



## CBO's Projections of Federal Receipts and Expenditures in the National Income and Product Accounts

The fiscal transactions of the federal government are recorded in two major sets of accounts that are conceptually quite different. One set is *The Budget of the United States Government*, prepared by the Office of Management and Budget. The budget is the framework generally used by executive branch agencies and the Congress and is the presentation of the federal government's budgetary activity that is most often discussed in the press. The other set of accounts is the national income and product accounts (NIPAs), produced by the Department of Commerce's Bureau of Economic Analysis (BEA).<sup>1</sup>

The purposes served by the budget and the NIPAs and the relationship between the two sets of accounts are examined briefly below and more thoroughly in previous publications of the Congressional Budget Office.<sup>2</sup> CBO recently reported its latest baseline projections of federal revenues and outlays using the standard structure for budget accounting.<sup>3</sup> This report presents those

projections using the NIPA framework (see Table 1) and shows how the two presentations differ (see Table 2 on page 4).

Over the 2017–2027 projection period spanned by CBO's baseline, conceptual differences cause receipts in the NIPAs to be greater than revenues in the budget by about 6 percent and expenditures in the NIPAs to exceed outlays in the budget by about 7 percent. Projected expenditures in the NIPAs exceed projected receipts by a total of \$12.2 trillion, whereas deficits in CBO's baseline budget projections total \$10.8 trillion.

### The Federal Budget

The budget of the federal government is best understood as an information and management tool.<sup>4</sup> Its main objectives are to provide information that can assist lawmakers in their policy deliberations, to facilitate the management and control of federal activities, and to help the Treasury manage its cash balances and determine

1. See Mark S. Ludwick and Ann W. Miller, "NIPA Translation of the Fiscal Year 2017 Federal Budget," *Survey of Current Business*, vol. 96, no. 4 (Bureau of Economic Analysis, April 2016), [www.bea.gov/scb/toc/0416cont.htm](http://www.bea.gov/scb/toc/0416cont.htm); and Bruce E. Baker and Pamela A. Kelly, "BEA Briefing: A Primer on BEA's Government Accounts," *Survey of Current Business*, vol. 88, no. 3 (Bureau of Economic Analysis, March 2008), [www.bea.gov/scb/toc/0308cont.htm](http://www.bea.gov/scb/toc/0308cont.htm).
2. See Congressional Budget Office, *CBO's Projections of Federal Receipts and Expenditures in the National Income and Product Accounts* (May 2013), [www.cbo.gov/publication/44140](http://www.cbo.gov/publication/44140).
3. See Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2017 to 2027* (June 2017),

[www.cbo.gov/publication/52801](http://www.cbo.gov/publication/52801). As specified in law, and to provide a benchmark against which potential policy changes can be measured, CBO constructs its baseline estimates of federal revenues and spending under the assumption that current laws generally remain unchanged.

4. Another approach to assessing the government's fiscal performance is used in the annual *Financial Report of the United States Government* ([www.fms.treas.gov/fr](http://www.fms.treas.gov/fr)), which employs an accrual basis of accounting to measure assets, liabilities, revenues, and expenses. See Congressional Budget Office, *Comparing Budget and Accounting Measures of the Federal Government's Fiscal Condition* (December 2006), [www.cbo.gov/publication/18262](http://www.cbo.gov/publication/18262).

Note: Unless otherwise indicated, all years referred to in this report are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end. Numbers in the text and tables may not add up to totals because of rounding.

Table 1.

