
Appendix A: Changes in CBO's Baseline Projections Since July 2021

Overview

The Congressional Budget Office estimates that if no new legislation affecting spending and revenues is enacted, the budget deficit for fiscal year 2022 will total \$1.0 trillion. That amount is \$118 billion (or 10 percent) less than the \$1.2 trillion deficit the agency estimated in July 2021, when it last updated its baseline budget projections.¹ CBO has increased its estimates of both revenues and outlays for the year. Revenues are \$0.4 trillion (or 10 percent) higher in the current baseline projections than they were in the previous projections, and outlays are up by \$0.3 trillion (or 6 percent).

CBO now projects that if current laws generally remained in place, the cumulative deficit for the 2022–2031 period would be \$14.5 trillion. That amount is \$2.4 trillion (or 20 percent) more than the \$12.1 trillion the agency projected in July 2021 (see Figure A-1). That increase is the combined result of a \$5.8 trillion (or 9 percent) increase in projected outlays and a \$3.4 trillion (or 7 percent) increase in projected revenues over the 2022–2031 period.

Primarily because of the increase in deficits, debt held by the public reaches \$37.9 trillion by the end of 2031 in CBO's current projections—\$2.1 trillion more than the \$35.8 trillion the agency projected in July 2021.² Nominal gross domestic product (GDP) in 2031 is also now larger than previously projected. That GDP growth dampens the effect of rising debt measured in relation to the size of the economy. Debt is currently projected to reach 107 percent of GDP in 2031—only slightly more than the 106 percent of GDP that CBO projected in July 2021.

1. See Congressional Budget Office, *Additional Information About the Updated Budget and Economic Outlook: 2021 to 2031* (July 2021), www.cbo.gov/publication/57263.

2. For a discussion of other factors that affect the change in debt held by the public, see the section titled “Relationship Between Debt and Deficits” in Chapter 1.

When CBO updates its baseline budget projections, it groups the revisions into three categories—legislative, economic, and technical. The categories are defined as follows:

- *Legislative changes* result from laws enacted since the agency published its previous baseline projections and generally reflect the budgetary effects reported in CBO's cost estimates when the legislation was enacted.³
- *Economic changes* arise from revisions the agency has made to its economic forecast (including those made to incorporate the macroeconomic effects of recently enacted legislation).⁴
- *Technical changes* are revisions to projections that are neither legislative nor economic.

Changes in all three categories increased revenues and outlays over the 2022–2031 period (see Table A-1 on page 112). Legislative and economic changes boosted projected deficits, whereas technical changes reduced them:

- Legislative changes *increased* projected deficits by \$2.4 trillion, mostly because of increases in discretionary outlays resulting from provisions of the Infrastructure Investment and Jobs Act (IIJA; Public Law 117-58) and the Consolidated Appropriations Act, 2022 (2022 CAA; P.L. 117-103), and from the assumption, specified in law, that appropriations in future years will equal those in 2022 with adjustments for inflation.

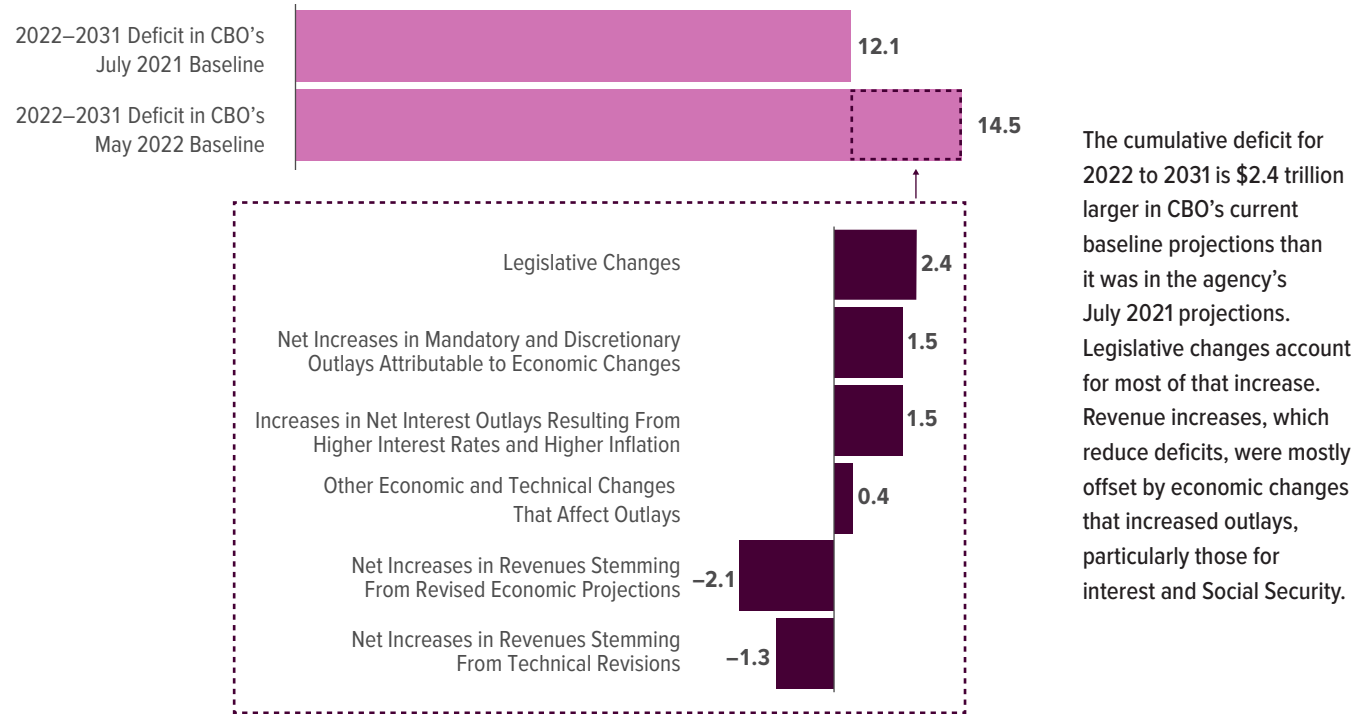
3. The baseline projections described in this report incorporate the effects of legislation enacted through April 8, 2022. The Suspending Normal Trade Relations With Russia and Belarus Act (Public Law 117-110), enacted on that date, is the most recent law whose budgetary effects are reflected in this analysis.

4. The current budget projections are based on CBO's latest economic forecast, which was completed on March 2, 2022. The economic changes discussed in this report reflect differences between that forecast and CBO's July 2021 forecast.

Figure A-1.

Changes in CBO’s Baseline Projections of the 10-Year Deficit Since July 2021

Trillions of Dollars



The cumulative deficit for 2022 to 2031 is \$2.4 trillion larger in CBO’s current baseline projections than it was in the agency’s July 2021 projections. Legislative changes account for most of that increase. Revenue increases, which reduce deficits, were mostly offset by economic changes that increased outlays, particularly those for interest and Social Security.

Data source: Congressional Budget Office. See www.cbo.gov/publication/57950#data.

