the past may have become less relevant because of changes in law, economic conditions, or the operation of federal programs; they are not included.

The options affecting mandatory spending, discretionary spending, and separately, spending for federal health care programs are grouped by budget function in the table.² Although CBO has not completed detailed new estimates of their budgetary impact, on the basis of its previous work the agency can provide rough estimates of potential savings in the three broad categories:

- Less than \$10 billion between 2015 and 2023,
- Between \$10 billion and \$50 billion between 2015 and 2023, and
- More than \$50 billion between 2015 and 2023.

The approximate savings shown here might differ from the amounts shown in the reports in which the options originally appeared because the baseline projections for the affected programs might have changed, because CBO has revised its estimating methodology or judgments about the effects of the options, or because the projection periods are different.

Options that would affect revenues are listed after the spending options. No savings are shown for the revenue options because the previous estimates do not account for the significant changes in the tax code enacted in early January 2013 in the American Taxpayer Relief Act of 2012.

See, for example, Congressional Budget Office, *Reducing the* Deficit: Spending and Revenue Options (March 2011), www.cbo.gov/publication/22043; Social Security Policy Options (July 2010), www.cbo.gov/publication/21547; and Budget Options, vol. 2 (August 2009), www.cbo.gov/publication/24910.

^{2.} Budget functions are the 20 general subject categories into which budget accounts are grouped so that all spending can be presented according to the national interests being addressed. They include, for example, national defense, international affairs, energy, agriculture, health, income security, and general government.

Table A-1.

Selected Deficit Reduction Options That Appeared in Previous CBO Reports

		Sa	wings, 2015–202	3 ^b
	Original		Between	
	Publication ^a (Option number)	Less Than \$10 Billion	\$10 Billion and \$50 Billion	Over \$50 Billion
Mandatory Spence	· · · · · · · · · · · · · · · · · · ·	φτο Dimon		
Budget Function 270: Energy				
Transfer the Tennessee Valley Authority's electric utility functions and associated assets and liabilities	K (2)	х		
Reduce the size of the Strategic Petroleum Reserve	K (3)	х		
Eliminate funding for the Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Research Program	M (270-2)	х		
Budget Function 300: Natural Resources and Environment				
Revise and reauthorize the Bureau of Land Management's land sales process	M (300-3)	х		
Reassign reimbursable costs for the Pick-Sloan Missouri Basin Program to the beneficiaries it serves	M (300-8)	х		
Budget Function 350: Agriculture				
Impose new limits on payments to producers of certain agricultural commodities	M (350-1)	х		
Reduce payment acreage by 1 percentage point	M (350-2)	х		
Eliminate the Foreign Market Development Program	M (350-4)	Х		
Reduce funding for the Market Access Program	M (350-5)	х		
Limit the repayment period for export credit guarantees	M (350-6)	Х		
Budget Function 370: Commerce and Housing Credit				
GSEs choose between the standard HAMP and the HAMP Principal Reduction Alternative	B (1)	х		
GSEs choose between the standard HAMP and principal forgiveness that would reduce the outstanding loan balance to 100 percent of a home's current assessed value	B (2)	Х		
GSEs choose between the standard HAMP and principal forgiveness that would reduce the outstanding loan balance to 90 percent of a home's current assessed value	В (3)	х		
Permanently extend the Federal Communications Commission's authority to auction licenses for use of the radio spectrum	M (370-3)	х		
Budget Function 600: Income Security				
Decrease the maximum benefit for the Supplemental Nutrition Assistance Program to 97 percent of the cost of the Thrifty Food Plan	Н		x	
Eliminate the exclusion for unearned income under the Supplemental Security Income program	M (600-7)	х		
Create a sliding scale for children's Supplemental Security Income benefits based on the number of recipients in a family	M (600-8)	х		
Remove the ceiling on the collection of overpayments from the Supplemental Security Income program	M (600-9)	x		

