



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

The federal government's fiscal transactions are recorded in two major sets of accounts: *The Budget of the United States Government*, which is prepared by the Office of Management and Budget, and the national income and product accounts (NIPAs), which are produced by the Department of Commerce's Bureau of Economic Analysis (BEA).¹ The federal budget is the framework generally used by executive branch agencies and the Congress; it is the presentation of budgetary activity that is most often discussed in the press. The NIPAs, by contrast, are not intended to help the government plan or manage its activities. Instead, those accounts provide a general framework for describing the U.S. economy and show how the federal government fits into that framework. The different purposes served by the federal budget and the NIPAs are examined briefly below.²

Each year, the Congressional Budget Office reports 10-year projections of federal revenues and outlays developed using the standard structure for budgetary accounting.³ This report presents those revenue and

spending projections translated to the NIPA framework (see Table 1), and it compares CBO's baseline budget projections with those projections on a NIPA basis (see Table 2 on page 4).

The conceptual differences between the budget accounts and the NIPAs over the 2018–2028 period (CBO's most recent baseline projection period) cause cumulative receipts in the NIPAs to exceed projected revenues in CBO's baseline by about 5 percent and expenditures to exceed outlays by about 6 percent. In the NIPAs, projected expenditures exceed projected receipts by a total of \$14.5 trillion; the deficits in CBO's baseline budget projections total \$13.2 trillion over the same period.

The Federal Budget

The budget of the federal government is best understood as an information and management tool.⁴ Its main objectives are to assist lawmakers in policy deliberations, facilitate the management and control of federal activities, and help the Treasury manage cash balances and

1. See Mark Ludwick and Brendan Brankin, "NIPA Translation of the Fiscal Year 2019 Federal Budget," *Survey of Current Business*, vol. 98, no. 3 (Bureau of Economic Analysis, March 2018), <https://go.usa.gov/xU2vK>; 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), <https://go.usa.gov/xU2v8>.
2. For a more thorough discussion, 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. For CBO's most recent projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028*

- (April 2018), www.cbo.gov/publication/53651, and *An Analysis of the President's 2019 Budget* (May 2018), www.cbo.gov/publication/53884, which includes updated budget projections. As specified in law, and to provide a benchmark against which potential policy changes can be measured, CBO constructs its baseline 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), which measures assets, liabilities, revenues, and expenses on an accrual basis. For more discussion, see Congressional Budget Office, *Comparing Budget and Accounting Measures of the Federal Government's Fiscal Condition* (December 2006), www.cbo.gov/publication/18262.

Note: Unless otherwise indicated, all years referred to 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 sum 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, 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total, 2018– 2028
Receipts													
Current Tax Receipts													
Taxes on personal income	1,582	1,613	1,701	1,787	1,851	1,939	2,039	2,143	2,256	2,505	2,733	2,850	23,416
Taxes on corporate income	407	294	293	316	342	372	408	427	443	478	510	530	4,412
Taxes on production and imports	133	144	132	154	160	165	171	175	179	184	186	186	1,835
Taxes from the rest of the world	22	23	25	26	27	28	29	31	32	36	38	40	335
Subtotal, current tax receipts	2,143	2,073	2,151	2,282	2,379	2,504	2,647	2,776	2,910	3,203	3,467	3,606	29,998
Contributions for Government Social Insurance ^a	1,269	1,325	1,372	1,435	1,497	1,567	1,640	1,714	1,791	1,870	1,950	2,035	18,200
Current Transfer Receipts	89	84	94	95	96	98	101	105	109	114	117	120	1,133
Income Receipts on Assets	63	37	62	64	67	68	70	73	75	77	80	83	756
Current Surpluses of Government Enterprises	-4	-8	-1	-4	-5	-6	-7	-5	-6	-7	-7	-8	-64
Total Current Receipts	3,561	3,511	3,678	3,872	4,034	4,231	4,451	4,663	4,880	5,258	5,608	5,836	50,022
Expenditures													
Consumption Expenditures													
Defense													
Compensation and purchased goods and services	426	447	484	467	473	482	490	500	512	523	535	548	5,460
Consumption of fixed capital	159	160	164	168	173	177	181	185	189	192	196	200	1,985
Subtotal, defense	585	607	648	635	646	659	672	685	700	716	731	747	7,445
Nondefense													
Compensation and purchased goods and services	280	301	315	313	315	320	328	337	347	357	368	382	3,683
Consumption of fixed capital	107	110	114	119	123	127	131	135	138	142	145	149	1,432
Subtotal, nondefense	387	412	430	431	438	447	458	471	485	499	513	531	5,114
Current Transfer Payments													
Government social benefits													
To persons	2,060	2,142	2,265	2,392	2,535	2,690	2,849	3,015	3,188	3,371	3,551	3,764	31,760
To the rest of the world	22	23	24	26	27	29	30	32	34	36	38	41	340
Subtotal, government social benefits	2,081	2,165	2,289	2,418	2,561	2,719	2,879	3,047	3,222	3,407	3,589	3,805	32,101
Other transfer payments													
Grants-in-aid to state and local governments	561	580	609	624	646	680	712	748	785	824	863	904	7,977
To the rest of the world	51	50	52	54	56	58	59	60	62	63	64	66	646
Subtotal, other transfer payments	612	630	662	679	702	739	772	808	847	887	928	970	8,623
Interest Payments	492	543	629	738	839	926	999	1,052	1,099	1,159	1,220	1,285	10,488
Subsidies	60	66	66	65	65	66	66	67	69	70	72	73	745
Total Current Expenditures	4,217	4,423	4,723	4,966	5,251	5,556	5,846	6,130	6,421	6,737	7,052	7,410	64,516
Net Federal Government Saving													
Net Federal Government Saving^b	-656	-912	-1,045	-1,094	-1,217	-1,325	-1,395	-1,467	-1,541	-1,479	-1,444	-1,575	-14,494
Memorandum:													
Total Federal Consumption	971	1,018	1,077	1,066	1,084	1,106	1,130	1,156	1,185	1,214	1,244	1,278	12,559