- On net, economic changes *increased* deficits by \$1.1 trillion. CBO revised its projections of outlays upward by \$3.1 trillion because of changes made to its economic projections, including increases in interest rates and inflation. That increase in outlays was partially offset by a \$2.1 trillion increase in projected revenues associated with higher projections of GDP.
- Technical changes in the agency’s projections of revenues and outlays *decreased* projected deficits over the period by a total of \$1.0 trillion, on net. The largest technical revision in a single budget category was an increase of \$0.8 trillion in CBO’s projections of individual income tax revenues, which reduced deficits.

As a result of those changes, *primary* deficits—that is, deficits excluding net outlays for interest—are now projected to total \$0.6 trillion more over the 2022–2031 period than CBO projected in July 2021. The agency’s projections of net interest outlays increased by more than three times that amount—\$1.9 trillion—over that period.

Legislative Changes

To account for legislation enacted after the July 2021 baseline projections were prepared, CBO increased its estimate of the deficit for 2022 by \$44 billion and its projections of deficits over the 2022–2031 period by \$2.4 trillion (see Table A-1).⁵ Nearly all the changes were to outlays. Those changes are mostly the result of increased discretionary funding provided by the IIJA and other appropriation acts, including the 2022 CAA, and of CBO’s projecting such funding into future years. Other legislation enacted since CBO prepared its previous baseline had a minor effect on the agency’s projections.

Changes in Outlays

Incorporating the effects of recently enacted legislation into CBO’s baseline projections increased outlays in 2022 by \$52 billion (or 1 percent) and outlays over the 2022–2031 period by \$2.4 trillion (or 4 percent).

5. The July 2021 baseline projections incorporated the effects of legislation enacted through May 18, 2021.



Most of that additional spending is for discretionary programs.⁶

Discretionary Outlays. The increase in projected outlays is roughly split between new funding provided by the IIJA and additional funding provided by other appropriation legislation.

The IIJA provided discretionary funding (nearly all of which was designated as an emergency requirement) mainly for transit infrastructure, pollution control and abatement, broadband deployment, and energy programs. The act provided \$163 billion in supplemental appropriations for 2022 and \$283 billion in advance appropriations for the 2023–2031 period.⁷ (See Box 3–4 on page 76 for more details about the IIJA.)

After consulting with the House and Senate Budget Committees, CBO followed provisions of law that require the agency to project future funding on the basis of existing appropriations and projected that the additional funding provided in the IIJA would be provided in future years with adjustments for inflation.⁸ Accordingly, in CBO's baseline projections, discretionary funding attributable to the IIJA grows from \$163 billion in 2022 to \$187 billion in 2031. That additional budget authority in turn results in additional outlays. Those outlays grow steadily throughout the period and add \$1.1 trillion to projected outlays over the 2022–2031 period.⁹

6. Funding that is provided in annual appropriation acts and the outlays that result from it are generally categorized as discretionary.
7. Funding designated as an emergency requirement is exempt from certain budget enforcement rules. Supplemental appropriations are provided by appropriation legislation enacted in addition to a regular annual appropriation act.
8. In accordance with section 257 of the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), CBO projects funding for individual accounts in future years by applying the specified inflation rate to the most recent appropriations for those accounts. For its projections of discretionary funding related to federal personnel, CBO is required to use the employment cost index for wages and salaries to adjust for inflation; for its projections of other types of discretionary funding, the agency is required to use the GDP price index.
9. Almost two-thirds (\$0.7 trillion) of that increase stems from the assumption that the funding provided by the IIJA would continue to be provided annually in future years. In its cost estimate, CBO estimated that outlays stemming from the IIJA would climb slowly for the first few years, peak in 2026, and

The other half of the increase in discretionary outlays stems from other appropriations enacted this year, including emergency funding provided as part of continuing resolutions and full-year funding provided by the 2022 CAA. Together, those laws provided defense and nondefense discretionary appropriations for fiscal year 2022 that were substantially larger than the amounts projected in CBO's July 2021 baseline.

As a result of the 2022 CAA, nonemergency discretionary funding for this year is \$56 billion more than it was in CBO's July 2021 projections.¹⁰ CBO increased its projections of budget authority throughout the projection period accordingly, and in turn, it raised its projections of outlays for the entire 2022–2031 period by \$627 billion—\$208 billion for defense and \$419 billion for nondefense activities.

In addition to the IIJA funding, lawmakers have thus far provided \$58 billion in funding for 2022 that was designated as an emergency requirement. (Including the IIJA funding, \$221 billion in emergency funding has been appropriated for 2022 to date.) That amount is substantially more than the \$10 billion in emergency funding

fall through 2031; in all, the IIJA would increase discretionary outlays by \$415 billion over the 2022–2031 period. Unlike the agency's baseline projections, the cost estimate—in keeping with CBO's standard practice—reflected only the funding provided by the act; it did not reflect the assumption that such funding would continue to be provided in future years. See Congressional Budget Office, cost estimate for Senate Amendment 2137 to H.R. 3684, the Infrastructure Investment and Jobs Act, as proposed on August 1, 2021 (revised August 9, 2021), www.cbo.gov/publication/57406. In addition to providing funding, the bill delayed the implementation of a rule affecting rebates for prescription drugs; established reporting requirements for digital assets; extended certain fees, taxes, and budget cuts; rescinded certain funds; and made other changes.

10. Each year, some mandatory programs are modified by provisions in annual appropriation acts (often referred to as CHIMPs). Such modifications may increase or decrease spending for a given program, and for budget enforcement procedures, they are considered to increase or decrease the amount of discretionary budget authority attributed to the appropriation acts that make the changes. Ultimately, those effects are applied in the budget to the relevant mandatory programs. In CBO's cost estimate for the 2022 CAA, changes in mandatory programs that were credited against discretionary budget authority decreased discretionary funding in 2022 by \$14 billion. When CBO incorporated those CHIMPs into its baseline projections, it accounted for those changes on the mandatory side of the ledger; thus, the discretionary funding for 2022 in the baseline is higher than the amount shown in the cost estimate for the CAA, which was partially offset by those reductions in mandatory spending.

Table A-1.

