
DIMENSIONS OF THE BUDGET

20. COMPARISON OF ACTUAL TO ESTIMATED TOTALS

In successive budgets, the Administration publishes several estimates of the surplus or deficit for a particular fiscal year. Initially, the year appears as an outyear projection at the end of the budget horizon. In each subsequent budget, the year advances in the estimating horizon until it becomes the “budget year.” One year later, the year becomes the “current year” then in progress, and the following year, it becomes the just-completed “actual year.”

The budget is legally required to compare budget year estimates of receipts and outlays with the subsequent actual receipts and outlays for that year. Part I of this chapter meets that requirement by comparing the ac-

tual results for 2007 with the current services estimates shown in the 2007 Budget, published in February 2006.

Part II of the chapter presents a broader comparison of estimates and actual outcomes. This part first discusses the historical record of budget year estimates versus actual results over the last two and a half decades. Second, it lengthens the focus to estimates made for each year of the budget horizon, extending four years beyond the budget year. This longer focus shows that the differences between estimates and the eventual actual results grow as the estimates extend further into the future.

PART I: COMPARISON OF ACTUAL TO ESTIMATED TOTALS FOR 2007

This part of the chapter compares the actual receipts, outlays, and deficit for 2007 with the current services estimates shown in the 2007 Budget, published in February 2006.¹ This part also presents a more detailed comparison for mandatory and related programs, and reconciles the actual receipts, outlays, and deficit totals shown here with the figures for 2007 previously published by the Department of the Treasury.

Receipts

Actual receipts for 2007 were \$2,568 billion, \$124 billion more than the \$2,444 billion current services estimate in the 2007 Budget (February 2006). As shown in Table 20–1, this increase was the net effect of legislative and administrative changes; economic conditions that differed from what had been expected; and technical factors that resulted in different collection patterns and effective tax rates than had been assumed.

Table 20–1. COMPARISON OF ACTUAL 2007 RECEIPTS WITH THE INITIAL CURRENT SERVICES ESTIMATES

(In billions of dollars)

	February 2006 estimate	Enacted legislation/administrative actions	Different economic conditions	Technical factors	Net change	Actual
Individual income taxes	1,119	–38	7	75	45	1,163
Corporate income taxes	265	–12	15	102	105	370
Social insurance and retirement receipts	884	.....	–10	–4	–15	870
Excise taxes	75	–*	–2	–8	–10	65
Estate and gift taxes	24	1	*	1	2	26
Customs duties	29	–1	1	–3	–3	26
Miscellaneous receipts	48	.....	2	–3	–1	48
Total receipts	2,444	–49	13	161	124	2,568

* \$500 million or less.

Policy differences. Several laws were enacted after February 2006 that reduced 2007 receipts by a net \$49 billion. The provisions of the Tax Increase Prevention and Reconciliation Act of 2005 (TIPRA), primarily the increase in the alternative minimum tax (AMT)

exemption amount and a modification of the timing of estimated tax payments by corporations, reduced 2007 receipts by a net \$34 billion. Enactment of the Tax Relief and Health Care Act of 2006, which extended a number of expired or expiring tax provisions,

¹The current services concept is discussed in Chapter 25, “Current Services Estimates.” For mandatory programs and receipts, the February 2006 current services estimate was based on laws then in place, adjusted to reflect extension of certain expiring provisions

in the 2001 and 2003 tax acts. For discretionary programs the current services estimate was based on the current year estimates, excluding one-time emergency appropriations, adjusted for inflation.

reduced 2007 receipts by an additional \$16 billion. The effects of other legislative and administrative changes on 2007 receipts were largely offsetting.

Economic differences. Differences between the economic assumptions upon which the current services estimates were based and actual economic performance increased 2007 receipts by a net \$13 billion above the February 2006 estimate. Higher-than-expected corporation income tax liability in tax years 2006 and 2007, attributable to higher-than-expected taxable profits, increased collections of 2007 corporation income taxes \$15 billion above the February 2006 estimate. Higher-than-anticipated non-wage sources of personal income, which more than offset lower-than-anticipated wages and salaries, were in large part responsible for the increase in individual income taxes of a net \$7 billion. These increases in individual and corporation income taxes were partially offset by a \$10 billion decrease in social insurance and retirement receipts, attributable in large part to lower-than-expected wages and salaries. Differences between anticipated and actual economic performance increased other sources of receipts by a net \$1 billion.

