



Appendix:

Changes in CBO's Baseline Projections

Overview

The Congressional Budget Office estimates that if no new legislation affecting spending and revenues is enacted, the budget deficit for fiscal year 2020 will total \$3.3 trillion. That amount is \$2.2 trillion more than the \$1.1 trillion deficit the agency estimated in March 2020, when it last updated its baseline budget projections—a difference mostly attributable to the enactment of new legislation (see Figure A-1).¹ CBO also now projects that if current laws generally remained in place, the cumulative deficit for the 2021–2030 period would be \$13.0 trillion. That amount is \$0.1 trillion less than the \$13.1 trillion in the agency's March 2020 baseline projections, reflecting a decrease stemming from economic changes that more than offsets increases from legislative and technical changes.

When CBO updates its baseline budget projections, it classifies the revisions it makes as either legislative, economic, or technical changes:

- 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 at the time the legislation was enacted.² The 2020 coronavirus pandemic has, however, continued to affect many of the factors underlying CBO's original cost estimates of legislation enacted since March 2020. For certain programs, including the Paycheck Protection Program (PPP) and the expansion of unemployment benefits, the agency updated its assessment of the

effects of that legislation and incorporated the results in the baseline projections presented here.³

- Economic changes arise from changes 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.⁵

The \$2.2 trillion increase in the estimated deficit for 2020 is the net result of the following changes:

- A \$2.3 trillion increase attributable to legislative changes stemming primarily from laws enacted to

1. See Congressional Budget Office, *Baseline Budget Projections as of March 6, 2020* (March 2020), www.cbo.gov/publication/56268.

2. The baseline projections described in this report incorporate legislation enacted through August 4, 2020. The most recently enacted law with significant budgetary effects reflected in this analysis is the Great American Outdoors Act (Public Law 116-152).

3. CBO does not ordinarily update cost estimates for enacted legislation when economic and technical factors change after enactment. Doing so is often difficult, particularly when the budgetary effects of that legislation cannot be separately identified. However, in preparing its baseline projections for this report, the agency had enough new information to update its estimates for some components of legislation enacted since March. For those components, CBO has incorporated updates to the originally estimated costs.

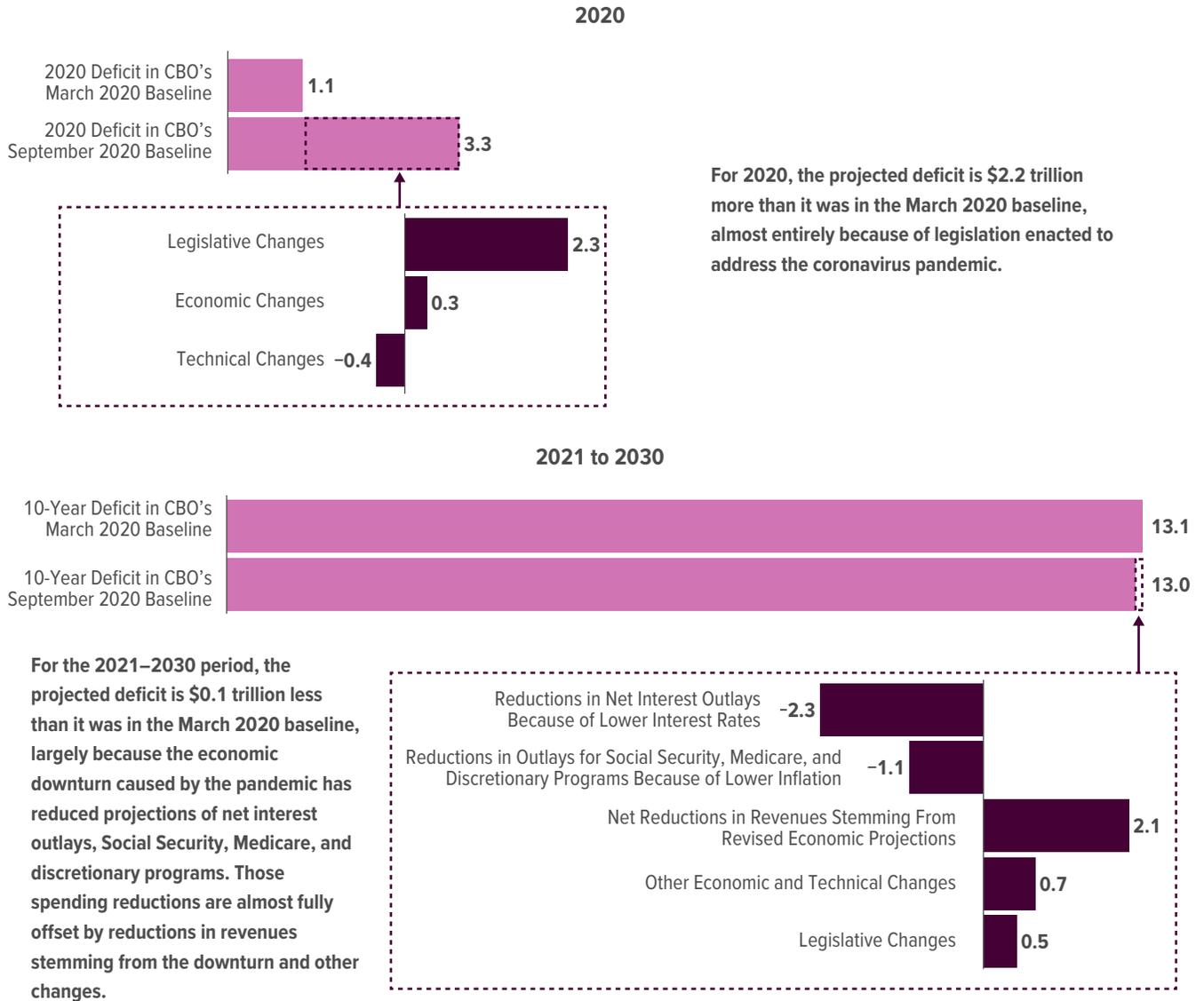
4. The current projections are based on CBO's latest economic forecast, which was completed on June 26 and reflects the agency's estimates of the effects on the economy of legislation enacted before that date. For further explanation of the revisions to the agency's economic forecast, see Congressional Budget Office, *An Update to the Economic Outlook: 2020 to 2030* (July 2020), www.cbo.gov/publication/56442. The economic changes discussed in this report reflect differences between that forecast and CBO's January 2020 forecast. For more details on that earlier forecast, see Congressional Budget Office, *The Budget and Economic Outlook: 2020 to 2030* (January 2020), www.cbo.gov/publication/56020.

5. The projections do not reflect the budgetary effects of tariffs the United States reimposed on imports of aluminum from Canada beginning on August 6, nor do they account for the four administrative actions announced by the President on August 8, 2020.

Figure A-1.

Changes in CBO’s Baseline Projections of Deficits Since March 6, 2020

Trillions of Dollars



Source: Congressional Budget Office.

CBO’s March 2020 baseline incorporated the effects of legislation enacted through March 6, 2020, including the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 (Public Law 116-123, enacted on March 6, 2020).

The current baseline includes three major laws enacted in response to the 2020 coronavirus pandemic that were not incorporated into CBO’s March 2020 baseline. Those three laws are the Families First Coronavirus Response Act (P.L. 116-127, enacted on March 18, 2020); the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136, enacted on March 27, 2020); and the Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139, enacted on April 24, 2020).

For the 2021–2030 period, the costs or savings in debt service resulting from the changes in deficits are included in the categories “Legislative Changes” and “Other Economic and Technical Changes.”

address the coronavirus pandemic and the resulting economic disruption,

- A \$0.3 trillion increase resulting from economic changes, and
- A \$0.4 trillion decrease attributable to technical changes (see Table A-1).

The \$0.1 trillion decrease in the agency's projected cumulative deficit for the 2021–2030 period stems from the following changes:

- Legislative changes *increased* projected deficits by \$0.5 trillion, primarily because of increases in outlays resulting from provisions of legislation enacted to address the coronavirus pandemic and the resulting economic downturn.
- Economic changes *reduced* deficits by \$1.4 trillion. Most significantly, the agency revised its projections of interest costs downward by \$2.3 trillion because it lowered its forecasts of interest rates considerably. That reduction more than offset the projected increase in deficits resulting from the lower revenues associated with lower projections of gross domestic product (GDP).
- Technical changes in the agency's projections of revenues and outlays *increased* projected deficits over the period by a total of \$0.8 trillion, on net. The single largest technical revision was a decrease of \$0.3 trillion in CBO's projections of individual income tax revenues.

As a result of those revisions, projected deficits over the 2021–2030 period are almost unchanged from CBO's March projections. *Primary* deficits—that is, deficits excluding net outlays for interest—are now projected to be a total of \$2.1 trillion more than they were in CBO's March 2020 baseline projections. That increase in primary deficits is, however, fully offset by a reduction of \$2.2 trillion in the agency's projections of interest costs over that same period.

In March, the agency projected that debt held by the public would be \$31.3 trillion (equal to 98 percent of GDP) at the end of 2030. CBO now projects that such debt would reach \$33.5 trillion (or 109 percent of GDP) by the end of that year if current laws generally

remained unchanged. That increase in projected debt is mostly driven by the large rise in the 2020 deficit. Additionally, the ratio of debt to GDP is projected to be higher throughout the 10-year projection period, partly because GDP is now expected to be lower than previously anticipated.