Changes in CBO's Baseline Projections of the Deficit Since July 2021

Billions of Dollars

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	
											2022–2026	2022–2031
Deficit in CBO's July 2021 Baseline	-1,153	-789	-753	-998	-1,049	-1,077	-1,395	-1,363	-1,661	-1,855	-4,741	-12,093
Legislative Changes												
Changes in Revenues												
Individual income taxes	8	-1	1	2	2	3	3	3	3	4	12	28
Excise taxes	1	2	2	2	2	2	2	2	2	2	8	19
Other	*	*	*	*	*	*	1	1	1	1	1	4
Total Change in Revenues	9	1	3	4	5	5	6	6	6	7	22	51
Changes in Outlays												
Discretionary												
Defense	14	25	30	34	36	37	39	40	41	42	138	337
Nondefense	39	94	148	178	208	229	243	252	261	269	667	1,922
Subtotal	53	118	178	212	244	266	282	292	302	311	805	2,259
Mandatory	-1	-22	-17	-18	-5	-2	-4	-4	-1	-23	-63	-98
Net Interest												
Debt Service ^a	*	2	5	10	17	24	32	41	51	62	34	245
Total Change in Outlays	52	98	167	204	255	288	310	329	352	350	777	2,406
Increase (-) in the Deficit From Legislative Changes	-44	-97	-164	-199	-251	-283	-305	-323	-346	-343	-755	-2,355
Economic Changes												
Changes in Revenues												
Individual income taxes	114	122	113	101	103	108	116	133	154	172	551	1,235
Payroll taxes	54	70	77	80	80	80	81	86	93	101	362	802
Federal Reserve remittances	-12	-112	-111	-81	-55	-41	-22	-6	2	8	-371	-430
Corporate income taxes	23	38	50	49	40	32	30	33	37	39	200	372
Other	7	8	9	9	9	7	6	7	9	10	41	80
Total Change in Revenues	186	126	138	157	176	186	212	252	296	330	783	2,059
Changes in Outlays												
Mandatory												
Social Security	17	59	80	86	89	92	92	96	101	106	330	817
Medicaid	5	10	12	13	14	14	15	16	16	17	54	132
Civilian and military retirement annuities	2	7	10	10	11	11	11	11	11	11	40	94
Veterans' benefits and services	2	7	8	9	9	9	10	8	10	10	36	83
Medicare	0	2	5	6	8	9	10	10	13	14	20	76
SNAP	*	6	8	8	8	8	8	8	8	8	30	72
Supplemental Security Income	1	3	4	4	4	4	5	4	4	5	16	38
Child nutrition	*	1	2	3	3	3	3	4	4	4	9	27
Other	-16	-9	-5	-3	-2	1	4	5	4	2	-34	-18
Subtotal	12	86	123	136	143	152	158	162	170	177	501	1,320
Discretionary	*	12	18	20	21	21	22	22	22	23	92	180
Net interest												
Effects of interest rates and inflation	70	118	173	193	189	177	168	154	132	114	743	1,487
Debt service ^a	-1	-1	2	7	13	18	22	26	29	30	21	146
Subtotal	69	117	176	200	201	195	190	180	161	144	763	1,633
Total Change in Outlays	81	215	317	357	365	367	370	364	353	344	1,335	3,133
Increase (-) or Decrease in the Deficit From Economic Changes	105	-90	-179	-199	-189	-182	-159	-111	-57	-14	-552	-1,075

Continued



Table A-1.

Continued

Changes in CBO's Baseline Projections of the Deficit Since July 2021

Billions of Dollars

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	
											2022–2026	2022–2031
Technical Changes												
Changes in Revenues												
Individual income taxes	173	124	75	53	80	67	59	55	53	51	506	790
Corporate income taxes	55	39	38	32	32	33	38	44	50	54	196	415
Payroll taxes	19	-2	-2	*	2	4	5	4	2	3	18	35
Other	3	5	1	1	1	1	1	1	1	1	10	14
Total Change in Revenues	251	165	113	86	115	105	102	104	105	108	729	1,253
Changes in Outlays												
Mandatory												
Social Security	-8	-19	-28	-33	-35	-37	-38	-39	-41	-43	-124	-322
SNAP	54	55	23	16	18	17	18	19	22	24	166	266
Premium tax credits and related spending	11	6	10	13	14	16	16	18	19	22	55	144
Medicaid	39	79	14	-8	-6	-8	-11	-15	-17	-17	117	49
Medicare	19	18	6	6	1	-2	2	-13	-5	11	50	43
Supplemental Security Income	-3	-4	-4	-4	-4	-4	-5	-4	-5	-5	-19	-42
Coronavirus Relief Fund	38	1	2	0	0	0	0	0	0	0	41	41
Revisions to the costs of credit programs	-32	0	0	0	0	0	0	0	0	0	-32	-32
Earned income and child tax credits	24	-1	-2	-1	*	1	2	2	2	2	21	29
Student loans	34	1	*	-1	-1	-1	-1	-1	-1	-1	32	27
Other	-24	12	42	17	*	-13	-13	-6	-11	-11	47	-8
Subtotal	151	148	62	5	-13	-31	-31	-39	-38	-18	353	196
Discretionary	19	18	10	5	6	8	7	4	4	-2	58	79
Net interest												
Debt service ^a	7	11	12	11	8	3	-3	-8	-12	-16	49	13
Other	17	-3	-12	-13	-12	-6	-5	*	-1	*	-22	-35
Subtotal	24	8	1	-2	-3	-3	-8	-9	-13	-16	28	-22
Total Change in Outlays	194	174	73	8	-10	-27	-32	-44	-47	-37	439	253
Increase (-) or Decrease in the Deficit From Technical Changes	56	-9	40	78	125	132	133	147	153	145	290	1,000
All Changes												
Total Increase (-) or Decrease in the Deficit	118	-195	-303	-320	-315	-333	-330	-288	-251	-212	-1,016	-2,429
Deficit in CBO's May 2022 Baseline	-1,036	-984	-1,056	-1,318	-1,364	-1,409	-1,725	-1,651	-1,912	-2,067	-5,758	-14,523
Memorandum:												
Increase in Revenues	446	292	253	248	295	296	319	362	407	445	1,534	3,363
Increase in Outlays	328	488	556	568	610	628	649	649	658	657	2,551	5,793
Increase (-) or Decrease in the Primary Deficit ^b	211	-68	-122	-112	-100	-117	-115	-75	-52	-23	-191	-573
Increase (-) in the Deficit From the Increase in Net Interest Outlays	-94	-127	-181	-208	-215	-215	-215	-213	-199	-189	-825	-1,856

Data source: Congressional Budget Office. See www.cbo.gov/publication/57950#data.

SNAP = Supplemental Nutrition Assistance Program; * = between -\$500 million and \$500 million.

a. Debt service is the change in interest payments resulting from an increase or decrease in estimates of the deficit.

b. Primary deficits exclude net outlays for interest.

for 2022 that was in CBO's July 2021 baseline projections.¹¹ The largest non-IIJA emergency appropriations this year were to provide disaster relief, to assist evacuees from Afghanistan, and to respond to the war in Ukraine. Because that funding continues with adjustments for inflation in CBO's baseline projections, outlays over the 2022–2031 period are now projected to be \$509 billion higher than they were projected to be in July 2021.

Mandatory Outlays. On net, new legislation affecting mandatory programs reduced estimated outlays in 2022 by \$1 billion and projected outlays over the 2022–2031 period by \$98 billion.¹² The largest changes stem from the IIJA, which reduced outlays in 2022 by \$10 billion and outlays over the 2022–2031 period by \$110 billion. The largest reductions occurred because the IIJA delayed implementation of a rule that would have eliminated the existing safe-harbor provision for pharmaceutical rebates, extended the guarantee fee that Fannie Mae and Freddie Mac assess on loans included in mortgage-backed securities, and rescinded previously enacted appropriations related to the coronavirus pandemic.¹³

11. That increase stems from the treatment of emergency appropriations in CBO's July 2021 baseline. Although lawmakers enacted \$192 billion in emergency funding in 2021, nearly all of that amount—\$184 billion—was provided in response to the coronavirus pandemic. Because of the unusual size and nature of that pandemic-related funding, CBO, after consulting with the House and Senate Budget Committees, deviated from the standard procedures that it uses to construct its baseline and did not extrapolate into future years that \$184 billion when projecting discretionary budget authority. Thus, in its previous baseline, CBO projected only \$10 billion in emergency funding in 2022.

