CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

An Analysis of the President's Budgetary Proposals for Fiscal Year 2005

MARCH 2004

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The Congress of the United States ■ Congressional Budget Office

Notes

Unless otherwise indicated, the years referred to in this report are fiscal years.

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

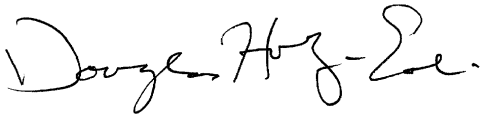
Preface

This Congressional Budget Office (CBO) analysis of the President's budgetary proposals for fiscal year 2005 was prepared at the request of the Senate Committee on Appropriations. The report updates CBO's preliminary analysis, which was released on February 27, 2004. That analysis incorporated estimates from the Joint Committee on Taxation that subsequently have been slightly revised. Those updated revenue estimates as well as other minor corrections are reflected in this report.

The analysis was produced by the staffs of CBO's Budget Analysis, Macroeconomic Analysis, and Tax Analysis Divisions under the supervision of Robert Sunshine, Robert Dennis, and Thomas Woodward, respectively. The baseline revenue estimates and the estimates of certain revenue proposals were prepared by CBO; most of the estimates of the President's revenue proposals were prepared by the Joint Committee on Taxation.

Barry Blom of CBO's Projections Unit wrote Chapter 1 under the supervision of Jeff Holland, with assistance from Mark Booth, John Peterson, David Weiner, and the staff of the State and Local Government Cost Estimates Unit. Ben Page of the Macroeconomic Analysis Division wrote Chapter 2 and Appendixes A and B with assistance from Bob Arnold, Paul Burnham, Ufuk Demiroglu, Tracy Foertsch, Mark Lasky, Shinichi Nishiyama, Larry Ozanne, and Frank Russek.

Leah Mazade edited the report, and Christian Spoor proofread it. Maureen Costantino prepared the report for publication. Lenny Skutnik printed the initial copies, and Annette Kalicki produced the electronic versions for CBO's Web site (www.cbo.gov).



Douglas Holtz-Eakin
Director

March 2004

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1

CBO's Estimate of the President's Budget for Fiscal Year 2005

At the request of the Senate Committee on Appropriations, the Congressional Budget Office (CBO), with contributions from the Joint Committee on Taxation (JCT), has analyzed the President's budget submission for fiscal year 2005. According to CBO's estimates, which use the agency's own economic assumptions and estimating techniques, the deficit under the President's budgetary proposals would be $478 billion in fiscal year 2004 and $358 billion in 2005 (see Table 1-1).[1] As a share of the economy, the deficit would total 4.2 percent of gross domestic product (GDP) this year, then fall to 3.0 percent next year. Under the President's policies, the deficit would decline further—to 2.1 percent of GDP—in 2006 and then remain between 1.6 percent and 1.8 percent of GDP through 2014. Those figures do not include possible future costs for ongoing operations in Iraq and Afghanistan, which the Administration did not include in its budget for 2005 and subsequent years.

Over the 10-year budget projection period, from 2005 through 2014, deficits would total more than $2.7 trillion under the President's policies—$726 billion higher than CBO's baseline projection of the cumulative deficit.[2] Debt held by the public would rise from 36 percent of GDP at the end of 2003 to about 40 percent during the years 2006 through 2014.

Under the President's budgetary proposals, outlays would total slightly less than 20 percent of GDP from 2005 through 2014 (see Table 1-2). Over that same period, spending for entitlements and other mandatory programs under the President's budget would grow faster than nominal GDP (by 5.7 percent annually versus 4.7 percent); in contrast, discretionary outlays would rise at an average annual rate of only 1.8 percent. Revenues as a share of GDP would grow from 15.8 percent this year to 16.8 percent in 2005—slightly below CBO's baseline level of 17 percent. By 2007, revenues would reach nearly 18 percent of GDP and remain around that level through 2014.

Relative to CBO's baseline projections, the President's budget would decrease outlays (excluding debt service) by $597 billion from 2005 through 2014, CBO estimates. Outlays for programs funded by discretionary appropriations (which CBO extrapolated beyond 2009) would be $706 billion below the baseline level over that period, mainly because CBO's baseline, as required by law, extends the 2004 supplemental appropriations for activities in Iraq and Afghanistan throughout the period.[3] That extension is equivalent to an assumption that discretionary spending on activities in Iraq and Afghanistan will con-

1. This report incorporates small revisions to some of the results that CBO released in its preliminary analysis on February 27, 2004. In total, the revisions reduce CBO's estimate of the cumulative deficit under the President's budgetary proposals by $12 billion over the 2005-2014 period.

2. The President's budget does not provide year-by-year estimates of spending and revenues after 2009. It does, however, specify a total budgetary effect from changes in tax and mandatory spending laws for the entire 10-year period and proposes annual levels of discretionary spending through 2009. To estimate discretionary outlays for the 2010-2014 period, CBO projected the discretionary budget authority recommended by the President for 2009, adjusted for inflation.

3. The Balanced Budget and Emergency Deficit Control Act of 1985 states that discretionary spending should be projected by adjusting the current year's budget authority to reflect inflation.

Table 1-1.

Comparison of Projected Deficits and Surpluses in CBO's Estimate of the President's Budget and CBO's March Baseline

(Billions of dollars)

	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
CBO's Estimate of the President's Budget														
On-Budget Deficit	-536	-639	-531	-464	-450	-476	-496	-498	-553	-532	-558	-572	-2,418	-5,132
Off-Budget Surplus	161	161	174	193	208	224	238	251	264	273	281	288	1,037	2,394
Total Deficit	**-375**	**-478**	**-358**	**-271**	**-242**	**-252**	**-258**	**-247**	**-289**	**-259**	**-278**	**-284**	**-1,381**	**-2,738**
CBO's March Baseline														
On-Budget Deficit	-536	-638	-537	-466	-482	-509	-519	-523	-439	-310	-314	-302	-2,513	-4,402
Off-Budget Surplus	161	161	174	193	208	224	238	250	263	273	280	287	1,036	2,390
Total Deficit	**-375**	**-477**	**-363**	**-273**	**-274**	**-286**	**-281**	**-272**	**-176**	**-38**	**-34**	**-15**	**-1,477**	**-2,012**
Difference (President's budget minus baseline)														
On-Budget Deficit	0	-1	6	1	32	33	22	25	-114	-222	-244	-270	95	-730
Off-Budget Surplus	0	0	*	*	*	*	1	1	1	1	1	1	1	4
Total Deficit	**0**	**-1**	**6**	**1**	**32**	**34**	**23**	**26**	**-114**	**-221**	**-243**	**-269**	**96**	**-726**
Memorandum:														
Total Deficit as a Percentage of GDP														
CBO's estimate of the President's budget	-3.5	-4.2	-3.0	-2.1	-1.8	-1.8	-1.8	-1.6	-1.8	-1.6	-1.6	-1.6	-2.1	-1.8
CBO's baseline	-3.5	-4.2	-3.0	-2.1	-2.1	-2.1	-1.9	-1.8	-1.1	-0.2	-0.2	-0.1	-2.2	-1.3
Debt Held by the Public as a Percentage of GDP														
CBO's estimate of the President's budget	36.1	38.2	39.4	39.8	40.0	40.1	40.2	40.1	40.3	40.2	40.2	40.1	n.a.	n.a.
CBO's baseline	36.1	38.2	39.4	39.8	40.3	40.6	40.8	40.9	40.3	38.9	37.6	36.1	n.a.	n.a.

Sources: Congressional Budget Office; Joint Committee on Taxation.

Note: * = between -$500 million and $500 million; n.a. = not applicable.

tinue at 2004 levels, adjusted for inflation, for the next 10 years. By contrast, the President's budget includes no funding for reconstruction and military operations in those countries beyond 2004. If those supplemental appropriations were excluded from the baseline projection, defense discretionary outlays over the next 10 years under the President's proposals would exceed that projection by $451 billion, or about 10 percent, CBO estimates; nondefense discretionary outlays would fall below that adjusted projection by $277 billion, or about 6 percent.

The President's proposals would increase mandatory spending (excluding debt service) through 2014 by $109 billion compared with CBO's baseline; most of that additional spending would come from proposals relating to refundable tax credits.[4] Debt-service costs on additional

4. Taxpayers who have no tax liability and income below a certain level can receive earned income and child tax credits in the form of government payments, which are classified as outlays in the federal budget.

Table 1-2.

CBO's Estimate of the President's Budget

	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
							In Billions of Dollars							
Revenues														
On-budget	1,258	1,272	1,454	1,610	1,722	1,811	1,905	2,016	2,093	2,210	2,330	2,458	8,502	19,609
Off-budget	524	545	572	601	629	659	690	721	753	786	821	858	3,152	7,091
Total	**1,782**	**1,816**	**2,027**	**2,211**	**2,351**	**2,470**	**2,595**	**2,738**	**2,847**	**2,996**	**3,151**	**3,315**	**11,654**	**26,701**
Outlays														
Discretionary spending	825	895	906	894	901	921	944	969	998	1,014	1,043	1,068	4,565	9,658
Mandatory spending	1,179	1,245	1,298	1,368	1,437	1,522	1,612	1,702	1,810	1,897	2,028	2,158	7,237	16,833
Net interest	153	155	180	220	256	279	298	313	328	344	358	374	1,232	2,948
Total	**2,158**	**2,295**	**2,384**	**2,482**	**2,593**	**2,722**	**2,853**	**2,984**	**3,136**	**3,256**	**3,429**	**3,600**	**13,034**	**29,439**
On-budget	1,795	1,911	1,986	2,074	2,172	2,287	2,401	2,514	2,647	2,743	2,888	3,030	10,920	24,741
Off-budget	363	384	399	408	421	435	451	470	489	513	540	570	2,114	4,697
Deficit (-) or Surplus	**-375**	**-478**	**-358**	**-271**	**-242**	**-252**	**-258**	**-247**	**-289**	**-259**	**-278**	**-284**	**-1,381**	**-2,738**
On-budget	-536	-639	-531	-464	-450	-476	-496	-498	-553	-532	-558	-572	-2,418	-5,132
Off-budget	161	161	174	193	208	224	238	251	264	273	281	288	1,037	2,394
Debt Held by the Public	3,914	4,387	4,758	5,043	5,298	5,563	5,834	6,092	6,393	6,664	6,954	7,251	n.a.	n.a.
Memorandum:														
Gross Domestic Product	10,829	11,469	12,091	12,682	13,236	13,862	14,519	15,187	15,862	16,562	17,301	18,070	66,389	149,371
							As a Percentage of GDP							
Revenues														
On-budget	11.6	11.1	12.0	12.7	13.0	13.1	13.1	13.3	13.2	13.3	13.5	13.6	12.8	13.1
Off-budget	4.8	4.7	4.7	4.7	4.8	4.8	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Total	**16.5**	**15.8**	**16.8**	**17.4**	**17.8**	**17.8**	**17.9**	**18.0**	**17.9**	**18.1**	**18.2**	**18.3**	**17.6**	**17.9**
Outlays														
Discretionary spending	7.6	7.8	7.5	7.0	6.8	6.6	6.5	6.4	6.3	6.1	6.0	5.9	6.9	6.5
Mandatory spending	10.9	10.9	10.7	10.8	10.9	11.0	11.1	11.2	11.4	11.5	11.7	11.9	10.9	11.3
Net interest	1.4	1.4	1.5	1.7	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	1.9	2.0
Total	**19.9**	**20.0**	**19.7**	**19.6**	**19.6**	**19.6**	**19.6**	**19.6**	**19.8**	**19.7**	**19.8**	**19.9**	**19.6**	**19.7**
On-budget	16.6	16.7	16.4	16.4	16.4	16.5	16.5	16.6	16.7	16.6	16.7	16.8	16.4	16.6
Off-budget	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.1
Deficit (-) or Surplus	**-3.5**	**-4.2**	**-3.0**	**-2.1**	**-1.8**	**-1.8**	**-1.8**	**-1.6**	**-1.8**	**-1.6**	**-1.6**	**-1.6**	**-2.1**	**-1.8**
On-budget	-4.9	-5.6	-4.4	-3.7	-3.4	-3.4	-3.4	-3.3	-3.5	-3.2	-3.2	-3.2	-3.6	-3.4
Off-budget	1.5	1.4	1.4	1.5	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6
Debt Held by the Public	36.1	38.2	39.4	39.8	40.0	40.1	40.2	40.1	40.3	40.2	40.2	40.1	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

borrowing would add another $37 billion to the cumulative deficit.

The President's proposed tax policies would lower receipts relative to CBO's baseline projection by about $1.3 trillion between 2005 and 2014.[5] Roughly $1.1 trillion (85 percent) of that difference stems from the President's proposal to permanently extend provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA). Because most of those provisions are slated to expire at the end of 2010, nearly 87 percent ($949 billion) of the decrease in revenues attributable to their extension would be seen during the 2011-2014 period. The remaining portion of the overall reduction in revenues (relative to CBO's baseline) would come from a variety of proposals either to extend current tax laws that are set to expire over the next 10 years or to introduce new tax provisions.

The preceding paragraphs summarize the results—presented in detail later in this chapter—of CBO's analysis of the President's budgetary proposals using methods that do not include the proposals' potential impact on the economy. Because any such impact could in turn influence how the proposals affected the deficit, CBO has prepared a macroeconomic analysis of the Administration's proposals. That assessment, which is discussed in Chapter 2, uses various models and assumptions to indicate the range of potential economic and budgetary impacts of the President's proposed policies. CBO has concluded that the macroeconomic effects and their resulting budgetary impact are likely to be modest.

Overall, CBO's and the Administration's estimates of the President's budget are similar (see Table 1-3). In their outlook for the next several years, both agencies expect the deficit to peak in 2004: CBO projects a deficit of $478 billion for this year; the Administration, a shortfall of $521 billion. For 2005, CBO estimates that the deficit will total $358 billion, $6 billion less than the Administration anticipates. (Neither figure includes costs for operations in Iraq and Afghanistan.) For the 2005-2009 period (the Administration did not provide estimates beyond 2009), CBO's cumulative deficit projection of $1.38 trillion is only $32 billion more than the Administration's estimate.

For 2004, CBO estimates that outlays will be $24 billion below the Administration's estimate; for the 2005-2009 period, CBO's estimates total just $9 billion less than those of the Administration. On the revenue side of the budget, the story is much the same—CBO's estimates under the President's budgetary proposals are similar to the Administration's. For 2004, CBO anticipates that total revenues under the President's budget will be $18 billion higher than the Administration expects; however, CBO's revenue estimate for the 2005-2009 period is $41 billion (about 0.3 percent) lower than the Administration's. Most of that variance can be traced to differing projections of revenues under current law.

In conjunction with its analysis of the President's budget, CBO has updated its baseline projections to take into account new information from the budget and other sources. Those changes are almost exclusively technical (that is, not related to legislation or to economic factors); revised estimates of spending for Medicaid and for Parts A and B of Medicare account for most of them. CBO now projects that the cumulative deficit for the 2005-2014 period will total a little more than $2 trillion if current policies remain unchanged—an increase of $119 billion from the baseline projections that CBO published in January 2004.

The President's Budgetary Policies

The President's policies would increase the projected deficit by $1 billion in 2004 and $726 billion between 2005 and 2014, CBO estimates. Outlays would be below the level in CBO's baseline by $559 billion over that 10-year period, largely because the President's budget does not assume further funding for activities in Iraq and Afghanistan, whereas CBO's baseline assumes continued spending for those activities at the 2004 level adjusted for inflation. Over the 10 years, revenues under the President's policies would be nearly $1.3 trillion lower than in the baseline—mostly because of the proposed extension and acceleration of provisions in EGTRRA and JGTRRA.

5. For proposals that would amend the Internal Revenue Code, CBO is required by law to use estimates provided by the Joint Committee on Taxation. For estimates related to the 2005 budget, see Joint Committee on Taxation, *Estimated Budget Effects of the Revenue Provisions Contained in the President's Fiscal Year 2005 Budget Proposal,* JCX-14-04R (March 3, 2004).

Table 1-3.