Technical reestimates. Technical factors increased receipts by a net \$161 billion above the February 2006 current services estimate. This net increase was in large part attributable to higher-than-expected collections of individual and corporation income taxes and estate and gift taxes, which were partially offset by lower-than-expected collections of other sources of receipts. Different collection patterns and effective tax rates than assumed in February 2006 were primarily responsible for the higher-than-anticipated collections of individual and corporation income taxes of \$75 billion and \$102 billion, respectively. Greater-than-anticipated numbers and values of taxable estates increased 2007 receipts an additional \$1 billion above the February 2006 estimate. Court decisions that effectively invali-

dated part of the Federal telephone tax were in large part responsible for the \$8 billion reduction in excise tax collections relative to the February 2006 estimate. Technical factors reduced collections of the remaining sources of receipts (social insurance and retirement receipts, customs duties and miscellaneous receipts) below the February 2006 estimates by smaller amounts.

Outlays

Outlays for 2007 were \$2,730 billion, \$30 billion more than the \$2,701 billion current services estimate in the 2007 Budget (February 2006).

Table 20–2 distributes the \$30 billion net increase in outlays among discretionary and mandatory programs and net interest.² The table also makes rough estimates according to three reasons for the changes: policy; economic conditions; and technical estimating differences, a residual.

Policy changes are the result of legislative actions that change spending levels, primarily through higher or lower appropriations or changes in authorizing legislation, which may themselves reflect responses to changed economic conditions. For 2007, policy changes increased outlays by an estimated \$133 billion relative to the initial current services estimates.

Policy changes increased discretionary outlays by \$124 billion. Defense discretionary outlays increased by \$105 billion and nondefense discretionary outlays increased by \$19 billion. A significant portion of both defense and nondefense outlay increases resulted from enactment of emergency supplemental appropriation acts for defense, the Global War on Terror, veterans' care, and hurricane recovery in 2006 and 2007. Policy changes increased mandatory outlays by a net \$6 billion

²Discretionary programs are controlled by annual appropriations, while mandatory programs are generally controlled by authorizing legislation. Mandatory programs are mostly formula benefit or entitlement programs with permanent spending authority that depend on eligibility criteria, benefit levels, and other factors.

Table 20–2. COMPARISON OF ACTUAL 2007 OUTLAYS WITH THE INITIAL CURRENT SERVICES ESTIMATES

(Outlays in billions)

	Current Services (Feb. 2006)	Changes				Actual
		Policy	Economic	Technical	Total changes	
Discretionary:						
Defense	463	105	.....	–18	86	549
Nondefense	500	19	.....	–25	–7	493
Subtotal, discretionary	962	124	.....	–44	80	1,042
Mandatory:						
Social Security	581	.....	3	–3	*	581
Medicare and Medicaid	589	3	–1	–29	–28	561
Other programs	324	3	1	–19	–16	308
Subtotal, mandatory	1,495	6	2	–51	–44	1,451
Net interest	244	4	3	–14	–7	237
Total outlays	2,701	133	6	–109	30	2,730

* \$500 million or less.

above current law. This increase reflects a \$3.5 billion increase in outlays for the Commodity Credit Corporation, enacted in the Emergency Supplemental Appropriations and Additional Supplemental Appropriations for Agriculture and Other Emergency Assistance Act for 2007, and a \$3 billion increase in Medicare outlays, enacted in the Tax Relief and Health Care Act of 2006. Debt service costs associated with the policy receipt and outlay changes were \$4 billion.

Economic conditions that differed from those forecast in February 2006 resulted in a net increase in outlays of \$6 billion. The most significant changes consist of a \$3 billion increase in Social Security benefits largely resulting from higher cost-of-living adjustments and a \$3 billion increase in net interest due to higher-than-expected interest rates.

Technical estimating differences and other changes resulted in a net decrease in outlays of \$109 billion. Technical changes result from changes in such factors as the number of beneficiaries for entitlement programs, crop conditions, or other factors not associated with policy changes or economic conditions. Outlays for discretionary programs decreased an estimated \$44 billion, because budget authority for both defense and nondefense programs was spent more slowly than expected. Outlays for mandatory programs decreased a net \$51 billion, largely due to lower-than-anticipated outlays for Medicare, Medicaid, and the Commodity Credit Corporation. Net interest outlays also decreased by \$14 billion due to technical factors compared to the February 2006 estimates.

Deficit

The preceding two sections discussed the differences between the initial current services estimates and the actual amounts of Federal Government receipts and outlays for 2007. This section combines these effects to show the net deficit impact of these differences.

As shown in Table 20–3, the 2007 current services deficit was initially estimated to be \$257 billion. The actual deficit was \$162 billion, which was a \$95 billion decrease from the initial estimate. Receipts were \$124 billion more than the initial estimate and outlays were \$30 billion more. The table shows the distribution of the changes according to the categories in the preceding two sections.