Continued

Selected Deficit Reduction Options That Appeared in Previous CBO Reports

		Savings, 2015–2023 ^b		3 ^b
	Original Publication ^a (Option number)	Less Than \$10 Billion	Between \$10 Billion and \$50 Billion	Over \$50 Billion
Mandatory Spending	Options (Continued)			
Budget Function 650: Social Security Reduce DI benefits for people age 53 and older	G		х	
Increase the age at which disability requirements become	ŭ		ň	
less restrictive	G	Х		
Raise the earliest eligibility age for Social Security	K (29)			Х
Apply the Social Security benefit formula to individual years of earnings	K (32)			Х
Extend the waiting period for DI benefits from 5 months to 12 months	G			х
Reduce the top two PIA factors by roughly one-third	L (13)			Х
Reduce COLAs by 0.5 percentage points	L (29)			х
Reduce the spousal benefit in Social Security from 50 percent to 33 percent	M (650-5)		х	
Eliminate the Social Security lump-sum death benefit	M (650-6)	х		
Require children under age 18 to attend school full time as a condition of eligibility for Social Security benefits	M (650-7)	х		
Eliminate Social Security benefits for children of early retirees	M (650-8)	х		
Require state and local pension plans to share data with the Social Security Administration	M (650-9)	х		
Budget Function 700: Veterans Benefits and Services				
Reduce veterans' disability compensation to account for Social Security DI payments	M (700-1)		х	
Budget Function 800: General Government				
Require the IRS to deposit fees for its services in the Treasury as miscellaneous receipts	M (800-2)	х		
	ending Options ^c			
Budget Function 050: National Defense				
Purchase the Israeli Namer armored personnel carrier	C (1)	Х		
Upgrade the Bradley Infantry Fighting Vehicle	C (2)	Х		
Purchase the German Puma Infantry Fighting Vehicle	C (3)		х	
Enhance GPS using the Iridium satellite system	I (2)	Х		
Consolidate the Department of Defense's retail activities and provide a grocery allowance to service members	K (6)	х		
Consolidate and encourage efficiencies in military exchanges	M (050-18)	х		
Substitute dependent education allowances for domestic on-base schools	M (050-20)	х		
Ease restrictions on contracting for depot maintenance	M (050-22)	х		
				Continued

Continued

Continued

Selected Deficit Reduction Options That Appeared in Previous CBO Reports

		Sa	avings, 2015–202	3 ^b
	Original Publication ^a (Option number)	Less Than \$10 Billion	Between \$10 Billion and \$50 Billion	Over \$50 Billion
Discretionary Spending Budget Function 150: International Affairs	Options ^c (Continued	d)		
Eliminate the Overseas Private Investment Corporation	M (150-1)	х		
Budget Function 250: General Science, Space, and Technology	()			
Eliminate National Science Foundation spending on elementary and secondary education	M (250-1)	х		
Reduce funding for research and development programs in the Science and Technology Directorate of the Department of Homeland Security	M (250-3)	x		
Budget Function 300: Natural Resources and Environment				
Reduce funding for timber sales that lose money	M (300-4)	х		
Eliminate the Energy Star program	M (300-10)	х		
Eliminate the Environmental Protection Agency's Science to Achieve Results Grant program	M (300-11)	х		
Eliminate the National Park Service's local funding for Heritage Area grants and statutory aid	M (300-15)	х		
Budget Function 370: Commerce and Housing Credit				
Eliminate the Hollings Manufacturing Extension Partnership and the Baldrige National Quality Program	M (370-2)	х		
Impose fees on the Small Business Administration's secondary market guarantees	M (370-4)	х		
Budget Function 400: Transportation				
Eliminate the Essential Air Service program	M (400-5)	х		
Budget Function 450: Community and Regional Development				
Eliminate NeighborWorks America	M (450-2)	х		
Eliminate the Community Development Financial Institutions Fund	M (450-3)	Х		
Create state revolving funds to finance rural water and waste disposal	M (450-4)	х		
Eliminate regional development agencies	M (450-5)	х		
Restrict first-responder grants to high-risk communities	M (450-6)	Х		
Budget Function 500: Education, Training, Employment, and Social Services				
Restrict Pell grants to students who meet more stringent academic eligibility requirements	А		х	
Restrict Pell grants to students who meet academic progress requirements	А		х	
Eliminate the Even Start program and redirect some funds to other education programs	M (500-5)	х		
Eliminate administrative fees paid to schools in the campus-based student aid and Pell grant programs	M (500-8)	х		
Eliminate the Leveraging Educational Assistance Partnership program	M (500-9)	х		

