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Automatic Stabilizers in the Federal Budget: 2022 to 2032

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Federal revenues and outlays regularly respond to cyclical movements in the economy in ways that tend to offset those movements; the budget mechanisms that drive that process are known as automatic stabilizers. Those mechanisms, which help stabilize the economy automatically, also contribute to short-run fluctuations in the deficit, without any legislated changes in tax or spending policies.

In this report, the Congressional Budget Office projects the budgetary effects of those automatic stabilizers—as well as the size of deficits without them—from 2022 to 2032 and provides historical estimates of the stabilizers' effects since 1972, including their effects in the wake of the coronavirus pandemic.[1] This report is based on CBO's forecast that was released in May 2022; those projections reflect economic developments through March 2, 2022. The projections in the May 2022 forecast and those presented in this report reflect the assumption that current law will generally remain unchanged.[2]

The key takeaways from CBO's analysis of the effects of automatic stabilizers are as follows:

- Automatic stabilizers added significantly to deficits in 2020 and 2021, though most of the change in the total deficit during those years was the result of temporary provisions in pandemic-related legislation.
- Automatic stabilizers are projected to reduce federal deficits from 2023 to 2026 and increase federal deficits from 2027 to 2032.
- With the effects of automatic stabilizers removed, deficits are projected to average 4.9 percent of potential gross domestic product (GDP) over the next decade, more than one-and-a-half times their 50-year average. (Potential GDP is an estimate of the maximum sustainable output of the economy.)

Background

When the unemployment rate is above the noncyclical rate of unemployment, automatic stabilizers typically boost federal outlays for transfer programs above what they would be if the unemployment rate was equal to the noncyclical rate. Those programs include unemployment insurance benefits, Medicaid, and the Supplemental Nutrition Assistance Program (SNAP); such programs support household income and thus private spending. Meanwhile, automatic stabilizers tend to reduce federal revenues when output is below potential because wages and salaries, corporate profits, and other tax bases are typically smaller than they would be if the economy was at its potential output. By contrast, when unemployment is below its noncyclical rate and output is above its potential, automatic stabilizers generally decrease federal spending on transfer programs and increase revenues relative to what they would be otherwise, thus restraining private spending.

CBO estimates the effects of automatic stabilizers on spending and revenues to inform policymakers and analysts about the extent to which changes in the budget deficit are caused by cyclical fluctuations in the economy rather than policy changes. The effects of automatic stabilizers are measured as the estimated changes in federal

1. Data going back to 1965 are available at www.cbo.gov/data/budget-economic-data#8, as are the agency's previous estimates of the effects of automatic stabilizers.
2. For the agency's current economic forecast and budget projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032* (May 2022), www.cbo.gov/publication/57950.

Notes: Unless this report indicates otherwise, all years referred to are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end. Numbers in the text, tables, and figures may not add up to totals because of rounding.

revenues and outlays—and thus in federal budget deficits—stemming from the cyclical components of GDP and the unemployment rate.[3] Those cyclical components are the output gap, which is the difference between GDP and potential GDP, and the unemployment gap, which is the difference between the rate of unemployment and the noncyclical rate of unemployment.

Automatic Stabilizers in 2020 and 2021

CBO estimates that automatic stabilizers increased federal deficits by 1.6 percent and 1.3 percent of potential GDP in 2020 and 2021, respectively. Those effects on the deficit were the result of the steep decline in GDP and the spike in the unemployment rate during the 2020 recession induced by the coronavirus pandemic. In the second quarter of 2020, GDP fell below its potential by 11 percent, and the unemployment rate rose above the noncyclical rate of unemployment by 8 percentage points. Those developments triggered automatic increases in transfers. In addition, the federal government provided significant financial support to households, businesses, and state and local governments through legislated changes in fiscal policy. A key component of that support was enhanced unemployment compensation; legislation expanded eligibility for unemployment benefits, temporarily increased the amount of benefits, and provided benefits for a longer period of time. Because the significant increase in unemployment benefits in 2020 and 2021 were in large part the result of those legislated policy changes, CBO's estimates of automatic stabilizers do not include the effects on the deficit of enhanced unemployment compensation.

Estimates of the Effects of Automatic Stabilizers Over the Next Decade

Using its latest budget and economic projections, CBO estimates that from 2022 through 2032, automatic stabilizers would increase federal budget deficits by an average of less than 0.1 percent of potential GDP under current law. By comparison, automatic stabilizers added an average of over 0.5 percent of potential GDP to deficits over the past 50 years. The projected average is low because automatic stabilizers are projected to reduce deficits from 2023 to 2026 and increase them thereafter.