The net effect of policy changes for receipts and outlays increased the deficit by \$183 billion. Economic conditions that differed from the initial assumptions in February 2006 accounted for an estimated \$7 billion decrease in the deficit. Technical factors reduced the deficit by an estimated \$270 billion.

Comparison of the Actual and Estimated Outlays for Mandatory and Related Programs

This section compares the original 2007 outlay estimates for mandatory and related programs under current law in the 2007 Budget (February 2006) with the actual outlays. Major examples of these programs include Social Security and Medicare benefits, agricultural price support payments to farmers, and deposit insurance for banks and thrift institutions. This category also includes net interest outlays and undistributed offsetting receipts.

A number of factors may cause differences between the amounts estimated in the budget and the actual mandatory outlays. For example, legislation may change benefit rates or coverage; the actual number of beneficiaries may differ from the number estimated; or economic conditions (such as inflation or interest rates) may differ from what was assumed in making the original estimates.

Table 20–4 shows the differences between the actual outlays for these programs in 2007 and the amounts originally estimated in the 2007 Budget, based on laws in effect at that time. Actual outlays for mandatory spending and net interest in 2007 were \$1,688 billion, which was \$50 billion less than the initial estimate of \$1,738 billion, based on existing law in February 2006.

As Table 20–4 shows, actual outlays for mandatory human resources programs were \$1,525 billion, \$28 billion less than originally estimated. This decrease was the net effect of legislative action, differences between actual and assumed economic conditions, differences between the anticipated and actual number of beneficiaries, and other technical differences. Outlays for other functions were \$24 billion less than originally estimated. Undistributed offsetting receipts were \$9 billion lower than expected, thus increasing total outlays.

Outlays for net interest were \$237 billion or \$7 billion less than the original estimate. This decrease was the net effect of changes in interest rates from those ini-

Table 20–3. COMPARISON OF THE ACTUAL 2007 DEFICIT WITH THE INITIAL CURRENT SERVICES ESTIMATE

(In billions)

	Current Services (Feb. 2006)	Changes				Actual
		Policy	Economic	Technical	Total changes	
Receipts	2,444	–49	13	161	124	2,568
Outlays	2,701	133	6	–109	30	2,730
Deficit	257	183	–7	–270	–95	162

Note: Deficit changes are outlays minus receipts. For these changes, a plus indicates an increase in the deficit.

Table 20–4. COMPARISON OF ACTUAL AND ESTIMATED OUTLAYS FOR MANDATORY AND RELATED PROGRAMS UNDER CURRENT LAW

(In billions of dollars)

	2007		
	Feb. 2006 estimate	Actual	Change
Mandatory outlays:			
Human resources programs:			
Education, training, employment, and social services	10	12	2
Health:			
Medicaid	199	191	–9
Other	22	23	1
Total health	221	214	–7
Medicare	390	371	–19
Income security:			
Retirement and disability	111	111	1
Unemployment compensation	38	32	–5
Food and nutrition assistance	49	49	–*
Other	114	117	3
Total, income security	312	310	–2
Social security	581	581	*
Veterans benefits and services:			
Income security for veterans	36	36	–*
Other	3	2	–1
Total veterans benefits and services	39	38	–2
Total mandatory human resources programs	1,554	1,525	–28
Other functions:			
Agriculture	21	12	–9
International	–2	–6	–4
Deposit insurance	–2	–1	*
Other functions	15	4	–11
Total, other functions	32	8	–24
Undistributed offsetting receipts:			
Employer share, employee retirement	–62	–62	*
Rents and royalties on the outer continental shelf	–9	–7	3
Other undistributed offsetting receipts	–20	–14	6
Total undistributed offsetting receipts	–91	–82	9
Total, mandatory	1,495	1,451	–44
Net interest:			
Interest on Treasury debt securities (gross)	438	430	–8
Interest received by trust funds	–181	–178	3
Other interest	–13	–15	–2
Total net interest	244	237	–7
Total outlays for mandatory and net interest	1,738	1,688	–50

* \$500 million or less.

tially assumed, changes in borrowing requirements due to differences in deficits, and technical factors.