Continued

Selected Deficit Reduction Options That Appeared in Previous CBO Reports

			avings, 2015–202	023 ^b	
	Original Publication ^a (Option number)	Less Than \$10 Billion	Between \$10 Billion and \$50 Billion	Over \$50 Billion	
Discretionary Spending	g Options ^c (Continued	d)			
Budget Function 600: Income Security					
Reduce rent subsidies for certain one-person households	M (600-5)	Х			
Budget Function 750: Administration of Justice					
Eliminate the Legal Services Corporation	M (750-2)	Х			
Budget Function 800: General Government					
Eliminate general fiscal assistance to the District of Columbia	M (800-1)	х			
Eliminate the Presidential Election Campaign Fund	M (800-3)	х			
Eliminate the National Youth Anti-Drug Media Campaign	M (800-4)	Х			
Health	Options				
Budget Function 550: Health					
Adopt a voucher plan and slow the growth of federal contributions for the Federal Employees Health Benefits Program	K (Mandatory-14)		х		
Repeal the individual health insurance mandate	K (Revenues-32)			Х	
Repeal the expansion of health insurance coverage under the Affordable Care Act	F			х	
Budget Function 570: Medicare					
Consolidate and reduce federal payments for graduate medical education costs at teaching hospitals	K (Mandatory-17)			х	
Reduce Medicare's payment rates across the board in high-spending areas	K (Mandatory-23)		х		
Eliminate the critical access hospital, Medicare-dependent hospital, and sole community hospital programs in Medicare	K (Mandatory-24)			х	
Revenue	Options ^d				
Individual Income Tax Base					
Convert the deduction for charitable giving to a nonrefundable 25 percent credit	J (6-8)				
Convert the deduction for charitable giving to a nonrefundable 15 percent credit	J (9-11)				
Gradually eliminate the mortgage interest deduction	K (4)				
Limit or eliminate the deduction for state and local taxes	K (5)				
Limit the tax benefit of itemized deductions to 15 percent	K (7)				
Replace the tax exclusion for interest income on state and local bonds with a direct subsidy for the issuer	K (13)				
Limit deductions for charitable gifts of appreciated assets to the gifts' tax basis	M (11)				
Eliminate tax subsidies for child and dependent care	M (13)				
Eliminate the additional standard deduction for elderly and blind taxpayers	M (14)				
Eliminate the tax exclusion for employment-based life insurance	M (16)				
End the preferential treatment of dividends paid on stock held in employee stock ownership plans	M (22)				

Continued

Selected Deficit Reduction Options That Appeared in Previous CBO Reports

		Sa	wings, 2015–202	3 ^b
	Original Publication ^a	Less Than	Between \$10 Billion and	Over
	(Option number)	\$10 Billion	\$10 Billion and \$50 Billion	Over \$50 Billion
Revenue Option	ns ^d (Continued)			
Individual Income Tax Credits				
Eliminate the refundable portion of the child tax credit	K (14)			
Eliminate the child tax credit	K (14)			
Eliminate the EITC for people who do not live with children	M (23)			
Include Social Security benefits in calculating the phase-out of the EITC	M (24)			
Consolidate tax credits and deductions for education expenses	M (26)			
Lower the age of dependent eligibility to 13 for the child tax credit	M (27)			
Corporate Income Tax Rates				
Set the corporate income tax rate at 35 percent for all corporations	K (19)			
axation of Income From Businesses and Other Entities				
Treat large pass-through entities as C corporations	Е			
Eliminate the subchapter S option and tax limited liability companies as C corporations	E			
Tax large credit unions in the same way as other thrift institutions	M (32)			
Tax the income earned by public electric utilities	M (34)			
Cap nonprofit organizations' outstanding stock of tax-exempt bonds	M (39)			
Tax the Federal Home Loan Banks under the corporate income tax	M (42)			
Tax qualified sponsorship payments to postsecondary sports programs	M (43)			
Faxation of Income From Worldwide Business Activity				
Eliminate check-the-box rules	D			
Defer interest deductions related to deferred income	D			
Tax the worldwide income of U.S. corporations as it is earned	K (25)			
axation of Payroll Income Raise the DI tax rate by 0.4 percentage points	G			
Require self-employed people and employees to pay the same amounts in payroll taxes	M (46)			

Continued

Continued

		Sa	avings, 2015–202	3 ^b
	Original Publication ^a	Less Than \$10 Billion	Between \$10 Billion and \$50 Billion	Over \$50 Billion
Revenue O	(Option number) ptions ^d (Continued)	ΣΤΟ ΡΙΙΙΙΟΙΙ	220 PIIIOII	
Other Taxes and Fees				
Impose a 5 percent value-added tax	K (27)			
Reinstate the Superfund taxes	K (34)			
·				
Impose a tax on emissions of sulfur dioxide	M (55)			
Impose a tax on emissions of nitrogen oxides	M (56)			
Charge for examinations of state-chartered banks	M (61)			
Finance the Food Safety and Inspection Service solely through fees	M (65)			

Selected Deficit Reduction Options That Appeared in Previous CBO Reports

Source: Congressional Budget Office.

