



# Effects of Automatic Stabilizers on the Federal Budget: 2024 to 2034

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**A**utomatic stabilizers are the components of federal revenues and outlays that automatically increase or decrease with cyclical changes in the economy to help strengthen a weakening economy or cool an overheating one. Examples of automatic stabilizers at work are when, during a downturn, income tax receipts decline as incomes fall, and unemployment insurance spending increases as more people claim unemployment benefits—or when tax receipts increase and unemployment insurance spending falls during an expansion. Those changes, which occur without any legislated changes in tax or spending policies, help stabilize the economy by boosting or restraining private spending.

Estimating the effects of automatic stabilizers on the federal budget sheds light on how much of the projected changes in budget deficits occurs automatically in response to economic fluctuations and how much is driven by other factors. Those other factors include scheduled changes in policy—such as executive actions and changes in legislation—and demographic trends.

In this report, the Congressional Budget Office provides estimates of the budgetary effects of automatic stabilizers—as well as the size of federal budget deficits without them—back to 1974 and forward to 2034. Effects are measured in dollars and in relation to CBO’s estimate of potential gross domestic product (GDP), which is the economic output that can be produced if labor and capital are employed at their maximum sustainable rates. Key takeaways include the following:

- In CBO’s projections, automatic stabilizers decrease federal deficits by an average of 0.3 percent of potential GDP from 2024 to 2027 and increase

federal deficits by an average of 0.1 percent of potential GDP from 2028 to 2034.

- Averaged over the 2024–2034 period, automatic stabilizers neither increase nor decrease federal deficits, in CBO’s projections. From 1974 to 2023, automatic stabilizers increased federal deficits by an estimated average of 0.4 percent of potential GDP per year.
- In CBO’s projections, deficits with the effects of automatic stabilizers removed (that is, deficits without the automatic effects of cyclical changes in the economy) average 6.3 percent of potential GDP over the next decade, about the same percentage of potential GDP for total deficits and nearly double the 50-year average of 3.2 percent for those cyclically adjusted deficits.

Those and other estimates in this report are based on historical data and projections released in June as part of CBO’s latest report on what the federal budget and the economy would look like in the current year and over the next 10 years if laws governing taxes and spending generally remained unchanged.<sup>1</sup> Like that June report, this report reflects economic developments and information through May 2, 2024, and the assumption that legislation enacted through May 12, 2024, would generally remain unchanged. Unlike the June report, this report estimates deficits as a percentage of potential GDP.

1. For those projections, see Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2024 to 2034* (June 2024), [www.cbo.gov/publication/60039](http://www.cbo.gov/publication/60039). Data going back to 1965 are available at [www.cbo.gov/data/budget-economic-data#8](http://www.cbo.gov/data/budget-economic-data#8), as are the agency’s previous estimates of the effects of automatic stabilizers.

## How Automatic Stabilizers Work and Their Effects Are Estimated

Certain changes in federal revenues and outlays occur automatically in response to cyclical movements in GDP and unemployment. When unemployment is relatively high (above the noncyclical rate of unemployment), federal outlays for unemployment insurance benefits, Medicaid benefits, and Supplemental Nutrition Assistance Program (SNAP) benefits are greater than they otherwise would be because more people qualify for benefits.<sup>2</sup> The increased outlays for those transfer programs automatically help stabilize the economy by supporting household income and thus private spending.<sup>3</sup>

Meanwhile, when GDP is below potential GDP, tax revenues are smaller than they otherwise would be because wages and salaries, corporate profits, and other tax bases are typically smaller than they otherwise would be. Those declines in revenues—because they reflect individuals' and companies' paying less in taxes—also support private spending.

By contrast, when the economy is operating above its sustainable capacity (when GDP exceeds potential GDP), spending on transfer programs decreases and revenues increase in relation to what they otherwise would be, thus restraining private spending.

The changes in federal revenues and outlays that stem from the cyclical components of GDP and of the unemployment rate are what CBO measures when it estimates the effects of automatic stabilizers.<sup>4</sup> Specifically,

2. The noncyclical rate of unemployment is the unemployment rate resulting from the normal turnover of jobs, mismatches between skills of available workers and skills necessary to fill vacant positions, and other sources except changes in aggregate demand.
3. Transfer programs are government programs that make benefit payments to people or organizations (payments for which no current or future goods or services are required in return). Transfer programs other than unemployment insurance, Medicaid, and SNAP, such as Social Security, are not included in CBO's estimates of the effects of automatic stabilizers, because they do not appear to CBO to be sufficiently cyclical. See Frank Russek and Kim Kowalewski, *How CBO Estimates Automatic Stabilizers*, Working Paper 2015-07 (Congressional Budget Office, November 2015) [www.cbo.gov/publication/51005](http://www.cbo.gov/publication/51005).
4. CBO's estimates of the effects of automatic stabilizers reflect the assumption that discretionary spending and interest payments do not respond automatically to cyclical developments in the economy. For a description of the methods that CBO uses to estimate the effects of automatic stabilizers, see Frank Russek and Kim Kowalewski, *How CBO Estimates Automatic Stabilizers*, Working Paper 2015-07 (Congressional Budget Office, November 2015), [www.cbo.gov/publication/51005](http://www.cbo.gov/publication/51005).