Reconciliation of Differences with Amounts Published by Treasury for 2007

Table 20–5 provides a reconciliation of the receipts, outlays, and deficit totals published by the Department

of the Treasury in the September 2007 Monthly Treasury Statement and those published in this Budget. The Department of the Treasury made adjustments to the estimates for the Combined Statement of Receipts, Outlays, and Balances, which increased receipts by \$2 million and decreased outlays by \$6 million. Additional adjustments for this Budget increased receipts by \$566

million and decreased outlays by \$258 million. Several financial transactions that are not reported to the Department of the Treasury, including those for the Affordable Housing Program, the Public Company Accounting Oversight Board, the Electric Reliability Organization, and the United Mine Workers of America benefit funds, are included in the budget. Reporting for these programs adds roughly equivalent amounts to outlays and receipts, with little impact on the deficit.

Another significant conceptual difference in reporting is for the National Railroad Retirement Investment Trust (NRRIT). Reporting to the Department of the Treasury for the NRRIT is done with a one month lag so that the fiscal year total provided in the Treasury Combined Statement covers September 2006 through August 2007. The budget has been adjusted to reflect transactions that occurred during the actual fiscal year, which begins in October.

Table 20-5. RECONCILIATION OF FINAL AMOUNTS FOR 2007

(In millions of dollars)

	Receipts	Outlays	Deficit
Totals published by Treasury (September 30 MTS)	2,567,671	2,730,505	-162,834
Miscellaneous Treasury adjustments	2	-6	8
Totals published by Treasury in Combined Statement	2,567,673	2,730,499	-162,826
Affordable Housing Program	315	315	.....
Public Company Accounting Oversight Board	122	122	.....
Electric Reliability Organization	65	65	.....
United Mine Workers of America benefit funds	44	49	-5
National Railroad Retirement Investment Trust .....	.....	-782	782
Other	20	-27	47
Total adjustments, net	566	-258	824
Totals in the budget	2,568,239	2,730,241	-162,002
MEMORANDUM:			
Total change since year-end statement	568	-264	832

PART II: HISTORICAL COMPARISON OF ACTUAL TO ESTIMATED SURPLUSES OR DEFICITS

This part of the chapter compares estimated surpluses or deficits to actual outcomes over the last two and a half decades. The first section compares the estimate for the budget year of each budget with the subsequent actual result. The second section extends the comparison to the estimated surpluses or deficits for each year of the budget window: that is, for the current year through the fourth year following the budget year. This part concludes with some observations on the historical record of estimates of the surplus or deficit versus the subsequent actual outcomes.

Historical Comparison of Actual to Estimated Results for the Budget Year

Table 20-6 compares the estimated and actual surpluses or deficits since the deficit estimated for 1982 in the 1982 Budget. The estimated surpluses or deficits for each budget include the Administration's policy proposals. Therefore, the original deficit estimate for 2006 differs from that shown in Table 20-3, which is on a current services basis. Earlier comparisons of actual and estimated surpluses or deficits were on a policy basis, so for consistency the figures in Table 20-6 are on this basis.

On average, the estimates for the budget year underestimated actual deficits (or overestimated actual surpluses) by \$12 billion over the 26-year period. Policy outcomes that differed from the original proposals in-

creased the deficit by an average of \$36 billion. Differences between economic assumptions and actual economic performance increased the deficit an average of \$11 billion. Differences due to these two factors were partly offset by technical revisions, which reduced the deficit an average of \$35 billion.

The relatively small average difference between actual and estimated deficits conceals a wide variation in the differences from budget to budget. The differences ranged from a \$389 billion underestimate of the deficit to a \$192 billion overestimate. The \$389 billion underestimate, in the 2002 Budget, was due largely to receipt shortfalls related to the 2001 recession and associated weak stock market performance. About a quarter of the underestimate was due to increased spending for recovery from the September 11, 2001 terrorist attacks, homeland security measures, and the war on terror, along with lower receipts due to tax relief in the March 2002 economic stimulus act. As discussed above, the \$192 billion overestimate of the deficit in the 2007 Budget stemmed largely from higher-than-anticipated collections of individual and corporation income taxes due to different collection patterns and effective tax rates than initially assumed, as well as lower-than-expected outlays due to technical factors.