12. Mandatory spending consists of outlays for some federal benefit programs, such as Social Security, Medicare, and Medicaid, and certain other payments to people, businesses, nonprofit institutions, and state and local governments. It is governed by statutory criteria and is not normally controlled by the annual appropriation process.

13. The IIJA delayed from 2023 to 2026 the implementation of a rule that would have eliminated the existing “safe harbor” for rebates paid by pharmaceutical manufacturers to health plans and pharmacy benefit managers (PBMs) in Medicare Part D. The safe harbor rule protects those parties from liability or penalty in specific situations defined in the regulations that implemented the anti-kickback statute, which prohibits offering or accepting payments to induce use of services reimbursable under federal health care programs. Eliminating the safe harbor would effectively make it illegal for drug manufacturers to pay post-sale rebates to health plans or PBMs in those programs in return for coverage or preferred treatment of their drug. CBO expects that

Those reductions were partially offset by the VOCA Fix to Sustain the Crime Victims Fund Act of 2021 (P.L. 117-27), which increased outlays projected for the 2022–2031 period by \$8 billion. Other laws had minimal net effects on mandatory outlays.

Net Interest Outlays. The changes that CBO made to account for legislation enacted since the July 2021 projections were made increased the agency's projections of the deficit for 2022 by \$44 billion and its projections of the cumulative deficit for the 2022–2031 period by \$2.1 trillion before debt-service costs are taken into account.¹⁴ The additional federal borrowing stemming from those larger annual deficits added \$245 billion to CBO's projections of net outlays for interest over the 2022–2031 period.

Changes in Revenues

To reflect enacted legislation, CBO increased its estimate of revenues in 2022 by \$9 billion (or less than 1 percent) and its projections of revenues for the 2022–2031 period by \$51 billion (or less than 1 percent). Most of those changes stemmed from provisions in the IIJA.

Individual Income Taxes. The agency increased its estimate of individual income tax revenues in 2022 by \$8 billion (or less than 1 percent) and its projections of such revenues over the 2022–2031 period by \$28 billion (or less than 1 percent). Most of the increase in 2022 is attributable to a provision of the IIJA that terminated tax credits for businesses that retained or rehired employees. (Those credits were originally enacted as part of the Coronavirus Aid, Relief, and Economic Security Act, P.L. 116-136.) The primary cause of the increases over the rest of the projection period was a provision requiring brokers who facilitate the transfer of digital assets (such as cryptocurrencies) to report information about such transactions to the Internal Revenue Service (IRS).

Excise Taxes. CBO increased its projections of excise tax revenues over the 2022–2031 period by \$19 billion (or 2 percent). Nearly all of that change resulted from a provision of the IIJA that reinstated and modified certain Superfund excise taxes.

enacting the rule and thus eliminating the safe harbor would result in pharmaceutical manufacturers' withholding some of the discounts that they previously negotiated and would thus increase federal outlays for prescription drugs.

14. Debt service is the change in interest payments resulting from an increase or decrease in estimates of the deficit.

Other Revenues. Laws enacted since the July 2021 baseline projections were made led CBO to increase its projections of revenues from all other sources over the 2022–2031 period by a total of \$4 billion (or less than 1 percent), on net. A few provisions were responsible for most of that increase. Like individual income taxes, corporate income taxes were boosted by the provision of the IIJA that requires information about transfers of digital assets to be reported to the IRS. The Suspending Normal Trade Relations With Russia and Belarus Act (P.L. 117-110) increased the tariff rates applicable to most imports from those countries, thereby boosting projections of customs duties. And a provision of the IIJA related to the reclamation of land with abandoned mines led CBO to increase its estimates of other miscellaneous receipts.

Economic Changes

The economic forecast that underlies CBO's baseline budget projections includes the agency's projections of GDP growth, interest rates, wages and salaries, inflation, and other factors that affect federal spending and revenues (see Figure A-2). The revisions that CBO made to its projections of those economic factors *decreased* its estimate of the deficit in 2022 by \$105 billion—the net effect of an increase in estimated revenues that is partially offset by an increase in projected outlays, mostly for interest (see Table A-1 on page 112). However, economic changes *increased* the cumulative deficit over the 2022–2031 period in CBO's projections by \$1.1 trillion. That increase is the net result of a \$3.1 trillion increase in outlays that is partially offset by a \$2.1 trillion increase in revenues.

Changes in Outlays

CBO's revisions to its economic forecast increased its estimate of outlays for the current year by \$81 billion (or 1 percent). CBO now projects that in later years, inflation, interest rates, and wages will be higher than it projected in July 2021. On net, those revisions increased projected outlays over the 2022–2031 period by \$3.1 trillion (or 5 percent).

Mandatory Outlays. Economic changes increased CBO's estimate of mandatory outlays in 2022 by \$12 billion (or less than 1 percent), on net. Projections of mandatory outlays from 2022 to 2031 increased by \$1.3 trillion (or 4 percent). Upward revisions to projected outlays for Social Security account for about 60 percent of that increase.

Social Security. Projected outlays for Social Security from 2022 to 2031 increased by a total of \$817 billion (or 6 percent) because of economic changes. CBO now projects higher inflation and higher average wages than it did previously. Social Security provides annual cost-of-living adjustments (COLAs) based on changes in the consumer price index for urban wage earners and clerical workers (CPI-W). CBO increased its projections of CPI-W growth and COLAs. As a result, the agency's projections of Social Security benefits paid over the 2022–2031 period increased by \$671 billion. The COLA that took effect in January 2022 was 5.9 percent, rather than the 3.8 percent that CBO projected it to be in July 2021. Next year's COLA is currently projected to be 6.0 percent; CBO previously anticipated that it would be 2.2 percent. The agency increased its estimate of the 2024 COLA by a smaller amount—0.6 percentage points. CBO's current projections of the COLAs for 2025 to 2031 are within 0.2 percentage points of its previous estimates. In addition, CBO increased its projections of average wages by about 5 percent, which boosted projected Social Security benefits for new recipients over the 2022–2031 period by \$145 billion.