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

(Billions of dollars)

	2004	2005	2006	2007	2008	2009	Total, 2005-2009
Administration's Estimate							
Deficit Under the President's Budget	-521	-364	-268	-241	-239	-237	-1,349
Sources of Differences Between CBO and the Administration							
Revenue Differences							
Baseline	26	1	14	4	-18	-35	-33
Policy	-8	-11	-9	-4	3	13	-8
Subtotal	18	-10	5	*	-16	-21	-41
Outlay Differences							
Discretionary	-13	-8	2	-4	-2	1	-11
Mandatory							
Baseline	-9	-12	-13	-7	-13	-13	-58
Policy	*	3	14	3	8	12	40
Subtotal	-9	-10	1	-5	-5	*	-19
Net interest	-1	2	7	9	5	-2	21
Subtotal, outlays	-24	-15	9	1	-2	-1	-9
Total, All Differences[a]	**42**	**6**	**-4**	**-1**	**-13**	**-21**	**-32**
CBO's Estimate							
Deficit Under the President's Budget	-478	-358	-271	-242	-252	-258	-1,381
Memorandum:							
Economic Differences							
Revenues	-1	2	6	-8	-26	-44	-70
Outlays	5	9	14	20	20	18	81
Total[a]	-6	-7	-8	-28	-46	-62	-151
Technical Differences							
Revenues	19	-11	*	8	10	23	29
Outlays	-29	-25	-5	-19	-23	-19	-90
Total[a]	48	13	4	27	33	41	119

Sources: Congressional Budget Office; Joint Committee on Taxation.

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

a. Positive numbers denote that the Administration's estimate of the deficit is higher than CBO's; negative numbers denote that its estimate of the deficit is lower than CBO's.

Table 1-4.

Discretionary Spending Under the President's Budget and CBO's March Baseline

(Billions of dollars)

	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
CBO's Estimate of Discretionary Spending Under the President's Budget[a]														
Funding														
Defense	455	459	421	443	463	484	507	519	532	545	558	572	2,317	5,043
Nondefense														
Homeland security[b]	28	27	31	30	32	33	37	35	36	37	38	39	163	349
Other[b]	407	433	415	416	419	422	423	433	442	453	463	474	2,095	4,361
Subtotal, nondefense	435	460	446	447	451	455	459	469	479	490	501	513	2,258	4,710
Total	**890**	**919**	**867**	**889**	**914**	**939**	**966**	**987**	**1,010**	**1,034**	**1,060**	**1,086**	**4,575**	**9,752**
Outlays														
Defense	405	452	447	439	445	464	485	505	525	531	549	564	2,281	4,955
Nondefense														
Homeland security	23	23	27	30	32	33	35	35	36	37	38	39	157	343
Other	397	420	431	425	423	423	424	429	437	446	456	466	2,127	4,360
Subtotal, nondefense	420	443	459	455	455	456	458	464	473	483	493	505	2,284	4,703
Total	**825**	**895**	**906**	**894**	**901**	**921**	**944**	**969**	**998**	**1,014**	**1,043**	**1,068**	**4,565**	**9,658**
CBO's Baseline for Discretionary Spending														
Funding														
Defense	455	459	472	480	491	503	516	529	542	556	570	585	2,462	5,244
Nondefense														
Homeland security[b]	28	27	29	27	28	29	32	30	31	32	33	34	146	306
Other[b]	407	433	447	454	464	475	487	498	510	522	535	548	2,327	4,939
Subtotal, nondefense	435	460	476	482	492	504	518	529	541	554	568	581	2,472	5,246
Total	**890**	**919**	**948**	**962**	**984**	**1,007**	**1,035**	**1,057**	**1,083**	**1,110**	**1,138**	**1,166**	**4,935**	**10,490**
Outlays														
Defense	405	452	469	476	482	497	509	522	540	544	563	578	2,433	5,180
Nondefense														
Homeland security	23	23	26	28	29	30	30	31	31	32	33	33	142	302
Other	397	420	441	452	462	471	481	492	503	514	526	539	2,307	4,882
Subtotal, nondefense	420	443	467	480	491	501	512	523	534	547	559	572	2,450	5,184
Total	**825**	**895**	**936**	**956**	**973**	**998**	**1,021**	**1,045**	**1,074**	**1,091**	**1,122**	**1,150**	**4,882**	**10,364**

Continued

Policy Proposals That Affect Discretionary Spending

By CBO's estimate, the President's budget proposes nearly $823 billion in discretionary budget authority for 2005 (including $2.5 billion previously enacted for Project Bioshield, a program to develop biodefense countermeasures) and $44 billion in obligational authority for transportation programs—for total discretionary funding of $867 billion (see Table 1-4).[6] (The advance appropriations for Project Bioshield are not part of the Administration's discretionary funding total. In addition, for a number of reasons, including different projections of offsetting collections and the effect of changes to mandatory programs proposed in appropriation bills, the Adminis-

6. Spending from the Highway Trust Fund and the Airport and Airway Trust Fund is subject to obligation limitations. Budget authority for those programs is provided in authorizing legislation and is not considered discretionary.

Table 1-4.

Continued

(Billions of dollars)

	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
	Difference (President's budget minus baseline)													
Funding														
Defense	0	0	-51	-38	-28	-19	-10	-10	-11	-11	-12	-13	-145	-202
Nondefense														
Homeland security[b]	0	0	2	3	3	4	5	5	5	5	5	5	17	43
Other[b]	0	0	-32	-38	-45	-53	-64	-65	-68	-70	-72	-73	-232	-579
Subtotal, nondefense	0	0	-30	-35	-42	-49	-59	-60	-63	-64	-66	-68	-215	-536
Total	**0**	**0**	**-81**	**-73**	**-70**	**-68**	**-69**	**-70**	**-73**	**-76**	**-78**	**-81**	**-360**	**-738**
Outlays														
Defense	0	0	-22	-37	-37	-33	-24	-17	-15	-13	-14	-14	-152	-225
Nondefense														
Homeland security	0	0	1	2	3	4	4	5	5	5	5	5	15	40
Other	0	0	-9	-27	-39	-48	-58	-63	-66	-69	-71	-73	-180	-521
Subtotal, nondefense	0	0	-8	-25	-35	-44	-53	-58	-61	-63	-65	-67	-166	-481
Total	**0**	**0**	**-30**	**-62**	**-72**	**-77**	**-77**	**-76**	**-76**	**-77**	**-79**	**-81**	**-318**	**-706**

Source: Congressional Budget Office.

a. The President's budget specifies discretionary spending only through 2009. The numbers shown here for discretionary spending after 2009 under the President's budget are projections by CBO using its baseline rates of inflation.

b. Funding comprises both budget authority and obligation limitations. Spending from the Highway Trust Fund and the Airport and Airway Trust Fund is subject to such limitations. Budget authority for those programs is provided in authorizing legislation and is not considered discretionary.

tration's estimate of budget authority is about $2 billion lower than CBO's figure.)

By comparison, discretionary funding for 2004 (including $43 billion in obligational authority for transportation programs and $0.9 billion for Project Bioshield) totals $919 billion. That sum includes $87 billion in supplemental budget authority mostly for reconstruction and military operations in Iraq and Afghanistan.

If the supplemental appropriations for 2004 were excluded from the comparison, the growth of discretionary funding (including obligational authority) in 2005 under the President's proposed budget would equal 4.2 percent, or $35 billion. Defense spending would grow by about 7 percent, and nondefense spending for homeland security would rise by roughly 15 percent.[7] Other nondefense funding, by contrast, would grow by 1 percent (see Table 1-5).

For 2005, the President's budget would add $27 billion in discretionary budget authority for defense programs, compared with the funding level for 2004 excluding supplemental appropriations. The budget would increase funding for operations and maintenance (by $13 billion), for pay and other benefits for service members (by $6.5 billion), and for the research and development of new weapon systems (by $4.6 billion).

The category of homeland security is also slated for an increase in funding—of $4 billion—in 2005 under the President's budget. Health-related programs would receive the largest portion of that increase ($1.8 billion), although most of that amount has already been provided

7. Funding for homeland security in the President's budget for 2005 includes about $700 million for programs that were not classified in that category for 2004.

Table 1-5.

Comparison of Discretionary Budget Authority Enacted for 2004 and Requested by the President for 2005, by Budget Function

(Billions of dollars)

			Increase or Decrease (-)	
	2004 Enacted	2005 Request	Billions of Dollars	Percent
Defense Discretionary	459.1	420.8	-38.3	-8.3
Nondefense Discretionary				
International affairs	48.7	31.6	-17.1	-35.1
General science, space, and technology	23.3	24.4	1.1	4.7
Energy	3.6	3.5	-0.1	-2.2
Natural resources and environment	30.3	28.4	-1.9	-6.2
Agriculture	5.6	5.5	-0.1	-2.0
Commerce and housing credit[a]	-0.8	-1.2	-0.4	49.0
Transportation	23.7	23.9	0.2	0.9
Community and regional development	15.6	14.0	-1.6	-10.2
Education, training, employment, and social services	78.0	80.4	2.3	3.0
Health	51.8	53.2	1.3	2.5
Medicare (Administrative costs)	3.8	3.9	0.1	1.5
Income security	44.6	45.2	0.6	1.2
Social Security (Administrative costs)	4.1	4.5	0.4	9.4
Veterans' benefits and services	29.3	29.8	0.5	1.8
Administration of justice	37.1	37.9	0.9	2.3
General government	17.6	17.2	-0.4	-2.3
Allowances for emergencies and other needs	0	-0.2	-0.2	n.a.
Subtotal, nondefense discretionary	416.4	402.1	-14.3	-3.4
Total Discretionary	875.5	822.9	-52.6	-6.0
Memorandum:				
Transportation Obligation Limitations	43.5	44.1	0.6	1.4
Discretionary Budget Authority Excluding Supplemental Appropriations				
Defense	394.0	420.8	26.8	6.8
Nondefense				
Homeland security	27.1	31.2	4.1	15.2
Other	367.2	370.9	3.8	1.0
Subtotal, nondefense discretionary	394.2	402.1	7.9	2.0
Total Budget Authority Excluding Supplemental Appropriations	788.2	822.9	34.7	4.4

Source: Congressional Budget Office.

Note: n.a. = not applicable.

a. Includes certain receipts (such as those from loan guarantees made by the Federal Housing Administration's Mutual Mortgage Insurance programs) and other collections (such as those from the Securities and Exchange Commission) that are recorded as negative budget authority and outlays.

through advance appropriations for Project Bioshield. Funding for law enforcement activities would also grow, by $1 billion. (Such activities include customs, border protection, and certain duties performed by the Federal Bureau of Investigation.) In addition, the Transportation Security Administration would receive a net increase of nearly $600 million.

For 2005, nondefense discretionary funding unrelated to homeland security would rise under the President's budget by about $4 billion (relative to the 2004 level excluding supplemental appropriations). From that small overall increase, however, some budget functions would receive relatively large boosts in funding, and others would have their funding reduced.[8] International affairs programs would see the biggest increase ($4.7 billion), with substantial additional funding allocated to the Millennium Challenge Corporation ($1.5 billion) and to international security assistance ($1.3 billion). Funding for education grants, social services, and related activities would also rise, by $2.1 billion. (Grants-in-aid to state, local, and tribal governments are discussed in Box 1-1.) Spending on general science, space, and technology would grow as well, by $1.0 billion, mostly because of larger appropriations for the National Aeronautics and Space Administration.

By contrast with those increases, other budget functions would experience cuts in non-homeland-security funding for 2005. For example, funding for natural resources under the President's budget would drop by $1.8 billion; the largest cuts would apply to the Environmental Protection Agency's state and tribal assistance grants and the Army Corps of Engineers. (In each case, funding for 2005 would fall by about $600 million.)

For the years 2006 through 2009, the President has proposed average annual increases of 4.8 percent in defense funding, 4.0 percent in homeland security funding, and 0.5 percent in all other nondefense discretionary funding.

Policy Proposals That Affect Mandatory Spending

The President's proposals would add $109 billion to mandatory spending over the 2005-2014 period, CBO estimates. Most of that budgetary impact stems from proposals that involve refundable tax credits (see Table 1-6).

Refundable Tax Credits. Outlays over the 2005-2014 period would rise—by an estimated $123 billion—under the Administration's tax proposals because some of the tax credits that those policies address are refundable. In particular, the President's proposal to extend tax credit-related provisions in EGTRRA and JGTRRA would increase outlays by $64 billion through 2014. The President also proposes to create a refundable tax credit for the cost of health insurance, which would add $54 billion in outlays over the 10-year period, by CBO's and JCT's estimates. A further $4 billion in outlays over that period would result from the President's proposal to simplify tax laws for families.

Customs User Fees. Under current law, the provisions relating to customs user fees expire on March 1, 2005. One such provision requires individuals to pay a processing fee—based on the value of an item—for merchandise brought into the United States. Another fee is charged for the entry of certain vehicles, vessels, and individuals. The President's budget would extend those fees, which in turn would increase offsetting receipts (a credit against mandatory spending) by an estimated $19 billion from 2005 through 2014.[9]

Other Proposals. The President's budget proposes a variety of other changes that would affect mandatory spending (and offsetting receipts) related to the federal student loan programs, auctions of licenses to use the electromagnetic spectrum, spending from tariffs on certain foreign goods, drilling leases in Alaska, and the federal government's debt-recovery efforts.

Student Loan Programs. Some of the President's proposals affecting the federal student loan programs (which could be incorporated in the upcoming reauthorization of the Higher Education Act of 1965) would reduce the federal government's costs, and some would raise them. For example:

- New student loans made after June 2006 are scheduled to carry a fixed interest rate of 6.8 percent. The President's proposal to continue the existing interest rate formulas for borrowers would save the government money because, under those formulas, borrowers would typically pay a rate higher than 6.8 percent.

8. Budgetary resources are grouped into 20 broad categories, called budget functions, so that all budget authority and outlays can be presented according to the national interests being addressed.

9. Spending from the fees related to the entry of certain vehicles, vessels, and individuals is included in CBO's baseline even though the law enabling collection of the fees is scheduled to expire.

Box 1-1.

Grants-in-Aid

Grants to state, local, and tribal governments now make up about 40 percent of nondefense discretionary funding. The grants are concentrated largely in three areas: education, training, employment, and social services; transportation; and income security. Excluding one-time appropriations for election reform assistance ($1.5 billion) and for temporary state fiscal assistance ($5 billion), funding for such grants totaled $166 billion in fiscal year 2004.[1] The discretionary funding requested in the President's 2005 budget includes slightly less than that amount for grants-in-aid—about $165 billion, CBO estimates.

Grants in three areas—administration of justice, community and regional development, and natural resources and the environment—would decline significantly under the President's proposed policies.

Budget authority for various law enforcement assistance grants would drop by more than $800 million, or approximately 35 percent. The Administration also proposes to reduce spending authority for community and regional development grants by a total of $1.4 billion, or 12 percent, with the reductions spread out over a number of programs. The largest cut would occur in state and local programs of the Department of Homeland Security—primarily among grants for firefighters and so-called first responders, which would fall by almost $800 million, or over 20 percent. (However, substantial funds have been appropriated in previous years for those programs, and unobligated balances in the programs' accounts total about $3.5 billion.) The President would also significantly reduce—by about 17 percent—discretionary grant programs of the Environmental Protection Agency. In contrast, under the 2005 budget, grants for education for the disadvantaged and special education would increase by about $2.1 billion, or 8 percent.

1. That amount includes obligation limitations for transportation trust fund programs.

- A more favorable formula for special-allowance payments to lenders who make loans funded with the proceeds of tax-exempt securities is slated to begin with loans newly acquired or disbursed after September 2004. Eliminating that change, which the President's budget proposes, would also reduce the government's costs.
- In contrast, the Administration's proposals to provide extended repayment terms in the guaranteed loan program and to increase loan limits for first-year students would raise the program's costs. An additional increase would come from the proposal designating $3.1 billion for new benefits for borrowers—although those benefits are as yet unspecified.

In total, student loan proposals affecting mandatory spending would increase the government's costs by $2.3 billion over the next 10 years, CBO projects. (In addition, the Administration is proposing to shift administrative costs that are currently classified as mandatory to the discretionary side of the budget.)