Legislative Changes

To account for legislation enacted after March 6, 2020, CBO increased its estimate of the deficit for 2020 by \$2.3 trillion and increased projected deficits over the 2021–2030 period by a total of \$0.5 trillion. Nearly all of those increases stem from legislation enacted to address the coronavirus pandemic and the related economic downturn. Over the 2020–2030 period, that legislation is projected to increase deficits by \$2.6 trillion—boosting outlays by \$2.2 trillion and decreasing revenues by \$0.4 trillion (see Figure A-2 on page 32).⁶

Changes in Outlays Stemming From Legislation to Address the Coronavirus Pandemic and the Related Economic Downturn

Since March 6, 2020, lawmakers have enacted three major laws in response to the coronavirus pandemic:⁷

- The Families First Coronavirus Response Act (FFCRA, Public Law 116-127, enacted on March 18, 2020);
- The Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136, enacted on March 27, 2020); and
- The Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139, enacted on April 24, 2020).

6. The Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136) authorized the Secretary of the Treasury to provide up to \$454 billion to fund emergency lending facilities established by the Board of Governors of the Federal Reserve System. However, because the income and costs stemming from that lending are expected to roughly offset each other, CBO estimates that the provision will have little effect on the deficit.

7. The effects of the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 (P.L. 116-123) are not included here because that law was enacted on March 6, 2020, and thus its effects were incorporated into CBO's March 2020 baseline.

Table A-1.

Changes in CBO's Baseline Projections Since March 6, 2020

Billions of Dollars

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
												2021–	2021–
												2025	2030
Deficit in CBO's March 2020 Baseline	-1,073	-1,002	-1,118	-1,114	-1,141	-1,306	-1,325	-1,311	-1,543	-1,472	-1,760	-5,681	-13,091
Legislative Changes													
Changes in Revenues ^a													
Individual income taxes	-462	-256	184	179	2	2	2	1	1	*	*	111	114
Corporate income taxes	-75	-6	2	3	7	11	11	7	5	2	3	17	45
Payroll taxes	3	*	-1	-1	-1	*	*	*	*	*	*	-2	-4
Other	-4	-2	0	0	*	*	*	*	*	*	*	-2	-2
Total Change in Revenues	-539	-264	186	182	9	12	12	8	5	2	2	124	153
Changes in Outlays													
Mandatory outlays													
Amounts in cost estimates ^a	1,451	116	4	2	2	1	3	3	3	12	-34	125	111
Updates in baseline	94	51	58	5	*	*	*	*	*	*	*	114	113
Subtotal, mandatory	1,546	167	62	7	2	1	2	3	2	12	-34	239	224
Discretionary outlays													
Amounts in cost estimates	193	175	62	17	11	5	2	1	*	*	*	270	273
Updates in baseline	38	-34	-25	-3	-1	3	3	4	4	4	4	-59	-40
Subtotal, discretionary	231	141	38	15	10	8	5	5	5	5	5	211	233
Debt service													
Effects of costs as originally estimated	2	6	7	7	8	9	12	16	24	33	44	38	167
Effects of updates in baseline	*	*	*	1	1	1	1	1	2	3	4	3	14
Subtotal, debt service	2	7	8	8	9	10	13	18	26	35	47	41	181
Total Change in Outlays	1,779	315	108	30	20	18	20	25	33	52	18	490	638
Increase (-) or Decrease in the Deficit From Legislative Changes	-2,317	-579	78	152	-12	-6	-8	-17	-28	-50	-15	-367	-485
Economic Changes													
Changes in Revenues													
Individual income taxes	-111	-195	-201	-187	-176	-161	-140	-125	-119	-122	-127	-919	-1,551
Payroll taxes	-89	-76	-49	-55	-62	-70	-67	-66	-68	-72	-73	-311	-656
Corporate income taxes	-30	-46	-42	-36	-34	-30	-24	-19	-16	-15	-15	-188	-277
Other	7	30	53	62	69	72	72	52	26	3	-31	286	407
Total Change in Revenues	-223	-287	-239	-216	-203	-188	-160	-158	-177	-205	-245	-1,132	-2,077
Changes in Outlays													
Mandatory outlays													
Social Security	0	-14	-31	-43	-51	-56	-60	-66	-68	-71	-75	-196	-536
Medicare	0	-4	-10	-15	-20	-27	-31	-35	-41	-40	-46	-76	-269
Unemployment compensation	128	51	32	24	16	9	4	*	-3	-4	-4	132	126
Medicaid	2	13	5	-1	-7	-11	-15	-19	-22	-23	-24	-2	-106
Veterans' benefits and services	*	-1	-3	-4	-5	-5	-6	-6	-7	-6	-7	-19	-51
Other	6	11	7	5	2	-2	-5	-7	-9	-9	-10	24	-16
Subtotal, mandatory	136	56	*	-36	-65	-93	-113	-132	-149	-154	-166	-137	-851
Discretionary outlays	*	*	-9	-18	-24	-29	-32	-34	-36	-36	-37	-80	-254
Net interest													
Effect of interest rates and inflation	-45	-102	-150	-200	-244	-280	-303	-309	-290	-253	-205	-976	-2,336
Debt service	*	1	2	2	2	1	-1	-4	-8	-14	-21	8	-40
Subtotal, net interest	-44	-101	-148	-198	-242	-279	-304	-312	-299	-268	-225	-968	-2,376
Total Change in Outlays	92	-45	-157	-252	-331	-401	-449	-479	-483	-457	-428	-1,185	-3,481
Increase (-) or Decrease in the Deficit From Economic Changes	-316	-242	-82	35	129	213	289	321	307	252	183	53	1,404

Table A-1.

Continued

Changes in CBO's Baseline Projections Since March 6, 2020

Billions of Dollars

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
												2021– 2025	2021– 2030
Technical Changes													
Changes in Revenues													
Individual income taxes	315	118	-158	-175	-23	-18	-11	-16	-14	-14	-13	-256	-324
Corporate income taxes	23	-82	-18	-11	-17	-20	-19	-15	-11	-7	-7	-148	-207
Payroll taxes	97	-35	-24	3	3	-6	-8	-10	-10	-10	-13	-59	-110
Other	-10	-10	-8	-8	-4	-8	-9	-11	-12	-15	-10	-38	-94
Total Change in Revenues	425	-8	-208	-190	-42	-53	-47	-51	-47	-45	-43	-501	-735
Changes in Outlays													
Mandatory outlays													
SNAP	2	10	14	12	14	17	19	21	19	16	12	67	154
Unemployment compensation	30	13	-1	-8	-9	-7	-8	-8	-9	-9	-9	-12	-55
Social Security	*	3	8	13	15	14	11	6	*	-6	-12	53	52
Premium tax credits and related spending	2	4	-2	-5	-5	-8	-10	-10	-10	-10	-10	-16	-67
Supplemental Security Income	*	1	3	4	5	6	6	6	6	4	4	19	46
Earned income and child tax credits	-4	1	9	6	6	6	4	4	3	3	4	27	45
Veterans' benefits and services	2	3	4	4	4	4	4	4	4	3	4	19	37
Medicare	-25	-32	-5	5	4	5	5	4	7	-15	-5	-23	-27
Other	17	-10	-10	-8	-5	-3	-2	-3	-4	-6	-9	-35	-59
Subtotal, mandatory	24	-8	21	23	29	33	31	23	17	-19	-23	98	126
Discretionary outlays	8	-1	-3	-5	-3	-3	-1	1	1	1	1	-16	-14
Net interest													
Debt service	1	-1	-1	1	1	2	2	3	4	7	9	2	27
Other	-3	-11	-11	-12	-12	-10	-7	-4	*	3	5	-56	-59
Subtotal, net interest	-2	-12	-12	-11	-10	-8	-5	-2	4	10	14	-53	-32
Total Change in Outlays	30	-21	6	6	15	22	25	22	22	-8	-9	28	80
Increase (-) or Decrease in the Deficit From Technical Changes	396	12	-214	-197	-56	-75	-72	-73	-69	-37	-35	-529	-815
All Changes													
Increase (-) or Decrease in the Deficit	-2,237	-809	-218	-9	60	132	209	230	210	165	133	-843	104
Deficit in CBO's September 2020 Baseline	-3,311	-1,810	-1,336	-1,124	-1,081	-1,174	-1,116	-1,080	-1,333	-1,306	-1,627	-6,524	-12,987
Memorandum:													
Changes in Revenues	-337	-559	-261	-225	-236	-228	-195	-201	-219	-248	-286	-1,509	-2,659
Changes in Outlays	1,900	249	-43	-215	-296	-361	-404	-432	-428	-414	-419	-666	-2,763
Increase (-) in the Primary Deficit ^b	-2,282	-914	-370	-210	-183	-145	-87	-66	-59	-57	-31	-1,823	-2,123
Decrease in Net Interest	45	105	152	201	244	277	296	296	268	222	164	979	2,227

Source: Congressional Budget Office.