Because the average deficit difference obscures the degree of under- and overestimation in the historical

Table 20-6. COMPARISON OF ESTIMATED AND ACTUAL SURPLUSES OR DEFICITS SINCE 1982

(In billions of dollars)

Budget	Surplus or deficit (–) estimated for budget year ¹	Differences due to			Total difference	Actual surplus or deficit(–)
		Enacted legislation	Economic factors	Technical factors		
1982	–62	15	–70	–11	–66	–128
1983	–107	–12	–67	–22	–101	–208
1984	–203	–21	38	–0	17	–185
1985	–195	–12	–17	12	–17	–212
1986	–180	–8	–27	–7	–41	–221
1987	–144	2	–16	8	–6	–150
1988	–111	–9	–19	–16	–44	–155
1989	–130	–22	10	–11	–23	–153
1990	–91	–21	–31	–79	–131	–221
1991	–63	21	–85	–143	–206	–269
1992	–281	–36	–21	48	–9	–290
1993	–350	–8	–13	115	95	–255
1994	–264	–8	16	52	61	–203
1995	–165	–18	1	18	1	–164
1996	–197	6	53	30	89	–107
1997	–140	1	–4	121	118	–22
1998	–121	–9	48	151	190	69
1999	10	–22	56	82	116	126
2000	117	–42	88	73	119	236
2001	184	–129	32	41	–56	128
2002	231	–104	–201	–84	–389	–158
2003	–80	–86	–34	–177	–297	–378
2004	–307	–122	–22	39	–105	–413
2005	–364	–67	–11	123	45	–318
2006	–390	–141	6	277	142	–248
2007	–354	–85	7	270	192	–162
Average		–36	–11	35	–12	
Absolute average ²		40	38	77	103	
Standard deviation		47	56	104	140	

¹ Surplus or deficit estimate includes the effect of the budget's policy proposals.

² Absolute average is the average without regard to sign.

data, a more appropriate statistic to measure the magnitude of the differences is the average absolute difference. This statistic measures the difference without regard to whether it was an under- or overestimate. Since 1982, the average absolute difference has been \$103 billion.

Another measure of variability is the standard deviation. This statistic measures the dispersion of the data around the average value. The standard deviation of the deficit differences since 1982 is \$140 billion. Like the average absolute difference, this measure illustrates the high degree of variation in the difference between estimates and actual deficits.

The large variability in errors in estimates of the surplus or deficit for the budget year underscores the inherent uncertainties in estimating the future path of the Federal budget. Some estimating errors are unavoidable, because of differences between the President's original budget proposals and the legislation that Congress subsequently enacts. Occasionally such differences are huge, such as additional appropriations for disaster recovery, homeland security, and war efforts in response to the terrorist attacks of September 11, 2001, which were obviously not envisioned in the President's Budget submitted the previous February.

Even aside from differences in policy outcomes, errors in budget estimates can arise from new economic developments, unexpected changes in program costs, shifts in taxpayer behavior, and other factors. The budget impact of changes in economic assumptions is discussed further in Chapter 12 of this volume, "Economic Assumptions."

Five-Year Comparison of Actual to Estimated Surpluses or Deficits

The substantial difference between actual surpluses or deficits and the budget year estimates made less than two years earlier raises questions about the degree of variability for estimates of years beyond the budget year. Table 20-7 shows the summary statistics for the differences for the current year (CY), budget year (BY), and the four succeeding years (BY+1 through BY+4). These are the years that are required to be estimated in the budget by the Budget Enforcement Act of 1990.

On average, the budget estimates since 1982 overstated the deficit in the current year by \$28 billion, but underestimated the deficit in the budget year by \$12 billion. The budget estimates understated the deficit in the years following, by amounts growing from \$50 billion for BY+1 to \$147 billion for BY+4. While

these results suggest a tendency to underestimate deficits toward the end of the budget horizon, the averages

are not statistically different from zero in light of the high variation in the data.

Table 20-7. DIFFERENCES BETWEEN ESTIMATED AND ACTUAL SURPLUSES OR DEFICITS FOR FIVE-YEAR BUDGET ESTIMATES SINCE 1982

(In billions of dollars)

	Current year estimate	Budget year estimate	Estimate for budget year plus			
			One year (BY+1)	Two years (BY+2)	Three years (BY+3)	Four years (BY+4)
Average difference ¹	28	-12	-50	-89	-122	-147
Average absolute difference ²	59	103	149	197	235	269
Standard deviation	70	140	202	246	266	284

¹ A positive figure represents an underestimate of the surplus or an overestimate of the deficit.

² Average absolute difference is the difference without regard to sign.

The estimates of variability in the difference between estimated and actual deficits can be used to construct a range of uncertainty around a given set of estimates. Statistically, if these differences are normally distributed, the actual deficit will be within a range of two standard deviations above or below the estimate about 90 percent of the time. Chart 20-1 shows this range

of two standard deviations applied to the deficit estimates in this Budget. This chart illustrates that unforeseen economic developments, policy outcomes, or other factors could give rise to large swings in the deficit estimates.

Chart 20-1. Illustrative Range of Budget Outcomes

Surplus(+)/deficit(-) in billions of dollars