Notes: The effects that CBO would estimate for these options now might differ from the amounts shown in the original publication for one or more of the following reasons: The baseline budget projections against which the options would be measured have changed, CBO has revised its estimating methodology or its judgments about the effects of the options, or the estimates for the options span a different projection period.

GSE = government-sponsored enterprise; HAMP = Home Affordable Modification Program; DI = Disability Insurance; PIA = primary insurance amount; COLA = cost-of-living adjustment; IRS = Internal Revenue Service; GPS = Global Positioning System; EITC = earned income tax credit.

- a. The options listed appeared originally in the following CBO publications:
 - A. The Federal Pell Grant Program: Recent Growth and Policy Options (September 2013), www.cbo.gov/publication/44448
 - B. *Modifying Mortgages Involving Fannie Mae and Freddie Mac: Options for Principal Forgiveness* (May 2013), www.cbo.gov/publication/44115
 - C. The Army's Ground Combat Vehicle Program and Alternatives (April 2013), www.cbo.gov/publication/44044
 - D. Options for Taxing U.S. Multinational Corporations (January 2013), www.cbo.gov/publication/43764
 - E. Taxing Businesses Through the Individual Income Tax (December 2012), www.cbo.gov/publication/43750
 - F. *Letter to the Honorable John Boehner providing an estimate for H.R. 6079, the Repeal of Obamacare Act* (July 24, 2012), www.cbo.gov/publication/43471
 - G. Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/43421
 - H. The Supplemental Nutrition Assistance Program (April 2012), www.cbo.gov/publication/43173
 - I. *The Global Positioning System for Military Users: Current Modernization Plans and Alternatives* (October 2011) www.cbo.gov/publication/42727
 - J. Options for Changing the Tax Treatment of Charitable Giving (May 2011), http://www.cbo.gov/publication/41452
 - K. Reducing the Deficit: Spending and Revenue Options (March 2011), www.cbo.gov/publication/22043
 - L. Social Security Policy Options (July 2010), www.cbo.gov/publication/21547
 - M. Budget Options, vol. 2 (August 2009), www.cbo.gov/publication/24910
- b. The savings constitute the change in the primary budget category—mandatory outlays, discretionary outlays, or revenues—and do not necessarily encompass all budgetary effects.
- c. To reduce deficits through changes in discretionary spending, lawmakers would need to reduce the statutory funding caps below the levels already established under current law or enact appropriations below those caps. The options listed here could be used to accomplish either of those objectives (although the savings shown for some of the defense options are measured relative to the Defense Department's plans rather than CBO's baseline projections). Alternatively, some of the options could be implemented to comply with the existing caps on discretionary funding rather than to reduce projected deficits.
- d. No potential savings are shown for the revenue options because the previous estimates do not account for the significant changes in the tax code enacted early in January 2013 in the American Taxpayer Relief Act of 2012.

APPENDIX

Spending Options by Budget Function

Function 050: National Defense

Discretionary Spending, Option 1	Reduce the Size of the Military to Satisfy Caps Under the Budget Control Act	56
Discretionary Spending, Option 2	Cap Increases in Basic Pay for Military Service Members	58
Discretionary Spending, Option 3	Replace Some Military Personnel With Civilian Employees	60
Discretionary Spending, Option 4	Replace the Joint Strike Fighter Program With F-16s and F/A-18s	62
Discretionary Spending, Option 5	Cancel the Army's Ground Combat Vehicle Program	64
Discretionary Spending, Option 6	Stop Building Ford Class Aircraft Carriers	66
Discretionary Spending, Option 7	Reduce the Number of Ballistic Missile Submarines	68
Discretionary Spending, Option 8	Cancel the Littoral Combat Ship Program	70
Discretionary Spending, Option 9	Defer Development of a New Long-Range Bomber	72
Health, Option 12	Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees	236

Function 150: International Affairs

Discretionary Spending, Option 10 Reduce Funding for International Affairs Programs	73
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Function 250: General Science, Space, and Technology