the agency estimates the relationship of revenues to the output gap, which is the difference between GDP and potential GDP, and the relationship of outlays to the unemployment gap, which is the percentage-point difference between the rate of unemployment and the noncyclical rate of unemployment. When the economy is operating at its sustainable capacity, the magnitude of automatic stabilizers is zero because the output and unemployment gaps are zero. By contrast, the size of automatic stabilizers is nonzero both when the economy is above its sustainable capacity (when the output gap is positive and the unemployment gap is negative) and when the economy is below capacity (when the output gap is negative and the unemployment gap is positive).

## Estimates of the Effects of Automatic Stabilizers

In CBO's estimates, which reflect the assumption that current laws remain the same, automatic stabilizers decrease deficits by an average of \$89 billion (or 0.3 percent of potential GDP) from 2024 to 2027 and increase deficits by an average of \$56 billion (or 0.1 percent) from 2028 to 2034. Those effects (which average out close to zero percent of potential GDP for the entire projection period) are smaller than the historical average effect from 1974 to 2023, when automatic stabilizers increased deficits by an average of 0.4 percent of potential GDP per year, mainly driven by seven recessions (see Figure 1). (For effects in billions of dollars, see Table 1 on page 4; for effects measured as a percentage of potential GDP, see Table 2 on page 6.)

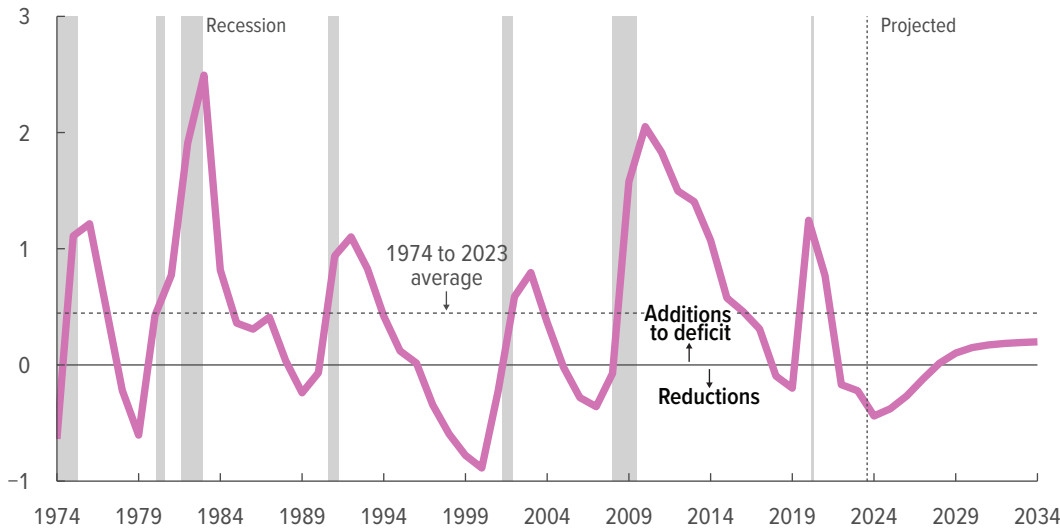
The estimate that automatic stabilizers decrease deficits by 0.3 percent of potential GDP per year from 2024 to 2027 derives from cyclical factors in CBO's economic forecast. In that forecast, GDP is greater than potential GDP and the unemployment rate is below the noncyclical rate from 2024 to 2027. Because of those factors, outlays for the unemployment insurance program, Medicaid, and SNAP are smaller, and tax revenues are larger, than they otherwise would be, thus decreasing deficits. For example, in 2024, when the projected output gap is 1.0 percent and the projected unemployment gap is -0.6 percentage points, automatic stabilizers decrease the deficit by \$124 billion, or 0.4 percent of potential GDP, in CBO's estimates.

From 2028 to 2034, automatic stabilizers increase deficits by an estimated 0.1 percent of potential GDP per year, also because of cyclical factors in CBO's economic forecast. Specifically, GDP falls short of potential GDP from 2028 to 2034 and the unemployment rate exceeds the noncyclical rate over that period, in CBO's forecast.

Figure 1.

## How Much Automatic Stabilizers Change the Federal Budget Deficit or Surplus

Percentage of potential GDP



Data source: Congressional Budget Office. See [www.cbo.gov/publication/60662#data](http://www.cbo.gov/publication/60662#data).