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

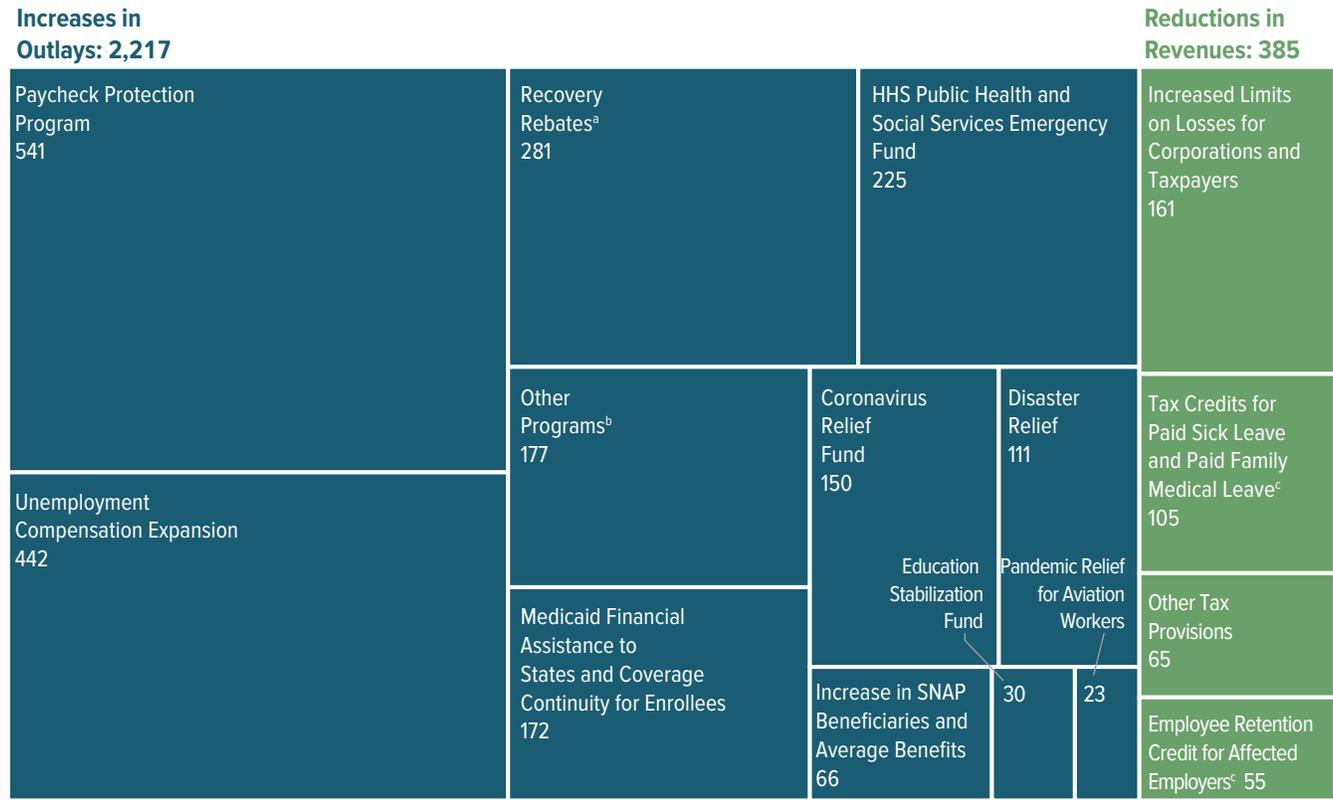
a. Because of how the Treasury is recording the effects of certain provisions of new laws, CBO has adjusted some estimates to include amounts as increases in outlays that were shown in initial cost estimates as reductions in revenues and vice versa. Those shifts have no effect on the deficit.

b. Primary deficits exclude net outlays for interest.

Figure A-2.

Deficit Increases Over the 2020–2030 Period From Legislation Enacted to Address the Coronavirus Pandemic, by Major Provision

Billions of Dollars



Total Increase in the Deficit: 2,603

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

The figure includes the effects of the three major laws enacted in response to the 2020 coronavirus pandemic that were not incorporated into CBO’s March 2020 baseline. Those laws are the Families First Coronavirus Response Act (Public Law 116-127, enacted on March 18, 2020); the Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136, enacted on March 27, 2020); and the Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139, enacted on April 24, 2020). The effects of the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 (P.L. 116-123, enacted on March 6, 2020) were included in CBO’s March 2020 baseline and thus are not reflected in the figure.

The CARES Act authorized the Secretary of the Treasury to provide up to \$454 billion to fund emergency lending facilities established by the Board of Governors of the Federal Reserve System. However, because the income and costs stemming from that lending are expected to roughly offset each other, CBO estimates that the provision will have little effect on the deficit.

HHS = Health and Human Services; SNAP = Supplemental Nutrition Assistance Program.

- a. In CBO’s initial estimate of the recovery rebates, the deficit effect was split almost evenly between an increase in outlays and a reduction in revenues. Because the Treasury is recording those rebates almost entirely as outlays, CBO has adjusted its projections accordingly. That shift from a reduction in revenues to an increase in outlays has no effect on the deficit.
- b. In this figure, “Other Programs” includes the effects of the Medicare accelerated payments shown in Table A-2.
- c. In CBO’s initial estimate of the costs of the payroll tax credits related to paid leave and employee retention, a portion of the deficit effect was shown as an increase in outlays. Because the Treasury is recording those credits almost entirely as a reduction in revenues, CBO has adjusted its projections accordingly. That shift from an increase in outlays to a reduction in revenues has no effect on the deficit.

CBO projects that outlays stemming from the provisions of that legislation will total \$1.8 trillion in 2020 and \$0.4 trillion between 2021 and 2030 (see Table A-2). Those legislative changes reflect both the original cost estimates produced by CBO and the staff of the Joint Committee on Taxation (JCT) and CBO's baseline updates of the effects of certain components of the legislation. The baseline updates reflect new information about the ways in which the laws have been implemented, actual outlays observed so far this year, and changes to the agency's economic forecast. Those updates increase projected deficits over the 11 years by about \$0.2 trillion relative to the effects estimated by CBO and JCT when the laws were enacted.⁸

Most of the added spending is for mandatory programs. CBO estimates that the new laws will increase mandatory outlays by \$1.5 trillion this year and \$0.2 trillion over the 2021–2030 period. Most of that spending is for the PPP, an expansion of unemployment compensation, and recovery rebates.⁹

In addition, the new legislation enacted in response to the coronavirus pandemic provided \$471 billion in discretionary funding that was designated as an emergency requirement.¹⁰ The largest appropriations, amounting to \$351 billion, were for the Health and Human Services (HHS) Public Health and Social Services Emergency Fund, disaster relief, and the Education Stabilization Fund, which are discussed below. Outlays from those appropriations will amount to \$185 billion this year

8. Because of how the Treasury is recording the effects of certain provisions of new laws, CBO has adjusted some estimates to include amounts as increases in outlays that were shown in initial cost estimates as reductions in revenues and vice versa. Those shifts have no effect on the deficit.
9. Mandatory outlays consist primarily of payments for benefit programs, such as Social Security, Medicare, and Medicaid. The Congress largely determines funding for those programs by setting rules for eligibility, benefit formulas, and other parameters rather than by appropriating specific amounts each year.
10. Discretionary outlays result from the funding controlled by appropriation acts in which policymakers specify how much money can be obligated for certain government programs in specific years. Because of the unusual size and nature of that funding, CBO, after consulting with the House and Senate Committees on the Budget, did not extrapolate the funding in its projections. Laws governing how CBO constructs its baseline projections would otherwise have required the agency to include that amount of funding, adjusted for inflation, in each year of the projection period.

and to \$162 billion over the 2021–2030 period, CBO estimates. The remaining \$120 billion in discretionary funding provided by lawmakers in response to the pandemic will increase outlays by \$46 billion this year and by \$72 billion over the 2021–2030 period, CBO projects. Roughly 30 percent of that funding was for transportation programs, 16 percent was for veterans' programs (mostly medical care), and most of the rest was for defense, agriculture, housing, and income security programs.

Paycheck Protection Program. CBO projects that the PPP will increase outlays by \$541 billion this year. Administered by the Small Business Administration (SBA), the PPP was established to provide guarantees of loans of up to \$10 million to small businesses, non-profit organizations, independent contractors, and other eligible entities. PPP loans are primarily for maintaining existing payrolls over 24 weeks following the loans' disbursement.¹¹ The full principal amount and any accrued interest on a PPP loan may be forgiven, although the amount that may be forgiven diminishes under certain circumstances if a borrower decreases the number of employees on its payroll or reduces employees' compensation. CBO anticipates that most of those loans will ultimately be forgiven. Amounts that are not forgiven must be repaid to lenders within two or five years at an interest rate of 1 percent.

The demand for PPP loans suggests that the amount allocated to the program was more than sufficient to provide loans to the businesses that wanted them. At the beginning of the program, businesses requested an average of \$28 billion in PPP loans each day, but demand for the loans had declined to about \$200 million per day by mid-July. In addition, the SBA's authority to guarantee PPP loans expired on August 9, 2020. Thus, CBO now projects \$130 billion less in outlays for the PPP than it originally anticipated.¹²

11. Borrowers that received a PPP loan before June 5, 2020, have the option to choose an 8-week forgiveness period rather than a 24-week forgiveness period. All PPP loans borrowed on or after June 5, 2020, include only the 24-week forgiveness period.

12. See Congressional Budget Office, cost estimate for H.R. 748, the CARES Act, P.L. 116-136 (April 16, 2020, revised April 27, 2020), www.cbo.gov/publication/56334, and cost estimate for H.R. 266, the Paycheck Protection Program and Health Care Enhancement Act (April 22, 2020), www.cbo.gov/publication/56338.

Table A-2.