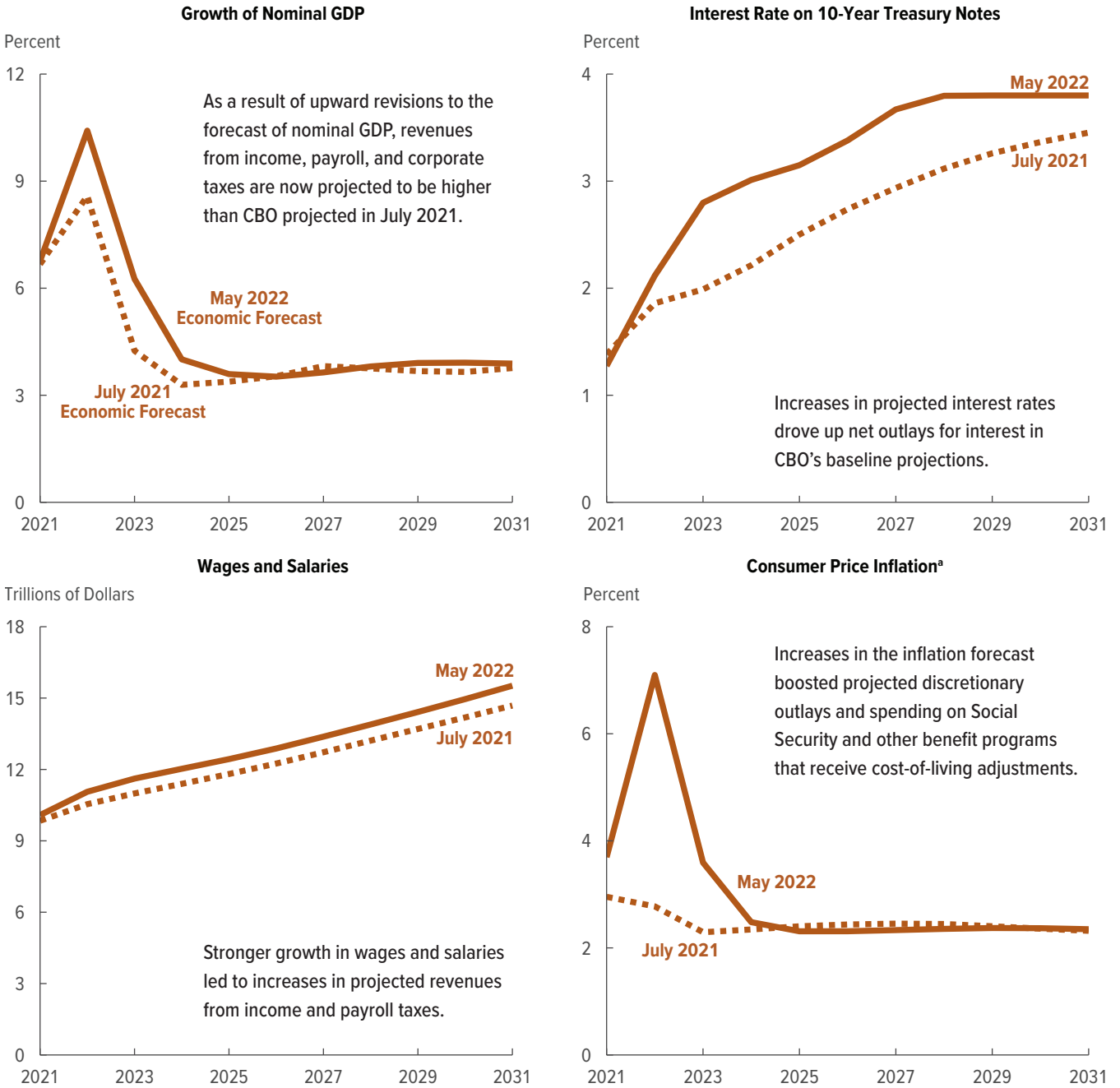
Medicaid and Medicare. CBO increased its projections of outlays for Medicaid over the 2022–2031 period by \$132 billion (or 2 percent) and its projections of outlays for Medicare in those years by \$76 billion (or 1 percent). Spending for those programs is affected by changes in the prices of labor, goods, and services.¹⁵ CBO's latest economic forecast includes upward revisions to the projected growth of wages and of many prices, which push up projected payment rates for Medicaid and for many of the services provided by Medicare's fee-for-service sector (such as hospital care and services provided by home health agencies and skilled nursing facilities).

Civilian and Military Retirement Annuities. CBO increased its projection of spending for federal employees' retirement annuities (civilian and military) over the 2022–2031 period by \$94 billion (or 5 percent). As with Social Security benefits, a COLA is applied to those

15. By law, many of Medicare's payment rates are also adjusted to account for gains in private nonfarm business productivity (the ability to produce the same output using fewer inputs, such as hours of labor) that occur over a 10-year period. See Centers for Medicare & Medicaid Services, "Market Basket Research and Information" (March 22, 2022), <https://go.usa.gov/xsB2D>. Upward revisions to CBO's forecast of productivity decreased projected Medicare spending, but they did so by a smaller amount than did the changes in prices.

Figure A-2.

Changes in CBO's Economic Forecast Since July 2021



Data source: Congressional Budget Office. See www.cbo.gov/publication/57950#data.

Data are for fiscal years.

GDP = gross domestic product.

a. As measured by the consumer price index for urban wage earners and clerical workers.



retirement annuities. Upward revisions to CBO's inflation projections boosted the COLA projections, which in turn increased projected outlays for those annuities.

Veterans' Benefits and Services. CBO increased its projections of spending for veterans' benefits and services over the 2022–2031 period by \$83 billion (or 5 percent). As was the case with Social Security, higher inflation projections gave rise to higher COLA projections that increased projected outlays for disability compensation.

Supplemental Nutrition Assistance Program. Economic changes increased CBO's projections of outlays for the Supplemental Nutrition Assistance Program (SNAP) over the 2022–2031 period by \$72 billion (or 9 percent). Most of that increase stems from upward revisions to CBO's projections of inflation in the prices of food.

Supplemental Security Income. CBO's projections of outlays for the Supplemental Security Income (SSI) program over the 2022–2031 period increased by \$38 billion (or 6 percent) since July 2021 because of changes the agency made to its economic forecast. Upward revisions to the agency's inflation projections pushed up its COLA projections, which in turn increased outlays for SSI benefits.

Child Nutrition. CBO's projections of outlays for the Child Nutrition program over the 2022–2031 period increased by \$27 billion (or 8 percent) since July 2021 because of changes the agency made to its economic forecast. As with SNAP, most of that increase stems from upward revisions to CBO's projections of inflation in the prices of food.

Other Mandatory Programs. CBO updated its projections of outlays for several other mandatory programs to reflect changes in its economic forecast. Although those changes resulted in both upward and downward adjustments to such spending, on net, they decreased projected outlays for the 2022–2031 period by a total of \$18 billion.

Discretionary Outlays. CBO's baseline projections generally reflect the assumption that funding for discretionary programs keeps pace with inflation. Increases in the agency's forecasts of certain measures of inflation drove up its projections of such funding over the 2022–2031 period. As a result, discretionary outlays over that period are now projected to be \$180 billion

(or 1 percent) greater than they were in CBO's previous baseline projections.

Net Interest Outlays. Economic changes boosted CBO's estimate of net interest outlays in 2022 by \$70 billion (or 23 percent) and its projections of such outlays from 2022 to 2031 by \$1.5 trillion (or 29 percent). The change in the estimate for this year is largely a result of higher inflation, which increases the cost of Treasury inflation-protected securities. The increase in the projections for the 2022–2031 period is largely attributable to upward revisions to the agency's forecasts of inflation and of interest rates on Treasury securities.

In all, changes stemming from revisions to CBO's economic forecast increased the projected cumulative deficit over the 2022–2031 period by \$0.9 trillion. As a result, the agency increased its projections of debt-service costs for the 2022–2031 period by \$146 billion because of those economic changes.

Changes in Revenues

As a result of changes it made to its economic forecast, CBO raised its estimate of revenues in 2022 by \$186 billion (or 4 percent) and its projections of revenues from 2022 to 2031 by \$2.1 trillion (or 4 percent). Increases in projections of factors that affect the size of the economy—including wages and salaries, proprietors' income, and corporate profits—spurred the increases in projected income and payroll taxes. CBO also raised its projections of imports, which boosted estimates of customs duties. Those increases were partially offset by decreases in CBO's projections of remittances by the Federal Reserve.