Automatic stabilizers are changes in federal revenues and outlays that occur automatically in response to cyclical movements in gross domestic product (GDP) and unemployment, helping stabilize the economy.

Potential GDP is CBO's estimate of the maximum sustainable output of the economy.

Recessions begin just after a peak in economic activity and run through the subsequent trough.

Data are fiscal year values.

As a result of those factors, outlays for the three transfer programs are larger and tax revenues are smaller than they otherwise would be, increasing deficits. For example, from 2032 to 2034, when the projected output gap is -0.5 percent and the projected unemployment gap is 0.2 percentage points, automatic stabilizers increase annual deficits by an average of 0.2 percent of potential GDP, in CBO's estimates.<sup>5</sup>

By 2034, the contribution of automatic stabilizers to the deficit settles at a small but positive value. That is because, in CBO's projections, economic output settles at a level just below potential and unemployment at a level just above the noncyclical rate by 2034.

### Projected Deficits Without the Effects of Automatic Stabilizers

Removing CBO's estimate of the effect of automatic stabilizers from projected federal budget deficits yields an estimate of what deficits would be absent any cyclical fluctuations in GDP and the unemployment rate (if GDP was at its potential and the unemployment rate equaled its noncyclical rate) and all other factors were unchanged. Estimates of those cyclically adjusted deficits help analysts evaluate the extent to which actual and projected changes in deficits are caused by factors such as past or scheduled changes in policy and long-run demographic trends rather than by automatic responses to cyclical changes in the economy. Historical and projected budget deficits (or surpluses) track relatively closely with cyclically adjusted deficits, especially in the projection period ending in 2034 (see Figure 2 on page 8). (For estimated deficits and surpluses with and without automatic stabilizers in billions of dollars, see Table 1 on page 4; for those deficits and surpluses measured as a percentage of potential GDP, see Table 2 on page 6.)

5. For further discussion of CBO's estimate of the average output gap, see Congressional Budget Office, *Why CBO Projects That Actual Output Will Be Below Potential Output on Average* (February 2015), [www.cbo.gov/publication/49890](http://www.cbo.gov/publication/49890). CBO's estimate of the average unemployment gap is consistent with its estimate of the average output gap.

Table 1.

### Federal Budget Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, in Billions of Dollars

	With automatic stabilizers			Without automatic stabilizers			Effects of automatic stabilizers			GDP gap <sup>a</sup>	Unemployment gap (percentage points) <sup>b</sup>