**Receipts and Expenditures in CBO's Baseline as Measured by the National Income and Product Accounts**

Billions of dollars

	Actual,											
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
<b>Receipts</b>												
Current Tax Receipts												
Taxes on personal income	1,542	1,574	1,689	1,787	1,884	1,984	2,081	2,188	2,293	2,405	2,520	2,640
Taxes on corporate income	410	404	392	396	417	432	435	445	461	477	496	514
Taxes on production and imports	138	130	143	146	150	155	158	162	167	172	175	179
Taxes from the rest of the world	21	22	25	26	27	28	30	31	33	34	36	37
Subtotal, current tax receipts	<b>2,111</b>	<b>2,129</b>	<b>2,249</b>	<b>2,355</b>	<b>2,478</b>	<b>2,599</b>	<b>2,704</b>	<b>2,826</b>	<b>2,954</b>	<b>3,087</b>	<b>3,227</b>	<b>3,370</b>
Contributions for Government Social Insurance <sup>a</sup>	1,226	1,273	1,329	1,379	1,421	1,472	1,534	1,595	1,654	1,726	1,796	1,869
Current Transfer Receipts	80	87	102	103	100	106	109	113	118	123	125	133
Income Receipts on Assets	43	63	59	62	65	66	69	72	78	82	86	91
Current Surpluses of Government Enterprises	-4	-4	-6	-6	-8	-9	-8	-8	-8	-9	-9	-10
<b>Total Current Receipts</b>	<b>3,456</b>	<b>3,549</b>	<b>3,733</b>	<b>3,892</b>	<b>4,056</b>	<b>4,233</b>	<b>4,408</b>	<b>4,599</b>	<b>4,794</b>	<b>5,009</b>	<b>5,225</b>	<b>5,452</b>
<b>Expenditures</b>												
Consumption Expenditures												
Defense												
Compensation and purchased goods and services	427	428	441	454	466	477	488	499	511	522	535	547
Consumption of fixed capital	159	158	160	162	165	167	170	172	175	178	182	185
Subtotal, defense	586	587	601	616	631	644	658	672	686	701	717	733
Nondefense												
Compensation and purchased goods and services	274	284	284	285	289	295	301	307	315	323	334	343
Consumption of fixed capital	104	108	111	114	117	119	122	125	127	130	133	135
Subtotal, nondefense	378	392	395	399	406	414	423	432	443	453	466	478
Current Transfer Payments												
Government social benefits												
To persons	2,007	2,074	2,175	2,307	2,446	2,594	2,750	2,907	3,079	3,252	3,453	3,652
To the rest of the world	21	21	22	23	25	26	28	29	31	33	35	37
Subtotal, government social benefits	2,028	2,095	2,196	2,330	2,470	2,620	2,778	2,936	3,110	3,285	3,488	3,689
Other transfer payments												
Grants-in-aid to state and local governments	550	568	588	604	629	655	680	706	735	768	804	842
To the rest of the world	53	53	53	55	57	58	59	60	61	62	63	64
Subtotal, other transfer payments	603	621	641	659	685	713	739	767	797	830	867	906
Interest Payments	461	508	554	620	696	769	841	917	989	1,056	1,130	1,204
Subsidies	61	58	60	61	60	59	60	61	61	62	63	64
<b>Total Current Expenditures</b>	<b>4,117</b>	<b>4,260</b>	<b>4,447</b>	<b>4,686</b>	<b>4,948</b>	<b>5,221</b>	<b>5,499</b>	<b>5,784</b>	<b>6,086</b>	<b>6,388</b>	<b>6,732</b>	<b>7,074</b>
<b>Net Federal Government Saving</b>												
<b>Net Federal Government Saving<sup>b</sup></b>	<b>-661</b>	<b>-711</b>	<b>-713</b>	<b>-793</b>	<b>-892</b>	<b>-987</b>	<b>-1,090</b>	<b>-1,185</b>	<b>-1,291</b>	<b>-1,379</b>	<b>-1,507</b>	<b>-1,622</b>
<b>Memorandum:</b>												
Total Federal Consumption	964	979	996	1,015	1,037	1,059	1,081	1,104	1,129	1,154	1,183	1,211

Source: Congressional Budget Office.

a. Includes Social Security taxes, Medicare taxes and premiums, and unemployment insurance taxes.

b. Negative numbers indicate that federal expenditures exceed federal receipts.

its borrowing needs. In most cases, items in the federal budget are reported on a cash accounting basis, a method that records the inflow of revenues and the outflow of spending over a given period. That period is a fiscal year that runs from October 1 through September 30.

The budget includes a few exceptions to cash-based accounting in cases in which lawmakers have decided that different approaches would improve the budget's usefulness as a decisionmaking tool. For example, when the federal government makes direct loans or provides loan guarantees, tracking annual cash flows gives a misleading view of the true costs or savings associated with such transactions. Therefore, the Federal Credit Reform Act of 1990 requires the budget to record as outlays an estimate of the net costs or savings to the government over the lifetime of a loan—that is, the net present value of all expected future cash flows related to the loan—at the time it is made.<sup>5</sup> Such estimates are often revised later in response to unexpected changes in interest rates and to other developments.

## The National Income and Product Accounts

The NIPAs, by contrast, are not intended to help the government plan and manage its activities. Instead, the NIPAs provide a general economic framework that describes the entire U.S. economy, and they show how the federal government fits into that framework. Specifically, the accounts detail current production and the resulting income over specific periods, the major sources of that production, and the recipients of that income. The NIPAs are constructed to cover calendar years and calendar quarters, but totals for fiscal years can be derived from the quarterly estimates. (The tables in this report show fiscal year numbers.)

In the context of the NIPAs, the federal government is both a producer and a consumer. Its workforce uses purchased goods and services and government-owned capital (structures, equipment, software, and research and development) to produce services for the public at large. Because those services are consumed by the public, they are, by convention, regarded as federal consumption expenditures in the NIPAs. In addition, through its taxes and transfers, the federal government affects the resources available to the private sector. The NIPAs record all of those activities in a manner consistent with the treatment accorded to other sectors of the economy.