Effects on Outlays of Legislation Enacted to Address the Coronavirus Pandemic and Economic Downturn

Billions of Dollars

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total	
												2021–	2021–
												2025	2030
Paycheck Protection Program	541	0	0	0	0	0	0	0	0	0	0	0	0
Unemployment Compensation Expansion													
FPUC - Additional \$600 per week	286	5	0	0	0	0	0	0	0	0	0	5	5
PUA - Eligibility expansion	67	14	0	0	0	0	0	0	0	0	0	14	14
PEUC - Additional 13 weeks of coverage	11	48	0	0	0	0	0	0	0	0	0	48	48
Other	6	5	0	0	0	0	0	0	0	0	0	5	5
Subtotal, unemployment compensation	370	71	0	0	0	0	0	0	0	0	0	71	71
Recovery Rebates ^a	272	9	0	0	0	0	0	0	0	0	0	9	9
Coronavirus Relief Fund	150	*	0	0	0	0	0	0	0	0	0	*	*
HHS Public Health and Social Services													
Emergency Fund	135	73	10	4	1	1	0	0	0	0	0	89	89
Medicaid Financial Assistance to States and Coverage Continuity for Enrollees	41	79	47	5	0	0	0	0	0	0	0	132	132
Disaster Relief	58	15	3	4	4	4	5	5	5	5	5	31	53
Medicare Accelerated Payments	47	-46	0	0	0	0	0	0	0	0	0	-46	-46
Increase in SNAP Beneficiaries and Average Benefits	24	33	8	0	0	0	0	0	0	0	0	41	41
Pandemic Relief for Aviation Workers	28	1	*	*	-1	-1	-1	-1	-1	-1	-1	-1	-5
Education Stabilization Fund	11	11	6	1	1	*	*	0	0	0	0	18	19
Other Programs	99	62	24	7	4	2	1	1	1	11	-35	99	76
Total	1,777	307	99	21	10	6	5	4	4	14	-32	444	440

Source: Congressional Budget Office.

The table includes the effects of the three major laws enacted in response to the 2020 coronavirus pandemic that were not incorporated into CBO's March 2020 baseline. Those three laws are the Families First Coronavirus Response Act (Public Law 116-127, enacted on March 18, 2020); the Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136, enacted on March 27, 2020); and the Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139, enacted on April 24, 2020). The effects of the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 (P.L. 116-123, enacted on March 6, 2020) were included in CBO's March 2020 baseline and thus are not reflected in the table.

The CARES Act authorized the Secretary of the Treasury to provide up to \$454 billion to fund emergency lending facilities established by the Board of Governors of the Federal Reserve System. However, because the income and costs stemming from that lending are expected to roughly offset each other, CBO estimates that the provision will have little effect on the deficit.

FPUC = Federal Pandemic Unemployment Compensation; HHS = Health and Human Services; PEUC = Pandemic Emergency Unemployment Compensation; PUA = Pandemic Unemployment Assistance; SNAP = Supplemental Nutrition Assistance Program; * = between -\$500 million and \$500 million.

a. In CBO's initial estimate of the recovery rebates, the deficit effect was split almost evenly between an increase in outlays and a reduction in revenues. Because the Treasury is recording those rebates almost entirely as outlays, CBO has adjusted its projections accordingly. That shift from an increase in outlays to a reduction in revenues has no effect on the deficit.

Expansion of Unemployment Compensation. Legislation enacted in response to the coronavirus pandemic significantly expanded unemployment compensation by increasing the amount of the benefits, enlarging the pool of eligible workers, and extending the length of time that beneficiaries receive benefits. CBO estimates that the cost of the expansion will total \$370 billion in 2020 and \$71 billion in 2021.

Specifically, three major new programs were created:

- **Federal Pandemic Unemployment Compensation (FPUC)** provided an additional \$600 each week to beneficiaries who receive regular or extended unemployment compensation benefits, trade readjustment allowances, short-time compensation (which provides benefits to workers who, instead of being laid off, are offered the opportunity to work reduced hours), Pandemic Unemployment Assistance benefits, or Pandemic Emergency Unemployment Compensation for weeks of unemployment ending on or before July 31, 2020. CBO projects that FPUC will increase outlays by \$286 billion in 2020 and by \$5 billion in 2021.
- **Pandemic Unemployment Assistance (PUA)** provides weekly benefits to the self-employed and others who are working less, or not at all, for reasons related to the pandemic and who are otherwise ineligible for unemployment compensation benefits. PUA pays benefits for up to 39 weeks beginning on or after January 27, 2020, and ending on or before December 31, 2020. CBO estimates that PUA will increase outlays by \$67 billion in 2020 and by \$14 billion in 2021.
- **Pandemic Emergency Unemployment Compensation (PEUC)** provides up to 13 additional weeks of benefits for people who have exhausted regular state and federal unemployment insurance benefits. The benefit amount is the same as the amount a beneficiary would receive as regular unemployment benefits. PEUC is projected to increase outlays by \$11 billion in 2020 and by \$48 billion in 2021.

CBO estimates that the expansion of unemployment compensation will cost \$151 billion more in 2020, and \$23 billion more in 2021, than anticipated in the agency's April 2020 cost estimate.¹³ The agency raised its

projections of those outlays because it now expects more people to collect unemployment compensation than it did when the preliminary estimates were produced.

Two factors have increased CBO's projection of the number of FPUC beneficiaries, thus increasing its estimate of the cost of that program by \$114 billion this year and by \$5 billion in 2021. First, the agency has raised its forecast of the unemployment rate, resulting in more projected beneficiaries of the program. Second, significantly more beneficiaries have enrolled in PUA than originally projected. Because PUA beneficiaries also receive FPUC, that change has resulted in an increase in the projected number of FPUC beneficiaries.

Because eligibility requirements for PUA were not as strict as first anticipated, there have been many more beneficiaries enrolled in the program than CBO originally projected. As a result, CBO now projects that the costs of PUA will be \$37 billion more this year, and \$9 billion more in 2021, than the agency originally estimated.

CBO has reduced its projection of outlays for PEUC by \$1 billion in 2020 and increased it by \$9 billion in 2021. Those adjustments are based on actual outlays to date, as well as updated caseload projections for other programs.

Recovery Rebates. For tax year 2020, lawmakers created a refundable tax credit of \$1,200 per person (\$2,400 for joint filers), plus \$500 for each dependent child under the age of 17. The credit phases out for taxpayers whose adjusted gross income exceeds \$75,000 (\$150,000 for joint filers; \$112,000 for head-of-household filers). CBO projects that those recovery rebates will increase outlays by \$272 billion in 2020 and by \$9 billion in 2021 (and anticipates that the rebates will reduce revenues by \$11 billion in 2021).¹⁴ In its estimates, the agency has shifted \$3 billion of outlays from 2021 to 2020 to reflect actual spending so far this year.

13. See Congressional Budget Office, cost estimate for H.R. 748, the CARES Act, P.L. 116-136 (April 16, 2020, revised April 27, 2020), www.cbo.gov/publication/56334.

14. JCT initially projected that recovery rebates would increase the deficit by \$269 billion in 2020 and by \$23 billion in 2021, nearly all of which the Treasury has classified as outlays; see Joint Committee on Taxation, *Estimated Revenue Effects of the Revenue Provisions Contained in an Amendment in the Nature of a Substitute to H.R. 748, the "Coronavirus Aid, Relief, and Economic Security ("CARES") Act," as Passed by the Senate on March 25, 2020, and Scheduled for Consideration by the House of Representatives on March 27, 2020*, JCX-11R-20 (April 23, 2020), <https://go.usa.gov/xvQuv>.

Coronavirus Relief Fund. Lawmakers provided \$150 billion to state, local, tribal, and territorial governments to help offset eligible expenses stemming from the pandemic. In addition to being pandemic-related, those expenses must be incurred between March 1 and December 30, 2020, and they must not have been included in a state's most recent budget. CBO estimates that nearly all of those funds will be provided in 2020, increasing outlays by \$150 billion. The relief funds are allocated as follows:

- \$139 billion for state governments,
- \$8 billion for tribal governments, and
- \$3 billion for the District of Columbia and U.S. territories.

The funds are allocated on the basis of population within each category. Up to 45 percent of each state's allocation may be provided directly to units of local government if those units certify to the Treasury that they have incurred pandemic-related expenses. Allocations to local governments are based on each locality's share of its state's population.

HHS Public Health and Social Services Emergency Fund. Lawmakers appropriated \$225 billion for the Public Health and Social Services Emergency Fund of the Department of Health and Human Services. CBO projects that the funding will result in \$135 billion in outlays in 2020 and \$89 billion in outlays over the 2021–2025 period. Most of the funding, \$175 billion, was dedicated to reimbursing health care providers (such as hospitals) for expenses related to health care or lost revenues as a result of the coronavirus pandemic. The remaining amount, including \$16 billion for the Strategic National Stockpile, can be used to support the development and purchase of vaccines, therapeutic treatments and drugs, and medical supplies.

Because the funding dedicated to reimbursing health care providers is being spent faster than originally anticipated, CBO has shifted the timing of those outlays in its projection. As a result, the agency now projects \$61 billion more in outlays in 2020 stemming from those appropriations than it did in its original estimate.

Medicaid Financial Assistance to States and Coverage Continuity for Enrollees. CBO projects that the changes

to Medicaid enacted in response to the pandemic will increase outlays by \$41 billion in 2020 and by \$132 billion over the 2021–2030 period. The most significant provision among those changes was an increase in the federal medical assistance percentage (FMAP) for Medicaid by 6.2 percentage points for the duration of the coronavirus public health emergency.¹⁵ FMAP is the share of Medicaid costs paid by the federal government and is based on a formula that provides higher federal reimbursement to states with lower per capita incomes (and vice versa) relative to the national average. By law, states can receive an FMAP rate of no less than 50 percent and no more than 83 percent.