	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus		
1974	263.2	269.4	-6.1	257.4	272.8	-15.4	5.8	-3.5	9.3	22.8	-1.1
1975	279.1	332.3	-53.2	294.2	328.9	-34.8	-15.1	3.4	-18.5	-57.6	1.2
1976	298.1	371.8	-73.7	313.1	364.5	-51.4	-15.0	7.3	-22.3	-50.1	1.8
1977	355.6	409.2	-53.7	361.1	404.5	-43.5	-5.5	4.7	-10.2	-22.2	1.1
1978	399.6	458.7	-59.2	394.5	458.6	-64.1	5.1	0.1	5.0	12.7	*
1979	463.3	504.0	-40.7	450.1	506.1	-56.0	13.2	-2.1	15.3	36.3	-0.4
1980	517.1	590.9	-73.8	526.3	588.1	-61.8	-9.2	2.9	-12.0	-42.7	0.6
1981	599.3	678.2	-79.0	615.6	670.0	-54.4	-16.4	8.3	-24.6	-51.1	1.2
1982	617.8	745.7	-128.0	664.7	725.8	-61.1	-46.9	19.9	-66.9	-189.6	3.0
1983	600.6	808.4	-207.8	663.3	777.1	-113.8	-62.8	31.2	-94.0	-232.6	4.0
1984	666.4	851.8	-185.4	686.7	839.2	-152.5	-20.3	12.6	-32.9	-84.8	1.7
1985	734.0	946.3	-212.3	741.5	938.2	-196.8	-7.4	8.1	-15.6	-55.1	1.2
1986	769.2	990.4	-221.2	775.8	982.9	-207.2	-6.6	7.4	-14.1	-48.7	1.1
1987	854.3	1,004.0	-149.7	870.1	1,000.0	-129.9	-15.8	4.1	-19.9	-65.6	0.5
1988	909.2	1,064.4	-155.2	912.9	1,066.2	-153.3	-3.6	-1.8	-1.8	-14.3	-0.3
1989	991.1	1,143.7	-152.6	982.3	1,148.3	-165.9	8.8	-4.5	13.3	28.8	-0.6
1990	1,032.0	1,253.0	-221.0	1,031.0	1,256.1	-225.1	0.9	-3.1	4.0	-1.2	-0.3
1991	1,055.0	1,324.2	-269.2	1,105.6	1,315.9	-210.4	-50.6	8.3	-58.9	-182.1	1.0
1992	1,091.2	1,381.5	-290.3	1,146.0	1,363.7	-217.7	-54.8	17.8	-72.6	-173.5	1.8
1993	1,154.3	1,409.4	-255.1	1,194.4	1,392.2	-197.8	-40.1	17.2	-57.2	-134.9	1.6
1994	1,258.6	1,461.8	-203.2	1,278.7	1,451.4	-172.7	-20.1	10.4	-30.5	-66.4	0.9
1995	1,351.8	1,515.7	-164.0	1,358.5	1,513.3	-154.8	-6.7	2.4	-9.1	-33.0	0.2
1996	1,453.1	1,560.5	-107.4	1,452.8	1,559.0	-106.2	0.2	1.5	-1.3	-2.5	0.1
1997	1,579.2	1,601.1	-21.9	1,552.9	1,603.7	-50.7	26.3	-2.6	28.9	84.1	-0.2
1998	1,721.7	1,652.5	69.3	1,680.6	1,663.8	16.8	41.1	-11.3	52.4	122.7	-0.7
1999	1,827.5	1,701.8	125.6	1,771.9	1,718.6	53.2	55.6	-16.8	72.4	170.1	-1.0
2000	2,025.2	1,789.0	236.2	1,960.6	1,812.4	148.2	64.6	-23.5	88.0	193.6	-1.2
2001	1,991.1	1,862.8	128.2	1,988.4	1,883.7	104.6	2.7	-20.9	23.6	-19.1	-0.8
2002	1,853.1	2,010.9	-157.8	1,912.4	2,005.3	-92.8	-59.3	5.6	-64.9	-202.1	0.6
2003	1,782.3	2,159.9	-377.6	1,856.1	2,142.0	-285.9	-73.8	17.9	-91.7	-247.6	0.9
2004	1,880.1	2,292.8	-412.7	1,907.5	2,276.0	-368.5	-27.4	16.9	-44.3	-80.1	0.6
2005	2,153.6	2,472.0	-318.3	2,143.1	2,464.0	-320.9	10.5	8.0	2.6	39.1	0.2
2006	2,406.9	2,655.1	-248.2	2,372.4	2,658.7	-286.3	34.5	-3.6	38.1	110.1	-0.2
2007	2,568.0	2,728.7	-160.7	2,528.1	2,739.7	-211.6	39.9	-11.0	50.9	126.8	-0.4
2008	2,524.0	2,982.5	-458.6	2,508.7	2,978.1	-469.4	15.3	4.5	10.8	29.8	0.4
2009	2,105.0	3,517.7	-1,412.7	2,257.4	3,430.6	-1,173.2	-152.4	87.1	-239.5	-707.9	3.6