Auctions of Spectrum Licenses. The Federal Communications Commission (FCC) conducts periodic auctions to award licenses for use of the electromagnetic spectrum. The President's budget includes four legislative proposals that would affect offsetting receipts from such license awards. The President would impose new fees on licenses used for analog television broadcasts and on licenses awarded by methods other than auctions, allow certain agencies to spend some auction receipts without further appropriations, and extend the FCC's authority to conduct auctions beyond 2007. Overall, implementing those proposals would reduce receipts from auctions by an estimated $400 million over the next five years. Over the following five years, however, receipts would increase by almost $6.5 billion.

Table 1-6.

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

(Billions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005, 2014
Deficit in CBO's March 2004 Baseline	-477	-363	-273	-274	-286	-281	-272	-176	-38	-34	-15	-1,477	-2,012
Effect of the President's Proposals													
Revenues													
Extension of expiring EGTRRA and JGTRRA provisions													
General tax rates, child credits, and brackets	0	-12	-20	-19	-15	-11	-7	-100	-157	-161	-166	-77	-669
Estate and gift taxes	0	-1	-1	-2	-2	-2	-2	-29	-51	-55	-61	-7	-206
Tax rates on dividends and capital gains	0	0	0	0	-2	-13	-14	-29	-31	-33	-35	-16	-157
Expensing for small businesses	0	0	-4	-7	-5	-4	-3	-3	-3	-3	-3	-19	-34
Education, retirement, and other provisions	0	0	0	0	0	0	*	-4	-7	-8	-10	0	-30
Subtotal, proposed extensions	0	-13	-25	-27	-24	-30	-27	-165	-249	-260	-274	-119	-1,095
Research and experimentation credit	*	-3	-4	-5	-5	-6	-6	-7	-7	-7	-8	-23	-58
Deduction for long-term care insurance	0	*	-1	-1	-2	-3	-3	-4	-4	-5	-5	-6	-27
Deduction for high-deductible health insurance	0	*	-2	-2	-2	-3	-3	-3	-3	-3	-4	-9	-25
Refundable health insurance credit	0	*	*	*	-1	-1	-1	-1	-1	-1	-1	-2	-7
AMT for individuals	*	-9	-14	0	0	0	0	0	0	0	0	-23	-23
Expansion of tax-free savings	0	4	6	4	2	*	-1	-2	-3	-4	-5	15	-1
Tax shelters and compliance	*	1	2	2	3	3	3	4	4	4	5	11	31
Other proposals	-1	-2	-6	-5	-6	-8	-10	-10	-10	-11	-12	-26	-80
Subtotal, revenues	-1	-23	-44	-33	-35	-48	-47	-188	-274	-288	-304	-183	-1,285
Outlays													
Discretionary													
Defense	0	-22	-37	-37	-33	-24	-17	-15	-13	-14	-14	-152	-225
Nondefense	0	-8	-25	-35	-44	-53	-58	-61	-63	-65	-67	-166	-481
Subtotal, discretionary	0	-30	-62	-72	-77	-77	-76	-76	-77	-79	-81	-318	-706
Mandatory													
Extension of expiring EGTRRA and JGTRRA provisions	0	*	5	4	4	4	3	*	15	15	14	18	64
Refundable health insurance credit	0	0	6	7	6	6	6	6	6	6	5	25	54
Customs user fees	0	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-8	-19
Other proposals	*	2	7	-2	2	2	1	*	-1	-1	-1	12	9
Subtotal, mandatory	*	1	16	7	12	11	8	4	17	17	16	47	109
Net interest	*	*	*	-1	-3	-4	-6	-2	6	18	30	-9	37
Subtotal, outlays	*	-28	-46	-66	-69	-71	-73	-74	-53	-45	-35	-279	-559
Total Impact on the Deficit	**-1**	**6**	**1**	**32**	**34**	**23**	**26**	**-114**	**-221**	**-243**	**-269**	**96**	**-726**
Deficit Under the President's Proposals	-478	-358	-271	-242	-252	-258	-247	-289	-259	-278	-284	-1,381	-2,738

Sources: Congressional Budget Office, Joint Committee on Taxation.

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

Spending from Tariff Proceeds. Currently, the federal government assesses tariffs on foreign goods that are sold below cost. The Continued Dumping and Subsidy Offset Act of 2000 provides that those collections be paid out to the affected domestic industries. The President proposes to repeal that law, saving $2.4 billion from 2005 through 2009, CBO estimates.

Alaskan Leasing Sales. Another of the President's proposed policies would open a portion of the coastal plain of the Arctic National Wildlife Refuge to oil and gas leasing and development. By CBO's estimate, leasing sales from such a program would generate receipts (net of payments to Alaska) totaling $2 billion over the 2007-2009 period.

Federal Debt Recovery. The President has proposed three methods to help recover debts owed to the government: eliminate the current 10-year limit on collection of nontax debts; use the National Directory for New Hires to locate delinquent debtors; and allow the government to withhold federal income tax refunds to recover outstanding overpayments of state unemployment insurance benefits. Overall, those proposals would reduce outlays by $1.4 billion and decrease revenues by $348 million over the 2005-2009 period, CBO estimates.

Policy Proposals That Affect Revenues

The President's budget proposes several changes to tax law that would significantly reduce revenues, relative to the level in CBO's baseline, over the next decade. Such proposals include the extension of a number of expiring tax provisions and a variety of new tax incentives. CBO and the Joint Committee on Taxation estimate that the proposals will reduce revenues by $23 billion in 2005. Over the 2005-2014 period, revenues would be reduced by $1.3 trillion (and outlays from proposals that affected revenues would be increased by $123 billion), according to Congressional estimates. (As noted earlier, the increase in outlays arises from the proposals' effects on refundable credits.) The most significant proposals include those involving provisions in EGTRRA and JGTRRA, the research and experimentation tax credit, deductions for long-term care insurance premiums and for high deductibles on health care plan reimbursement, the alternative minimum tax, tax-free savings plans, treatment of tax shelters, and tax compliance.

Permanently Extend Provisions of EGTRRA and JGTRRA. The President proposes to permanently extend certain provisions of EGTRRA and JGTRRA that are scheduled to expire, or "sunset." The provisions in EGTRRA that were scheduled to sunset at the end of 2010 would be extended permanently; they include changes in income tax rates, relief from the so-called marriage penalty, the implementation of child tax credits and of policies related to education and retirement, and repeal of the estate tax. In addition to making the provisions permanent, the President proposes to maintain the timing of the implementation of some of them (including the 10 percent tax bracket, the child credit, and marriage penalty relief). Their implementation was accelerated by JGTRRA, which directed that they take effect earlier than they would have under EGTRRA. However, the acceleration is due to expire at the end of 2004; the President's proposal would make the speedup permanent beginning in 2005.

Those extensions and accelerations would reduce revenues by $904 billion from 2005 through 2014, JCT and CBO estimate. They would also increase outlays for refundable tax credits by $64 billion over the same period.

Other proposals in the President's budget to permanently extend provisions of JGTRRA that are scheduled to expire would also result in a decline in revenues. JGTRRA's reduction—to 15 percent—of the maximum tax rate on long-term capital gains and dividend income is scheduled to expire in 2008. Making that cut permanent would reduce revenues by an additional $157 billion between 2005 and 2014, CBO and JCT project. Another provision of JGTRRA liberalized rules governing depreciation for small businesses from 2003 through 2005, increasing the amount of investment that such businesses could "expense" (immediately deduct from their taxable income rather than deduct over time) from $25,000 to $100,000. The President's proposal would make those expensing changes permanent, at a cost of about $34 billion between 2005 and 2014.

In total, making permanent all of the extensions and accelerations proposed in the 2005 budget would reduce revenues by an estimated $1.1 trillion over the 2005-2014 period.

Permanently Extend the Research and Experimentation Tax Credit. Under current law, corporations may obtain a tax credit of 20 percent on certain research expenditures above a base amount. The credit is scheduled to expire on June 30, 2004, but the President is proposing to make it permanent. The resulting revenue loss, according to CBO's and JCT's estimates, would total $58 billion over the next 10 years.

Allow an "Above-the-Line" Deduction for Long-Term Care Insurance. The tax code currently treats the costs of insurance for long-term health care as it does other medical expenses: taxpayers can take a deduction from their taxable income if they itemize deductions and have total medical expenditures that exceed 7.5 percent of their adjusted gross income (AGI). The President's proposal would permit taxpayers to deduct premiums for long-term health care insurance (up to current annual limits) regardless of whether they itemized deductions and without requiring that their medical expenditures exceed a prescribed limit. The provision would be phased in through 2008 and would cost, by CBO's calculation, $27 billion over the 2005-2014 period.

Allow an "Above-the-Line" Deduction for High-Deductible Health Insurance. Taxpayers who carry individual (not employment-based) health insurance plans with a high deductible amount that must be met before reimbursement occurs may contribute to health savings accounts (HSAs) that can be used to pay health care costs for themselves and their dependents.[10] Medical expenses exceeding 7.5 percent of AGI are currently deductible from taxable income for taxpayers who itemize. This proposal would allow people who contributed to HSAs to deduct the premiums they paid on individually purchased, high-deductible plans from their taxable income. The deduction would be used in calculating AGI and would be allowed even if the taxpayer did not itemize. With an effective date of January 1, 2005, the proposal would cost an estimated $25 billion from 2005 through 2014.

Establish a Refundable Tax Credit for Health Insurance. The creation of a refundable income tax credit for the cost of health insurance is another of the President's proposed policies for 2005. The credit, which would become effective on January 1 of that year, would be worth as much as $1,000 per adult and $500 per child (for up to two children). It could cover a maximum of 90 percent of the cost of insurance for individual taxpayers with a maximum modified AGI of $15,000; those with higher income would receive less, and the credit would phase out completely for taxpayers with a modified AGI of $30,000. Over the 2005-2014 period, the proposal would reduce revenues by a total of $7 billion and increase outlays by $54 billion.

10. The Administration did not provide specific information on what kinds of plans would qualify as high-deductible health insurance.

Provide AMT Relief for Individuals. The alternative minimum tax (AMT) is a parallel income tax system with fewer exemptions, deductions, and rates than the regular income tax has; taxpayers pay a tax equal to the greater of the regular tax or the AMT. Previous legislation gave temporary relief to taxpayers who would otherwise have been subject to the AMT. Permitting the use of certain nonrefundable personal credits that would otherwise have been disallowed by the AMT was one feature of that legislation, as was raising the amount of income that was exempt from tax under the AMT rates. The President proposes to extend taxpayers' ability to use nonrefundable credits against the AMT for two years (the credits could be applied to tax years 2004 and 2005) and to extend the higher AMT exemption amounts enacted in JGTRRA through tax year 2005. After that, the AMT would revert to the same rules that existed before the recent years' tax cuts. The cost of extending the temporary relief is estimated to total $23 billion from 2005 through 2006.

Expand Tax-Free Savings Plans. The tax code comprises a variety of individual retirement accounts (IRAs) that can be used not only for retirement but also for other purposes (such as education). The President proposes to unify many of those accounts into two tax-free savings vehicles—retirement savings accounts (RSAs) and lifetime savings accounts (LSAs)—and to expand their applicability.

For RSAs, individuals could contribute up to $5,000 annually, and no income limits would apply. Contributions would be taxable, but all earnings on the accounts would accumulate tax free. Withdrawals without penalty could occur after age 58 or because of death or disability. Accounts currently held as Roth IRAs would become RSAs. Moreover, traditional IRAs and nondeductible IRAs could be converted into RSAs in the same way that they can now be converted into Roth IRAs. Another difference distinguishing RSAs from traditional IRAs is that even someone who was already covered by another retirement plan could open an RSA.

Individuals could also contribute up to $5,000 annually to lifetime savings accounts, which would face the same tax treatment as RSAs and, like them, have no income restrictions on participation. In contrast to the treatment that applies to IRA withdrawals, however, withdrawals from LSAs could be made for any purpose and at any age. Balances currently held in Coverdell education savings accounts and qualified state tuition plans could be converted into balances in LSAs.

Over the 2005-2014 period, the net revenue loss attributable to the expansion of tax-free savings plans would be $1 billion, CBO projects. Gains in revenue would initially occur (from 2005 through 2008) because contributions to many current savings vehicles that receive favorable tax treatment are made on a pretax basis, whereas the new vehicles' contributions would be made after taxes. In addition to redirecting their contributions, some taxpayers would convert their existing traditional IRAs to RSAs. As a result, the proposals would increase federal revenues when the contributions were made and the balances converted but reduce revenues later, when withdrawals went untaxed. From 2009 through 2014, the net budgetary effect of the proposals would be losses in revenue.

Change the Treatment of Tax Shelters and Improve Tax Compliance. The President proposes a number of measures to address tax shelters, abusive transactions, and tax compliance. Altogether, the proposals would raise revenues by an estimated $31 billion over the 2005-2014 period. About $21 billion of that amount would be generated by reducing the advantages of certain leasing transactions, generally with tax-exempt parties, that are often referred to as sale-in/lease-out (SILO) transactions. Other proposals would modify the rules for tax deductions that apply to donations of patents and other intellectual property (increasing revenues by $4 billion) and limit interest deductions by corporations that result from the debt of their related foreign entities (for a revenue gain of $3 billion).

Other Proposals. The President's 2005 budget also contains a number of other tax changes, such as incentives related to charitable giving, health care, education, energy, and the environment. Included as well are various changes in taxes related to pensions and other retirement saving; an effort to simplify the tax code by establishing a uniform definition of a child and implementing other changes that would affect taxpayers with children; a new tax credit for developers of affordable single-family housing; and reinstatement of a number of provisions that expired at the end of 2003. Those proposed changes would combine over the 2005-2014 period to reduce revenues by an estimated $80 billion and increase outlays by $4 billion.

CBO's and the Administration's Economic Assumptions

Although CBO and the Administration forecast similar values for the underlying economic variables used to estimate revenues and outlays, the Administration's projections imply a more favorable outlook for the budget than do CBO's, particularly for fiscal years 2007 through 2009.

The Administration's projections of the level of wages and salaries—the income category that has the biggest effect on revenue projections—are larger than CBO's for 2004 through 2009 (see Table 1-7 on page 16). The difference derives in part from the Administration's higher estimates of wages and salaries as a percentage of GDP. In the later years of that period, the slightly higher level of GDP that the Administration projects also tends to keep the estimated level of wages and salaries above that in CBO's projection.

Profits, another income category that influences revenue estimates, are lower in the Administration's projections than in CBO's after 2005, both in dollars and as a share of GDP. Because the projections of profits do not affect revenue estimates as much as projections of wages and salaries do, however, the net effect of the differences in income categories is higher revenues after 2006 under the Administration's projections.

CBO assumes that the growth of real GDP will be slightly faster than the Administration estimates in 2004 and 2005; by contrast, the Administration anticipates faster growth in the remaining years (2006 to 2009). Over the entire period, however, average real GDP growth is almost the same in the two forecasts.

The Administration projects lower inflation through 2007 (as measured by the consumer price index for all urban consumers) and generally lower interest rates than does CBO. (However, the Administration's estimates of 10-year interest rates are higher than CBO's beginning in 2007.) Lower inflation and interest rates produce lower outlays under the President's budget, in large part for two reasons. First, the inflation measures used to determine cost-of-living adjustments for programs such as Social Security and Food Stamps grow less rapidly under the Administration's lower inflation outlook than under CBO's through 2007. Second, the Administration's projection through 2007 of lower short- and long-term interest rates has a substantial effect on debt-service costs, particularly in fiscal years 2006 through 2008.

A comparison of the two agencies' forecasts to a recent survey of 50 private-sector forecasts, the *Blue Chip Economic Indicators*, shows that the average of private-sector views for the next two years does not differ much from that of either the Administration or of CBO.

Differences Between CBO's and the Administration's Policy Estimates

Overall, CBO's estimates of the budgetary impact of the President's proposals for revenues and mandatory spending do not differ much from those of the Administration. However, some notable differences are apparent in estimates of specific proposals (see Table 1-3 on page 5).

Outlay Differences

On the outlay side of the budget, there are several significant differences between CBO's and the Administration's estimates. For mandatory outlays, CBO projects that the President's proposals will increase spending by more than $47 billion over the 2005-2009 period—$40 billion more than the Administration estimates. About 55 percent of that difference is attributable to the proposal to create a refundable tax credit for the cost of health insurance. According to the budget, the Administration expects to make offsetting cuts elsewhere and has included savings from such reductions in its estimates. But the President's budget does not specify where the cuts are to be made, and as a result, CBO did not incorporate any savings into its five-year projections. Those unspecified savings in the Administration's budget amounted to $22 billion over the 2005-2009 period.