Individual Income Taxes. CBO raised its estimate of individual income tax revenues in 2022 by \$114 billion (or 5 percent) and its projections of such revenues over the 2022–2031 period by \$1.2 trillion (or 5 percent). The increase was driven largely by a 5 percent increase in projected wages and salaries over the projection period, owing to a stronger-than-anticipated recovery of the labor market and higher-than-expected inflation. Projections of proprietors' income also increased. Additionally, higher asset values in recent years boosted expected capital gains realizations and distributions from pensions.

Payroll Taxes. CBO's estimate of payroll tax revenues in 2022 increased by \$54 billion (or 4 percent); its

projections for the 2022–2031 period rose by \$802 billion (or 5 percent). The main drivers of those increases are upward revisions to estimates of wages and salaries and proprietors' income.

Federal Reserve Remittances. CBO revised its estimate of Federal Reserve remittances between 2022 and 2031 downward by \$430 billion. The central bank's interest expenses are now projected to rise sooner than they were projected to rise in July 2021, so its projected net profit is less.

Corporate Income Taxes. CBO raised its estimate of corporate income tax revenues in 2022 by \$23 billion (or 7 percent) and its projections of such revenues over the 2022–2031 period by \$372 billion (or 10 percent), mostly because of a \$1.2 trillion upward revision to its forecast of domestic profits over the 2022–2031 period. That increase in projected domestic profits was partially offset by a decrease in projected profits earned abroad by U.S. businesses over that period.

Other Revenues. CBO increased its projections of other revenues over the 2022–2031 period by a total of \$80 billion (or 3 percent). Its projections of receipts from customs duties and excise taxes in those years increased by a total of \$102 billion (or 6 percent) in response to higher projections of economic growth, imports, and taxable air travel. That increase was partially offset by a \$22 billion reduction in projected estate and gift tax receipts over the decade; although in recent years asset values were higher than expected, CBO projects that they will grow more slowly than previously anticipated.

Technical Changes

Technical changes—those revisions that are neither legislative nor economic—result from a variety of factors, including revisions made to CBO's population projections, the incorporation of new information or data from federal agencies, and changes made to the way programs are administered that affect federal spending and revenues. Technical changes reduced CBO's estimate of the deficit in 2022 by \$56 billion. Over the 2022–2031 period, deficits are now projected to be \$1.0 trillion smaller, on net, than they were projected to be in July 2021 because of technical changes—mostly increases in projected individual income and corporate tax receipts (see Table A-1 on page 112).

Changes in Revenues

CBO revised its estimate of revenues in 2022 upward by \$251 billion (or 6 percent) and its projection for the 2022–2031 period upward by \$1.3 trillion (or 2 percent) for technical reasons. New tax data and stronger-than-anticipated tax collections over the past year account for the most significant increases. CBO observes payments to the Treasury as they occur but does not receive detailed information on tax liabilities until as many as two years after payments have been made. As a result, there is frequently a discrepancy between estimates of tax liabilities based on available economic data and those based on recent collections. When the reasons for a discrepancy cannot be explained by changes in economic conditions or other measured phenomena, CBO treats the discrepancy as temporary and typically phases it out over several years in its projections.

Individual Income Taxes. Technical changes raised CBO's estimate of individual income tax receipts in 2022 by \$173 billion (or 7 percent) and its projections for the 2022–2031 period by \$790 billion (or 3 percent). CBO boosted projected receipts at the beginning of the period because recent tax collections have continued to be stronger than expected given current economic data and the agency's estimates of the budgetary effects of recently enacted legislation. Additionally, CBO revised upward its estimates of the amount of corporate business income taxed at the individual level throughout the projection period. That change reflects modeling refinements based on recent historical tax and economic data. Partially offsetting the upward adjustments to 2022 revenues was a reduction in the anticipated amount of payroll taxes that would be reallocated to individual income taxes in that year. (See the section on payroll taxes, below.)

Corporate Income Taxes. CBO has increased its estimate of corporate income tax revenues in 2022 by \$55 billion (or 17 percent) and its projections of such revenues over the 2022–2031 period by \$415 billion (or 11 percent). One reason for that increase is that since last spring, corporate tax collections have been stronger than can be explained by the data currently available to CBO. As a result, CBO revised upward its estimate of receipts in 2022 and in subsequent years. Those adjustments, which diminish over the projection period, total about \$100 billion from 2022 to 2031.

CBO also increased its projections of corporate tax revenues throughout the decade because it now anticipates that some of the recent strength in collections will be permanent. Those upward revisions, which total about \$300 billion over the decade, mostly result from three factors:

- CBO continued to refine its treatment of income and deductions from foreign corporations and branches, including how it estimates taxes collected on global intangible low-taxed income (GILTI). Specifically, CBO adjusted its estimates of foreign income received by U.S. firms and the associated deductions to better align with updated estimates that the Bureau of Economic Analysis released in July 2021. That change increased projections of corporate taxable income, thereby boosting projected net receipts.
- The agency adjusted its treatment of GILTI and the associated deduction in a manner consistent with recent tax data to better reflect the budgetary effects of that category of taxable income. Recent tax data indicate that income categorized as GILTI increases the share of positive profits for a given level of corporate net income, which further increases projected corporate receipts.
- CBO changed its projections of the adjustment made to account for misreporting on corporate income tax returns to better reflect recent estimates from the Bureau of Economic Analysis. That change increased the agency's projections of corporate tax receipts.

Payroll Taxes. CBO increased its estimate of payroll tax revenues in 2022 by \$19 billion (or 1 percent) and its projections for 2022 to 2031 by a total of \$35 billion (or less than 1 percent). The agency boosted its estimate for 2022 because it now expects that reallocations from payroll taxes to individual income taxes will be smaller than it previously anticipated. Amounts recorded by the Treasury as payroll taxes for 2020 were largely determined before the onset of the pandemic. The effects of subsequent declines in wages and new laws were recorded as reductions in individual income tax receipts in 2020. CBO previously anticipated that the Treasury would reallocate amounts between payroll taxes and individual income taxes in both 2021 and 2022, thereby reducing payroll revenues in those years. CBO now estimates that most of those reallocations already occurred in 2021. The revisions to CBO's projections of payroll tax revenues over the 2022–2031 period—which amount to less than 1 percent of payroll tax revenues in those years in

the agency's July 2021 baseline projections—result from incorporating newly available historical tax information into its estimates.

Other Revenues. Technical changes increased CBO's projections of other revenues from 2022 to 2031 by \$14 billion (or less than 1 percent). The most significant increase in other revenues was an increase of \$34 billion (or 4 percent) in projected receipts from customs duties over the next decade, reflecting updated estimates of the effects of administratively imposed tariffs. Additionally, the agency increased its projections of estate and gift tax receipts by \$15 billion (or 4 percent) to align those estimates with recently recorded collections, changes in mortality rates resulting from the pandemic, and other factors.

Those increases were partially offset by a net reduction of \$40 billion (or 4 percent) in excise tax revenues. Most significantly, CBO lowered its projections of receipts from taxes on alcohol and tobacco products from 2022 to 2031 by about \$17 billion because a recent court ruling allows many products in those categories to avoid excise taxes. Tobacco and alcohol products that would normally be subject to excise taxes may, as a result of the ruling, receive a drawback (or refund) of excise taxes based on a substitution drawback allowed for similar merchandise that is exported or destroyed even when no excise tax had been previously collected on that merchandise.