Source: Congressional Budget Office

All amounts are for fiscal years. The national income and product accounts are recorded by calendar year; CBO's baseline projections are recorded by fiscal year.

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

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

determine borrowing needs. In most cases, items in the federal budget are reported on a cash-accounting basis, recording the inflow of revenues and the outflow of spending over a given period. The budget follows a fiscal year that runs from October 1 through September 30.

In some cases, lawmakers have decided that different approaches would improve the budget's usefulness as a decisionmaking tool, and so there are several exceptions to cash-based accounting. For example, because tracking the annual cash flows of federal direct loans or loan guarantees would give a misleading view of the true costs or savings associated with those transactions, the Federal Credit Reform Act of 1990 requires the estimated net costs or savings over the lifetime of the loan or loan guarantee—the net present value of all expected cash flows—to be recorded in the budget as outlays at the time of origination.⁵ Such estimates are subject to revision over time in response to unexpected changes in interest rates or other factors.

The National Income and Product Accounts

The NIPAs are not intended to help the government plan and manage its activities. Instead, those accounts provide a general economic framework that describes the entire U.S. economy, and they show the place of the federal government within that framework. Specifically, the NIPAs detail current production and the resulting income for specific periods, the major sources of production, and the recipients of the 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 are for fiscal years.)

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 provide services to the public at large. Because those services are consumed by the public, they are regarded in the NIPAs as federal consumption expenditures. In addition, through taxes and transfers, the federal government affects the resources available to the private sector. All of those activities are recorded

in a way that is consistent with the NIPAs' treatment of other sectors of the economy.

To convert federal transactions from the framework of the federal budget into that of the NIPAs, it is necessary to judge how best to classify various transactions—government investment, the sale or purchase of existing assets, or the provision of loans or loan guarantees, for example—that resemble business activities. In some cases, transactions that the budget classifies as involving revenues or outlays are not classified that way in the NIPAs because they are not closely related to current economic activity or because the NIPAs do not include them in the federal sector. In other cases, the NIPAs record as receipts transactions 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 main differences between CBO's baseline budget projections and the corresponding amounts in the NIPAs in three categories:

- Coverage, for transactions that are included either in the budget or in the NIPAs but not both;
- Netting, for transactions that are recorded as offsets to outlays in the budget but as receipts in the NIPAs; and
- Timing, for certain 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 result in totals for receipts and expenditures in the NIPAs that differ from totals for revenues and outlays in the budget. However, the netting differences have no effect on the NIPAs' measure of the federal deficit because they affect revenues and outlays equally.

Differences in coverage more than account for the variance between the NIPAs' and the budgetary measures of the federal deficit, in large part because of BEA's treatment of federal pension plans:

- BEA imputes additional interest costs for periods in which the government's pension plans are underfunded (that is, when the plans' financial assets

5. A 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. The value depends on the rate of interest, known as the discount rate, used to translate future cash flows into current dollars at that time.

Table 2.