The President's budget also includes savings of almost $10 billion over the next five years from legislation involving Medicaid. The proposed legislation would limit Medicaid's cost reimbursements to government-operated providers (such as county hospitals) and curb states' use of intergovernmental transfers to claim additional federal Medicaid funds without a corresponding increase in state spending. CBO did not estimate any savings for those proposals because the Administration did not provide specific details about how the legislation would achieve them.

Another major difference between the Administration's and CBO's estimates involves tax proposals that affect the amount of the refundable child credit and the earned income credit. JCT and CBO expect that the President's proposals, if enacted, will increase outlays by over $4 billion more than the Administration has projected.

CBO and the Administration also differ in their assessment of the impact of the proposals related to student loans: in the Administration's estimates, the policies reduce outlays by $1 billion over the next five years; in CBO's, they increase spending by about $0.5 billion. Those differences occur mainly because CBO expects smaller effects than the Administration does from provisions to reduce costs. In addition, CBO estimates that the proposal relating to borrowers' interest rates will decrease federal costs; the Administration estimates that it will increase them.

Revenue Differences

The President's proposals in combination would reduce revenues over the 2005-2009 period by a total of $183 billion, CBO estimates—or $8 billion (5 percent) more than the Administration's estimated reduction of $175 billion. CBO and JCT project larger revenue losses than the Administration does in each year from 2005 through 2007; it projects smaller losses in 2008 and 2009.

The $8 billion more in net revenue losses in CBO's projections for the five-year period results from lower estimates of the gains in revenue from certain provisions—specifically, those that would alter the interest rates used to determine required pension contributions ($9 billion less revenue gain); address certain issues regarding tax compliance and tax shelters, especially SILO transactions ($8 billion); and expand tax-free savings plans ($6 billion).

Partially offsetting those effects in CBO's estimates is a lower amount of lost revenue as a consequence of certain revenue-reducing provisions. Most significantly, by CBO's estimate, extending the reduced tax rates on dividends and capital gains would cut revenues by $12 billion less through 2009 than the Administration projects. That difference applies mainly to 2008 and 2009, around the time of the proposed extension of the rate reduction. With the exception of their estimates of the effect of the dividend/capital gains rate reduction, CBO's and the Administration's projections of the reductions in revenues from the proposals that extend and accelerate provisions of EGTRRA and JGTRRA are very similar.

For 2004, CBO forecasts a potential net revenue decline of $1 billion from those proposals, whereas the Administration forecasts a potential net revenue increase of $7 bil-

Table 1-7.

Comparison of CBO's, the Administration's, and Private-Sector Economic Projections for Calendar Years 2004 Through 2009

	Estimated 2003	Forecast 2004	Forecast 2005	Projected Annual Average, 2006-2009
Nominal GDP (Billions of dollars)				
CBO	10,980	11,629	12,243	13,728
Administration	10,984	11,612	12,187	13,822
February *Blue Chip*	10,988	11,651	12,280	n.a.
Nominal GDP (Percentage change)				
CBO	4.8	5.9	5.3	4.7
Administration	4.8	5.7	4.9	5.1
February *Blue Chip*	4.8	6.0	5.4	n.a.
Real GDP (Percentage change)				
CBO	3.2	4.8	4.2	2.8
Administration	3.1	4.4	3.6	3.3
February *Blue Chip*	3.1	4.6	3.7	n.a.
GDP Price Index (Percentage change)				
CBO	1.6	1.1	1.1	1.8
Administration	1.6	1.2	1.3	1.8
February *Blue Chip*	1.6	1.4	1.6	n.a.
Consumer Price Index[a] (Percentage change)				
CBO	2.3	1.6	1.7	2.2
Administration	2.3	1.4	1.5	2.2
February *Blue Chip*	2.3	1.6	2.0	n.a.

Continued

lion. The $8 billion difference stems mostly from CBO's lower estimate of the gain in revenues from the proposal to alter the interest rates used for pension calculations. CBO also projects more revenue losses from certain tax incentives than the Administration does.

Changes to CBO's Baseline

In conjunction with its annual analysis of the President's budget, CBO has updated the 10-year baseline projections that it published in January.[11] Constructed according to rules specified in law and intended to serve as a neutral benchmark, CBO's baseline projections estimate the future path of spending and revenues if current laws remain unchanged.

Technical revisions to the baseline (changes attributable to factors other than legislation or economic variables) have increased projected outlays over the 2005-2014 period by $102 billion and reduced projected revenues by $18 billion (see Table 1-8 on page 18). Technical revisions make up almost all of the changes to CBO's baseline; revisions resulting from legislation since January have been minimal, and CBO saw no need to update the baseline's underlying economic assumptions. All told, CBO now projects that deficits will total $2.0 trillion over the next 10 years if current policies remain in place (see Table 1-9 on page 20). Deficits as a percentage of GDP are projected to decline from 4.2 percent in 2004 to 3.0 percent in 2005 and 1.8 percent in 2010. After 2011, if the tax cuts enacted in EGTRRA expired as scheduled, if growth in discretionary spending continued to be limited to the rate of inflation, and if other policies stayed the same, the budget would essentially be in balance.

11. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2005-2014* (January 2004).

Table 1-7.

Continued

	Estimated 2003	Forecast 2004	Forecast 2005	Projected Annual Average, 2006-2009
Unemployment Rate (Percent)				
CBO	6.0	5.8	5.3	5.1
Administration	6.0	5.6	5.4	5.1
February *Blue Chip*	6.0	5.7	5.4	n.a.
Ten-Year Treasury Note Rate (Percent)				
CBO	4.0	4.6	5.4	5.5
Administration	4.0	4.6	5.0	5.7
February *Blue Chip*	4.0	4.6	5.3	n.a.
Tax Bases[b] (Percentage of GDP)				
Corporate book profits				
CBO	7.7	8.1	10.8	9.9
Administration	7.7	8.5	10.8	9.4
Wage and salaries				
CBO	46.3	45.9	46.1	46.4
Administration	46.4	46.1	46.6	47.1
Tax Bases[b] (Billions of dollars)				
Corporate book profits				
CBO	844	948	1,319	1,357
Administration	845	992	1,313	1,297
Wages and salaries				
CBO	5,087	5,333	5,639	6,367
Administration	5,092	5,352	5,682	6,513

Sources: Congressional Budget Office; Office of Management and Budget; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (February 10, 2004); Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board; Department of Labor, Bureau of Labor Statistics.

Note: Percentage changes are year over year; n.a. = not available.

a. The consumer price index for all urban consumers.

b. The *Blue Chip* survey does not include projections of tax bases.

Increases in projected spending for Medicare ($48 billion from 2005 through 2014) and Medicaid ($32 billion over those 10 years) represent the largest changes to the baseline. Revisions to Medicaid outlays were driven by new information on the growth of caseloads in the fee-for-service and managed care sectors of the program and on spending for prescription drugs for beneficiaries not covered by the newly enacted prescription drug plan under Medicare (Part D). New data on Parts A and B of Medicare (Hospital Insurance and Supplementary Medical Insurance, respectively), together with improvements in CBO's modeling of Medicare benefits for those programs, explain most of the increases in projected outlays for Medicare. (CBO's estimate of the cost of Part D is unchanged.)

The most significant change to projected revenues in the baseline affects corporate income tax receipts—the revision reduces such revenues by about $12 billion over the 2005-2014 period. That adjustment was based on new information about the growing use of certain corporate tax shelters.

Table 1-8.

Changes in CBO's Baseline Projections of the Deficit or Surplus Since January 2004

(Billions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
Total Deficit (-) or Surplus as Projected in January 2004	-477	-362	-269	-267	-278	-268	-261	-162	-24	-16	13	-1,443	-1,893
Changes to Projections													
Legislative	*	*	*	*	*	*	*	*	*	*	*	*	1
Technical													
Revenues	*	1	-1	-1	-1	-1	-1	-1	-2	-2	-9	-3	-18
Outlays													
Discretionary	-1	*	1	*	*	*	*	*	*	*	*	1	*
Mandatory													
Medicare	3	5	3	4	4	6	4	6	4	6	7	22	48
Medicaid	*	1	1	3	3	4	4	4	4	4	4	11	32
Debt service	*	*	*	*	*	1	1	2	3	4	6	*	15
Other	*	-3	-1	*	*	2	1	1	2	2	2	-2	7
Subtotal, mandatory	2	3	3	6	8	12	10	13	12	16	19	31	102
Subtotal, technical	*	-2	-4	-8	-8	-13	-11	-14	-14	-18	-28	-35	-120
Total Impact on the Deficit or Surplus	*****	**-2**	**-4**	**-8**	**-8**	**-13**	**-11**	**-14**	**-14**	**-18**	**-28**	**-34**	**-119**
Total Deficit as Projected in March 2004	-477	-363	-273	-274	-286	-281	-272	-176	-38	-34	-15	-1,477	-2,012

Source: Congressional Budget Office.

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

Because of revisions that decrease projected revenues and increase projected outlays, CBO estimates that the Treasury will need to borrow more than it would have under the previous baseline. By CBO's estimate, such additional borrowing will raise net interest payments by $15 billion over the decade.

Differences Between CBO's Baseline and the Administration's Current-Services Baseline

In the past, the Administration and CBO constructed their baselines using similar concepts derived from the Balanced Budget and Emergency Deficit Control Act of 1985. Consequently, discrepancies between the two sets of estimates derived from differences in technical or economic estimating assumptions. In its current baseline, however, the Administration has deviated from prior practices in three ways. First, its baseline assumes that EGTRRA and JGTRRA will be extended. Second, as noted earlier, the Administration has not extended into future years the $87 billion supplemental appropriation for 2004 (mostly for military and reconstruction activities in Iraq and Afghanistan). And third, it has made an adjustment to the way it accounts for increases in pay when projecting discretionary spending. Aside from the effects of those revised approaches, underlying differences between the Administration's and CBO's benchmark measures are small.

In its modified baseline, the Administration projects a deficit for 2004 of $527 billion, whereas CBO's baseline

shows a deficit of $477 billion (see Table 1-10 on page 22). For the five years from 2005 through 2009, the Administration expects the deficit to decline each year, with the shortfall totaling about $1.3 trillion. Under CBO's projections, the deficit continues to drop in both 2005 and 2006 and stays relatively constant thereafter, producing a cumulative five-year deficit of $1.5 trillion. If the Administration's projections were produced in a manner comparable with CBO's, its projections would show a five-year deficit nearly equal to CBO's estimate.

Outlay Differences

On the spending side of the budget, CBO's estimate of outlays for 2004 is $24 billion lower than the Administration's. Of that amount, differences in discretionary spending account for $13 billion. CBO believes that in many cases, agencies have overestimated the rate at which funds will be spent this year. The largest variations between the two agencies' assessments involve international affairs, disaster relief and insurance, ground transportation, federal law enforcement activities, and education. In terms of mandatory spending, CBO's estimate is lower than the Administration's by about $9 billion, primarily because of differing judgments about outlays for Medicare and Medicaid.

For the 2005-2009 period, CBO's estimate of total outlays exceeds that of the Administration by $306 billion. Discretionary outlays in CBO's baseline exceed the Administration's projections by $345 billion, with the bulk of that difference stemming from the Administration's decision not to extend and inflate the $87 billion supplemental appropriation enacted in November 2003. If the two baselines were prepared on a comparable basis, the Administration would add $400 billion to its estimate of discretionary outlays—and the Administration's and CBO's figures for that category over the next five years would differ by about $54 billion, or about 1 percent.

CBO's projection of mandatory spending (excluding debt service) over the five-year period is about $75 billion below the Administration's, with the largest differences stemming from the agencies' divergent estimates for Medicare and Medicaid. Over the 2005-2009 period, CBO's baseline projection of Medicare spending is $75 billion less than the Administration's, mostly because the Administration projects higher costs for the Medicare Advantage program and for Medicare's new prescription drug benefit. CBO's estimates of Medicaid spending, which are $56 billion below the Administration's projections over the five-year period, anticipate smaller overall increases in enrollment and reflect different assumptions about per capita growth for a range of services.

Another difference between the two baselines arises because CBO does not include the effects of proposed policy changes in its baseline. Consequently, unlike the Administration, it did not include the effects on outlays of permanently extending the child tax credit—which add $16 billion in outlays over the five-year period to the baseline published by the Administration. For 2005 through 2009, CBO's estimates of the outlays from refundable tax credits under current law are an additional $10 billion lower than those of the Administration.

In the other direction, CBO's baseline estimates of outlays for Social Security are slightly higher than those of the Administration—by about $33 billion. CBO's projections of outlays for all other mandatory programs over the 2005-2009 period are a total of $49 billion higher than the Administration's.

By contrast, the Administration's projections of net interest for 2005 through 2009 are lower than CBO's by $35 billion, mostly because CBO assumes that interest rates will be higher over that period than the Administration anticipates they will be.

Revenue Differences

CBO estimates that revenues for the current fiscal year will be $26 billion higher than the Administration expects—mainly because the Administration reduced its revenue projections by $20 billion to account for the element of uncertainty in making such projections. Nevertheless, CBO's estimates of baseline revenues over the 2005-2009 period are very similar to those of the Administration. In total, CBO's estimates are higher than the Administration's by $99 billion (about 0.8 percent) for that five-year period.

The major difference results from the Administration's decision to include the effects of making permanent the tax cuts enacted in 2001 and 2003. Those proposals include the higher child credit, marriage penalty relief, the expanded 10 percent tax bracket for individuals, increased expensing of capital expenditures for small businesses, and reduced tax rates on dividends and capital gains. CBO's baseline does not include those effects, which increases its estimates relative to the Administration's by $132 billion over the 2005-2009 period. CBO's baseline does include the effects of certain legislation en-

Table 1-9.

CBO's March Baseline Projections

	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
							In Billions of Dollars							
Revenues														
Individual income taxes	794	762	885	997	1,074	1,146	1,237	1,335	1,528	1,684	1,786	1,896	5,339	13,569
Corporate income taxes	132	161	223	264	272	274	275	277	285	295	306	318	1,308	2,789
Social insurance taxes	713	747	789	830	868	906	946	988	1,031	1,076	1,123	1,173	4,340	9,732
Other	144	148	152	164	170	178	185	184	190	215	224	234	849	1,896
Total	**1,782**	**1,817**	**2,050**	**2,255**	**2,384**	**2,505**	**2,643**	**2,785**	**3,035**	**3,271**	**3,439**	**3,620**	**11,837**	**27,986**
On-budget	1,258	1,273	1,477	1,654	1,755	1,846	1,953	2,064	2,282	2,484	2,618	2,762	8,685	20,895
Off-budget	524	545	572	601	629	659	690	721	753	786	821	858	3,152	7,091
Outlays														
Discretionary spending	825	895	936	956	973	998	1,021	1,045	1,074	1,091	1,122	1,150	4,882	10,364
Mandatory spending	1,179	1,245	1,297	1,352	1,429	1,511	1,601	1,694	1,806	1,880	2,011	2,142	7,190	16,724
Net interest	153	155	180	220	257	282	302	318	330	338	340	343	1,241	2,911
Total	**2,158**	**2,295**	**2,413**	**2,528**	**2,659**	**2,791**	**2,924**	**3,057**	**3,211**	**3,309**	**3,473**	**3,635**	**13,314**	**29,998**
On-budget	1,795	1,911	2,014	2,120	2,237	2,355	2,472	2,586	2,721	2,795	2,932	3,064	11,199	25,297
Off-budget	363	384	398	408	421	435	452	471	490	514	541	571	2,115	4,702
Deficit (-) or Surplus	**-375**	**-477**	**-363**	**-273**	**-274**	**-286**	**-281**	**-272**	**-176**	**-38**	**-34**	**-15**	**-1,477**	**-2,012**
On-budget	-536	-638	-537	-466	-482	-509	-519	-523	-439	-310	-314	-302	-2,513	-4,402
Off-budget	161	161	174	193	208	224	238	250	263	273	280	287	1,036	2,390
Debt Held by the Public	3,914	4,385	4,762	5,048	5,335	5,633	5,927	6,212	6,400	6,450	6,496	6,525	n.a.	n.a.
Memorandum:														
Gross Domestic Product	10,829	11,469	12,091	12,682	13,236	13,862	14,519	15,187	15,862	16,562	17,301	18,070	66,389	149,371

Continued

acted since the beginning of calendar year 2004, which the Administration's estimates do not, but the resulting difference in revenues is negligible.