To receive the additional funds, states are required to maintain continuous coverage for people enrolled in Medicaid for the duration of the coronavirus public health emergency regardless of changes in their income or other eligibility criteria.¹⁶ In addition, states may not increase Medicaid premiums, enact stricter eligibility standards, or establish any cost sharing for services related to the coronavirus pandemic.

CBO initially estimated that this provision would increase outlays by \$30 billion in 2020 and by \$23 billion in 2021. Mostly because many more enrollees are remaining on Medicaid than initially estimated and because CBO increased its estimate of the length of the public health emergency, the agency now projects that the expansion will cost \$11 billion more in 2020, and \$108 billion more from 2021 through 2023, than it projected in its April 2020 cost estimate.¹⁷

15. The law specifies that the FMAP increase is to remain in effect until the last day of the quarter in which the coronavirus public health emergency ends. The coronavirus public health emergency is currently in effect, as was most recently determined on July 25, 2020. See the Families First Coronavirus Response Act, P.L. 116-127, 134 Stat. 178, enacted on March 18, 2020; and Department of Health and Human Services, "Renewal of Determination That A Public Health Emergency Exists" (July 23, 2020), <https://go.usa.gov/xG3ag>.

16. The law specifies that the continuous coverage provision is to remain in effect until the end of the month in which the coronavirus public health emergency ends. See the Families First Coronavirus Response Act, P.L. 116-127, 134 Stat. 178, enacted on March 18, 2020.

17. See Congressional Budget Office, cost estimate for H.R. 6201, the Families First Coronavirus Response Act (April 2, 2020), www.cbo.gov/publication/56316.

Disaster Relief. In response to the coronavirus pandemic, lawmakers appropriated \$115 billion for disaster relief (\$20 billion of which was for Economic Injury Disaster Loans and is considered mandatory). Altogether, that funding is projected to increase outlays by \$58 billion in 2020 and by \$53 billion over the 2021–2030 period. The Federal Emergency Management Agency's (FEMA's) Disaster Relief Fund received \$45 billion in funding, and the SBA received \$70 billion. The funding for FEMA was allocated to reimburse state, local, and tribal governments and nonprofit organizations for certain expenses related to responding to the coronavirus pandemic; the SBA funding is meant to support loans for small businesses that have been harmed by the pandemic, including the funding for Economic Injury Disaster Loans, which were provided in the form of emergency advances that do not need to be repaid.

Because spending from the Disaster Relief Fund and spending on loans for small businesses have occurred much more slowly than anticipated, CBO has shifted the timing of those outlays in its projections. The agency now estimates that \$30 billion less will be spent in 2020 than originally anticipated.

Medicare Accelerated Payments. Medicare can make accelerated payments to hospitals based on expected future health care claims, and those amounts are recouped by reducing Medicare's payments for future claims. The CARES Act includes a provision that allows hospitals more time before they must repay those amounts. Although CBO initially expected that provision to have minimal budgetary effects, the agency now estimates that, on net, it will increase outlays in 2020 by \$47 billion and lower outlays in 2021 by \$46 billion.

Increase in Supplemental Nutrition Assistance Program Beneficiaries and Average Benefits. An expansion of the Supplemental Nutrition Assistance Program (SNAP, which helps people in low-income households purchase food) is expected to increase the number of beneficiaries in that program, increase benefits for certain households, and provide benefits to certain school children to replace meals they would otherwise have received at school. CBO projects that the expansion will increase outlays by \$24 billion in 2020 and by \$41 billion over the 2021–2030 period.

Pandemic Relief for Aviation Workers. Financial assistance to the airline industry for payroll support

is projected to increase outlays by \$28 billion in 2020 but to decrease them by \$5 billion over the 2021–2030 period as companies repay a portion of the assistance.

Education Stabilization Fund. Lawmakers appropriated \$31 billion for the Education Stabilization Fund to help educational institutions respond to the pandemic. CBO projects that the funding will increase outlays by \$11 billion in 2020 and by \$19 billion between 2021 and 2030.

Other Programs. Other programs associated with legislation enacted in response to the coronavirus pandemic will increase outlays by \$99 billion this year and by \$76 billion over the 2021–2030 period, CBO projects.

Changes in Outlays Stemming From Other Legislation

Although almost all of the changes in CBO's projections of outlays are the result of legislation enacted to address the coronavirus pandemic and the related economic downturn, other legislation enacted since March has raised projected mandatory outlays by less than \$1 billion for 2020 and by \$17 billion over the 2021–2030 period. Nearly all of those changes stem from the enactment of the Great American Outdoors Act (P.L. 116-152), which established the National Parks and Public Land Legacy Restoration Fund to support deferred maintenance projects on federal lands.¹⁸

Changes in Debt Service

Before debt-service costs are taken into account, the changes that CBO made to its projections to reflect legislation enacted since March increased the deficit for 2020 by \$2.3 trillion and the cumulative deficit for the 2021–2030 period by \$0.3 trillion. The additional federal borrowing stemming from those larger annual deficits added \$182 billion to CBO's projection of total outlays for interest on federal debt.

Changes in Revenues

As a result of legislative changes, CBO has reduced its projections of revenues by \$539 billion for 2020 and increased them by \$153 billion for the 2021–2030 period. Almost all of the net decrease of \$385 billion stems from the provisions of the FFCRA and the CARES Act. The revisions to the baseline associated with

18. See Congressional Budget Office, "Direct Spending Effects of the Senate Amendment to H.R. 1957, the Great American Outdoors Act" (July 16, 2020), www.cbo.gov/publication/56477.

those two laws—that is, the changes CBO categorizes as legislative—reflect the estimates of the revenue effects produced by JCT on March 16, 2020, and April 23, 2020.¹⁹

The acts decrease revenues, on net, in 2020 by deferring some tax payments; suspending certain taxes; expanding available deductions, exclusions, and credits; and allowing greater use of losses to offset taxable income. Some of that decrease in revenues is offset by increased receipts in later years when, for example, deferred taxes are paid.

Individual Income Taxes. Most of the legislative changes to CBO’s projections of revenues stem from changes to individual income taxes. CBO reduced its projection of revenues from those taxes by \$462 billion for 2020 but increased it by \$114 billion for the 2021–2030 period. The reduction in 2020 stems from provisions of the FFCRA, which created payroll tax credits for employers required by that law to provide emergency paid sick leave and emergency paid family and medical leave, and from the CARES Act, which provided for deferral of payments of some payroll taxes, created payroll tax credits for employee retention, and relaxed the limitation on the amount of business losses that can be used to offset tax liability.²⁰ The CARES Act also temporarily eliminated penalties for early withdrawals from retirement accounts and expanded certain exclusions and deductions that are anticipated to temporarily decrease revenues in 2021. The payroll tax credits created by the FFCRA and the CARES Act reduce tax payments in 2020 and 2021. Although some of those laws’ provisions affect payroll taxes, the Treasury is recording the effects in the budget—at least initially—as individual income tax reductions. After 2021, projected receipts of individual

income taxes increase for legislative reasons, primarily because of payments in 2022 and 2023 of taxes deferred in 2020 and 2021.

Corporate Income Taxes. CBO reduced its estimate of corporate income taxes by \$75 billion for 2020 but increased it by \$45 billion for the 2021–2030 period. The reduction for 2020 results primarily from provisions of the CARES Act, which gave corporations an expanded ability to carry back refunds for net operating losses generated in 2018, 2019, and 2020. Those losses can be used to offset tax liability for up to five prior years. As of 2018, corporations could only carry forward net operating losses generated to offset future liability. Those provisions of the CARES Act will decrease corporate income taxes in 2020 and 2021 but increase them thereafter.

Payroll Taxes. As a result of provisions in the CARES Act and the FFCRA that affect taxable wages, CBO increased its estimate of payroll taxes by \$3 billion for 2020 but decreased it by \$4 billion over the 2021–2030 period.

Other Revenues. Because the CARES Act suspended certain excise taxes, CBO has reduced its projection of excise tax revenues by \$4 billion in 2020 and by \$2 billion over the 2021–2030 period.

Economic Changes

The economic forecast that underlies CBO’s baseline budget projections includes the agency’s projections of GDP, income, the unemployment rate, interest rates, inflation, and other factors that affect federal spending and revenues.²¹ The current projections are based on the latest economic forecast, which was completed on June 26, 2020, and reflects the agency’s estimates of the effects on the economy of legislation enacted before that date.