Continued

In CBO's estimates, with current laws generally remaining unchanged, deficits without automatic stabilizers average 6.3 percent of potential GDP from 2024 to 2034—markedly greater than the 3.2 percent of potential GDP that cyclically adjusted deficits averaged in the 50 years from 1974 to 2023. In comparison, deficits with the effects of automatic stabilizers included average 6.3 percent

of potential GDP from 2024 to 2034—also markedly greater than the 3.6 percent of potential GDP that such deficits averaged in the 50 years from 1974 to 2023.

Budget deficits without automatic stabilizers decrease in the first part of the projection period—from 7.2 percent of potential GDP in 2024 to 5.6 percent of potential

Table 1.

Continued

### Federal Budget Deficit or Surplus With and Without CBO’s Estimate of Automatic Stabilizers, in Billions of Dollars

	With automatic stabilizers			Without automatic stabilizers			Effects of automatic stabilizers			GDP gap <sup>a</sup>	Unemployment gap (percentage points) <sup>b</sup>
	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus		
2010	2,162.7	3,457.1	-1,294.4	2,335.5	3,311.5	-976.0	-172.8	145.6	-318.4	-637.7	4.9
2011	2,303.5	3,603.1	-1,299.6	2,451.5	3,456.9	-1,005.4	-148.1	146.1	-294.2	-612.4	4.3
2012	2,450.0	3,526.6	-1,076.6	2,570.9	3,398.1	-827.3	-120.9	128.4	-249.3	-544.6	3.5
2013	2,775.1	3,454.9	-679.8	2,909.2	3,346.3	-437.2	-134.0	108.6	-242.6	-573.2	2.8
2014	3,021.5	3,506.3	-484.8	3,137.3	3,430.3	-293.0	-115.8	76.0	-191.8	-465.4	1.8
2015	3,249.9	3,691.9	-442.0	3,316.1	3,652.0	-335.8	-66.3	39.9	-106.2	-267.1	0.8
2016	3,268.0	3,852.6	-584.7	3,338.2	3,836.1	-497.9	-70.2	16.5	-86.7	-286.2	0.3
2017	3,316.2	3,981.6	-665.5	3,376.1	3,981.0	-604.9	-59.9	0.6	-60.5	-217.5	-0.1
2018	3,329.9	4,109.0	-779.1	3,330.3	4,128.9	-798.6	-0.4	-20.0	19.6	17.1	-0.6
2019	3,463.4	4,447.0	-983.6	3,453.9	4,480.0	-1,026.1	9.5	-33.1	42.5	40.3	-0.8
2020	3,421.2	6,553.6	-3,132.5	3,613.6	6,472.7	-2,859.1	-192.4	80.9	-273.3	-652.1	2.8
2021	4,047.1	6,822.5	-2,775.4	4,137.1	6,734.5	-2,597.5	-90.0	87.9	-177.9	-195.5	1.5
2022	4,897.3	6,273.3	-1,375.9	4,859.9	6,278.8	-1,418.9	37.4	-5.5	43.0	68.6	-0.7
2023	4,440.9	6,134.7	-1,693.7	4,421.3	6,174.7	-1,753.4	19.6	-40.1	59.7	40.3	-0.8
2024	4,889.8	6,804.9	-1,915.2	4,802.8	6,841.6	-2,038.8	87.0	-36.7	123.7	271.3	-0.6
2025	5,037.6	6,975.5	-1,937.9	4,956.4	7,005.1	-2,048.7	81.3	-29.6	110.9	264.2	-0.4
2026	5,393.6	7,244.4	-1,850.8	5,333.2	7,266.0	-1,932.7	60.4	-21.5	81.9	200.8	-0.3
2027	5,756.1	7,512.0	-1,755.9	5,726.9	7,521.4	-1,794.5	29.2	-9.4	38.6	98.0	-0.1
2028	5,943.9	7,886.4	-1,942.5	5,948.0	7,885.8	-1,937.8	-4.1	0.6	-4.7	-6.1	*
2029	6,133.4	8,082.4	-1,949.0	6,161.2	8,075.0	-1,913.8	-27.7	7.4	-35.2	-79.2	0.1
2030	6,354.0	8,546.9	-2,192.8	6,395.6	8,535.3	-2,139.7	-41.6	11.5	-53.2	-124.5	0.2
2031	6,661.1	8,944.0	-2,282.9	6,711.1	8,930.0	-2,218.9	-50.0	14.0	-64.0	-153.5	0.2
2032	6,899.4	9,386.9	-2,487.5	6,955.1	9,371.2	-2,416.1	-55.7	15.7	-71.4	-173.9	0.2
2033	7,176.0	9,998.2	-2,822.1	7,236.5	9,981.2	-2,744.7	-60.5	16.9	-77.4	-189.5	0.2
2034	7,458.7	10,320.4	-2,861.7	7,523.8	10,302.6	-2,778.8	-65.1	17.8	-82.9	-204.1	0.2

Data sources: Congressional Budget Office; Office of Management and Budget (OMB). See [www.cbo.gov/publication/60662#data](http://www.cbo.gov/publication/60662#data).

Automatic stabilizers are changes in federal revenues and outlays that occur automatically in response to cyclical movements in gross domestic product (GDP) and unemployment, helping stabilize the economy.

Shaded values are actual amounts; historical budget numbers are from OMB.

The projections used for this analysis come from CBO’s current baseline projections of the federal budget deficit as presented in Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2024 to 2034* (June 2024), [www.cbo.gov/publication/60039](http://www.cbo.gov/publication/60039).

\* = between -0.05 percentage points and 0.05 percentage points.

- a. The GDP gap equals the difference between actual or projected GDP and CBO’s estimate of potential GDP (the maximum sustainable output of the economy).
- b. The unemployment gap equals the actual or projected rate of unemployment minus CBO’s estimate of the noncyclical rate of unemployment (the rate resulting from the normal turnover of jobs, mismatches between skills of available workers and skills necessary to fill vacant positions, and other sources except changes in aggregate demand).

GDP in 2027—before increasing in the second part of the projection period—to 6.7 percent of potential GDP in 2034. Some of the decrease from 2024 to 2027 is attributable to increased tax revenues from the expiration of certain provisions of the 2017 tax act (Public Law 115-97) at the end of calendar year 2025. The

budget deficit without automatic stabilizers as a percentage of potential GDP in 2034 is 0.2 percentage points lower than the deficit with automatic stabilizers.

Some of the year-to-year variation of estimated budget deficits without automatic stabilizers in the projection





Table 2.