In CBO's current economic forecast, GDP exceeds its potential through 2025, and the unemployment rate remains below its noncyclical rate through 2027. Because of those cyclical factors, outlays for unemployment insurance, Medicaid, and SNAP are projected to be smaller, and tax revenues are projected to be larger, than they would be otherwise. Thus, automatic stabilizers would reduce deficits from 2023 through 2026. In 2023, for example, when the output gap reaches a cyclical peak, automatic stabilizers are projected to reduce the deficit by $107 billion, or 0.4 percent of potential GDP (see Table 1 on page 4 and see Table 2 on page 6).[4]

From 2027 to 2032, GDP is projected to fall short of potential GDP, and beginning in 2028, the unemployment rate is projected to exceed CBO's estimate of the noncyclical rate of unemployment. From 2027 to 2032, automatic stabilizers increase annual deficits—by an average of 0.2 percent of potential GDP—as the projected output and unemployment gaps begin to settle at their long-run average values of -0.5 percent and 0.3 percent, respectively (see Figure 1).[5]

Budget Deficits Without Automatic Stabilizers

Removing CBO's estimate of the effect of automatic stabilizers from the federal budget deficit yields an estimate of what the deficit would be if GDP was at its potential, the unemployment rate equaled its noncyclical rate, and all other factors were unchanged. The budget deficit without automatic stabilizers—also referred to as the cyclically adjusted deficit—can help analysts evaluate the extent to which actual and projected changes in the deficit are caused by factors other than cyclical developments in the economy, such as past or scheduled changes in policy and long-run demographic trends.

3. CBO's estimates of the effects of automatic stabilizers reflect the assumption that discretionary spending and interest payments do not respond automatically to the business cycle. 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.

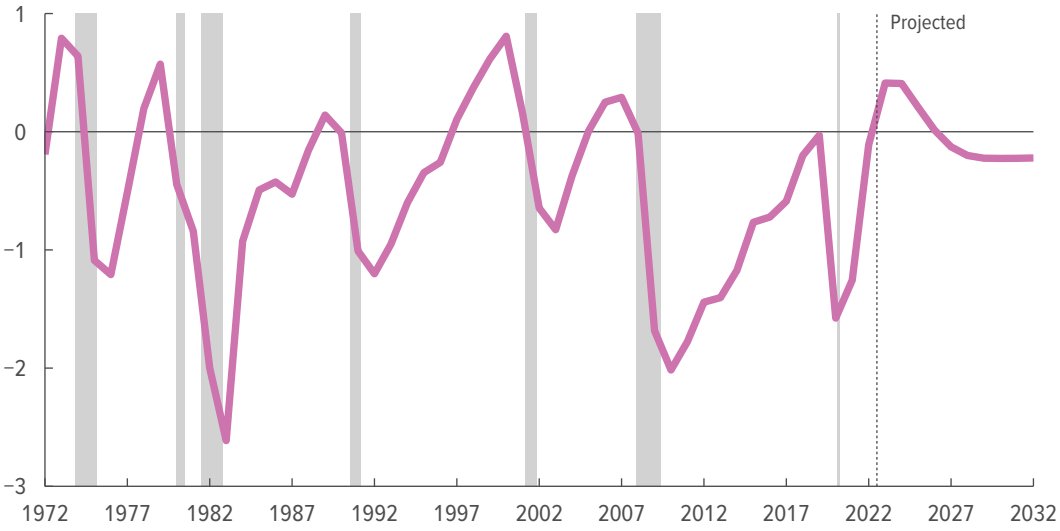
4. In addition to showing the effects of automatic stabilizers in billions of dollars, CBO also presents them as a percentage of potential GDP, which, unlike GDP, excludes fluctuations that are attributable to the business cycle.

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. CBO's estimate of the average unemployment gap is consistent with its estimate of the average output gap.

Figure 1.

Effect of Automatic Stabilizers on the Budget Deficit or Surplus

Percentage of Potential Gross Domestic Product



Data source: Congressional Budget Office. See www.cbo.gov/publication/58495#data.

Automatic stabilizers are budget mechanisms that automatically help stabilize the economy by changing revenues and outlays in response to cyclical movements in gross domestic product and unemployment.

A negative value indicates that automatic stabilizers increase the deficit, and a positive value indicates that they reduce the deficit (or increase the surplus).