The remaining differences between CBO's and the Administration's revenue projections are relatively small—$33 billion over 10 years—and are explained by differences in the agencies' projections of macroeconomic activity and their assumptions about how much revenue that activity will generate. CBO's economic projection yields about $70 billion less in revenues over the 2005-2009 period than the Administration's does. Compared with the Administration, CBO projects a higher level of GDP through 2006, but it anticipates less income in the form of wages and salaries and generally more in corporate profits—and the effects on revenues from those differences roughly offset each other. From 2007 through 2009, however, CBO projects that GDP will be slightly lower than the Administration expects and that less of GDP will be earned in the form of wages and salaries.

Partially offsetting the small difference related to economic assumptions are other, technical estimating differences. Such variations add about $38 billion over the 2005-2009 period to CBO's revenue projections relative to the Administration's baseline. Of that total, $15 billion stems from the baseline adjustment that the Administration attributes to the uncertainty inherent in making revenue estimates.

Table 1-9.

Continued

	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total, 2005-2009	Total, 2005-2014
							As a Percentage of GDP							
Revenues														
Individual income taxes	7.3	6.6	7.3	7.9	8.1	8.3	8.5	8.8	9.6	10.2	10.3	10.5	8.0	9.1
Corporate income taxes	1.2	1.4	1.8	2.1	2.1	2.0	1.9	1.8	1.8	1.8	1.8	1.8	2.0	1.9
Social insurance taxes	6.6	6.5	6.5	6.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Other	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Total	**16.5**	**15.8**	**17.0**	**17.8**	**18.0**	**18.1**	**18.2**	**18.3**	**19.1**	**19.7**	**19.9**	**20.0**	**17.8**	**18.7**
On-budget	11.6	11.1	12.2	13.0	13.3	13.3	13.5	13.6	14.4	15.0	15.1	15.3	13.1	14.0
Off-budget	4.8	4.7	4.7	4.7	4.8	4.8	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Outlays														
Discretionary spending	7.6	7.8	7.7	7.5	7.3	7.2	7.0	6.9	6.8	6.6	6.5	6.4	7.4	6.9
Mandatory spending	10.9	10.9	10.7	10.7	10.8	10.9	11.0	11.2	11.4	11.4	11.6	11.9	10.8	11.2
Net interest	1.4	1.4	1.5	1.7	1.9	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9
Total	**19.9**	**20.0**	**20.0**	**19.9**	**20.1**	**20.1**	**20.1**	**20.1**	**20.2**	**20.0**	**20.1**	**20.1**	**20.1**	**20.1**
On-budget	16.6	16.7	16.7	16.7	16.9	17.0	17.0	17.0	17.2	16.9	16.9	17.0	16.9	16.9
Off-budget	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.1
Deficit (-) or Surplus	**-3.5**	**-4.2**	**-3.0**	**-2.1**	**-2.1**	**-2.1**	**-1.9**	**-1.8**	**-1.1**	**-0.2**	**-0.2**	**-0.1**	**-2.2**	**-1.3**
On-budget	-4.9	-5.6	-4.4	-3.7	-3.6	-3.7	-3.6	-3.4	-2.8	-1.9	-1.8	-1.7	-3.8	-2.9
Off-budget	1.5	1.4	1.4	1.5	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Debt Held by the Public	36.1	38.2	39.4	39.8	40.3	40.6	40.8	40.9	40.3	38.9	37.6	36.1	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

Table 1-10.

Comparison of CBO's March Baseline and the Administration's Published February Baseline

(Billions of dollars)

	2004	2005	2006	2007	2008	2009	Total, 2005-2009
CBO's March Baseline							
Revenues	1,817	2,050	2,255	2,384	2,505	2,643	11,837
On-budget	1,273	1,477	1,654	1,755	1,846	1,953	8,685
Off-budget	545	572	601	629	659	690	3,152
Outlays							
Discretionary	895	936	956	973	998	1,021	4,882
Mandatory	1,245	1,297	1,352	1,429	1,511	1,601	7,190
Net interest	155	180	220	257	282	302	1,241
Total	2,295	2,413	2,528	2,659	2,791	2,924	13,314
On-budget	1,911	2,014	2,120	2,237	2,355	2,472	11,199
Off-budget	384	398	408	421	435	452	2,115
Deficit (-) or Surplus	-477	-363	-273	-274	-286	-281	-1,477
On-budget	-638	-537	-466	-482	-509	-519	-2,513
Off-budget	161	174	193	208	224	238	1,036
Administration's Published February Baseline							
Revenues	1,791	2,037	2,215	2,354	2,497	2,636	11,738
On-budget	1,257	1,462	1,612	1,717	1,830	1,937	8,557
Off-budget	534	575	603	636	668	699	3,181
Outlays							
Discretionary	908	910	885	896	914	933	4,537
Mandatory	1,254	1,309	1,370	1,441	1,528	1,618	7,265
Net interest	156	178	213	245	273	296	1,206
Total	2,319	2,397	2,468	2,583	2,715	2,847	13,008
On-budget	1,939	2,000	2,067	2,171	2,294	2,410	10,942
Off-budget	380	396	401	412	420	436	2,066
Deficit (-) or Surplus	-527	-360	-253	-229	-218	-211	-1,270
On-budget	-682	-539	-455	-453	-465	-474	-2,385
Off-budget	154	179	202	224	247	263	1,115

Continued

Table 1-10.
Continued

(Billions of dollars)

	2004	2005	2006	2007	2008	2009	Total, 2005-2009
			Difference (CBO minus Administration)				
Revenues	26	13	40	31	8	7	99
On-budget	16	16	42	38	16	16	128
Off-budget	11	-3	-2	-7	-9	-9	-29
Outlays							
Discretionary	-13	26	71	76	84	88	345
Mandatory	-9	-12	-18	-12	-17	-17	-75
Net interest	-1	2	7	11	9	5	35
Total	-24	16	60	76	76	77	306
On-budget	-28	14	53	67	61	61	256
Off-budget	4	2	7	9	15	16	49
Deficit (-) or Surplus[a]	50	-3	-20	-45	-68	-70	-207
On-budget	43	2	-11	-29	-45	-45	-128
Off-budget	7	-5	-9	-16	-24	-25	-79
Memorandum:							
Deficit Under the Administration's Budget Enforcement Act Baseline[b]	-527	-393	-305	-292	-288	-271	-1,549

Sources: Congressional Budget Office; Office of Management and Budget.

a. Positive numbers denote that the Administration's estimate of the deficit is higher than CBO's; negative numbers denote that its estimate of the deficit is lower than CBO's.

b. Baseline deficits calculated by the Administration according to the Balanced Budget and Emergency Deficit Control Act as amended.

CHAPTER

2

The Economy Under the President's Budget and Under CBO's Baseline Policy Assumptions

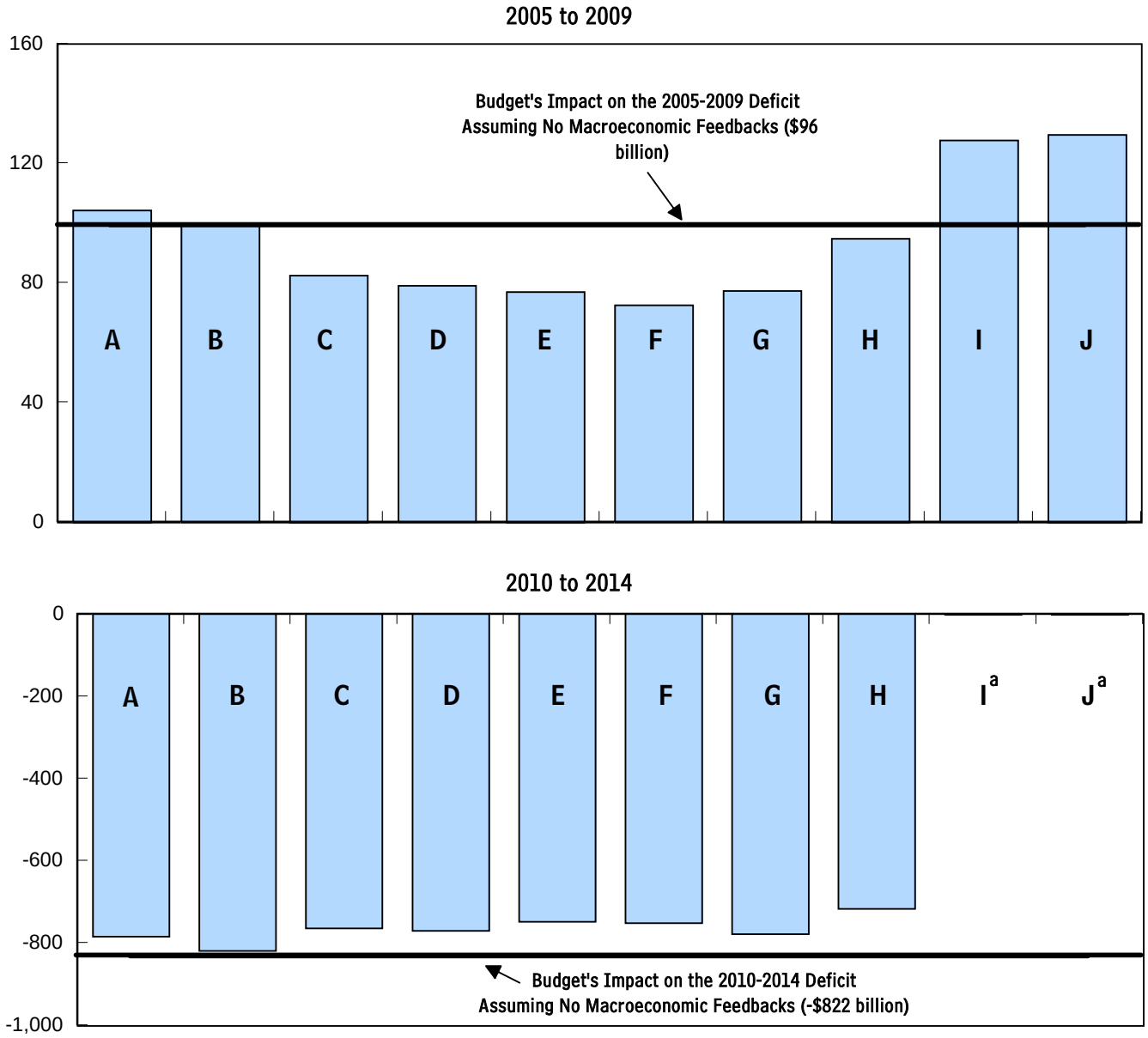
The Congressional Budget Office's analysis of the President's budgetary proposals included a consideration of how those policies—in comparison with the policies assumed in CBO's baseline—would affect the economy. That assessment produced the following main conclusions:

- Under the policies in the President's budget, economic output could be either higher or lower, on average, over the 2005-2009 period and would probably be higher over the 2010-2014 period than it would be under the policies in CBO's baseline. However, the differences are likely to be small, affecting output by less than one-half of one percentage point, on average.
- The small size of the effects on output stems in part from the small size—relative to the overall economy—of the budgetary impact of the proposals. From 2005 to 2009, CBO estimates, revenues under the President's proposals—excluding economic effects—would be lower by 0.3 percent of cumulative gross domestic product than they would be under CBO's baseline. Spending, including interest on government debt, would be lower by 0.4 percent of GDP. (Spending under the President's proposals would be lower largely because CBO's baseline extends supplemental appropriations for 2004, adjusted for inflation, to future years, and the President's proposals do not.)
- Another reason that the proposals' effects on the economy are estimated to be small and to vary over time is that their changes in policy (relative to CBO's baseline) have offsetting effects: some proposals tend to imply greater output, and some tend to imply less.
- The macroeconomic effects of the proposals could in turn alter their budgetary cost. Under the baseline's economic assumptions, the President's budgetary proposals would reduce the cumulative deficit for the 2004-2009 period by $96 billion, CBO estimates, compared with the deficit under the baseline's policy assumptions. When the budgetary effects of the economic changes resulting from those proposals are included in the estimate, the projected reduction in the cumulative deficit over that period ranges from as much as $130 billion to as little as $72 billion (see Figure 2-1 and Table 2-1).
- For the years 2010 to 2014, under the baseline's economic assumptions, the President's budgetary proposals would increase the cumulative deficit by $822 billion. When the budgetary effects of the economic changes resulting from those proposals are also considered, the projected increase in the cumulative deficit over that period ranges from as much as $818 billion to as little as $716 billion.

Figure 2-1.

CBO's Estimates, Using Various Models, of How the President's Budget Would Affect the Deficit After Accounting for Economic Effects

(Cumulative change from CBO's baseline, in billions of dollars)



Source: Congressional Budget Office.

Notes: The estimates in the figure reflect the proposals' supply-side effects on the economy but exclude demand-side economic impacts. Positive changes reduce the deficit; negative changes increase it.

CBO's analysis used the following models (which are described in the text): (A) "textbook" high model, (B) "textbook" low model, (C) closed-economy life-cycle model with lower government spending after 2014, (D) closed-economy life-cycle model with higher taxes after 2014, (E) open-economy life-cycle model with lower government spending after 2014, (F) open-economy life-cycle model with higher taxes after 2014, (G) infinite-horizon model with lower government consumption after 2014, (H) infinite-horizon model with higher taxes after 2014, (I) Macroeconomic Advisers' model, and (J) Global Insight's model.

a. Because this model is designed primarily to capture business-cycle developments, which are hard to predict beyond a few years, CBO did not compute an estimate for the 2010-2014 period.

Table 2-1.

CBO's Estimates of How the President's Budget Would Affect the Deficit After Accounting for Economic Effects

(Cumulative change from CBO's baseline, in billions of dollars)

	2005 to 2009	2010 to 2014
Growth Models		
Without Forward-Looking Behavior		
Textbook Growth Model		
High (Hours worked respond strongly to tax-rate changes)	104	-783
Low (Hours worked respond weakly to tax-rate changes)	100	-818
With Forward-Looking Behavior		
Closed-Economy Life-Cycle Growth Model		
Lower government spending after 2014	82	-763
Higher taxes after 2014	79	-769
Open-Economy Life-Cycle Growth Model		
Lower government spending after 2014	77	-748
Higher taxes after 2014	72	-750
Infinite-Horizon Growth Model		
Lower government spending after 2014	77	-777
Higher taxes after 2014	95	-716
Macroeconometric Models		
Supply-Side Contribution		
Macroeconomic Advisors	128	n.a.
Global Insight	130	n.a.
Supply-Side and Demand-Side Contributions		
Macroeconomic Advisers	110	n.a.
Global Insight	82	n.a.
Memorandum:		
CBO's Estimate of the Budgetary Effects of the President's Proposals Under Baseline Economic Assumptions	96	-822

Source: Congressional Budget Office.

Notes: n.a. = not applicable.

Numbers in this table reflect the positive or negative effects of the President's proposals on the cumulative deficit relative to CBO's baseline.

The "textbook" growth model is an enhanced version of a model developed by Robert Solow. The life-cycle growth model, developed by CBO, is an overlapping-generations general-equilibrium model. The infinite-horizon growth model is an enhanced version of a model first developed by Frank Ramsey. The models by Macroeconomic Advisers and Global Insight, which are available commercially, are designed to forecast short-term economic developments. The various models reflect a wide range of assumptions about the extent to which people are forward-looking in their behavior: in the textbook model and those by Macroeconomic Advisers and Global Insight, people have the least foresight, whereas in the infinite-horizon model, foresight is perfect and extends infinitely to include a full consideration of effects on descendants.

In models with forward-looking behavior, CBO had to make assumptions about how the President's budget would be financed after 2014. CBO chose two alternatives—cutting government consumption and transfer payments or raising marginal tax rates.

How Fiscal Policy Affects the Economy

Budgetary policies can affect the economy in a variety of ways. Changes in the tax rates that people face on their income can affect incentives to work and save; government spending on goods and services can reduce the resources available for investment; and spending and tax policies can influence the overall level of demand in the economy.[1] Those impacts and other possible economic influences can be broadly divided into long-run supply-side effects and short-run demand-side effects.