Changes in Outlays

Technical changes increased CBO's estimate of outlays in 2022 by \$194 billion (or 4 percent) and its projections of outlays over the 2022–2031 period by \$253 billion (or less than 1 percent). Changes to spending for mandatory programs account for about three-quarters of the technical changes that CBO made to its baseline projections of outlays since July 2021. Those changes stem mostly from revisions to projections of demographic or technical factors that underlie the agency's projections of mandatory spending (see Figure A-3). Increases to estimates of discretionary spending and reductions in projections of net interest costs account for the rest.

Mandatory Outlays. For technical reasons, CBO increased its estimates of spending this year for some programs and decreased them for others. On net, technical changes increased mandatory outlays for 2022 by \$151 billion (or 4 percent). Technical changes increased

CBO's projections of mandatory outlays over the 2022–2031 period by \$196 billion (or less than 1 percent).

Social Security. CBO lowered its estimate of outlays for Social Security this year by \$8 billion (or 1 percent) and its projections of such outlays over the 2022–2031 period by \$322 billion (or 2 percent) for technical reasons. Most of that reduction is attributable to two factors. First, the increase in mortality stemming from the coronavirus pandemic led CBO to lower its projections of the population age 65 or older; as a result, the agency's projections of outlays for Old-Age and Survivors Insurance are now lower than they were in July 2021. Second, CBO lowered its estimate of the number of people receiving Disability Insurance (DI) benefits over the 10-year projection period, primarily because in recent months far fewer new DI beneficiaries have begun receiving benefits than previously projected. Those changes partially offset the increases in projected outlays for Social Security stemming from the economic changes that are discussed above.

Supplemental Nutrition Assistance Program. CBO increased its estimate of outlays for SNAP this year by \$54 billion and its projections for the 2022–2031 period by \$266 billion (or 33 percent) for technical reasons. Changes in the Thrifty Food Plan (TFP) that resulted from the Department of Agriculture's recent reevaluation of the TFP for 2022 were the main source of those increases.¹⁶ (The TFP is a basket of foods selected by the Department of Agriculture that would provide a nutritious diet for a household of a particular size. The price of the TFP is used to determine SNAP benefit levels.) Largely as a result of that reevaluation, the price of the TFP is now about 23 percent higher than it was last year. The increases in projected outlays for SNAP in 2022 and 2023 also stem from additional SNAP allotments provided during the public health emergency and from additional benefits provided through the Pandemic Electronic Benefit Transfer program. (Including the economic changes discussed earlier, projected outlays for SNAP over the 2022–2031 period are now 41 percent greater than they were in CBO's July 2021 baseline projections.)

Premium Tax Credits and Related Spending. CBO and the staff of the Joint Committee on Taxation (JCT) increased their estimate of outlays for premium tax credits (which help defray the cost of obtaining health insurance) and related spending this year by \$11 billion (or 15 percent) and their projections of such spending over the 2022–2031 period by \$144 billion (or 22 percent) for technical reasons.¹⁷ Those increases are largely the result of increased projections of the number of people who receive federal subsidies to enroll in health insurance plans through the marketplaces established under the Affordable Care Act and of higher projected premiums for those plans. In addition, CBO and JCT now estimate that the average subsidy received by people enrolled in subsidized marketplace coverage will be larger than the agencies previously estimated, in part because of a change in the projected income distribution of marketplace enrollees.

Medicaid. CBO increased its estimate of outlays for Medicaid in 2022 by \$39 billion (or 8 percent) and its projections of such outlays over the 2022–2031 period by \$49 billion (or 1 percent). The increase in the near term is largely attributable to two factors. First, actual spending in 2021 was higher than expected. Second, CBO pushed back its estimate of when the public health emergency brought on by the coronavirus pandemic will end to July 2023; two provisions of previously enacted legislation that increased Medicaid outlays remain in effect for the duration of that emergency. As part of the Families First Coronavirus Response Act (P.L. 116-127), lawmakers increased the portion of the program's costs that the federal government must cover. To receive the enhanced federal funding, the law required states to maintain coverage for all Medicaid enrollees as long as the public health emergency continued, regardless of any changes in their income or circumstances that would otherwise have caused them to become ineligible for the program.

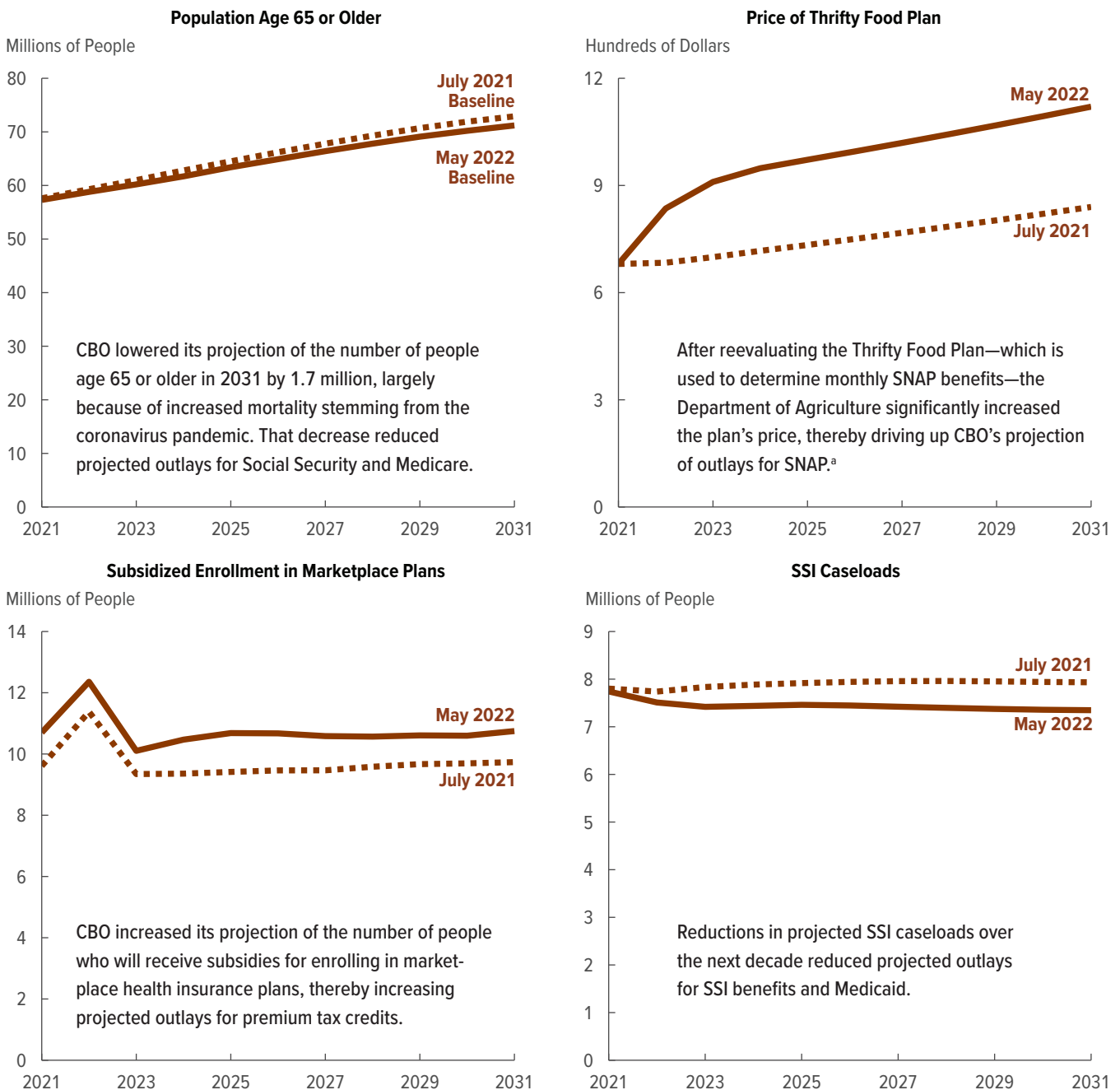
The reductions in spending in later years are attributable to smaller projected SSI caseloads, which result in lower projections of the number of SSI beneficiaries who are enrolled in Medicaid. SSI beneficiaries are typically automatically eligible for Medicaid. (Including the economic changes discussed earlier, projected outlays for Medicaid