Potential gross domestic product is CBO's estimate of the maximum sustainable output of the economy.

Shaded vertical bars indicate the duration of recessions. (A recession extends from the peak of a business cycle to its trough.)

Data are fiscal year values.

The government's response to the pandemic added significantly to the budget deficit without automatic stabilizers: In 2020 and 2021, the budget deficit without automatic stabilizers totaled $2.8 trillion and $2.5 trillion, representing 12.7 percent and 10.8 percent of potential GDP, respectively. Before the pandemic, the highest level of the cyclically adjusted deficit as a percentage of potential GDP was 7.6 percent in 2009, and the five-year average before 2020 was 3.0 percent.

If current laws generally remained unchanged, the deficit without automatic stabilizers would average 4.9 percent of potential GDP from 2022 to 2032—markedly greater than the 2.9 percent of potential GDP it averaged in the 50 years from 1972 to 2021, CBO projects. In CBO's projections, budget deficits without automatic stabilizers increase from 4.1 percent of potential output in 2022 to 5.9 percent of potential output in 2032, the highest since 2011. The budget deficit without automatic stabilizers in 2032 would be 0.2 percentage points lower than the deficit in CBO's baseline (which includes the effects of automatic stabilizers). The increase over this period would not be uniform, however. In 2026 and 2027, the deficit without automatic stabilizers would be lower than it would be in 2025, largely due to an uptick in revenue growth attributable to the expiration of certain provisions of the 2017 tax act (Public Law 115-97) at the end of calendar year 2025 (see Figure 2 on page 8).

Some of the year-to-year variation of the budget deficit without automatic stabilizers in the projection period can be attributed to timing shifts. When October 1 (the first day of the fiscal year) falls on a weekend, certain payments that would ordinarily have been made on that date will instead be made in September, thus boosting outlays in the previous fiscal year and reducing them in the following fiscal year.[6] If not for those shifts, the

6. October 1 falls on a weekend in 2022, 2023, and 2028, so certain payments shift from fiscal years 2023, 2024, and 2029 to fiscal years 2022, 2023, and 2028. Those shifts will noticeably boost spending and the deficit in 2028 and reduce spending and the deficit in 2029.

Table 1.