Discretionary Spending, Option 11	Eliminate Human Space Exploration Programs	74
Function 270: Energy		
Function 270. Energy		

Discretionary Spending, Option 12	Reduce Department of Energy Funding for Energy Technology	
	Development	75

Function 300: Natural Resources and Environment

Mandatory Spending, Option 1	Change the Terms and Conditions for Federal Oil and Gas Leasing	12
Mandatory Spending, Option 2	Limit Enrollment in Department of Agriculture Conservation Programs	14
Discretionary Spending, Option 13	Eliminate Certain Forest Service Programs	77

Function 350: Agriculture

Mandatory Spending, Option 3	Reduce Subsidies in the Crop Insurance Program	16
Mandatory Spending, Option 4	Eliminate Direct Payments to Agricultural Producers	18

Function 370: Commerce and Housing Credit

Mandatory Spending, Option 5	Reduce Subsidies to Fannie Mae and Freddie Mac	19
Discretionary Spending, Option 14	Eliminate the International Trade Administration's Trade Promotion Activities	78

Function 400: Transportation

Limit Highway Funding to Expected Highway Revenues	79
Eliminate Grants to Large and Medium-Sized Airports	81
Increase Fees for Aviation Security	82
Eliminate Subsidies for Amtrak	83
Eliminate Capital Investment Grants for Transit Systems	84
	Eliminate Grants to Large and Medium-Sized Airports Increase Fees for Aviation Security Eliminate Subsidies for Amtrak

Function 500: Education, Training, Employment, and Social Services

Mandatory Spending, Option 6	Reduce or Eliminate Subsidized Loans for Undergraduate Students	21
Mandatory Spending, Option 7	Eliminate the Add-On to Pell Grants That Is Funded With Mandatory Spending	23
Discretionary Spending, Option 20	Restrict Pell Grants to the Neediest Students	85
Discretionary Spending, Option 21	Eliminate Federal Funding for National Community Service and Senior Community Service Employment Programs	87
Discretionary Spending, Option 22	Reduce Federal Funding for the Arts and Humanities	88

Function 550: Health

Health, Option 1	Impose Caps on Federal Spending for Medicaid	186
Health, Option 2	Add a "Public Plan" to the Health Insurance Exchanges	195
Health, Option 3	Eliminate Exchange Subsidies for People With Income Over 300 Percent of the Federal Poverty Guidelines	198
Health, Option 4	Limit Medical Malpractice Torts	201
Health, Option 5	Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life	203
Health, Option 13	Reduce or Constrain Funding for the National Institutes of Health	239

Function 570: Medicare

Health, Option 6	Convert Medicare to a Premium Support System	204
Health, Option 7	Change the Cost-Sharing Rules for Medicare and Restrict Medigap Insurance	211
Health, Option 8	Raise the Age of Eligibility for Medicare to 67	219
Health, Option 9	Increase Premiums for Parts B and D of Medicare	222
Health, Option 10	Bundle Medicare's Payments to Health Care Providers	224
Health, Option 11	Require Manufacturers to Pay a Minimum Rebate on Drugs Covered Under Part D of Medicare for Low-Income Beneficiaries	234

Function 600: Income Security

Mandatory Spending, Option 8	Increase Federal Insurance Premiums for Private Pension Plans	24
Mandatory Spending, Option 9	Eliminate Concurrent Receipt of Retirement Pay and Disability Compensation for Disabled Veterans	26
Mandatory Spending, Option 10	Reduce the Amounts of Federal Pensions	28
Mandatory Spending, Option 11	Tighten Eligibility and Determinations of Income for the Supplemental Nutrition Assistance Program	30
Mandatory Spending, Option 12	Eliminate Subsidies for Certain Meals in the National School Lunch and School Breakfast Programs	32
Mandatory Spending, Option 13	Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States	33
Mandatory Spending, Option 14	Eliminate Supplemental Security Income Benefits for Children	36
Discretionary Spending, Option 23	Increase Payments by Tenants in Federally Assisted Housing	89