In the first quarter of 2020, the coronavirus pandemic and the social distancing resulting from it ended the longest economic expansion and triggered the deepest downturn in output and employment since the demobilization following World War II. CBO’s current economic forecast incorporates the agency’s estimates of the

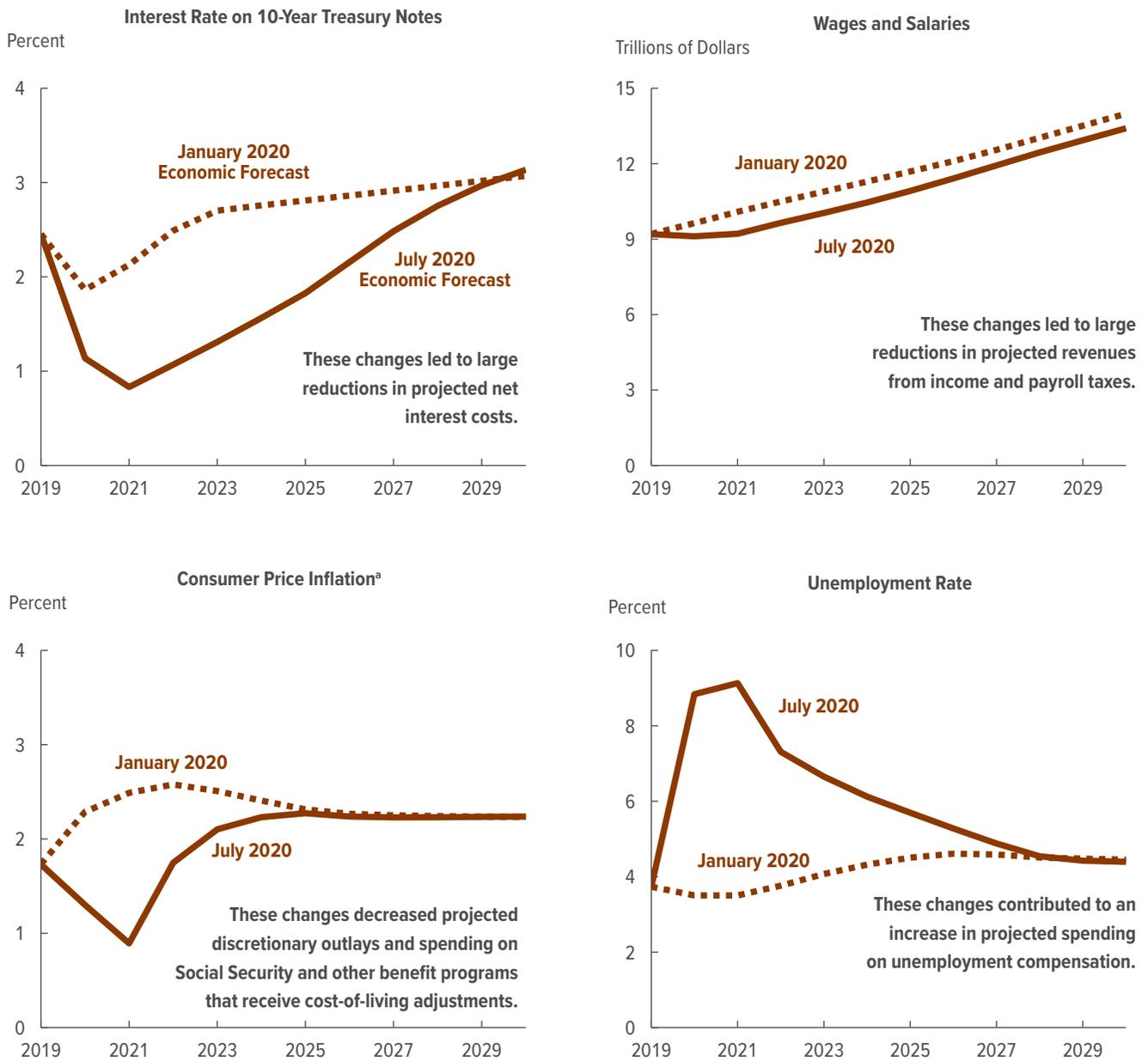
19. See Joint Committee on Taxation, *Estimated Revenue Effects of the Revenue Provisions Contained in Division G of H.R. 6201, the “Families First Coronavirus Response Act,”* JCX-9-20 (March 16, 2020), <https://go.usa.gov/xvaWT>, and *Estimated Revenue Effects of the Revenue Provisions Contained in an Amendment in the Nature of a Substitute to H.R. 748, the “Coronavirus Aid, Relief, and Economic Security (‘CARES’) Act,”* as Passed by the Senate on March 25, 2020, and Scheduled for Consideration by the House of Representatives on March 27, 2020, JCX-11R-20 (April 23, 2020), <https://go.usa.gov/xvQuv>.

20. In CBO’s initial estimate of the payroll tax credits related to paid leave and employee retention, a portion of the deficit effect was shown as an increase in outlays. Because the Treasury is recording those credits almost entirely as a reduction in revenues, CBO has adjusted its projections accordingly. That shift from an increase in outlays to a reduction in revenues has no effect on the deficit.

21. For further explanation of the revisions to the agency’s economic forecast, see Congressional Budget Office, *An Update to the Economic Outlook: 2020 to 2030* (July 2020), www.cbo.gov/publication/56442.

Figure A-3.

Changes in CBO's Economic Forecast Since January 2020



Source: Congressional Budget Office.

The data shown are for fiscal years, and the 2019 values reflect the annual revisions to the national income and product accounts released by the Bureau of Economic Analysis on July 30, 2020.

a. Calculated using the consumer price index for urban wage earners and clerical workers.

effects of the widespread economic disruption caused by the pandemic as well as the effects of the laws enacted to address the public health emergency and to directly assist households, businesses, and state and local governments.

The changes that CBO has made to its economic forecast have increased its estimate of the deficit for 2020 by \$316 billion but have decreased its projections of deficits over the 2021–2030 period by a total of \$1.4 trillion. Those budgetary effects stem largely from changes in CBO’s projections of interest rates, wages and salaries, inflation, and the unemployment rate (see Figure A-3 on page 39). The reduction in deficits over the 10-year period results from a decrease in projected net interest outlays and spending for benefit programs, including Social Security and Medicare, partially offset by a reduction in tax revenues.

Changes in Outlays

The revisions that CBO made to its economic forecast raised its estimate of outlays for the current year by \$92 billion (or 2 percent) but decreased its projections of outlays for the 2021–2030 period by \$3.5 trillion (or 6 percent). Most of the reduction in outlays projected for the latter period stems from two factors. First, CBO significantly reduced its forecast of interest rates, which decreased its projections of net interest costs by \$2.3 trillion before changes in debt-service costs are accounted for. Second, the reduction in the agency’s forecast of inflation resulted in a decrease of about \$0.8 trillion in projected outlays for Social Security and Medicare over the 2021–2030 period.

Mandatory Outlays. Because of changes the agency made to its economic forecast, CBO increased its estimate of mandatory spending for 2020 by \$136 billion (or 5 percent) and decreased its projections for the 2021–2030 period by \$851 billion (or 2 percent). The largest economic changes are reflected in CBO’s projections of outlays for Social Security.

Social Security. Projected outlays for Social Security over the 2021–2030 period decreased by a total of \$536 billion (or 4 percent). Most of that reduction—\$440 billion—is attributable to lower estimates of the cost-of-living adjustments (COLAs) that beneficiaries will receive in the next several years. Social Security’s COLAs are based on changes in the consumer price index for urban wage earners and clerical workers (CPI-W). To account for changes in its forecast of the CPI-W, CBO

decreased its projection of the COLAs that beneficiaries will receive in January 2021 by 1.7 percentage points. The agency also decreased its projections of the COLAs in both January 2022 and 2023 by about 1 percentage point. The rest of the decrease in projected spending is the result of the agency’s downward revision to its projections of average wages, which lowered the initial benefits expected to be received by new Social Security claimants.

Medicare. CBO decreased its projections of Medicare outlays for the 2021–2030 period by \$269 billion (or 3 percent) because of revisions it made to its economic forecast. Under current law, payment rates for much of Medicare’s fee-for-service sector (such as hospital care and services provided by home health agencies and skilled nursing facilities) are updated automatically. Those updates are based on changes in the prices of the labor, goods, and services that health care providers purchase, and they include an adjustment 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.²² CBO’s latest economic forecast includes large downward revisions to the growth of many prices. As a result of those revisions, the agency now expects payment rates to increase by smaller amounts between 2021 and 2030 than it had previously projected—a change that decreases projected Medicare outlays.

Unemployment Compensation. CBO increased its projection of spending on regular unemployment compensation by \$128 billion for 2020 and by \$126 billion (or 27 percent) for the 2021–2030 period, primarily because of a sharp increase in the forecast of the unemployment rate this year and next. In its previous economic forecast, the agency projected that the unemployment rate would be 3.5 percent in fiscal years 2020 and 2021. As a result of the economic downturn caused by the coronavirus pandemic, the agency now projects that the unemployment rate will be 8.8 percent in fiscal year 2020 and 9.1 percent in fiscal year 2021. Such a large increase in the unemployment rate will result in many more people receiving unemployment benefits and thus much more spending on unemployment compensation. That increase in spending is partially offset by lower projected wage growth, which results in lower projected average benefits.

22. See Centers for Medicare & Medicaid Services, “Market Basket Research and Information” (accessed August 20, 2020), <https://go.usa.gov/xG3aQ>.

(The unemployment compensation discussed in this section refers to benefits provided under permanent law by the states in partnership with the federal government; such benefits flow through the unemployment trust fund and are considered federal outlays. Additional unemployment benefits stemming from recent laws enacted in response to the coronavirus pandemic are discussed in the section on legislative changes.)

Medicaid. The agency decreased its projections of Medicaid spending for the 2021–2030 period by \$106 billion (or 2 percent), primarily because it reduced its forecasts of inflation. CBO revised downward its projections of growth in both the consumer price index for all urban consumers and the employment cost index for wages and salaries of workers in private industry (ECI) over the first few years of the projection period. It did so because new data indicate that inflation will be weaker than previously anticipated. Average benefit costs are projected to be lower as a result of that lower inflation.