When converting federal transactions from the budget framework into the NIPA framework, one must make judgments about how best to classify certain transactions, such as government investment, the sale and purchase of existing assets, the provision of loans and guarantees, and other federal activities that resemble those of businesses. In some cases, items that are classified as revenues or outlays in the budget are not classified as such in the NIPAs because they are not closely related to current economic activity or because they are excluded from the federal sector. In other cases, the NIPAs record as receipts items that the federal budget reports as off-setting collections (that is, as negative outlays), or they adjust the timing of federal transactions to better match the timing of related production or accrued income.

Table 2 shows the major differences between CBO's baseline budget projections and the corresponding NIPA amounts in three categories:

- Coverage—transactions that are included in either the budget or the NIPAs but not both,
- Netting—transactions that are recorded as offsets to outlays in the budget but as receipts in the NIPAs, and
- Timing—receipts and outlays that are recorded on a cash basis in the budget but on an accrual basis in the NIPAs.

All three categories can make total receipts and expenditures in the NIPAs differ from total revenues and outlays in the budget. However, netting differences have no effect on the NIPA measure of the federal deficit because they affect revenues and outlays equally.

Differences in coverage account for most of the variance between the NIPA measure of the federal deficit and the budgetary measure. Of those differences, BEA's treatment of federal pension plans is the source of many of the biggest discrepancies, for several reasons:

- BEA imputes additional interest for periods in which the government's pension plans are underfunded (that is, when the plans' financial assets are not sufficient to cover promises of future benefits) because, in BEA's view, the government has effectively borrowed from those plans. That imputed-interest transaction does not appear in the federal budget, and it is the largest discrepancy created by BEA's treatment of federal pensions.

5. Present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time.

Table 2.

**Relationship of the Budget to the Federal Sector of the National Income and Product Accounts**

Billions of dollars

	Actual, 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
<b>Receipts</b>												
Revenues in CBO's Baseline	3,268	3,315	3,531	3,687	3,853	4,011	4,178	4,361	4,545	4,742	4,948	5,158
Differences												
Coverage												
Adjustments related to government employees' retirement	-4	-4	-4	-5	-5	-5	-6	-6	-7	-7	-8	-8
Estate and gift taxes	-21	-23	-25	-25	-25	-26	-27	-28	-29	-31	-32	-34
Universal Service Fund receipts	-10	-10	-11	-11	-12	-12	-12	-12	-12	-12	-12	-12
Subtotal, coverage	-35	-37	-39	-41	-42	-43	-44	-46	-48	-50	-52	-55
Netting												
Medicare premiums	81	88	102	111	117	123	134	141	148	162	176	188
Deposit insurance premiums	9	12	12	8	7	9	9	10	10	11	11	12
Government contributions for												
OASDI and HI for employees	21	21	22	23	23	24	25	26	26	27	28	29
Income receipts on assets	38	57	52	54	56	57	59	62	67	71	75	79
Surpluses of government enterprises	-4	-4	-6	-6	-8	-9	-8	-8	-8	-9	-9	-10
Other	44	49	50	52	53	52	52	52	52	54	47	47
Subtotal, netting	189	223	232	240	248	255	271	282	295	315	328	345
Timing Shift of Corporate Estimated												
Tax Payments	0	*	*	0	-6	6	0	0	0	0	0	0
Other	34	48	9	6	2	5	3	1	2	1	2	3
<b>Total Differences</b>	<b>188</b>	<b>234</b>	<b>202</b>	<b>206</b>	<b>203</b>	<b>222</b>	<b>230</b>	<b>238</b>	<b>249</b>	<b>267</b>	<b>277</b>	<b>294</b>
Receipts in the NIPAs	3,456	3,549	3,733	3,892	4,056	4,233	4,408	4,599	4,794	5,009	5,225	5,452
<b>Expenditures</b>												
Outlays in CBO's Baseline	3,853	4,008	4,094	4,375	4,628	4,891	5,205	5,419	5,628	5,967	6,300	6,621
Differences												
Coverage												
Treatment of investment and depreciation	-2	-9	-9	-10	-10	-11	-12	-14	-16	-18	-21	-23
Adjustments related to government employees' retirement	101	119	122	125	130	135	141	147	154	158	167	172
Capital transfers	-73	-77	-75	-76	-77	-78	-79	-80	-81	-82	-84	-86
Lending and financial adjustments	34	22	28	23	23	20	26	24	25	36	27	28
Universal Service Fund payments	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-12	-12
Subtotal, coverage	50	45	55	52	55	56	65	66	72	82	77	80

Continued

Table 2.