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				
	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	GDP Gap[a]	Unemployment Gap (Percentage points)[b]
1972	207.3	230.7	-23.4	210.0	231.0	-21.0	-2.7	-0.3	-2.3	-3.9	-0.1
1973	230.8	245.7	-14.9	222.6	247.9	-25.3	8.2	-2.2	10.4	37.2	-0.9
1974	263.2	269.4	-6.1	257.3	272.8	-15.5	5.9	-3.4	9.3	23.0	-1.1
1975	279.1	332.3	-53.2	293.8	329.0	-35.1	-14.7	3.4	-18.1	-57.7	1.2
1976	298.1	371.8	-73.7	313.0	364.6	-51.5	-15.0	7.2	-22.2	-50.0	1.8
1977	355.6	409.2	-53.7	361.4	404.6	-43.1	-5.9	4.7	-10.5	-23.1	1.1
1978	399.6	458.7	-59.2	395.0	458.6	-63.6	4.6	0.1	4.4	11.2	*
1979	463.3	504.0	-40.7	450.9	506.1	-55.2	12.4	-2.1	14.5	34.0	-0.4
1980	517.1	590.9	-73.8	526.9	588.1	-61.2	-9.8	2.8	-12.7	-45.9	0.6
1981	599.3	678.2	-79.0	617.9	670.0	-52.1	-18.6	8.2	-26.8	-58.5	1.2
1982	617.8	745.7	-128.0	668.2	725.9	-57.7	-50.5	19.8	-70.3	-201.0	3.0
1983	600.6	808.4	-207.8	668.4	777.3	-109.0	-67.8	31.1	-98.9	-247.0	4.0
1984	666.4	851.8	-185.4	692.8	840.6	-147.8	-26.4	11.2	-37.6	-104.0	1.7
1985	734.0	946.3	-212.3	747.9	938.8	-190.9	-13.9	7.5	-21.4	-75.4	1.2
1986	769.2	990.4	-221.2	781.8	983.5	-201.7	-12.6	6.9	-19.5	-67.4	1.1
1987	854.3	1,004.0	-149.7	876.8	1,000.9	-124.1	-22.5	3.1	-25.7	-82.9	0.5
1988	909.2	1,064.4	-155.2	919.5	1,066.6	-147.1	-10.3	-2.2	-8.0	-30.7	-0.3
1989	991.1	1,143.7	-152.6	987.8	1,148.2	-160.4	3.3	-4.5	7.8	14.0	-0.6
1990	1,032.0	1,253.0	-221.0	1,035.0	1,255.5	-220.5	-3.0	-2.5	-0.6	-12.9	-0.3
1991	1,055.0	1,324.2	-269.2	1,109.1	1,314.9	-205.8	-54.1	9.3	-63.4	-192.1	1.0
1992	1,091.2	1,381.5	-290.3	1,152.8	1,363.7	-210.9	-61.6	17.8	-79.4	-190.5	1.8
1993	1,154.3	1,409.4	-255.1	1,204.9	1,393.9	-189.1	-50.5	15.5	-66.0	-163.9	1.6
1994	1,258.6	1,461.8	-203.2	1,293.5	1,452.9	-159.4	-34.9	8.9	-43.8	-108.3	0.9
1995	1,351.8	1,515.7	-164.0	1,376.5	1,514.0	-137.5	-24.7	1.7	-26.4	-84.8	0.2
1996	1,453.1	1,560.5	-107.4	1,472.7	1,559.4	-86.7	-19.7	1.1	-20.7	-59.3	0.1
1997	1,579.2	1,601.1	-21.9	1,573.3	1,603.9	-30.6	5.9	-2.8	8.7	25.7	-0.2
1998	1,721.7	1,652.5	69.3	1,699.4	1,663.2	36.3	22.3	-10.7	33.0	68.2	-0.7
1999	1,827.5	1,701.8	125.6	1,785.4	1,717.2	68.2	42.1	-15.3	57.4	130.9	-1.0
2000	2,025.2	1,789.0	236.2	1,966.2	1,810.3	155.9	59.0	-21.4	80.3	174.8	-1.2
2001	1,991.1	1,862.8	128.2	1,992.8	1,880.1	112.6	-1.7	-17.3	15.6	-29.1	-0.8
2002	1,853.1	2,010.9	-157.8	1,917.5	2,003.9	-86.4	-64.4	7.0	-71.4	-212.5	0.6
2003	1,782.3	2,159.9	-377.6	1,861.6	2,143.6	-282.0	-79.3	16.3	-95.6	-259.7	0.9
2004	1,880.1	2,292.8	-412.7	1,911.5	2,279.2	-367.7	-31.4	13.6	-45.0	-93.3	0.6
2005	2,153.6	2,472.0	-318.3	2,146.5	2,465.7	-319.2	7.1	6.3	0.8	25.2	0.2
2006	2,406.9	2,655.1	-248.2	2,376.9	2,658.9	-282.0	30.0	-3.8	33.8	92.5	-0.2
2007	2,568.0	2,728.7	-160.7	2,536.2	2,738.3	-202.1	31.8	-9.6	41.4	98.1	-0.4