Veterans' Benefits and Services. CBO decreased its projections of outlays for mandatory veterans' benefits over the 2021–2030 period by \$51 billion (or 3 percent), largely because of reductions in its forecast of inflation. As is the case with Social Security, the COLAs that beneficiaries receive are based on the CPI-W. The agency decreased its projections of that measure of inflation, resulting in smaller COLAs and thus lower projected spending.

Other Mandatory Programs. CBO updated its projections of outlays for several other mandatory programs to reflect changes in its economic forecast; those changes resulted in both upward and downward adjustments to such outlays, decreasing projected outlays for the 2021–2030 period by a total of \$16 billion, on net.

Discretionary Outlays. CBO's baseline projections generally reflect the assumption that funding for discretionary programs keeps pace with inflation (unless such funding is constrained by statutory limits).²³ Changes to the forecasts of the measures of inflation that CBO is required to use in developing its baseline projections of discretionary funding drove the economic changes in discretionary outlays. For discretionary funding related to federal personnel, the agency uses the ECI to prepare its

projections; for other types of discretionary funding, the agency uses the GDP price index. As a result of significant decreases in the agency's forecasts of those measures, discretionary funding over the 2021–2030 period is now projected to be lower than it was projected to be in March, and outlays for that period are now projected to be \$254 billion (or 2 percent) smaller.

Net Interest. Economic changes caused CBO to reduce its baseline projections of net interest costs by \$44 billion (or 12 percent) for 2020 and by \$2.4 trillion (or 40 percent) for the 2021–2030 period. The main reason for that reduction is that the agency has substantially lowered its forecasts of both short- and long-term interest rates on Treasury securities since January. For 2020 to 2030, CBO decreased its forecast of the rate on 3-month Treasury bills by an average of 1.5 percentage points (or 70 percent) each year. The agency decreased its forecast of the rate on 10-year Treasury notes by an average of 1.2 percentage points (or 50 percent) in the first half of the period. As a result of those substantial reductions, the agency now projects that the average interest rate on debt held by the public for the period will be 60 percent lower than it projected in March. Primarily because of the lower projected interest rates, the agency decreased its projections of net interest outlays (and thus of deficits) by \$45 billion in 2020 and by \$2.3 trillion for the 2021–2030 period (before accounting for the resulting change in the amount of federal debt).

Because of those changes and others stemming from revisions to its economic forecast, CBO increased its projected deficit for 2020 by \$0.3 trillion but reduced projected deficits for the 2021–2030 period by \$1.4 trillion (before accounting for the resulting change in the amount of federal debt). The debt-service savings associated with those changes in projected deficits are estimated to equal \$40 billion.

Changes in Revenues

As a result of revisions to its economic forecast, CBO reduced its estimate of revenues for 2020 by \$223 billion (or 6 percent) and its projections for 2021 through 2030 by a total of \$2.1 trillion (or 4 percent). The reduction in revenues for the entire 2020–2030 period stems from several lowered projections, among them a decrease in GDP and taxable income—primarily wages and salaries, proprietors' income, and domestic and foreign profits. In addition, CBO lowered its projections of interest rates and of imports, which also affected the baseline

23. In its projections, CBO did not extrapolate the new funding that was designated as an emergency requirement, as noted in the section on legislative changes.

revenue projections. Partially offsetting those factors are increases in the agency's projections of states' deposits of unemployment insurance taxes and of the amount of debt and securities held by the Federal Reserve.

Individual Income Taxes. In response to economic changes, CBO lowered its projections of total individual income tax revenues by \$111 billion (or 6 percent) in 2020 and by \$1.6 trillion (or 6 percent) over the 2021–2030 period. The largest source of the revision was a 6 percent reduction in projected wages and salaries over the 2020–2030 period. Projections of proprietors' income, capital gains realizations, and distributions from pensions and IRAs also decreased.

Other factors partially offset those reductions. The agency lowered its forecast of inflation, thereby raising its projections of income tax revenues. (Because the tax brackets and other parameters of the individual income tax system are indexed to inflation, lower inflation pushes a larger portion of taxable income growth into higher tax brackets, thus raising income tax receipts.) The agency also lowered its forecast of interest paid on owner-occupied housing, which in turn reduced its projections of deductions for mortgage interest and raised projected income tax receipts.

Payroll Taxes. As a result of its latest economic forecast, CBO lowered its projection of payroll tax revenues by \$89 billion (or 7 percent) for 2020 and by \$656 billion (or 4 percent) for the 2021–2030 period. Nearly all of that reduction stems from a \$9.5 trillion downward revision in the agency's projections of wages and salaries and of proprietors' income. An increase in the projection of state unemployment insurance deposits partially offsets some of that decrease.

Corporate Income Taxes. CBO lowered its projection of corporate income tax revenues by \$30 billion (or 13 percent) for 2020 and by \$277 billion (or 8 percent) for the period from 2021 to 2030 because of economic changes. That decrease occurred largely because the agency lowered its projections of domestic corporate profits by 3 percent over the 2020–2030 period and reduced its projections of foreign profits. Lowered forecasts of interest rates are among other factors contributing to the decrease in projected revenues from corporate income taxes.

Other Revenues. In response to economic changes, CBO increased its projection of Federal Reserve remittances by \$13 billion (or 19 percent) for 2020 and by \$491 billion (or 64 percent) over the 2021–2030 period—mostly because of actions taken by the Federal Reserve in response to the significant changes in the economic outlook. Those actions increased the Federal Reserve's holdings of assets and the interest that the central bank earns from those assets. The lower interest rates in CBO's current economic forecast partially offset the additional earnings on assets, thereby lowering remittances, but they also reduce the interest expenses the Federal Reserve pays to banks whose deposits it holds, thus increasing remittances.

CBO also lowered its projections of imports over the 2020–2030 period by a total of \$2.9 trillion (or 10 percent). That change in the economic forecast reduced CBO's projections of customs duties over the same period by \$51 billion (or 5 percent).

Technical Changes

Technical changes—those changes that are neither legislative nor economic—caused CBO to decrease its estimate of the deficit for 2020 by \$396 billion but to increase its projections of deficits over the 2021–2030 period by a total of \$815 billion. Revisions to the agency's projections of income and payroll taxes are the main reasons for the overall adjustments.

Changes in Revenues

Because of technical changes, CBO increased its estimate of revenues for 2020 by \$425 billion (or 12 percent). Most of that increase stems from recent data on tax collections, which have indicated stronger revenues than expected. That strength suggests that employers have deferred a smaller share of 2020 taxes in recent months, which in turn reduces the offsetting increase in taxes in later years.

The agency has revised projected revenues downward, for technical reasons, by \$735 billion (or 1.5 percent), on net, over the 2021–2030 period. Those reductions stem from changes to individual and corporate income taxes that reflect businesses' responses to the coronavirus pandemic and the need for social distancing. (As businesses' expenses increase, the share of businesses with taxable

profits is reduced.) The net reductions also reflect new information about recent tax collections.

Individual Income Taxes. Because of technical changes, the agency increased its projection of individual income tax revenues by \$315 billion (or 18 percent) for 2020 but lowered it by \$324 billion (or 1 percent) for the 2021–2030 period. Those changes are the result of several offsetting factors. Most of the increase in 2020 and 2021 derives from the fact that the amount of taxes withheld from paychecks over the past several months has been much greater than expected, given the estimated declines in wages and the initial estimates of the reductions to withholding that would result from recently enacted tax provisions. Those provisions, which affect payroll taxes but are being recorded in the budget as reductions in individual income taxes, include the option for employers to defer payment of their portion of most payroll taxes on wages paid from March 27, 2020, through December 31, 2020. The provisions also include tax credits to compensate employers for paid sick leave, family and medical leave, and employee retention. Although the reasons for the larger-than-expected amount of withheld taxes are not yet fully known, less take-up by employers of the option to defer payroll taxes is probably a significant factor. The larger revenues in 2020 and 2021 from that smaller amount of deferred taxes are largely offset by corresponding reductions in 2022 and 2023.

Other factors increasing individual income taxes are greater taxable unemployment benefits and an upward revision to the projected share of wages and salaries going to high-wage earners, which was based on data showing that low-wage workers have been disproportionately affected by the economic disruption caused by the pandemic. For any given amount of aggregate wages, when high-wage earners' share of wages and salaries increases, individual income tax revenues rise because of the progressive nature of income tax rates in the United States. As a result of that revision, CBO increased its projections of individual income tax receipts over the next decade by about \$120 billion. (That revision is partially offset by a corresponding but smaller reduction in payroll taxes, which is described below.)

One factor reducing individual income tax receipts in 2020, but netting to zero over the full forecast period, is related to the way tax payments are attributed to individual or payroll taxes. As a result of the Treasury's administrative practice, estimates of employment dictate

the portion of tax payments remitted by employers that is initially allocated to payroll taxes. As more information becomes available (including detailed information about tax returns), periodic reallocations are made to revise past allocations. Lower wages in 2020 will reduce both payroll and income tax payments, but that reduction is initially reflected only as lower individual income tax receipts. CBO projects that, as a result, corresponding adjustments in future fiscal years will increase income tax receipts, generating offsetting technical changes.