The economy's underlying potential to produce goods and services depends on the size and quality of both the labor force and the stock of productive capital (such as factories and information systems), as well as on the level of technological know-how. Economists refer to long-term changes in those three determinants of potential output as "supply-side" changes because they alter the quantity of goods and services that the economy is capable of supplying on a sustainable basis. Supply-side changes have a lasting effect on the economy.

In the short run, however, economic output can deviate from its potential level, as the total demand for goods and services moves above and below that level, causing employment to rise and fall and the stock of capital to be used more or less intensively. Those movements are referred to as demand-side, or cyclical, variations. Unlike movements on the supply side of the economy, cyclical changes are temporary—built-in corrective forces usually tend to move the economy back toward the sustainable potential level determined by the supply side.

Both supply-side and demand-side economic developments depend on the choices of millions of individuals about what and how much to buy, how much to save and what assets to hold, and where and how much to work. The government plays a crucial role in establishing the legal and institutional framework within which the economy operates and an overall level of government spending and taxes. Once that general framework is in place, however, changes in government spending and tax policies influence individuals' choices only to a limited degree. Decisions by businesses, personal circumstances, and preferences play a much larger role in economic performance than do modest changes in the federal government's fiscal policies.

Supply-Side Effects

The supply-side effects of the policies in the President's budget could include influences on the quantity and quality of labor, the size and composition of the capital stock, and technological progress. Changes in any or all of those factors are capable of permanently altering potential output.

The Quantity and Quality of Labor. The overall quantity and quality of labor is an important determinant of potential output. Put simply, a long-term increase in the overall number of hours worked in the economy raises its potential to generate output. Moreover, increases in workers' educational attainment, level of training, and experience or degree of effort on the job raise the quality of each hour worked, which will also increase potential output. Some analysts argue that certain policies in the President's budget, such as extending expiring tax cuts, will ultimately affect the quality of labor. However, the channels through which budgetary policies influence that supply-side variable and the pace at which the effects occur are not well understood. For that reason, CBO's analysis concentrated on the hours of labor supplied, which the President's proposals would affect in two main ways.

First, several provisions, such as the extension of the child tax credit and the exemption of some dividend and capital gains income from taxation, would increase people's after-tax income but not significantly change the marginal tax rates on income resulting from labor. (In general, the marginal rate is the rate on the last dollar of income.) A rise in after-tax income without a change in those marginal rates tends to reduce the number of hours of labor that people supply because they can maintain the same standard of living with less work.

Second, provisions in the President's budget, such as the extension of the reductions in marginal tax rates enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, would both increase the compensation after taxes for each additional hour of work and boost after-tax income overall. Evaluating how such rate reductions affect the number of hours people work is complicated by the fact that the cuts have opposing effects: people earn more for each extra hour they work, which tends to en-

1. Economists refer to government outlays for current goods and services (as opposed to outlays for transfer payments, interest on government debt, or long-lasting investments such as highways or military equipment) as "government consumption" because it reduces the resources available for investment in much the same way that private consumption does.

Table 2-2.

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

(Percent)

Calendar Year	Tax Rate Under Current Law	Tax Rate Under the President's Budget	Difference	
			Percentage Points	Percent
2004	27.8	27.8	0	0
2005	28.7	28.0	-0.6	-2.2
2006	28.7	28.7	-0.1	-0.3
2007	29.0	28.9	-0.1	-0.3
2008	29.2	29.2	0	0
2009	29.4	29.4	0	0
2010	29.7	29.7	0	0
2011	31.5	29.9	-1.6	-5.2
2012	31.8	30.2	-1.6	-4.9
2013	31.9	30.4	-1.5	-4.6
2014	32.1	30.7	-1.4	-4.4

Source: Congressional Budget Office.

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

courage work, but they can earn the same after-tax income working fewer hours, which tends to discourage work. Most studies find, however, that on balance, reductions in marginal tax rates such as those the President is proposing to extend will increase the hours of labor supplied, primarily because the cuts will draw secondary earners (for example, the spouse of a household's primary breadwinner) into the labor force.

To summarize as a single number the changes proposed by the President in the schedule of marginal tax rates, CBO estimated the impact those changes would have on the effective marginal tax rate on labor income—the rate at which the average additional dollar of compensation for labor is taxed (see Table 2-2). The largest changes in rates occur for the years 2011 to 2014, when the President proposes to extend various expiring tax cuts. For those years, the average effective marginal tax rate on labor income is about 5 percent lower under the President's proposals than under the current-law policies assumed in CBO's baseline.

The President's proposals could also influence the level of the capital stock (as discussed in the next section), potentially affecting the hours of labor supplied by changing people's productivity and wages. If the proposals reduced investment, the stock of productive capital would be smaller and wages would be lower, which would discourage work. (Increased investment would imply the opposite results.)

Another way in which the President's proposals could affect the hours worked in the economy would be by changing people's expectations about future policies. Under the President's budget, the cumulative federal budget deficit over the 2005-2014 period would grow. That rise could lead people to expect that at some time after that period, fiscal policy would have to change to finance the increase in the federal government's interest payments on the money it borrowed to cover the bigger deficit. Either taxes would have to be raised or spending cut.[2] If people expected to have to pay more in taxes or receive less in services or transfer payments (such as Social Security benefits), they might try to work and save more now so as to have more resources to compensate for the larger burden in the future. In addition, if people expected to face higher tax rates on their income from labor in the future, they might try to work more before the rates went up and then work less when the rates were higher.

2. For some time, the shortfall could be made up by running larger deficits. But the federal government could not follow such an approach indefinitely, because the interest costs would compound over time.

It is difficult to gauge, however, the degree to which such foresight influences people's decisions. Also unclear is the time horizon that people consider in making plans and the future changes in policy they actually expect. To illustrate the importance of those factors, CBO used various assumptions in its analysis about the extent of people's foresight and the expectations they might have about future policies.

In sum, CBO estimates that the President's budgetary proposals would have relatively small effects, on average, on the number of hours worked over the first five years of the 2005-2014 period, and those effects could be positive or negative. Over the second five years of that period, however—during which the reductions in marginal tax rates are largest relative to CBO's baseline policy assumptions—the proposals would increase the hours of labor supplied.

The Size and Composition of the Capital Stock. The President's budgetary policies would influence the size of the capital stock primarily by affecting consumption and therefore investment. The President's proposals would directly lower government consumption of goods and services relative to the level assumed in CBO's baseline. That reduction would tend to boost private investment in productive capital by increasing the resources available for that purpose.[3]

The President's budgetary policies would also produce offsetting influences on private consumption. The reductions in taxes that the budget proposes would increase after-tax income, which would tend to increase consumption. Other things being equal, higher consumption could reduce investment and crowd out private capital. But some of the President's tax proposals would tend to reduce consumption in the years they were in effect—including proposals such as extending EGTRRA's reductions in marginal income tax rates, extending the reductions in tax rates on dividends and capital gains enacted in the Jobs and Growth Tax Relief Reconciliation Act of 2003, and expanding tax-free savings accounts. Those proposals would provide an incentive to save by lowering the effective marginal tax rates on capital income and thus increasing the after-tax rate of return on savings. (For a detailed analysis of the President's proposals concerning dividend and capital gains taxation, savings accounts, and the estate tax, see Appendix A.)

Again, to summarize in one number the effects of the President's proposals on the rate of return on savings, CBO calculated the average effective marginal tax rate on capital income. That calculation was performed under two sets of policy assumptions: one comprising the President's policies and the other, the current-law policies in CBO's baseline (see Table 2-3). In both instances, the estimated effective tax rates resulting from that analysis are below all but the lowest statutory marginal tax rate because some capital income (for example, the interest that flows into tax-free savings accounts or pension funds) is not taxed. According to CBO's estimates, by 2014, the effective marginal tax rate on capital income would be almost 9 percent lower under the President's proposals than under CBO's baseline.

The proposed reductions in taxes on capital income would raise the rate of return on savings and affect consumption in two opposing ways (just as lowering the marginal tax rate on labor income would have opposing effects on the labor supply). The higher return on savings that the reductions would imply would increase the gain in savers' future consumption for every dollar they saved, which would tend to increase saving and reduce current consumption. But the higher return would also increase savers' wealth by boosting their after-tax income, both now and in the future, which would tend to push up their current consumption. On balance, the implications for consumption could be either positive or negative. The general conclusion by economists analyzing empirical data is that the return on savings has a relatively small effect on how much people spend. Nevertheless, to cover other possibilities, CBO included in its analysis a range of assumptions about the rate of return's effect on consumption. Some of CBO's estimates incorporate the assumption that the rate has little or no effect on how much people spend; others assume that increasing the rate of return on savings will reduce consumption—and increase saving—significantly.

Finally, as described earlier, the higher (relative to CBO's baseline) cumulative 10-year deficit under the President's budgetary proposals might lead some people to anticipate changes in policy in the future. If people expected higher

3. Some of the supportive effect on investment of that lower government consumption would probably be offset by a decline in the amount of foreign capital flowing into the United States. However, because most of the returns on foreign investments accrue to foreigners, a decline in foreign capital flows would not commensurately reduce the resources available to U.S. firms and consumers in the long run.

Table 2-3.

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

(Percent)

Calendar Year	Tax Rate Under Current Law	Tax Rate Under the President's Budget	Difference	
			Percentage Points	Percent
2004	13.5	13.3	-0.2	-1.5
2005	13.6	13.3	-0.2	-1.7
2006	13.6	13.3	-0.3	-2.0
2007	13.6	13.3	-0.3	-2.1
2008	13.6	13.3	-0.3	-2.4
2009	13.9	13.3	-0.6	-4.5
2010	14.0	13.3	-0.7	-4.9
2011	14.5	13.3	-1.3	-8.7
2012	14.6	13.3	-1.3	-8.7
2013	14.6	13.3	-1.3	-8.7
2014	14.6	13.3	-1.3	-8.7

Source: Congressional Budget Office.

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

taxes, lower transfer payments, or fewer government services in the years to come, they might reduce their spending and build up their savings to compensate for those anticipated policies. CBO used a range of assumptions about those expectations in its analysis. Some of CBO's estimates indicated that, on average, the capital stock would be larger under the policies in the President's budget than under those in CBO's baseline; others suggested that it would be smaller. Yet in most cases, the differences are modest. The most positive effects on the capital stock come under the most dramatic assumption about foresight—that people care just as much for future generations as they do for themselves. In effect, if people have a sufficiently long time horizon, they may recognize and counter the deleterious effects of fiscal policy on the formation of capital and thus on future standards of living.

In addition to changes in the level of the capital stock, changes in the mix of different types of capital within that stock can affect potential output. Of the policies in the President's budget, the proposal to extend the reduction in tax rates on corporate dividends and capital gains would probably have the largest effect on the stock's composition because it would encourage a shift of capital from the noncorporate to the corporate sector by lessening the taxation of corporate income. Some corporate income is taxed once at the level of the firm, through the corporate income tax, and again at the personal level, through the individual income tax on dividends and capital gains. That tax treatment distorts the way that capital is allocated in the economy because it discourages investing in the corporate sector relative to investing in the housing and noncorporate business sectors. As a result, less capital is held in the corporate sector than is optimal for the economy's efficient operation.

The taxation of dividends and capital gains also encourages firms to finance investment by borrowing rather than by issuing stock. Interest payments on debt are deducted from taxable profits at the corporate level and so are taxed only once, at the individual level, when people receive them as income. That tax policy may influence firms' decisions about financing and lead to economic inefficiencies. Reducing the tax on dividends and capital gains would lessen those inefficiencies and thereby increase overall economic output.

Technological Progress. The President's budgetary policies might conceivably affect the economy by influencing the rate of technological progress—an important consideration because new and improved processes and products are the source of most long-term growth in productivity. Economists, however, lack a basis for estimating how fiscal policy influences technological innovation. Because so little is understood about the genesis of such in-

novation, CBO has not incorporated in its analysis any effects on technological progress from the President's proposals.

Demand-Side (Cyclical) Effects

The federal government's policies also affect the economy by adding to or subtracting from the total demand for goods and services. Increases in demand can cause firms to temporarily gear up production and hire more workers; decreases in demand can have the opposite effects. From a demand-side perspective, budgetary policies that reduce consumption (and other purchases) might slow the pace of the current cyclical expansion of the U.S. economy.

Demand-side effects, however, can only temporarily raise or lower output beyond what it would have been otherwise—with or without demand-side effects, built-in economic forces tend to move output toward its sustainable potential level. Moreover, policies that increase demand by raising government or private consumption are likely to lower output in the long run because they tend eventually to decrease investment and the size of the capital stock.

A Description of CBO's Models and Their Results

CBO estimated the economic effects of the President's budget relative to CBO's baseline assumptions by using several different models of the economy. Although similar in some respects, the models capture different features of the economy and reflect different ways of thinking about it.

Those models fall into two broad categories. Three estimate only supply-side effects. The other two are commercial macroeconometric models that emphasize the business-cycle aspects of the economy and are designed primarily to analyze demand-side effects, although they incorporate some supply-side influences as well. (For a year-by-year graphic presentation of some of the key inputs into CBO's various models—the impact of the President's proposals on effective tax rates on labor and capital and on the deficit—see Figure 2-2.)

Ten-Year Analysis of Supply-Side Effects

CBO used three growth models—a life-cycle growth model, an infinite-horizon growth model, and a "textbook" growth model—to analyze the supply-side effects of the President's proposals from 2005 through 2014 (the same period that the budget process requires CBO to cover in its baseline projections). The models differ in part in their assumptions about how far ahead people look in making their plans (see Appendix B). The life-cycle model incorporates the assumption that people make life-long plans for working and saving but do not care about events after their death. By contrast, the infinite-horizon model incorporates the assumption that people care as much about the welfare of their descendants as they do about their own. That assumption means that people behave as if they will live forever. The textbook growth model is not forward-looking—it assumes that people do not explicitly incorporate expected future policies into their current plans.

It is important to note that the estimates CBO produced using the life-cycle and infinite-horizon growth models are based on the assumption that people behave as if they are certain that the assumed budgetary policies—those of the President or of CBO's baseline—will be maintained over the 10-year modeling period. In reality, people would probably think it possible that the policies could change at some point during that time.

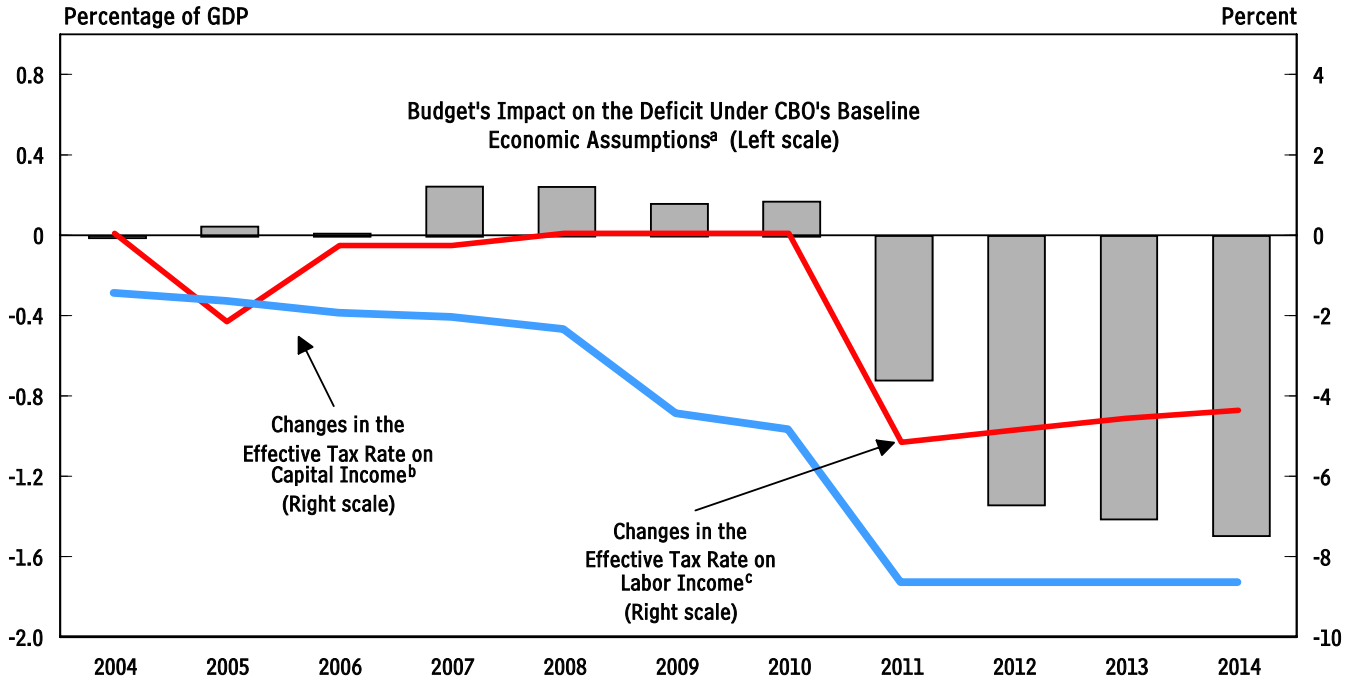
Another characteristic of the estimates produced by the life-cycle and infinite-horizon models is that they depend in part on how the President's budgetary proposals affect people's expectations about fiscal policy beyond 2014. The models both generated two sets of estimates, each of which was based on a different assumption about how the increased deficits under the President's budget would eventually be financed (the models require such an assumption about financing because they are forward-looking). Under one assumption, people believe that the proposals will be financed by gradually reducing government spending on goods and services and on transfer payments (as shares of GDP) over the 2015-2024 period. (The reductions in the two categories would be proportional to their shares of government spending in CBO's baseline.) Under the other assumption, people believe that the proposals will be financed by gradually increasing marginal tax rates over the same period.[4]

Depending on which of the assumptions is used and on whether the economy is assumed to be open or closed to

4. Those financing assumptions differ somewhat from those used in last year's analysis of the President's budget; see Appendix B for details.