Continued

Table 1. Continued

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				
	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	GDP Gap[a]	Unemployment Gap (Percentage points)[b]
2008	2,524.0	2,982.5	-458.6	2,518.5	2,975.3	-456.8	5.5	7.3	-1.7	-1.3	0.4
2009	2,105.0	3,517.7	-1,412.7	2,273.2	3,429.8	-1,156.6	-168.3	87.8	-256.1	-737.8	3.6
2010	2,162.7	3,457.1	-1,294.4	2,346.8	3,327.8	-981.0	-184.1	129.3	-313.4	-656.6	4.9
2011	2,303.5	3,603.1	-1,299.6	2,460.4	3,474.4	-1,014.0	-156.9	128.7	-285.6	-617.8	4.3
2012	2,450.0	3,526.6	-1,076.6	2,577.2	3,413.7	-836.5	-127.2	112.9	-240.1	-540.2	3.5
2013	2,775.1	3,454.9	-679.8	2,921.5	3,359.0	-437.6	-146.4	95.8	-242.2	-588.8	2.8
2014	3,021.5	3,506.3	-484.8	3,166.3	3,441.1	-274.8	-144.8	65.2	-210.0	-537.8	1.8
2015	3,249.9	3,691.9	-442.0	3,357.7	3,658.1	-300.4	-107.8	33.7	-141.5	-380.4	0.8
2016	3,268.0	3,852.6	-584.7	3,390.1	3,837.8	-447.7	-122.2	14.8	-136.9	-427.8	0.3
2017	3,316.2	3,981.6	-665.4	3,432.4	3,982.4	-550.0	-116.2	-0.7	-115.5	-381.7	-0.1
2018	3,329.9	4,109.0	-779.1	3,390.4	4,128.4	-738.0	-60.5	-19.4	-41.1	-158.0	-0.6
2019	3,463.4	4,447.0	-983.6	3,499.6	4,476.8	-977.2	-36.2	-29.9	-6.4	-97.8	-0.8
2020	3,421.2	6,553.6	-3,132.4	3,673.0	6,459.7	-2,786.7	-251.8	93.9	-345.8	-974.4	2.8
2021	4,047.1	6,822.4	-2,775.3	4,275.3	6,762.2	-2,486.9	-228.2	60.3	-288.5	-606.1	1.5
2022	4,836.0	5,871.8	-1,035.8	4,869.9	5,878.5	-1,008.6	-33.8	-6.6	-27.2	-54.4	-0.5
2023	4,889.6	5,873.6	-984.0	4,813.8	5,905.0	-1,091.2	75.8	-31.4	107.2	220.8	-0.9
2024	4,923.9	5,979.8	-1,055.9	4,850.7	6,017.2	-1,166.5	73.2	-37.4	110.6	186.2	-0.8
2025	4,981.5	6,299.8	-1,318.3	4,955.2	6,331.9	-1,376.7	26.3	-32.1	58.5	82.2	-0.6
2026	5,279.7	6,643.5	-1,363.8	5,300.1	6,667.6	-1,367.5	-20.4	-24.1	3.8	-37.5	-0.4
2027	5,548.4	6,957.8	-1,409.4	5,601.1	6,971.5	-1,370.4	-52.7	-13.7	-38.9	-122.4	-0.2
2028	5,715.6	7,440.7	-1,725.1	5,779.0	7,440.5	-1,661.5	-63.4	0.2	-63.6	-156.4	0.1
2029	5,934.0	7,584.8	-1,650.8	5,997.5	7,574.6	-1,577.1	-63.6	10.2	-73.7	-164.4	0.2
2030	6,161.3	8,073.6	-1,912.2	6,224.2	8,059.3	-1,835.1	-62.9	14.3	-77.1	-170.8	0.2
2031	6,401.8	8,469.2	-2,067.4	6,465.0	8,452.4	-1,987.4	-63.2	16.8	-80.0	-177.3	0.3
2032	6,662.1	8,915.3	-2,253.3	6,726.5	8,897.9	-2,171.4	-64.4	17.5	-81.9	-184.0	0.3

Data sources: Congressional Budget Office; Office of Management and Budget. See www.cbo.gov/publication/58495#data.

Automatic stabilizers are budget mechanisms that automatically help stabilize the economy by changing revenues and outlays in response to cyclical movements in GDP and unemployment.

Shaded values are actual amounts.

Projected deficits with automatic stabilizers are CBO's current baseline projections of the federal budget deficit as presented in Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032* (May 2022), www.cbo.gov/publication/57950.

GDP = gross domestic product; * = 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 underlying long-term rate of unemployment.

Table 2.