### Federal Budget Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, as a Percentage of Potential GDP

	With automatic stabilizers			Without automatic stabilizers			Effects of automatic stabilizers			GDP gap <sup>a</sup>	Unemployment gap (percentage points) <sup>b</sup>
	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus		
1974	18.0	18.4	-0.4	17.6	18.7	-1.1	0.4	-0.2	0.6	1.6	-1.1
1975	16.8	20.0	-3.2	17.7	19.8	-2.1	-0.9	0.2	-1.1	-3.5	1.2
1976	16.2	20.2	-4.0	17.1	19.9	-2.8	-0.8	0.4	-1.2	-2.7	1.8
1977	17.4	20.0	-2.6	17.6	19.8	-2.1	-0.3	0.2	-0.5	-1.1	1.1
1978	17.7	20.3	-2.6	17.4	20.3	-2.8	0.2	*	0.2	0.6	**
1979	18.3	19.9	-1.6	17.8	20.0	-2.2	0.5	-0.1	0.6	1.4	-0.4
1980	18.2	20.8	-2.6	18.6	20.7	-2.2	-0.3	0.1	-0.4	-1.5	0.6
1981	18.8	21.3	-2.5	19.3	21.0	-1.7	-0.5	0.3	-0.8	-1.6	1.2
1982	17.6	21.3	-3.7	19.0	20.7	-1.7	-1.3	0.6	-1.9	-5.4	3.0
1983	15.9	21.5	-5.5	17.6	20.6	-3.0	-1.7	0.8	-2.5	-6.2	4.0
1984	16.5	21.1	-4.6	17.0	20.8	-3.8	-0.5	0.3	-0.8	-2.1	1.7
1985	17.0	21.9	-4.9	17.2	21.7	-4.6	-0.2	0.2	-0.4	-1.3	1.2
1986	16.8	21.6	-4.8	17.0	21.5	-4.5	-0.1	0.2	-0.3	-1.1	1.1
1987	17.7	20.8	-3.1	18.0	20.7	-2.7	-0.3	0.1	-0.4	-1.4	0.5
1988	17.6	20.7	-3.0	17.7	20.7	-3.0	-0.1	*	*	-0.3	-0.3
1989	17.9	20.7	-2.8	17.8	20.8	-3.0	0.2	-0.1	0.2	0.5	-0.6
1990	17.5	21.2	-3.7	17.5	21.3	-3.8	*	-0.1	0.1	*	-0.3
1991	16.8	21.1	-4.3	17.6	21.0	-3.4	-0.8	0.1	-0.9	-2.9	1.0
1992	16.6	21.0	-4.4	17.4	20.7	-3.3	-0.8	0.3	-1.1	-2.6	1.8
1993	16.7	20.4	-3.7	17.3	20.1	-2.9	-0.6	0.2	-0.8	-2.0	1.6
1994	17.4	20.2	-2.8	17.7	20.0	-2.4	-0.3	0.1	-0.4	-0.9	0.9
1995	17.8	20.0	-2.2	17.9	19.9	-2.0	-0.1	*	-0.1	-0.4	0.2
1996	18.3	19.6	-1.4	18.3	19.6	-1.3	*	*	*	*	0.1
1997	18.9	19.1	-0.3	18.6	19.2	-0.6	0.3	*	0.3	1.0	-0.2
1998	19.5	18.8	0.8	19.1	18.9	0.2	0.5	-0.1	0.6	1.4	-0.7
1999	19.6	18.3	1.3	19.0	18.5	0.6	0.6	-0.2	0.8	1.8	-1.0
2000	20.4	18.0	2.4	19.8	18.3	1.5	0.7	-0.2	0.9	2.0	-1.2
2001	18.9	17.7	1.2	18.9	17.9	1.0	*	-0.2	0.2	-0.2	-0.8
2002	16.8	18.2	-1.4	17.3	18.2	-0.8	-0.5	0.1	-0.6	-1.8	0.6
2003	15.5	18.7	-3.3	16.1	18.6	-2.5	-0.6	0.2	-0.8	-2.1	0.9
2004	15.5	18.9	-3.4	15.8	18.8	-3.0	-0.2	0.1	-0.4	-0.7	0.6
2005	16.8	19.3	-2.5	16.7	19.2	-2.5	0.1	0.1	*	0.3	0.2
2006	17.8	19.6	-1.8	17.5	19.7	-2.1	0.3	*	0.3	0.8	-0.2
2007	18.1	19.2	-1.1	17.8	19.3	-1.5	0.3	-0.1	0.4	0.9	-0.4
2008	17.1	20.2	-3.1	17.0	20.2	-3.2	0.1	*	0.1	0.2	0.4
2009	13.9	23.2	-9.3	14.9	22.6	-7.7	-1.0	0.6	-1.6	-4.7	3.6

Continued

period can be attributed to timing shifts. When October 1 (the first day of the fiscal year) falls on a weekend, certain monthly payments that the government would ordinarily have made on that day are instead made at the end of September and thus are shifted into the previous fiscal year, reducing the number of payments in the fiscal year beginning in October.<sup>6</sup> If not for those

shifts, cyclically adjusted deficits would vary less over the next decade and would increase steadily after

6. October 1, 2023 (the first day of fiscal year 2024) fell on a weekend, so certain payments that would ordinarily have

been made on that day were instead made in fiscal year 2023. October 1 will fall on a weekend again in calendar years 2028, 2033, and 2034, causing certain payments due on those days to be made at the end of September and thus to be recorded in the previous fiscal year. Those timing shifts will boost federal outlays and deficits in fiscal years 2028, 2033, and 2034; they will reduce federal outlays and deficits in fiscal years 2024 and 2029.