16. See Department of Agriculture, Food and Nutrition Service, "USDA Modernizes the Thrifty Food Plan, Updates SNAP Benefits: First Update in More Than 45 Years Reflects Current Cost Realities" (August 16, 2021), www.fns.usda.gov/news-item/usda-0179.21.

17. Premium tax credits are federal subsidies for health insurance purchased through the marketplaces established by the Affordable Care Act. Related spending consists almost entirely of payments for risk adjustment and the Basic Health Program.

Figure A-3.

Changes in CBO's Technical Projections Since July 2021



Data source: Congressional Budget Office. See www.cbo.gov/publication/57950#data.

SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income.

a. The increase in the price of the Thrifty Food Plan also reflects upward revisions to CBO's projections of inflation in the prices of food. Although the increase in the forecast of food prices is significant, most of the change in the price of the Thrifty Food Plan stems from the Department of Agriculture's reevaluation.

over the 2022–2031 period are now 3 percent greater than CBO projected in July 2021.)

Medicare. Technical changes increased CBO’s estimate of outlays for Medicare in 2022 by \$19 billion (or 3 percent) and its projections of such outlays over the 2022–2031 period by \$43 billion (or less than 1 percent). Outlays for prescription drugs and Medicare Advantage plans in 2021 were higher than expected, so CBO increased its projections of such outlays. In addition, such spending is now anticipated to grow more rapidly than CBO projected in July 2021. Lower projections of Medicare enrollment partially offset that increase. Enrollment over the 2022–2031 period is 2 percent lower in CBO’s current projections than it was in the agency’s previous projections because mortality rates increased during the pandemic.

Supplemental Security Income. CBO lowered its estimate of outlays for Supplemental Security Income for this year by \$3 billion (or 5 percent) and its projections for the 2022–2031 period by \$42 billion (or 6 percent) for technical reasons. Most of those reductions stem from a larger-than-anticipated decline in caseloads. The technical changes offset much of the effect of the economic changes affecting SSI that are discussed above.

Coronavirus Relief Fund. CBO increased its estimate of outlays for direct assistance to state, local, tribal, and territorial governments in response to the pandemic in 2022 by \$38 billion and its projections of such spending over the 2022–2031 period by \$41 billion. Outlays in 2021 from the fund were less than expected, so CBO shifted spending to later years in its projections, thereby increasing its estimate for 2022 and, by much smaller amounts, its projections for 2023 and 2024.

Revisions to the Costs of Credit Programs. Changes recorded by the Administration to the subsidy costs of loans and loan guarantees made before 2022 under federal credit programs other than student loan programs (which are discussed below) caused CBO’s estimate of mandatory outlays in 2022 to drop by \$32 billion. The largest of those changes are as follows: a \$22 billion reduction in the cost of loan guarantees provided by the Federal Housing Administration, a \$4 billion reduction in the cost of the Treasury Department’s Economic Stabilization Program, and a \$4 billion reduction in the cost of certain disaster loan programs run by the Small Business Administration.

Earned Income and Child Tax Credits. CBO increased its estimate of total outlays for the earned income tax credit (EITC) and the child tax credit (CTC) in 2022 by \$24 billion and its projections of such outlays over the 2022–2031 period by \$29 billion. The increase in the estimate for 2022 is the result of higher-than-expected CTC outlays in the first half of fiscal year 2022 that are partially offset by lower-than-expected EITC outlays over the same period.

Student Loans. CBO’s estimate of outlays for student loan programs in 2022 is now \$34 billion higher than it was in July 2021. The largest source of that increase, \$23 billion, stems from revisions that the Department of Education made to the estimated subsidy costs of outstanding loans that were issued before 2022. An additional \$4 billion in costs results from pandemic-related administrative actions, which included suspending repayment, interest accrual, and involuntary collections on student loans until the end of August 2022; those costs are partially offset by savings related to the shift of default collection activities to Federal Student Aid’s Business Process Operations vendors.¹⁸

Other Mandatory Programs. Smaller technical changes decreased CBO’s estimate of outlays for other mandatory programs in 2022 by \$24 billion and its projections of outlays for such programs over the 2022–2031 period by \$8 billion.

Discretionary Outlays. Technical changes increased CBO’s estimate of discretionary outlays in 2022 by \$19 billion (or 1 percent) and its projections over the 2022–2031 period by \$79 billion (or 1 percent). The two largest changes are increases in outlays for the Public Health and Social Services Emergency Fund (PHSSEF) of the Department of Health and Human Services and in outlays for the Federal Emergency Management Agency’s Disaster Relief Fund (DRF). In 2021, outlays from both funds were smaller than expected, so CBO shifted spending to later years in its baseline projections, thereby increasing estimates of such outlays over the next decade. Estimated outlays for the PHSSEF in 2022 rose by \$35 billion, and projected outlays from 2022 to 2031, by a total of \$63 billion. For the DRF, estimated outlays

18. Although the administrative actions are set to continue through August 2022, the Administration’s recorded costs of those actions—which CBO uses in its projections—reflect the costs only through May 1, 2022.

in 2022 increased by \$7 billion, and projected outlays over the 10-year period rose by \$43 billion.

Those increases in outlays were partially offset by a \$7 billion reduction in outlays for IIJA-funded programs in 2022 and by a \$32 billion reduction in such outlays over the 2022–2031 period. Information from the Administration indicates that spending for those programs will occur more slowly than CBO originally estimated.

Net Interest Outlays. Technical changes decreased CBO's projections of net interest outlays for the 2022–2031 period by \$35 billion (or less than 1 percent). Because the Treasury's ability to borrow was limited by

the statutory debt ceiling, debt held by the public at the end of 2021 was lower than CBO forecast. That lower amount of debt at the end of 2021 led to a \$28 billion decrease in net interest costs over the 10-year period. Other technical changes reduced net interest outlays by \$8 billion.

All told, technical changes to revenues and noninterest outlays reduced CBO's projections of debt held by the public in 2031 by \$1.0 trillion. However, because of increases in debt in the earlier years of the projection period, those technical changes increased the cost of servicing debt over the 2022–2031 period by an estimated \$13 billion.