The net increase in individual income taxes for technical reasons in 2020 is more than offset by reductions in subsequent periods, amounting to a decrease of \$324 billion (or 1 percent) over the 2021–2030 period. The most significant factors leading CBO to lower its projections of individual income tax receipts include a downward revision to the effective tax rate on business income over the next several years and a reduction in projections of taxable withdrawals from retirement accounts—the latter a response to recent data indicating that assets in retirement accounts are worth less than previously anticipated.

Corporate Income Taxes. For technical reasons, CBO increased its projection of corporate income tax receipts by \$23 billion (or 10 percent) for 2020 but decreased it by \$207 billion (or 6 percent) for the 2021–2030 period. The increase for 2020 reflects the expectation that some refunds originally anticipated to be paid to businesses this year will instead be paid in 2021. The decrease in subsequent years is largely attributable to a downward revision to the share of profits in the national income and product accounts (NIPA) that represents taxable income, reflecting firms' adjusting investments and operations in response to the pandemic and the related economic downturn. Declines in the taxable share of NIPA profits also occurred following previous recessions.

Payroll Taxes. For technical reasons, the agency has increased its estimate of payroll taxes for 2020 by \$97 billion (or 7 percent). That change is driven primarily by the Treasury's accounting procedures (described above) that also affect individual income taxes: Lower wages in 2020 will initially be reflected in individual income taxes rather than in payroll taxes; that allocation will be corrected in subsequent years. CBO has therefore increased the amount of payroll taxes that it estimates will be recorded in 2020 and correspondingly reduced the amounts of payroll taxes in subsequent periods.

CBO reduced its projections of payroll taxes for the 2021–2030 period by a total of \$110 billion (or 1 percent), largely because of an upward revision in high-wage earners’ projected share of total wages and salaries. That change reduces payroll taxes because it lowers the share of income below the maximum amount subject to Social Security payroll taxes (currently \$137,700). That revision is more than offset by a corresponding increase in individual income tax revenues, as described above.

Customs Duties. For technical reasons, the agency decreased its projections of customs duties by \$4 billion (or 5 percent) for 2020 and by \$72 billion (or 7 percent) over the 2021–2030 period. That change reflects the Administration’s actions to reduce tariffs on a range of imports from China.²⁴

Other Revenues. CBO lowered its projection of revenues from other sources by \$6 billion (or 3 percent) for 2020 and by \$22 billion (or 1 percent) for the 2021–2030 period. The most significant changes among those revenue sources was a \$19 billion (or 4 percent) reduction in miscellaneous fees and fines over the 2020–2030 period and a \$5 billion (or 2 percent) reduction in the collections of estate and gift taxes. The reduction in estate taxes aligns CBO’s projections with recently recorded collection amounts, changes to mortality rates resulting from the coronavirus pandemic, and other changes.

Changes in Outlays

Because of technical updates—largely for mandatory spending programs—CBO increased its estimate of outlays in 2020 by \$30 billion (or 1 percent) and its projections for the 2021–2030 period by \$80 billion (or less than 1 percent).

Mandatory Outlays. For technical reasons, CBO increased its estimates of spending this year for some programs and decreased spending estimates for others. On net, the technical changes increased mandatory outlays for 2020 by \$24 billion (or 1 percent). For the 2021–2030 period, projections of mandatory outlays increased by \$126 billion (or less than 1 percent).

24. The United States agreed to reduce the List 4A tariffs on approximately \$120 billion of Chinese products from 15 percent to 7.5 percent, effective February 14, 2020. In addition, the Administration announced on March 16, 2020, that it would exclude imports of certain medical products from the Section 301 duties.

Supplemental Nutrition Assistance Program. CBO increased its projections of outlays for SNAP over the 2021–2030 period by \$154 billion (or 24 percent)—an adjustment based on substantial projected increases in program enrollment. In 2021, nearly 50 million people are projected to participate in SNAP, about 40 percent more than the 35 million that CBO projected in March 2020. In 2030, participation is projected to be about 20 percent higher than CBO projected in March.

Unemployment Compensation. CBO increased its estimate of outlays for unemployment compensation in 2020 by \$30 billion, largely because a much higher-than-expected percentage of unemployed workers are receiving benefits. For the 2021–2030 period, CBO decreased its projections of unemployment compensation benefits by \$55 billion (or 12 percent). That change primarily derives from a reduction in the projected average weekly benefit, which was based on actual benefit amounts reported for 2020.

Social Security. CBO increased projected outlays for Social Security over the 2021–2030 period by \$52 billion (or less than 1 percent), on net, because of partially offsetting revisions. The agency reduced its population projections, partly in response to the coronavirus pandemic, resulting in a \$143 billion reduction in outlays for Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). Offsetting that reduction, however, is CBO’s expectation that more working-age people will now claim DI and that more people ages 62 to 64 will claim OASI because of the economic downturn. Over the 10-year period, those changes increased the agency’s projection of DI outlays by \$91 billion and OASI outlays by \$106 billion.

Premium Tax Credits and Related Spending. CBO and JCT reduced their projections of outlays for premium tax credits and related spending over the 2020–2030 period by \$67 billion (or 10 percent), on net.²⁵ The current update reflects lower projected premiums for health insurance purchased through the marketplaces established by the Affordable Care Act. The projection of premiums is, on average, 6 percent lower over the 2021–2030 period than the agencies previously projected. The decreased premiums are mostly the result of lower estimates of personal disposable income. Private

25. The related spending consists almost entirely of outlays for risk adjustment and the Basic Health Program.

insurance premiums are projected on the basis of past trends in premium growth and on the basis of projected growth in personal income, which affects people's ability to buy health insurance.

Supplemental Security Income. CBO increased its projections of spending on Supplemental Security Income (SSI) by \$46 billion (or 7 percent) over the 2021–2030 period. Under the SSI program, the federal government and the states provide monthly cash assistance to people who are disabled, blind, or elderly, and who have low income and few assets. The increase in projected spending was primarily the result of a projected increase in the number of beneficiaries receiving SSI. That larger number of beneficiaries was in turn derived from a projected increase in the unemployment rate and from the extension of the program to Puerto Rico, the latter the result of *U.S. v. José Luis Vaello-Madero*, decided in the U.S. Court of Appeals for the First Circuit on April 10, 2020.

Earned Income and Child Tax Credits. CBO increased projected outlays for the earned income tax credit (EITC) and the child tax credit over the 2021–2030 period by \$45 billion (or 5 percent). That change was based on the larger projected number of households receiving the EITC as a result of the projected decrease in the share of wages and salaries going to low-wage earners. According to new data, low-wage earners have been disproportionately affected by the widespread economic disruption caused by the coronavirus pandemic.

Veterans' Benefits and Services. CBO increased its projections of outlays for mandatory veterans' benefits over the 2021–2030 period by \$37 billion (or 2 percent). That change stems largely from an increase in the agency's projections of outlays for veterans' compensation and pensions: Recent data show that average payments for disability compensation are rising faster than previously projected and that the number of new veterans qualifying for disability compensation is greater than previously projected. Both the number of veterans with disabilities connected to their service and the average severity of their disabilities have increased at faster rates than CBO had projected. The more severe veterans' injuries and illnesses are, the greater the disability compensation payments.

Medicare. CBO estimates that net Medicare spending will be reduced by \$25 billion (or 4 percent) in 2020

and by \$27 billion (or less than 1 percent) over the 2021–2030 period, primarily because of declines in the use of medical services. The agency projects that, compared with its March baseline, that development will reduce Medicare spending under Part A by about \$11 billion, and under Part B by about \$26 billion, for fiscal year 2020. Partially offsetting that reduction is an increase in outlays to providers under Medicare Part B in 2020, which stems from payments made in advance of expected future health care claims. Those payments will then be recouped in 2020 and 2021. Advance payments made under Part B are governed by existing regulatory authority.

Other Mandatory Programs. Smaller technical changes decreased CBO's projections of outlays for other mandatory programs by \$59 billion over the 2021–2030 period.

Discretionary Outlays. Technical updates increased CBO's estimate of discretionary outlays in 2020 by \$8 billion (or 1 percent) and reduced its projections of such outlays over the 2021–2030 period by \$14 billion (or less than 1 percent). Those changes stem from adjustments made to better reflect the recent rates at which funding for various discretionary programs has been spent. (The changes discussed here do not include the significant changes to discretionary spending resulting from laws enacted to address the coronavirus pandemic, which appear in the section on legislative changes.)

Net Interest. Technical changes decreased CBO's projections of net interest outlays for the 2021–2030 period by \$32 billion (or 1 percent). That decrease stems from three main sources. First, on the basis of recent debt issuance, the agency decreased its projection of the average maturity of newly issued debt. Because shorter-term debt carries lower interest rates, that change reduced the agency's projections of interest costs by \$34 billion over the 10-year period. Second, technical changes to revenues and other outlays decreased the projected deficit for 2020 by \$397 billion but increased projected deficits for the 2021–2030 period by \$788 billion. The additional debt-service costs associated with those changes in projected deficits are estimated to equal \$28 billion. Third, CBO increased its estimate of interest earnings from credit-financing accounts by \$24 billion to acknowledge the increases in the loan balances in those accounts. Credit-financing accounts, which are not included in the federal budget, track the cash flows of the federal

government's various loan programs. (Only the net subsidy costs of loan and loan guarantee programs are recorded in the budget.) To provide loans to borrowers, the accounts often borrow from the Treasury and then

pay interest back to the Treasury. Those interest earnings are classified as offsetting receipts, or negative outlays; thus, an increase in earnings is classified as a reduction in outlays.