Table 2.

Continued

### Federal Budget Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, as a Percentage of Potential GDP

	With automatic stabilizers			Without automatic stabilizers			Effects of automatic stabilizers			GDP gap <sup>a</sup>	Unemployment gap (percentage points) <sup>b</sup>
	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus	Revenues	Outlays	Deficit (-) or surplus		
2010	13.9	22.3	-8.3	15.0	21.3	-6.3	-1.1	0.9	-2.1	-4.1	4.9
2011	14.3	22.4	-8.1	15.2	21.5	-6.3	-0.9	0.9	-1.8	-3.8	4.3
2012	14.7	21.2	-6.5	15.4	20.4	-5.0	-0.7	0.8	-1.5	-3.3	3.5
2013	16.1	20.0	-3.9	16.9	19.4	-2.5	-0.8	0.6	-1.4	-3.3	2.8
2014	16.9	19.6	-2.7	17.5	19.2	-1.6	-0.6	0.4	-1.1	-2.6	1.8
2015	17.6	20.0	-2.4	18.0	19.8	-1.8	-0.4	0.2	-0.6	-1.4	0.8
2016	17.3	20.4	-3.1	17.6	20.3	-2.6	-0.4	0.1	-0.5	-1.5	0.3
2017	16.9	20.3	-3.4	17.2	20.3	-3.1	-0.3	*	-0.3	-1.1	-0.1
2018	16.3	20.1	-3.8	16.3	20.2	-3.9	*	-0.1	0.1	0.1	-0.6
2019	16.3	20.9	-4.6	16.3	21.1	-4.8	*	-0.2	0.2	0.2	-0.8
2020	15.6	29.9	-14.3	16.5	29.5	-13.0	-0.9	0.4	-1.2	-3.0	2.8
2021	17.5	29.5	-12.0	17.9	29.1	-11.2	-0.4	0.4	-0.8	-0.8	1.5
2022	19.4	24.9	-5.5	19.3	24.9	-5.6	0.1	*	0.2	0.3	-0.7
2023	16.5	22.8	-6.3	16.4	22.9	-6.5	0.1	-0.1	0.2	0.2	-0.8
2024	17.3	24.1	-6.8	17.0	24.3	-7.2	0.3	-0.1	0.4	1.0	-0.6
2025	17.1	23.7	-6.6	16.8	23.8	-7.0	0.3	-0.1	0.4	0.9	-0.4
2026	17.6	23.6	-6.0	17.4	23.7	-6.3	0.2	-0.1	0.3	0.7	-0.3
2027	18.1	23.6	-5.5	18.0	23.6	-5.6	0.1	*	0.1	0.3	-0.1
2028	17.9	23.8	-5.9	18.0	23.8	-5.9	*	*	*	*	**
2029	17.8	23.5	-5.7	17.9	23.5	-5.6	-0.1	*	-0.1	-0.2	0.1
2030	17.8	23.9	-6.1	17.9	23.9	-6.0	-0.1	*	-0.1	-0.3	0.2
2031	17.9	24.1	-6.1	18.1	24.0	-6.0	-0.1	*	-0.2	-0.4	0.2
2032	17.9	24.3	-6.4	18.0	24.3	-6.3	-0.1	*	-0.2	-0.5	0.2
2033	17.9	24.9	-7.0	18.1	24.9	-6.8	-0.2	*	-0.2	-0.5	0.2
2034	17.9	24.8	-6.9	18.1	24.8	-6.7	-0.2	*	-0.2	-0.5	0.2

Data sources: Congressional Budget Office; Office of Management and Budget (OMB). See [www.cbo.gov/publication/60662#data](http://www.cbo.gov/publication/60662#data).

Automatic stabilizers are changes in federal revenues and outlays that occur automatically in response to cyclical movements in gross domestic product (GDP) and unemployment, helping stabilize the economy.

Shaded values are actual amounts; historical budget numbers are from OMB.

The projections used for this analysis come from CBO's current baseline projections of the federal budget deficit as presented in Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2024 to 2034* (June 2024), [www.cbo.gov/publication/60039](http://www.cbo.gov/publication/60039).

\* = between -0.05 percent and 0.05 percent; \*\* = between -0.05 percentage points and 0.05 percentage points.

- a. The GDP gap equals the difference between actual or projected GDP and CBO's estimate of potential GDP (the maximum sustainable output of the economy).  
 b. The unemployment gap equals the actual or projected rate of unemployment minus CBO's estimate of the noncyclical rate of unemployment (the rate resulting from the normal turnover of jobs, mismatches between skills of available workers and skills necessary to fill vacant positions, and other sources except changes in aggregate demand).