Figure 2-2.

Selected Inputs Used for CBO's Estimates



Source: Congressional Budget Office.

a. Positive changes reduce the deficit, and negative changes increase it.

b. Changes in the effective federal marginal tax rate on income from capital (in principle, the share of the last dollar of such income taken by federal individual income and corporate income taxes).

c. Changes in the effective federal marginal tax rate on income from labor (in principle, the share of the last dollar of such income taken by federal individual income and payroll taxes).

flows of foreign capital, the life-cycle model projects that under the President's proposals, economic output will fall by between 0.1 percent and 0.2 percent over the 2005-2009 period compared with CBO's baseline and will rise by between 0.4 percent and 0.5 percent over the 2010-2014 period (see Table 2-4). The difference in the projected effects over the two periods stems partly from the assumption that people will shift some hours of work from the earlier to the later period, when tax rates are lower (relative to CBO's baseline assumptions).

The infinite-horizon model projects that the President's proposals will subtract between zero and 0.2 percent from GDP over the first five years but then raise output by between 0.3 percent and 0.7 percent (relative to CBO's baseline) over the second five years. Again, the difference in projected effects arises partly because people are estimated to shift some of their hours of work from one period to another. (See Table 2-5 for details of CBO's baseline projections of GDP and other economic variables.)

In the infinite-horizon model, estimates produced under the assumption that taxes will eventually increase after 2014 tend to suggest more positive effects on output over the next 10 years than do estimates that assume that government spending will be cut. The reason is that people—as the model represents them—will work and save more inside the 10-year projection period to prepare for a tax increase or cut in transfer payments, but they will not do so for a reduction in government spending on goods and services. (The models incorporate the assumption that people do not value such spending.)

The differing assumptions about funding have a greater effect on the infinite-horizon model than on the life-cycle model because people as represented in the infinite-horizon model know that they (or their descendants, whom they care about as much as they do themselves) are going

Table 2-4.

CBO's Estimates of How the President's Budget Would Affect Real Gross Domestic Product

(Average percentage change from CBO's baseline)

	2005 to 2009	2010 to 2014
Growth Models		
Without Forward-Looking Behavior		
Textbook Growth Model		
High (Hours worked respond strongly to tax-rate changes)	0.1	0.2
Low (Hours worked respond weakly to tax-rate changes)	0	0
With Forward-Looking Behavior		
Closed-Economy Life-Cycle Growth Model		
Lower government spending after 2014	-0.1	0.4
Higher taxes after 2014	-0.1	0.4
Open-Economy Life-Cycle Growth Model		
Lower government spending after 2014	-0.2	0.5
Higher taxes after 2014	-0.2	0.5
Infinite-Horizon Growth Model		
Lower government spending after 2014	-0.2	0.3
Higher taxes after 2014	0	0.7
Macroeconometric Models		
Supply-Side Contribution		
Macroeconomic Advisors	0.3	n.a.
Global Insight	0.2	n.a.
Supply-Side and Demand-Side Contributions		
Macroeconomic Advisers	0.1	n.a.
Global Insight	-0.3	n.a.

Source: Congressional Budget Office.

Notes: n.a. = not applicable.

The "textbook" growth model is an enhanced version of a model developed by Robert Solow. The life-cycle growth model, developed by CBO, is an overlapping-generations general-equilibrium model. The infinite-horizon growth model is an enhanced version of a model first developed by Frank Ramsey. The models by Macroeconomic Advisers and Global Insight, which are available commercially, are designed to forecast short-term economic developments. The various models reflect a wide range of assumptions about the extent to which people are forward-looking in their behavior: in the textbook model and those by Macroeconomic Advisers and Global Insight, people have the least foresight, whereas in the infinite-horizon model, foresight is perfect and extends infinitely to include a full consideration of effects on descendants.

In models with forward-looking behavior, CBO had to make assumptions about how the President's budget would be financed after 2014. CBO chose two alternatives—cutting government consumption and transfer payments or raising marginal tax rates.

to bear the burden of any future increase in taxes. By contrast, people as represented in the life-cycle model face some probability of retiring or dying before the increase occurs. (An increase in marginal tax rates has less effect on retirees because they do not earn and pay taxes on labor income.)

CBO used the textbook growth model to produce estimates under two assumptions about the degree to which people alter their hours of labor in response to changes in marginal tax rates: a "low" assumption, in which there is little response, and a "high" assumption, in which the response is at the upper end of the consensus of economists'

Table 2-5.

CBO's Year-by-Year Forecast and Projections for Fiscal Years 2004 Through 2014

	Estimated	Forecast		Projected								
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Nominal GDP (Billions of dollars)	10,829	11,469	12,091	12,682	13,236	13,862	14,519	15,187	15,862	16,562	17,301	18,070
Nominal GDP (Percentage change)	4.4	5.9	5.4	4.9	4.4	4.7	4.7	4.6	4.4	4.4	4.5	4.4
Real GDP (Percentage change)	2.8	4.7	4.3	3.5	2.6	2.8	2.8	2.7	2.5	2.5	2.5	2.5
GDP Price Index (Percentage change)	1.5	1.2	1.1	1.3	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Consumer Price Index[a] (Percentage change)	2.4	1.7	1.6	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Employment Cost Index[b] (Percentage change)	2.8	2.5	2.5	2.6	3.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Unemployment Rate (Percent)	6.0	5.9	5.4	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Three-Month Treasury Bill Rate (Percent)	1.1	1.1	2.6	3.8	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Ten-Year Treasury Note Rate (Percent)	3.9	4.5	5.3	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Tax Bases (Billions of dollars)												
Corporate book profits	819	938	1,215	1,353	1,354	1,358	1,357	1,382	1,435	1,500	1,569	1,645
Wages and salaries	5,051	5,257	5,563	5,859	6,134	6,435	6,744	7,057	7,370	7,693	8,033	8,386
Tax Bases (Percentage of GDP)												
Corporate book profits	7.6	8.2	10.0	10.7	10.2	9.8	9.3	9.1	9.0	9.1	9.1	9.1
Wages and salaries	46.6	45.8	46	46.2	46.3	46.4	46.5	46.5	46.5	46.5	46.4	46.4

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: Percentage change is year over year.

a. The consumer price index for all urban consumers.

b. The employment cost index for wages and salaries only, private-industry workers.

empirical estimates.[5] (The model makes no assumption about future financing because it is not forward-looking.) Under the low assumption, the President's budgetary proposals would have little effect on GDP in either the 2005-2009 or the 2010-2014 period. Under the high assumption, the proposals would raise GDP by about 0.1 percent over the 2005-2009 period and by about 0.2 percent over the 2010-2014 period.

The textbook growth model's results differ from those of the other two growth models largely because it does not incorporate forward-looking behavior: people, as represented by the model, do not shift hours of labor from the earlier to the later period and do not work and save more in anticipation of a tax increase after 2014. In addition, unlike the life-cycle and infinite-horizon models, the textbook growth model does not incorporate any direct effects on private consumption from lower marginal (as opposed to average) tax rates and higher pretax interest rates.

The effects on the economy from the President's proposed changes in fiscal policy would in turn affect the federal budget through 2014 (see Tables 2-1 and 2-6). The President's proposals are projected to reduce the cumulative deficit over the 2005-2009 period by $96 billion under the economic assumptions incorporated in CBO's baseline. Under the various assumptions used in the growth models that CBO employed in its analysis, the economic effects of the President's proposals over that period could add as much as $8 billion to that reduction or subtract as much as $24 billion from it.

For the 2010-2014 period, the President's budgetary proposals are projected to increase the cumulative deficit by $822 billion under the baseline's economic assumptions. The economic effects of the President's proposals over that period, according to the models, could lessen that increase by as little as $4 billion or as much as $106 billion.

5. See Congressional Budget Office, *Labor Supply and Taxes* (January 1996).

Five-Year Analysis Including Demand-Side Effects

CBO turned to macroeconometric forecasting models created by two private forecasting firms, Macroeconomic Advisers (MA) and Global Insight (GI), to analyze both the demand-side and supply-side effects of the President's budgetary proposals on the economy over the next five years. Although the MA and GI models include embedded growth models, their design concentrates on demand-side (cyclical) economic effects. Such effects are increasingly harder to estimate as the projection extends into the future. Therefore, CBO used those models to produce estimates only for the first five years of the 2005-2014 projection period.

Like the textbook growth model, the MA and GI models are not forward-looking—people as the models represent them do not behave as though they have specific expectations about future policies or economic developments. Instead, people respond to economic changes in the same way as they have in the past, regardless of the source of those changes. For example, they react to the tax proposals in the President's budget (which would raise disposable income) by increasing their purchases to about the same degree as they have, on average, in the past when disposable income rose. However, in reality, people might increase their spending by a smaller amount in response to a tax cut than they would in response to some other change that raised income (such as an increase in productivity) because they might feel that the tax cut was more likely to be reversed in the future.

The lack of forward-looking behavior in the macroeconometric models implies that specific policy changes scheduled to occur in the future do not affect the current behavior of people represented in the model unless special out-of-model adjustments are made to mimic such behavior. For example, the President's proposal to extend EGTRRA's tax cuts would reduce taxes from 2011 to 2014 compared with the levels in CBO's baseline. The reduced taxes would increase the amount of after-tax income that people expected in the future, which might cause them to boost their spending today (as the forward-looking models imply). In the macroeconometric models, however, those tax cuts affect consumption only when they occur.

Table 2-6.

The Budgetary Implications of the Macroeconomic Effects

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

	2005 to 2009	2010 to 2014
Growth Models		
Without Forward-Looking Behavior		
Textbook Growth Model		
High (Hours worked respond strongly to tax-rate changes)	8	39
Low (Hours worked respond weakly to tax-rate changes)	4	4
With Forward-Looking Behavior		
Closed-Economy Life-Cycle Growth Model		
Lower government spending after 2014	-14	59
Higher taxes after 2014	-17	53
Open-Economy Life-Cycle Growth Model		
Lower government spending after 2014	-19	74
Higher taxes after 2014	-24	72
Infinite-Horizon Growth Model		
Lower government spending after 2014	-19	45
Higher taxes after 2014	-1	106
Macroeconometric Models		
Supply-Side Contribution		
Macroeconomic Advisors	31	n.a.
Global Insight	33	n.a.
Supply-Side and Demand-Side Contributions		
Macroeconomic Advisers	14	n.a.
Global Insight	-14	n.a.

Source: Congressional Budget Office.

Notes: n.a. = not applicable.

Numbers in this table reflect the positive or negative effects on the deficit of the economic impacts shown in Table 2-4. They do not include the estimated cost of the President's budgetary proposals under CBO's baseline economic assumptions. The total impact of the proposals on the deficit, including both those direct costs and the secondary effects shown above, appear in Table 2-1.

The "textbook" growth model is an enhanced version of a model developed by Robert Solow. The life-cycle growth model, developed by CBO, is an overlapping-generations general-equilibrium model. The infinite-horizon growth model is an enhanced version of a model first developed by Frank Ramsey. The models by Macroeconomic Advisers and Global Insight, which are available commercially, are designed to forecast short-term economic developments. The various models reflect a wide range of assumptions about the extent to which people are forward-looking in their behavior: in the textbook model and those by Macroeconomic Advisers and Global Insight, people have the least foresight, whereas in the infinite-horizon model, foresight is perfect and extends infinitely to include a full consideration of effects on descendants.

In models with forward-looking behavior, CBO had to make assumptions about how the President's budget would be financed after 2014. CBO chose two alternatives—cutting government consumption and transfers or raising marginal tax rates.

The projections by the MA and GI models also required an adjustment relating to the supply of labor. Those models, like the textbook growth model, do not incorporate the effects of taxes on the number of hours worked, so CBO adjusted the models' equations to incorporate its own estimates of those effects.[6]

CBO produced two sets of estimates to illustrate the magnitude of demand-side effects in the models. For one set, CBO ran the models using the standard assumption that monetary policy would not allow both demand- and supply-side effects. For the second set, CBO attempted to isolate the supply-side effects by altering interest rates in such a way as to hold the unemployment rate at the level projected in CBO's baseline. That approach produced an estimate of the implications of the proposals for potential (or noncyclical) GDP.[7] CBO took the difference between the two sets of projections as its estimate of the demand-side effects of the President's proposals on various economic variables.

The MA and GI models differed in their estimates of the effects of the policies in the President's budget compared with the policies in CBO's baseline (see Table 2-4). The GI model predicted that together, the demand- and supply side effects of those changes would subtract about 0.3 percent from GDP, on average, between 2005 and 2009. The MA model projected that the changes would add about 0.1 percent to output.

The results differ because of the divergence in the models' estimates of the magnitude of the opposing effects on demand under the President's proposals. The policies proposed in the 2005 budget would cut government spending, which would reduce demand. But the proposal to extend the reduction in capital gains and dividend taxation would lead to an increase in stock prices, which would increase people's wealth and therefore consumption, boosting demand. In the GI model's projections, the effect of lower government spending outweighs the effect of increased consumption. The MA model, however, incorporates a much stronger response by consumption to changes in wealth, and therefore its estimates show the proposal increasing demand on a net basis.

In contrast to the models' diverging estimates of demand-side effects, their estimates of the supply-side impacts were quite similar. The macroeconometric models projected that the supply-side effects of the President's budgetary proposals would increase output by between 0.2 percent and 0.3 percent.

The projected economic impacts of the proposals would in turn affect the budget. According to the GI model's estimates, the supply-side and cyclical effects of the President's proposals could subtract $14 billion from the $96 billion reduction in the deficit projected for the 2005-2009 period under the baseline's economic assumptions (see Table 2-6). By the MA model's projections, the proposals' impacts on the economy could add $14 billion to deficit reduction over the same period.

6. Those estimates accounted for the effects of changes in both marginal tax rates and after-tax income under the President's proposals, using data on a large sample of taxpayers and incorporating a larger response to changes in marginal tax rates among secondary earners than among primary earners.

7. Because the decrease in interest rates stems mostly from demand-side effects and the Federal Reserve's efforts to offset them, using those changes in interest rates to calculate budgetary effects ascribed to the supply side makes little sense. Instead, in its estimates of those effects in Tables 2-1 and 2-6, CBO used interest rate changes that reflected only the predicted changes in the marginal product of capital (the amount produced by one additional unit of capital)—the true supply-side effect.