Function 650: Social Security

Mandatory Spending, Option 15	Link Initial Social Security Benefits to Average Prices Instead of Average Earnings	38
Mandatory Spending, Option 16	Raise the Full Retirement Age for Social Security	40
Mandatory Spending, Option 17	Lengthen by Three Years the Computation Period for Social Security Benefits	42
Mandatory Spending, Option 18	Reduce Social Security Benefits for New Beneficiaries by 15 Percent	43
Mandatory Spending, Option 19	Eliminate Eligibility for Starting Social Security Disability Benefits at Age 62 or Later	44
Mandatory Spending, Option 20	Require Social Security Disability Insurance Applicants to Have Worked More in Recent Years	46

Function 700: Veterans Benefits and Services

Mandatory Spending, Option 21	Narrow Eligibility for Veterans' Disability Compensation by Excluding Certain Disabilities Unrelated to Military Duties	47
Mandatory Spending, Option 22	Restrict VA's Individual Unemployability Benefits to Disabled Veterans Who Are Younger Than the Full Retirement Age for Social Security	48
Health, Option 14	End Enrollment in VA Medical Care for Veterans in Priority Groups 7 and 8	241

Multiple Functions

Mandatory Spending, Option 23	Use an Alternative Measure of Inflation to Index Social Security and Other Mandatory Programs	49
Discretionary Spending, Option 24	Reduce the Annual Across-the-Board Adjustment for Federal Civilian Employees' Pay	90
Discretionary Spending, Option 25	Reduce the Size of the Federal Workforce Through Attrition	92
Discretionary Spending, Option 26	Impose Fees to Cover the Cost of Government Regulations and Charge for Services Provided to the Private Sector	94
Discretionary Spending, Option 27	Repeal the Davis-Bacon Act	96
Discretionary Spending, Option 28	Eliminate or Reduce Funding for Certain Grants to State and Local Governments	97
Health, Option 15	Reduce Tax Preferences for Employment-Based Health Insurance	243
Health, Option 16	Increase the Excise Tax on Cigarettes by 50 Cents per Pack	250



Options by Major Program or Category

Business and Finance

Discretionary Spending, Option 14	Eliminate the International Trade Administration's Trade Promotion Activities	78
Discretionary Spending, Option 26	Impose Fees to Cover the Cost of Government Regulations and Charge for Services Provided to the Private Sector	94
Discretionary Spending, Option 27	Repeal the Davis-Bacon Act	96
Revenues, Option 3	Raise the Tax Rates on Long-Term Capital Gains and Dividends by 2 Percentage Points	111
Revenues, Option 11	Tax Carried Interest as Ordinary Income	128
Revenues, Option 15	Eliminate the Tax Exemption for New Qualified Private Activity Bonds	135
Revenues, Option 23	Increase Corporate Income Tax Rates by 1 Percentage Point	152
Revenues, Option 24	Repeal the "LIFO" and "Lower of Cost or Market" Inventory Accounting Methods	154
Revenues, Option 25	Repeal Certain Tax Preferences for Extractive Industries	156
Revenues, Option 26	Extend the Period for Depreciating the Cost of Certain Investments	158
Revenues, Option 27	Repeal the Deduction for Domestic Production Activities	160
Revenues, Option 28	Repeal the Low-Income Housing Tax Credit	162
Revenues, Option 29	Modify the Rules for the Sourcing of Income From Exports	164
Revenues, Option 30	Determine Foreign Tax Credits on a Pooling Basis	166
Revenues, Option 33	Impose a Tax on Financial Transactions	172
Revenues, Option 34	Impose a Fee on Large Financial Institutions	174
Revenues, Option 35	Impose a Tax on Emissions of Greenhouse Gases	176

Education

Mandatory Spending, Option 6	Reduce or Eliminate Subsidized Loans for Undergraduate Students	21
Mandatory Spending, Option 7	Eliminate the Add-On to Pell Grants That Is Funded With Mandatory Spending	23
Discretionary Spending, Option 20	Restrict Pell Grants to the Neediest Students	85
Revenues, Option 16	Eliminate Certain Tax Preferences for Education Expenses	137

Energy, Science, and Space

Discretionary Spending, Option 11	Eliminate Human Space Exploration Programs	74
Discretionary Spending, Option 12	Reduce Department of Energy Funding for Energy Technology Development	75
Discretionary Spending, Option 28	Eliminate or Reduce Funding for Certain Grants to State and Local Governments	97
Revenues, Option 25	Repeal Certain Tax Preferences for Extractive Industries	156
Revenues, Option 35	Impose a Tax on Emissions of Greenhouse Gases	176

