



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).¹

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.² CBO recently reported its latest baseline projections of federal revenues and outlays using the standard structure for budget accounting.³ 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 2016–2026 projection period spanned by CBO's baseline, conceptual differences cause receipts in the NIPAs to be greater than revenues in the budget by about 5 percent and expenditures in the NIPAs to exceed outlays in the budget by about 7 percent.⁴ Projected expenditures in the NIPAs exceed projected receipts by a total of \$10.7 trillion, whereas deficits in CBO's baseline budget projections total \$9.2 trillion.

The Federal Budget

The budget of the federal government is best understood as an information and management tool.⁵ Its main objectives are to provide information that can assist lawmakers

1. See, for example, 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), <http://go.usa.gov/xWHT3> (PDF, 805 KB); 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), <http://go.usa.gov/xWHTA> (PDF, 240 KB).
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.

3. See Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2016 to 2026* (August 2016), www.cbo.gov/publication/51908.
4. 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.
5. Another approach to assessing the government's fiscal performance is reflected in the annual *Financial Report of the United States Government* (www.fms.treas.gov/fr), which uses 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.

Table 1.

Baseline Receipts and Expenditures as Measured by the National Income and Product Accounts

Billions of Dollars

	Actual, 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Receipts												
Current Tax Receipts												
Taxes on personal income	1,505	1,537	1,633	1,739	1,834	1,923	2,021	2,121	2,223	2,333	2,451	2,573
Taxes on corporate income	439	415	397	410	410	422	428	426	436	452	472	494
Taxes on production and imports	138	137	124	144	146	150	155	158	162	167	171	174
Taxes from the rest of the world	22	22	24	25	26	27	29	30	31	33	35	36
Subtotal, Current Tax Receipts	2,104	2,111	2,178	2,318	2,416	2,523	2,632	2,735	2,853	2,985	3,128	3,277
Contributions for Government Social Insurance ^a	1,177	1,222	1,271	1,318	1,365	1,413	1,470	1,530	1,586	1,644	1,715	1,784
Current Transfer Receipts	71	77	86	93	108	105	107	112	117	121	125	125
Income Receipts on Assets	54	43	53	60	62	64	67	70	73	77	80	83
Current Surpluses of Government Enterprises	-7	-11	-9	-9	-10	-10	-10	-10	-11	-11	-10	-10
Total Current Receipts	3,399	3,443	3,579	3,780	3,941	4,095	4,266	4,436	4,618	4,817	5,038	5,259
Expenditures												
Consumption Expenditures												
Defense												
Compensation and purchased goods and services	429	419	435	437	445	455	465	475	486	497	509	521
Consumption of fixed capital	162	164	165	167	169	172	174	176	179	182	185	188
Subtotal, Defense	590	582	600	604	614	626	639	652	665	679	694	709
Nondefense												
Compensation and purchased goods and services	266	265	272	273	272	276	281	288	294	302	311	320
Consumption of fixed capital	103	106	109	112	115	119	122	124	127	130	133	136
Subtotal, Nondefense	369	371	380	385	388	395	403	413	422	433	444	456
Current Transfer Payments												
Government social benefits												
To persons	1,942	2,008	2,086	2,196	2,323	2,463	2,607	2,771	2,921	3,087	3,266	3,466
To the rest of the world	20	21	21	22	23	25	26	28	30	31	33	35
Subtotal, Government Social Benefits	1,962	2,028	2,107	2,217	2,346	2,488	2,633	2,799	2,950	3,118	3,299	3,501
Other transfer payments												
Grants-in-aid to state and local governments	523	546	573	589	606	630	654	678	705	735	767	803
To the rest of the world	53	50	51	52	54	56	56	57	58	59	60	61
Subtotal, Other Transfer Payments	576	596	624	642	661	686	710	736	763	794	827	864
Interest Payments	436	464	504	551	613	683	750	817	889	957	1,024	1,095
Subsidies	56	58	63	62	64	63	62	63	64	65	66	67
Total Current Expenditures	3,989	4,099	4,277	4,460	4,685	4,940	5,198	5,480	5,754	6,046	6,354	6,692
Net Federal Government Saving												
Net Federal Government Saving^b	-590	-656	-698	-680	-744	-845	-932	-1,044	-1,135	-1,229	-1,315	-1,433
Memorandum												
Total Federal Consumption	959	953	980	989	1,002	1,021	1,042	1,064	1,087	1,112	1,137	1,165

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.

in their policy deliberations, to facilitate the management and control of federal activities, and to help the Treasury manage its cash balances and determine 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. The main period of interest for the budget is the federal fiscal year, which runs from October 1 through September 30.

The budget incorporates a few exceptions to cash-based accounting in cases in which lawmakers have decided that alternative 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 provides a misleading view of the true costs or savings associated with such transactions. Therefore, as specified in the Federal Credit Reform Act of 1990, the budget records 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. Such estimates are often revised later in response to changes in interest rates and to other developments.

The National Income and Product Accounts

The treatment of the federal sector in the NIPAs reflects none of the planning and management goals that underlie the budget. Instead, the NIPAs indicate how the federal government fits into a general economic framework by detailing current production and income over specific periods, the major sources of that production, and recipients of income resulting from current output. 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 (buildings, 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, judgments must be made 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 offsetting 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 differentiate total receipts and expenditures in the NIPAs 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

Table 2.