APPENDIX

A

The Potential Economic Effects of Selected Proposals in the President's 2005 Budget

Three provisions in the President's 2005 budget—the proposals to extend the reductions in dividend and capital gains taxes beyond 2008, to expand the availability of tax-free savings accounts, and to extend the repeal of the estate tax—have especially complex economic impacts. Discussed below are the factors that the Congressional Budget Office (CBO) considered and the methods it used in assessing those impacts. (CBO's analysis of the overall economic effects of the President's budgetary proposals is described in Chapter 2.)

Extend the Reductions in Dividend and Capital Gains Taxes

In 2003, the Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) reduced the tax rates applicable to both dividends and capital gains to a bottom rate of 5 percent and a top rate of 15 percent. Previously, dividends would have been subject to the same tax rates as ordinary income—ranging from 15 percent to 35 percent—and most capital gains would have been subject to rates of 8 percent, 10 percent, and 20 percent. However, JGTRRA's lower rates expire in 2008, and the President, in his 2005 budget, is proposing to extend them permanently.

The rate reductions were enacted in part to reduce overall taxation of corporate profits. Some corporate profits are taxed once under the corporate income tax and then again, when people receive dividends and realize capital gains on stock sales—gains brought about by the firm's reinvesting of its profits. Lowering the tax rates that individuals face on the two types of income reduces the total rate of taxation.

JGTRRA's lower tax rates not only reduce the taxation of corporate income but also cut taxes on some income that is currently taxed only once. A substantial portion of taxable capital gains arises from investments whose earnings are not subject to the corporate income tax, such as gains on individually held real estate. The lower capital gains tax rate will lower the level of taxation on those investments as well.

To some extent, the impacts on the economy of reducing the tax rates on dividends and capital gains are already being felt because the lower rates are currently in effect. However, the short duration of those rates lessens their effect on investment and the capital stock. Investments in productive capital take time to implement, and firms are unlikely to fully adjust their long-term investment plans in response to temporary changes in dividend and capital gains taxation. Thus, some portion of the impacts of the lower rates can be expected to occur only if the proposed extension of those rates takes effect.

One such impact is that by reducing the overall taxation of capital income, a cut in taxes on dividends and capital gains might be expected to lower the cost of financing for businesses. (They could pay investors less before taxes to yield the same after-tax return.) But how much the cost of capital might drop is unclear. Some analysts argue that firms' financial strategies imply that the reduction in the cost of capital will reflect only the cut in taxes on capital gains. Others hold that the reduction will reflect the cut in taxes on both gains and dividends.[1]

1. George R. Zodrow, "On the 'Traditional' and 'New' Views of Dividend Taxation," *National Tax Journal,* vol. 44, no. 4, part 2 (December 1991), pp. 497-509.

Corresponding to the disagreement among analysts about the size of the drop in the cost of capital is a difference of opinion about how much the values of firms' stock might rise. (Share values rise because the tax cuts increase the after-tax return to shareholders.)[2] The view of corporate finance that predicts a relatively large increase in those values predicts a relatively small decrease in the cost of capital, and vice versa.

In the absence of a consensus, CBO has adopted a middle-ground estimate of the effects of the President's proposal on the cost of capital for firms and on share values.

High values for stock shares lead to more consumption among shareholders (the so-called wealth effect). Therefore, the President's proposal will help boost overall demand in the short run. But the more it helps demand by raising consumption, the more it will hurt supply in the long run by lowering saving and investment.

Another impact of extending the tax cuts on capital gains and dividends is that it is likely to lessen the disadvantage that the corporate sector now faces in the competition for capital. For example, although under current law some income from the corporate sector is taxed twice, income from small businesses is taxed only once (at the personal level), and the value of housing services from owner-occupied housing is not taxed at all. That disparity in tax treatment leads to less investment in the corporate sector than may be optimal for economic output. Lowering taxes on firms would allow them to attract additional capital from the housing and small-business sectors and in general improve the economy's efficiency. It might, however, conflict with other policy goals, such as support for owner occupancy of homes or for unincorporated businesses.

Yet another impact of the proposal is that it would affect firms' financial behavior in two ways: it would make equity financing more attractive relative to debt financing, and it would make the payment of dividends more attractive relative to the retention of earnings. Currently, firms can deduct interest payments on debt from corporate income, so those payments are taxed only once, at the personal level. (That is, the individual who receives the payment pays the tax.) But if a firm finances a project by issuing stock (equity financing), some of the returns on the investment that the project generates are taxed at both the corporate and personal levels. The President's proposal would narrow that disparity in tax treatment.

The proposed reduction in the taxation of dividends and capital gains would also interact with some of the President's other proposals and with current law. For instance, the President's proposal to boost the amount that people could deposit in tax-free savings accounts (discussed below) would increase the share of personal assets held in such accounts—duplicating some of the effect that the proposal to cut the tax on dividends and capital gains would have on the cost of capital and on its allocation among sectors of the economy. However, the expanded accounts would partly undo the impact that the dividend/capital gains proposal would have in bolstering equity financing because the interest earned on assets in the accounts would not be taxed at either the personal or the corporate level. That lessening of the proposal's impact on equity financing would be intensified by the combined effect of the two policies in increasing the proportion of interest-bearing assets in tax-free accounts: the incentive to hold equities in such accounts would be weakened if their returns already faced lower tax rates.

CBO incorporated the effects of the dividend/capital gains proposal in its analysis in two ways. For the macroeconometric models, CBO estimated the proposal's effect on the cost of capital in different economic sectors and on the values of stock shares. It then incorporated those estimates into the models, and the models' equations estimated the ultimate effect on the economy.

For the growth models, CBO estimated the proposal's overall effect on the average cost of capital and incorporated that calculation. Those models, however, have no mechanism to incorporate the effect of the reallocation of capital. To take account of that impact, CBO reviewed research on how reallocation might influence output, determined a midrange estimate, and added that amount to the models' underlying estimates of the effect on output. The procedure added an average of 0.07 percent to the proposal's projected effect on gross domestic product over the 2005-2014 period in the growth models.

Expand Tax-Free Savings Accounts

The President's budget includes a proposal that is designed to both consolidate and expand the current system of tax-free savings accounts for retirement and other purposes, such as education. Two new kinds of accounts

2. Over time, however, increased investment will enlarge the capital stock, in turn reducing the pretax rate of return and offsetting at least some of the impact of the reduction in taxes.

would be created: retirement savings accounts (RSAs) and lifetime savings accounts (LSAs). The RSA would function in some ways like a Roth individual retirement account (IRA)—that is, taxes would not be deferred on contributions, as they are for contributions to traditional IRAs, but the interest that the accounts earned would accrue tax-free. In contrast to Roth IRAs, however, RSAs would be available to all workers (and their spouses) regardless of income; they would also have higher limits on contributions and allow penalty-free withdrawals at a slightly earlier age. The proposal would eliminate further tax deferrals for IRA contributions.

Like the RSAs, the proposed lifetime savings accounts would face tax treatment similar to that governing Roth IRAs. However, unlike Roth IRAs or RSAs, LSAs would be open to everyone, regardless of age, income, or employment status, and participants could withdraw funds at any time for any reason. Taxpayers could also use LSAs to consolidate other savings plans, including Coverdell education savings accounts and qualified state tuition plans.

CBO estimates that the new savings accounts that the President has proposed would have little effect on the economy, on average, through 2014. Most taxpayers would simply save the same amount in one of the new accounts as they would have saved in one of their present tax-free accounts. One possible outcome of implementing the new accounts is that people who currently have assets in taxable accounts will reduce their tax liability by selling those assets and putting the cash from the sale into the new accounts. However, that action would create no new saving and thus would have no effect on the total amount of private saving. Most new saving would involve small amounts set aside by taxpayers with few taxable assets to shift.

Beyond 2014, the effects of the proposal could be greater than those just described. In those years, CBO estimates, the proposal would have a modestly positive impact on saving, an effect that would increase for some time.

Extend the Repeal of the Estate Tax

The President's proposal to extend the repeal of the estate and gift tax beyond 2010 (its scheduled expiration date) could have varying effects on consumption and saving, depending on people's motives for leaving bequests. There is little consensus about the dominant form of those motives or even about whether bequests are typically the result of a deliberate saving plan. If they are not, the repeal of the estate tax will not encourage saving. Moreover, those who believe that estate taxes affect consumption and saving disagree about the direction of that effect. A lower estate tax makes it cheaper for people to leave money to their heirs, which could encourage people to save more to leave larger bequests. But a lower estate tax also means that people can leave the same after-tax bequest with a smaller amount of savings, which might induce them to save less. Moreover, to the extent that a lower estate tax increases the size of bequests after taxes, potential recipients might reduce their saving. Some opponents of the estate tax argue that it has a particularly negative effect on the creation of new small businesses, but there is little evidence available on that position.

Because so little is understood about how the permanent repeal of the estate tax would affect consumption, CBO's estimates incorporated the assumption that people would alter their consumption and saving in the same way as they altered them, on average, in response to past spending or tax changes that affected the budget deficit. That assumption implies that people will spend some of their increased after-tax income, boosting total consumption.

APPENDIX

B

The Models Used to Analyze the Macroeconomic Effects of the President's Budget Over the Next Decade

The Congressional Budget Office (CBO) used three models to estimate the supply-side effects of the President's budget from 2005 to 2014: a "textbook" growth model, a life-cycle growth model, and an infinite-horizon growth model. (The estimates resulting from those models are presented in Chapter 2.)

The textbook growth model, which CBO uses to project the economy's potential output for the agency's 10-year economic baseline, is an enhanced version of the model developed by Robert Solow, a pioneer in the theory of growth accounting.[1] The textbook growth model assumes that output is determined by the number of hours of labor supplied by workers, the size and composition of the capital stock (for example, factories and information systems), and total factor productivity—which represents the state of technological know-how. The model is not forward-looking—people base their decisions entirely on current economic conditions. In particular, they do not respond to expected future changes in government policy. Nor does the model incorporate effects from demand-side, or cyclical, variations in the economy; rather, the model assumes that output is always at its potential level.

The estimates that CBO developed using the textbook growth model incorporate the effects of the changes in marginal tax rates specified in the President's budget on the number of hours worked. (CBO estimated the tax-rate effects in a side calculation.) Those effects are greatest from 2011 through 2014, when lower marginal tax rates increase the supply of labor relative to the level in CBO's baseline.

The estimated effect of the President's budget on the capital stock differs over time in the textbook growth model. Initially, the reduction in the federal government's consumption of goods and services makes more resources available for investment. However, the tax cuts that the President proposes to extend to the final four years of the 2005-2014 period (and beyond) lead to increased private consumption, the model estimates, which eventually outweighs the earlier effect and crowds out investment. In the textbook growth model, changes in marginal tax rates on capital have no direct effect on spending by the private sector.

The positive effects on the capital stock are partially offset by two factors, for which the model includes assumptions based on past relationships. First, the decrease in government consumption is moderated by the assumption that people reduce their private saving by 40 cents for every dollar that the deficit declines. Second, for every dollar that national saving rises (national saving equals private plus government saving), the amount of foreign capital invested in the United States is assumed to fall by 40 cents.

The life-cycle and infinite-horizon growth models that CBO also used in its supply-side analysis differ in funda-

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

mental ways from the textbook growth model.[2] The life-cycle and infinite-horizon models incorporate simulated people who make decisions about how much to work and save in order to make themselves as well off as possible over their lifetime. Their behavior is calibrated so that macroeconomic variables such as the total amount of labor supplied and the size of the capital stock match the levels occurring in the U.S. economy. In the life-cycle and infinite-horizon growth models, people's consumption changes by a relatively large amount in response to changes in the after-tax rate of return on their saving. Like the textbook growth model, those models do not allow for any demand-side effects.

The people in the life-cycle and infinite-horizon models are assumed to be forward-looking—that is, they know future changes in economic conditions and policy and alter their behavior accordingly. In terms of the degree to which people incorporate future events into their current behavior, that "perfect foresight" is at the other end of the range of possible assumptions from the assumption used in the textbook growth model. Most people actually fall somewhere between those two extremes. However, in using those two somewhat extreme assumptions, CBO has tried to encompass as broad a range of possible responses to the President's budgetary proposals as is feasible.

Because people's behavior as represented in the life-cycle and infinite-horizon growth models depends in part on future policies, the use of those models requires analysts to make assumptions about budgetary policies beyond 2014 (the end of the period covered by CBO's current 10-year baseline projections). Policies that increase deficits must be offset at some point in the future by taxes that are higher or spending that is lower than it would have been in the absence of the higher deficits.

The assumptions about how and when to offset the bill that comes due can influence the estimated economic effects of the President's proposed policies over the 2005-2014 period. That influence stems from the fact that in the models, people anticipate the offsetting policies and plan accordingly. In its analysis, CBO used two different assumptions about how the budget would be stabilized after 2014: either marginal tax rates would be increased, or government consumption of goods and services (which the models assume does not enhance people's well-being) and transfer payments would be cut. The size of the cuts in those two categories that the models incorporate would be proportional to the relative size of transfer payments and government consumption in CBO's baseline for 2014, an assumption that implies that they would be roughly equal.

CBO has made the assumptions about financing in the forward-looking models more realistic—relative to those that CBO used last year in analyzing the President's budgetary policies—in two ways. First, as described above, the two assumptions now involve increases in marginal tax rates or a blend of cuts in government consumption and transfer payments; last year, they consisted of increases in lump-sum taxes (an equal dollar amount of taxes levied on everyone) or cuts in government consumption. Second, in this year's analysis, those policy changes are assumed to be phased in over 10 years, whereas in last year's assessment, they were assumed to occur all at once, in the year following the end of the 10-year budget projection period.

The life-cycle and infinite-horizon growth models differ in what they assume about how far ahead people look in making their plans. The life-cycle model is calibrated so that the probability of death at a given age matches current U.S. mortality rates, and people are assumed to take account of the impact of future economic or policy changes only on themselves and not on their children. In the infinite-horizon model, people behave as though the well-being of their descendants is as important to them as their own well-being. That leads them to behave as if they expected to live forever. Although the possibility that such an assumption reflects actual behavior cannot be ruled out, there is some evidence against it.[3]

The difference in the models' time horizons has an important effect on the resulting estimates. The people in

2. For a detailed description of the life-cycle model, see Shinichi Nishiyama, *Analyzing Tax Policy Changes Using a Stochastic OLG Model with Heterogeneous Households*, Technical Paper 2003-12 (December 2003), available from CBO's Macroeconomic Analysis Division or at www.cbo.gov/tech.cfm. CBO plans to publish a full description of its infinite-horizon growth model sometime in the future.

3. See Joseph G. Altonji, Fumio Hayashi, and Laurence Kotlikoff, "Risk Sharing Between and Within Families," *Econometrica,* vol. 64, no. 2 (March 1996), pp. 261-294; Paul Evans, "Consumers Are Not Ricardian: Evidence from Nineteen Countries," *Economic Inquiry,* vol. 31, no. 4 (October 1993), pp. 534-548; and T.D. Stanley, "New Wine in Old Bottles: A Meta-Analysis of Ricardian Equivalence," *Southern Economic Journal,* vol. 64, no. 3 (January 1998), pp. 713-727.

both models expect the increase in deficits under the President's budgetary proposals to be offset at some point in the future. However, people as represented in the life-cycle model, especially older individuals, know that they may die before an offsetting policy change occurs. Consequently, they may be less willing to work or save more during the 10-year projection period to compensate for any future tax increases or cuts in transfer payments.

By contrast, people in the infinite-horizon model act as though they (or, equivalently, their descendants, whom they care about as much as they do themselves) will be alive when the offsetting policy change is made. That expectation implies that a belief that taxes will increase in the future has a greater effect on their current work and saving than it does on the corresponding variables for people in the life-cycle model. For that reason, the infinite-horizon model using the assumption of future tax increases produces the most positive estimates of the effect of the President's budget on the economy within the current budget window (2005 through 2014).

CBO used two different assumptions in the life-cycle model about how open the economy is to flows of capital to and from other countries. One assumption was that the economy is completely closed—no capital can flow into or out of the country. The other assumption was that the economy is completely open and cannot affect world interest rates—capital flows freely into and out of the country to keep the domestic interest rate equal to a constant world rate. The U.S. economy effectively operates somewhere between those two extremes, because although it is relatively open to investment, it is so large that it can influence world interest rates.