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

Billions of Dollars

	Actual, 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total, 2018– 2028
Receipts													
Revenues in CBO's Baseline	3,316	3,339	3,490	3,680	3,829	4,016	4,232	4,448	4,667	5,003	5,301	5,520	47,525
Differences													
Coverage													
Adjustments related to government employees' retirement	-4	-5	-5	-5	-6	-6	-7	-7	-8	-8	-9	-10	-75
Estate and gift taxes	-23	-26	-19	-19	-20	-21	-21	-23	-24	-25	-37	-40	-275
Universal Service Fund receipts	-10	-10	-11	-11	-11	-12	-12	-12	-12	-12	-12	-12	-126
Repatriation of deferred income	0	-14	-28	-28	-28	-28	-40	-60	-77	-43	0	0	-347
Subtotal, coverage	-37	-54	-63	-64	-65	-66	-80	-102	-121	-88	-58	-62	-823
Netting													
Medicare premiums	88	101	111	119	128	139	149	161	173	188	202	218	1,687
Deposit insurance premiums	11	11	7	7	7	8	9	9	10	10	11	11	101
Government contributions for HI and OASDI for employees	22	22	23	23	24	25	26	27	27	28	29	30	284
Income receipts on assets	57	30	55	56	59	60	62	65	66	68	71	73	666
Surpluses of government enterprises	-4	-8	-1	-4	-5	-6	-7	-5	-6	-7	-7	-8	-64
Other	43	46	51	51	53	55	55	55	57	58	57	54	592
Subtotal, netting	217	202	245	254	266	282	294	312	328	346	362	377	3,266
Timing Shift of Corporate Estimated Tax Payments	*	*	0	0	0	0	0	0	0	0	0	0	*
Other	65	24	6	3	4	*	4	5	6	-2	2	1	54
Total Differences	245	172	188	193	205	216	219	215	213	255	306	316	2,497
Receipts in the NIPAs	3,561	3,511	3,678	3,872	4,034	4,231	4,451	4,663	4,880	5,258	5,608	5,836	50,022
Expenditures													
Outlays in CBO's Baseline	3,982	4,131	4,463	4,683	4,947	5,290	5,505	5,693	6,020	6,324	6,616	7,047	60,718
Differences													
Coverage													
Treatment of investment and depreciation	-13	-25	-35	-19	-12	-8	-6	-7	-8	-10	-12	-15	-157
Adjustments related to government employees' retirement	100	102	113	117	123	129	135	142	145	153	158	162	1,481
Capital transfers	-76	-74	-75	-78	-81	-84	-86	-88	-90	-92	-94	-95	-936
Lending and financial adjustments	43	39	39	38	33	32	27	24	40	21	27	29	348
Universal Service Fund payments	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-11	-118
Subtotal, coverage	44	32	32	47	53	59	59	60	77	61	68	69	617

Continued

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Continued

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

Billions of Dollars

	Actual, 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total, 2018– 2028
Expenditures (Continued)													
Differences (Continued)													
Netting													
Medicare premiums	88	101	111	119	128	139	149	161	173	188	202	218	1,687
Deposit insurance premiums	11	11	7	7	7	8	9	9	10	10	11	11	101
Government contributions for HI and OASDI for employees	22	22	23	23	24	25	26	27	27	28	29	30	284
Income receipts on assets	57	30	55	56	59	60	62	65	66	68	71	73	666
Surpluses of government enterprises	-4	-8	-1	-4	-5	-6	-7	-5	-6	-7	-7	-8	-64
Other	43	46	51	51	53	55	55	55	57	58	57	54	592
Subtotal, netting	217	202	245	254	266	282	294	312	328	346	362	377	3,266
Timing	-7	46	5	0	0	-63	-5	68	0	0	0	-89	-38
Other	-18	11	-22	-17	-15	-12	-7	-2	-3	6	6	8	-47
Total Differences	236	291	260	283	304	266	341	438	402	413	436	364	3,797
Expenditures in the NIPAs	4,217	4,423	4,723	4,966	5,251	5,556	5,846	6,130	6,421	6,737	7,052	7,410	64,516
Net Federal Government Saving													
Budget Deficit in CBO's Baseline	-665	-793	-973	-1,003	-1,118	-1,275	-1,273	-1,245	-1,352	-1,321	-1,314	-1,527	-13,193
Differences													
Coverage													
Treatment of investment and depreciation	13	25	35	19	12	8	6	7	8	10	12	15	157
Adjustments related to government employees' retirement	-104	-107	-118	-122	-129	-135	-142	-149	-153	-162	-167	-172	-1,556
Estate and gift taxes	-23	-26	-19	-19	-20	-21	-21	-23	-24	-25	-37	-40	-275
Repatriation of deferred income	0	-14	-28	-28	-28	-28	-40	-60	-77	-43	0	0	-347
Capital transfers	76	74	75	78	81	84	86	88	90	92	94	95	936
Lending and financial adjustments	-43	-39	-39	-38	-33	-32	-27	-24	-40	-21	-27	-29	-348
Universal Service Fund	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-8
Subtotal, coverage	-80	-86	-95	-111	-118	-125	-139	-162	-197	-150	-126	-131	-1,440
Timing	6	-46	-5	0	0	63	5	-68	0	0	0	89	38
Other	83	13	28	20	20	12	11	7	8	-9	-4	-7	101
Total Differences	9	-119	-72	-90	-99	-50	-122	-223	-189	-158	-130	-48	-1,300
Net Federal Government Saving in the NIPAs ^a	-656	-912	-1,045	-1,094	-1,217	-1,325	-1,395	-1,467	-1,541	-1,479	-1,444	-1,575	-14,494