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

Billions of Dollars

	Actual,											
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	Receipts											
Revenues in CBO's Baseline	3,250	3,276	3,421	3,600	3,745	3,900	4,048	4,212	4,385	4,574	4,779	4,993
Differences												
Coverage												
Adjustments related to government employees' retirement	-4	-4	-4	-4	-4	-5	-5	-6	-6	-6	-7	-7
Estate and gift taxes	-19	-22	-23	-23	-25	-25	-26	-27	-29	-30	-32	-34
Universal Service Fund receipts	-9	-10	-11	-12	-12	-12	-12	-12	-12	-12	-13	-13
Subtotal, Coverage	-32	-35	-37	-39	-41	-42	-43	-45	-47	-49	-52	-54
Netting												
Medicare premiums	75	81	92	99	105	114	122	133	140	146	159	173
Deposit insurance premiums	9	9	8	11	15	13	12	13	13	14	14	15
Government contributions for												
OASDI and HI for employees	20	21	21	22	23	23	24	25	26	26	27	28
Income receipts on assets	49	37	47	52	54	56	58	61	63	67	69	72
Surpluses of government enterprises	-7	-11	-9	-9	-10	-10	-10	-10	-11	-11	-10	-10
Other	42	44	43	43	45	46	46	47	47	47	49	40
Subtotal, Netting	188	181	202	218	232	242	252	267	279	290	309	318
Timing Shift of Corporate Estimated												
Tax Payments	0	0	*	*	0	-6	6	0	0	0	0	0
Other	-6	20	-7	1	5	*	4	2	2	2	2	2
Total Differences	149	166	158	180	196	195	218	224	233	243	259	266
Receipts in the NIPAs	3,399	3,443	3,579	3,780	3,941	4,095	4,266	4,436	4,618	4,817	5,038	5,259
	Expenditures											
Outlays in CBO's Baseline	3,688	3,866	4,015	4,120	4,370	4,614	4,853	5,166	5,373	5,574	5,908	6,235
Differences												
Coverage												
Treatment of investment and depreciation	1	-1	-1	2	5	4	4	3	2	*	-3	-5
Adjustments related to government employees' retirement	89	93	100	108	114	120	127	134	141	149	159	167
Capital transfers	-73	-72	-73	-72	-73	-74	-75	-76	-77	-77	-78	-80
Lending and financial adjustments	49	32	24	26	31	23	23	25	24	24	36	26
Universal Service Fund payments	-9	-10	-10	-11	-11	-11	-11	-11	-11	-11	-12	-12
Subtotal, Coverage	57	42	40	53	65	63	68	75	79	85	102	97

Continued

Table 2.

Continued

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

Billions of Dollars

	Actual, 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Expenditures (Continued)												
Differences (Continued)												
Netting												
Medicare premiums	75	81	92	99	105	114	122	133	140	146	159	173
Deposit insurance premiums	9	9	8	11	15	13	12	13	13	14	14	15
Government contributions for												
OASDI and HI for employees	20	21	21	22	23	23	24	25	26	26	27	28
Income receipts on assets	49	37	47	52	54	56	58	61	63	67	69	72
Surpluses of government enterprises	-7	-11	-9	-9	-10	-10	-10	-10	-11	-11	-10	-10
Other	42	44	43	43	45	46	46	47	47	47	49	40
Subtotal, Netting	188	181	202	218	232	242	252	267	279	290	309	318
Timing	8	-41	-4	45	0	0	0	-64	-5	70	0	0
Other	49	50	24	25	18	21	24	36	28	27	35	42
Total Differences	301	233	262	341	315	326	344	314	380	471	446	457
Expenditures in the NIPAs	3,989	4,099	4,277	4,460	4,685	4,940	5,198	5,480	5,754	6,046	6,354	6,692
Net Federal Government Saving												
Budget Deficit in CBO's Baseline	-438	-590	-594	-520	-625	-714	-806	-954	-988	-1,000	-1,128	-1,243
Differences												
Coverage												
Treatment of investment and depreciation	-1	1	1	-2	-5	-4	-4	-3	-2	*	3	5
Adjustments related to government employees' retirement	-92	-97	-104	-112	-118	-125	-132	-139	-147	-156	-165	-175
Estate and gift taxes	-19	-22	-23	-23	-25	-25	-26	-27	-29	-30	-32	-34
Capital transfers	73	72	73	72	73	74	75	76	77	77	78	80
Lending and financial adjustments	-49	-32	-24	-26	-31	-23	-23	-25	-24	-24	-36	-26
Universal Service Fund	*	*	*	*	-1	-1	-1	-1	-1	-1	-1	-1
Subtotal, Coverage	-89	-78	-77	-92	-106	-105	-112	-120	-126	-134	-153	-151
Timing	-8	41	4	-45	0	-6	6	64	5	-70	0	0
Other	-55	-30	-31	-24	-13	-21	-20	-34	-27	-25	-34	-39
Total Differences	-151	-66	-104	-161	-119	-131	-126	-90	-147	-229	-187	-190
Net Federal Government Saving (NIPAs) ^a	-590	-656	-698	-680	-744	-845	-932	-1,044	-1,135	-1,229	-1,315	-1,433

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.

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

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

of federal pension plans is the source of many of the biggest disparities, 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. In contrast, that imputed interest transaction does not appear in the federal budget, making it the one of the largest differences created by BEA's treatment of federal pensions.
- The NIPA measure of current expenditures reflects the actual interest paid by the Treasury to the federal pension funds, but the receipts from such payments are recorded in the pension sector; on net, budgetary outlays are unaffected by such interest flows because the budget records both the payment and receipt of that interest.
- BEA measures the costs associated with benefits paid by federal pension plans differently. 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 \$1.4 trillion between 2016 and 2026. Over that period, accounting for all conceptual differences, the difference between projected budget deficits and projected net federal government saving as reported in the NIPAs amounts to \$1.6 trillion.

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