Continued

**Relationship of the Budget to the Federal Sector of the National Income and Product Accounts**

Billions of dollars

	Actual,											
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	<b>Expenditures (Continued)</b>											
Differences (Continued)												
Netting												
Medicare premiums	81	88	102	111	117	123	134	141	148	162	176	188
Deposit insurance premiums	9	12	12	8	7	9	9	10	10	11	11	12
Government contributions for												
OASDI and HI for employees	21	21	22	23	23	24	25	26	26	27	28	29
Income receipts on assets	38	57	52	54	56	57	59	62	67	71	75	79
Surpluses of government enterprises	-4	-4	-6	-6	-8	-9	-8	-8	-8	-9	-9	-10
Other	44	49	50	52	53	52	52	52	52	54	47	47
Subtotal, netting	189	223	232	240	248	255	271	282	295	315	328	345
Timing	-41	-4	45	0	0	0	-62	-5	68	0	0	0
Other	66	-12	20	18	17	20	20	22	23	23	27	29
<b>Total Differences</b>	<b>264</b>	<b>252</b>	<b>353</b>	<b>310</b>	<b>320</b>	<b>330</b>	<b>294</b>	<b>365</b>	<b>457</b>	<b>421</b>	<b>432</b>	<b>453</b>
Expenditures in the NIPAs	4,117	4,260	4,447	4,686	4,948	5,221	5,499	5,784	6,086	6,388	6,732	7,074
	<b>Net Federal Government Saving</b>											
Budget Deficit in CBO's Baseline	-585	-693	-563	-689	-775	-879	-1,027	-1,057	-1,083	-1,225	-1,352	-1,463
Differences												
Coverage												
Treatment of investment and depreciation	2	9	9	10	10	11	12	14	16	18	21	23
Adjustments related to government employees' retirement	-105	-123	-126	-129	-135	-141	-146	-153	-161	-166	-174	-180
Estate and gift taxes	-21	-23	-25	-25	-25	-26	-27	-28	-29	-31	-32	-34
Capital transfers	73	77	75	76	77	78	79	80	81	82	84	86
Lending and financial adjustments	-34	-22	-28	-23	-23	-20	-26	-24	-25	-36	-27	-28
Universal Service Fund	*	*	*	-1	-1	-1	-1	-1	-1	-1	-1	-1
Subtotal, coverage	-85	-82	-95	-93	-97	-99	-109	-112	-120	-132	-130	-134
Timing	41	4	-45	0	-6	6	62	5	-68	0	0	0
Other	-32	60	-11	-12	-14	-15	-17	-21	-21	-22	-25	-25
<b>Total Differences</b>	<b>-76</b>	<b>-18</b>	<b>-151</b>	<b>-105</b>	<b>-117</b>	<b>-108</b>	<b>-64</b>	<b>-128</b>	<b>-209</b>	<b>-154</b>	<b>-155</b>	<b>-159</b>
Net Federal Government Saving in the NIPAs <sup>a</sup>	-661	-711	-713	-793	-892	-987	-1,090	-1,185	-1,291	-1,379	-1,507	-1,622

Source: Congressional Budget Office.

Differences in coverage arise when a transaction is reported in either the budget or the NIPAs but not both; in netting, when an item appears as an offset to outlays in the budget but as a receipt in the NIPAs; and in timing, when receipts or outlays are shifted between fiscal years.

OASDI = Old-Age, Survivors, and Disability Insurance; HI = Hospital Insurance; \* = between -\$500 million and \$500 million; NIPAs = National Income and Product Accounts.

a. Negative numbers indicate that federal expenditures exceed federal receipts.

- The measure in the NIPAs of current federal expenditures includes interest paid by the Treasury to the federal pension trust funds. Those payments are not offset by the funds' receipt of those interest payments because those receipts are recorded in a nonfederal sector of the NIPAs called the pension sector. The federal budget, by contrast, records both the payment of that interest and the receipt (as offsetting outlays) of that interest, leaving federal outlays unaffected.
- Rather than recording the cash payments of benefits each year as a federal expenditure (which is how they are shown in the budget), the NIPAs record the value of the benefits that employees accrue during the year.

Altogether, the annual differences between BEA's approach and the budget's presentation of transactions for federal pensions under CBO's baseline projections are shown in Table 2, in "Adjustments related to government employees' retirement." Those differences amount to \$1.6 trillion between 2017 and 2027. Over that period, once all conceptual differences are accounted for, the difference between projected budget deficits and projected net federal government saving as reported in the NIPAs amounts to \$1.4 trillion.

The Congressional Budget Office prepares this report each year in response to interest expressed by the Congress. In keeping with CBO's mandate to provide objective, impartial analysis, the report contains no recommendations.

Dan Ready of CBO's Budget Analysis Division wrote the report with assistance from Cecilia Pastrone and guidance from Theresa Gullo and Christina Hawley Anthony. Wendy Edelberg reviewed it, Benjamin Plotinsky edited it, and Jorge Salazar prepared it for publication. The report is available on the agency's website ([www.cbo.gov/publication/53083](http://www.cbo.gov/publication/53083)).



Keith Hall  
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