Federal Employment

Mandatory Spending, Option 10	Reduce the Amounts of Federal Pensions	28
Mandatory Spending, Option 23	Use an Alternative Measure of Inflation to Index Social Security and Other Mandatory Programs	49
Discretionary Spending, Option 1	Reduce the Size of the Military to Satisfy Caps Under the Budget Control Act	56
Discretionary Spending, Option 2	Cap Increases in Basic Pay for Military Service Members	58
Discretionary Spending, Option 3	Replace Some Military Personnel With Civilian Employees	60
Discretionary Spending, Option 24	Reduce the Annual Across-the-Board Adjustment for Federal Civilian Employees' Pay	90
Discretionary Spending, Option 25	Reduce the Size of the Federal Workforce Through Attrition	92
Revenues, Option 36	Increase Federal Civilian Employees' Contributions to Their Pensions	178

Health

Mandatory Spending, Option 23	Use an Alternative Measure of Inflation to Index Social Security and Other Mandatory Programs	49
Discretionary Spending, Option 26	Impose Fees to Cover the Cost of Government Regulations and Charge for Services Provided to the Private Sector	94
Revenues, Option 8	Limit the Value of Itemized Deductions	121
Revenues, Option 20	Increase the Payroll Tax Rate for Medicare Hospital Insurance by 1 Percentage Point	145
Revenues, Option 32	Increase All Taxes on Alcoholic Beverages to \$16 per Proof Gallon	170
Health, Option 1	Impose Caps on Federal Spending for Medicaid	186
Health, Option 2	Add a "Public Plan" to the Health Insurance Exchanges	195
Health, Option 3	Eliminate Exchange Subsidies for People With Income Over 300 Percent of the Federal Poverty Guidelines	198
Health, Option 4	Limit Medical Malpractice Torts	201
Health, Option 5	Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life	203
Health, Option 6	Convert Medicare to a Premium Support System	204
Health, Option 7	Change the Cost-Sharing Rules for Medicare and Restrict Medigap Insurance	211
Health, Option 8	Raise the Age of Eligibility for Medicare to 67	219
Health, Option 9	Increase Premiums for Parts B and D of Medicare	222
Health, Option 10	Bundle Medicare's Payments to Health Care Providers	224
Health, Option 11	Require Manufacturers to Pay a Minimum Rebate on Drugs Covered Under Part D of Medicare for Low-Income Beneficiaries	234
Health, Option 12	Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees	236
Health, Option 13	Reduce or Constrain Funding for the National Institutes of Health	239
Health, Option 14	End Enrollment in VA Medical Care for Veterans in Priority Groups 7 and 8	241
Health, Option 15	Reduce Tax Preferences for Employment-Based Health Insurance	243
Health, Option 16	Increase the Excise Tax on Cigarettes by 50 Cents per Pack	250

Housing

Mandatory Spending, Option 5	Reduce Subsidies to Fannie Mae and Freddie Mac	19
Discretionary Spending, Option 23	Increase Payments by Tenants in Federally Assisted Housing	89
Discretionary Spending, Option 28	Eliminate or Reduce Funding for Certain Grants to State and Local Governments	97
Revenues, Option 5	Convert the Mortgage Interest Deduction to a 15 Percent Tax Credit	115
Revenues, Option 8	Limit the Value of Itemized Deductions	121
Revenues, Option 28	Repeal the Low-Income Housing Tax Credit	162

Income Security

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About This Document

t the request of the House and Senate Committees on the Budget, the Congressional Budget Office (CBO) periodically issues a compendium of budget options to help inform federal lawmakers about the implications of possible policy choices. This volume presents more than 100 options for altering spending and revenues to reduce federal budget deficits.

The options discussed in this report come from a variety of sources, including legislative proposals, various Administrations' budget proposals, Congressional staff, other government entities, and private groups. The options are intended to reflect a range of possibilities rather than to provide a ranking of priorities or a comprehensive list. The inclusion or exclusion of a particular policy change does not represent an endorsement or rejection by CBO. In keeping with CBO's mandate to provide objective, impartial analysis, this report makes no recommendations.

This volume is the result of work by almost 150 people at CBO, whose names are listed on the following pages, as well as the staff of the Joint Committee on Taxation. Various experts outside of CBO (also listed) reviewed selected portions of the volume in draft. (The assistance of external reviewers implies no responsibility for the final product, which rests solely with CBO.)

The report is available on CBO's website (www.cbo.gov/publication/44715).

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