Source: Congressional Budget Office.

All amounts are for fiscal years. The NIPAs are recorded by calendar year; CBO's baseline projections are recorded by fiscal year.

Differences in coverage arise when a transaction is reported either in the budget or the in 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 = Medicare's Hospital Insurance; OASDI = Social Security's Old-Age, Survivors, and Disability Insurance; NIPAs = national income and product accounts; * = between -\$500 million and \$500 million.

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

are insufficient to cover promised future benefits) because, in BEA's view, the government has effectively borrowed from those plans. That imputed-interest payment does not appear in the federal budget, and it is the largest discrepancy created by BEA's treatment of federal pensions.

- 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 interest payments because the receipts are recorded in the pension sector—a nonfederal sector of the NIPAs. The federal budget, by contrast, records both the payment and the receipt of that interest (the latter as an offset to outlays), leaving federal outlays unaffected.
- Rather than recording the cash payments of benefits each year as a federal expenditure (as they are shown in the budget), the NIPAs record the value of the benefits that employees accrue during a given year as an expenditure in the federal sector.

The annual differences between BEA's approach and the federal budget's presentation of transactions for federal pensions under CBO's baseline projections are shown in Table 2, in the row "Adjustments related to government employees' retirement." Those differences total \$1.6 trillion over the 2018–2028 period.

In addition, Public Law 115-97, the tax legislation enacted in December 2017, imposed a onetime tax on previously untaxed foreign profits accumulated after 1986 and before 2018. Such a tax often is called a deemed repatriation tax. Domestic owners of foreign corporations that are subject to the tax must report the full tax liability for those profits on their 2017 tax returns but may remit the payments in eight annual installments, making smaller payments initially and larger payments at the end.

In the NIPAs, BEA does not include the proceeds from the deemed repatriation tax in the measurement of current receipts. Instead, it treats those payments as a capital transfer from businesses to the federal government. As a result, the tax has no effect on net federal saving in the NIPAs. Those taxes paid as a result of deemed repatriation will, however, be counted in the federal budget when paid to the Treasury over the next eight years. The

difference in how BEA and the federal budget account for the tax totals \$347 billion over the 2018–2028 period.⁶

Other differences in coverage reduce that measure of the deficit by about \$0.5 trillion, and differences attributable to other sources offset another \$0.1 trillion. All told, the federal government's projected negative saving over the period as reported in the NIPAs exceeds budget deficits in CBO's baseline projections by \$1.3 trillion.

6. Although the payment of the tax over the next eight years is the source of differences between the NIPAs and the federal budget owing to the deemed repatriation tax, that tax is projected to have additional effects on revenues beyond those payments. The staff of the Joint Committee on Taxation estimated that, on net, the revenue effects of the provision total \$338.8 billion over the 2018–2027 period; see Joint Committee on Taxation, *Estimated Budget Effects of the Conference Agreement for H.R. 1, the "Tax Cuts and Jobs Act,"* JCX-67-17 (December 2017), <https://go.usa.gov/xUkGk>.

This report is an annual publication of the Congressional Budget Office, prepared in response to interest expressed by the Congress. Previous editions are available at <https://go.usa.gov/xU2df>. In keeping with CBO's mandate to provide objective, impartial analysis, the report contains no recommendations.

Dan Ready wrote the report with assistance from Cecilia Pastrone; with guidance from Christina Hawley Anthony, Theresa Gullo, John McClelland, and Joshua Shakin; and with contributions from the staff of the Joint Committee on Taxation. Wendy Edelberg, Leo Lex, Robert Sunshine, and Jeffrey Werling reviewed the report; Kate Kelly edited it; and Casey Labrack prepared it for publication. An electronic version is available on the agency's website (www.cbo.gov/publication/54194).



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