2027 (versus dipping slightly in 2029 before resuming an upward climb that extends to 2034).

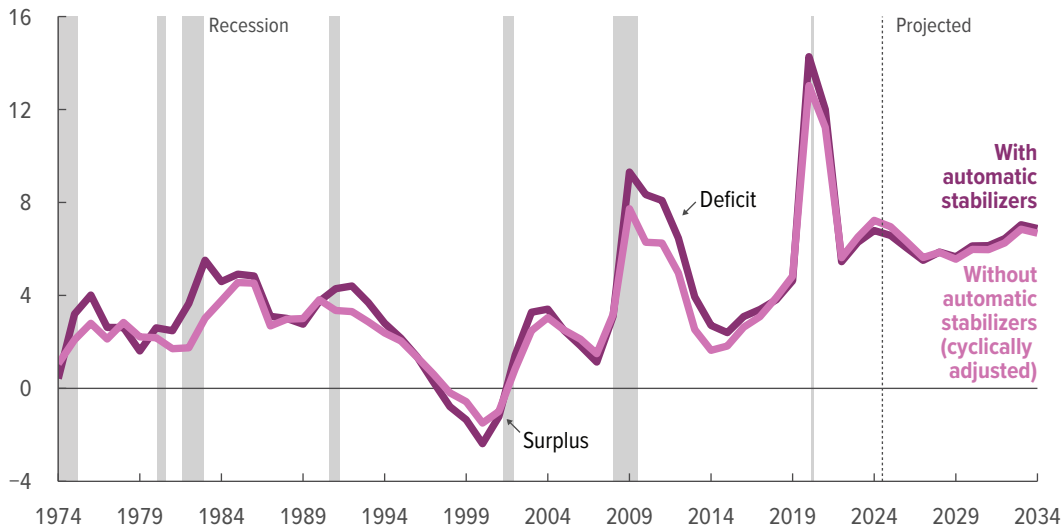
In CBO's estimates, deficits without automatic stabilizers are correlated with cyclical changes in the economy. In particular, those adjusted deficits as a percentage of

potential GDP tend to increase during recessions and in the early phases of recovery periods. How could estimated deficits that exclude the effects of cyclical movements in output and unemployment still correlate with those movements? One reason is legislative or executive actions: Often during times of recession or

Figure 2.

## Federal Budget Deficit or Surplus With and Without Automatic Stabilizers

Percentage of potential GDP



Data sources: Congressional Budget Office; Office of Management and Budget. See [www.cbo.gov/publication/60662#data](http://www.cbo.gov/publication/60662#data).

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Potential GDP is CBO's estimate of the maximum sustainable output of the economy.

Recessions begin just after a peak in economic activity and run through the subsequent trough.

Data are fiscal year values.

high unemployment, lawmakers seeking to support a weak economy have enacted measures—such as those cutting taxes or increasing government spending—that increase deficits. Because legislated changes and executive actions are not automatically built into existing law, their budgetary effects are not attributable to automatic stabilizers. Typically, after times of recession or high unemployment, deficits adjusted for automatic stabilizers have shrunk. That decrease in cyclically adjusted deficits during economic recoveries was evident from 2009 to 2014, although those deficits began to increase in 2015.

Another potential reason that deficits without automatic stabilizers are correlated with cyclical changes in the economy is CBO's methods for estimating the effects of automatic stabilizers: For certain changes that have

not been reliably estimated to have a sufficiently regular relationship with cyclical developments in the economy over time, CBO's methods may only partially remove the effects of those changes. For example, large fluctuations in the stock market, which are partially cyclical and have notable effects on federal revenues from capital gains taxes, are not estimated to be primarily cyclical in nature in CBO's analysis and thus are not reflected in the agency's estimates of automatic stabilizers.<sup>7</sup>

7. Frank Russek and Kim Kowalewski, *How CBO Estimates Automatic Stabilizers*, Working Paper 2015-07 (Congressional Budget Office, November 2015), [www.cbo.gov/publication/51005](http://www.cbo.gov/publication/51005).



This report supplements *An Update to the Budget and Economic Outlook: 2024 to 2034*, which is available on the Congressional Budget Office's website at [www.cbo.gov/publication/60039](http://www.cbo.gov/publication/60039). In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

Matthew Wilson prepared the report with guidance from Devrim Demirel and Jaeger Nelson.

Mark Doms and Jeffrey Kling reviewed the report. Lora Engdahl edited it, and R. L. Rebach created the graphics and prepared the text for publication. The report is available at [www.cbo.gov/publication/60662](http://www.cbo.gov/publication/60662).

CBO seeks feedback to make its work as useful as possible. Please send comments to [communications@cbo.gov](mailto:communications@cbo.gov).



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