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				
	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	GDP Gap[a]	Unemployment Gap (Percentage points)[b]
1972	17.0	18.9	-1.9	17.2	18.9	-1.7	-0.2	*	-0.2	-0.3	-0.1
1973	17.5	18.7	-1.1	16.9	18.8	-1.9	0.6	-0.2	0.8	2.8	-0.9
1974	18.0	18.5	-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	17.0	19.9	-2.8	-0.8	0.4	-1.2	-2.7	1.8
1977	17.4	20.0	-2.6	17.7	19.8	-2.1	-0.3	0.2	-0.5	-1.1	1.1
1978	17.7	20.3	-2.6	17.5	20.3	-2.8	0.2	*	0.2	0.5	**
1979	18.3	19.9	-1.6	17.8	20.0	-2.2	0.5	-0.1	0.6	1.3	-0.4
1980	18.2	20.8	-2.6	18.6	20.7	-2.2	-0.3	0.1	-0.4	-1.6	0.6
1981	18.8	21.3	-2.5	19.4	21.0	-1.6	-0.6	0.3	-0.8	-1.8	1.2
1982	17.6	21.2	-3.6	19.0	20.7	-1.6	-1.4	0.6	-2.0	-5.7	3.0
1983	15.9	21.4	-5.5	17.7	20.5	-2.9	-1.8	0.8	-2.6	-6.5	4.0
1984	16.4	21.0	-4.6	17.1	20.7	-3.6	-0.7	0.3	-0.9	-2.6	1.7
1985	16.9	21.8	-4.9	17.2	21.6	-4.4	-0.3	0.2	-0.5	-1.7	1.2
1986	16.7	21.6	-4.8	17.0	21.4	-4.4	-0.3	0.2	-0.4	-1.5	1.1
1987	17.6	20.7	-3.1	18.1	20.6	-2.6	-0.5	0.1	-0.5	-1.7	0.5
1988	17.6	20.6	-3.0	17.8	20.6	-2.8	-0.2	*	-0.2	-0.6	-0.3
1989	17.9	20.6	-2.8	17.8	20.7	-2.9	0.1	-0.1	0.1	0.3	-0.6
1990	17.5	21.2	-3.7	17.5	21.2	-3.7	-0.1	*	*	-0.2	-0.3
1991	16.8	21.1	-4.3	17.6	20.9	-3.3	-0.9	0.1	-1.0	-3.1	1.0
1992	16.5	20.9	-4.4	17.4	20.6	-3.2	-0.9	0.3	-1.2	-2.9	1.8
1993	16.6	20.3	-3.7	17.4	20.1	-2.7	-0.7	0.2	-1.0	-2.4	1.6
1994	17.3	20.1	-2.8	17.8	19.9	-2.2	-0.5	0.1	-0.6	-1.5	0.9
1995	17.7	19.8	-2.1	18.0	19.8	-1.8	-0.3	*	-0.3	-1.1	0.2
1996	18.1	19.5	-1.3	18.4	19.5	-1.1	-0.2	*	-0.3	-0.7	0.1
1997	18.7	19.0	-0.3	18.7	19.0	-0.4	0.1	*	0.1	0.3	-0.2
1998	19.4	18.6	0.8	19.2	18.8	0.4	0.3	-0.1	0.4	0.8	-0.7
1999	19.5	18.2	1.3	19.1	18.4	0.7	0.5	-0.2	0.6	1.4	-1.0
2000	20.4	18.0	2.4	19.8	18.2	1.6	0.6	-0.2	0.8	1.8	-1.2
2001	18.9	17.6	1.2	18.9	17.8	1.1	*	-0.2	0.1	-0.3	-0.8
2002	16.8	18.2	-1.4	17.4	18.1	-0.8	-0.6	0.1	-0.6	-1.9	0.6
2003	15.4	18.7	-3.3	16.1	18.6	-2.4	-0.7	0.1	-0.8	-2.3	0.9
2004	15.5	18.9	-3.4	15.8	18.8	-3.0	-0.3	0.1	-0.4	-0.8	0.6
2005	16.8	19.3	-2.5	16.8	19.2	-2.5	0.1	*	*	0.2	0.2
2006	17.8	19.6	-1.8	17.5	19.6	-2.1	0.2	*	0.3	0.7	-0.2
2007	18.1	19.2	-1.1	17.9	19.3	-1.4	0.2	-0.1	0.3	0.7	-0.4

Continued

Table 2. Continued

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				
	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	Revenues	Outlays	Deficit (-) or Surplus	GDP Gap[a]	Unemployment Gap (Percentage points)[b]
2008	17.1	20.2	-3.1	17.0	20.1	-3.1	*	*	*	*	0.4
2009	13.8	23.1	-9.3	15.0	22.6	-7.6	-1.1	0.6	-1.7	-4.9	3.6
2010	13.9	22.2	-8.3	15.1	21.4	-6.3	-1.2	0.8	-2.0	-4.2	4.9
2011	14.3	22.4	-8.1	15.3	21.6	-6.3	-1.0	0.8	-1.8	-3.8	4.3
2012	14.7	21.2	-6.5	15.5	20.5	-5.0	-0.8	0.7	-1.4	-3.2	3.5
2013	16.1	20.0	-3.9	16.9	19.5	-2.5	-0.8	0.6	-1.4	-3.4	2.8
2014	16.9	19.6	-2.7	17.7	19.2	-1.5	-0.8	0.4	-1.2	-3.0	1.8
2015	17.6	20.0	-2.4	18.2	19.8	-1.6	-0.6	0.2	-0.8	-2.1	0.8
2016	17.2	20.3	-3.1	17.9	20.2	-2.4	-0.6	0.1	-0.7	-2.3	0.3
2017	16.9	20.3	-3.4	17.5	20.3	-2.8	-0.6	*	-0.6	-1.9	-0.1
2018	16.3	20.1	-3.8	16.6	20.2	-3.6	-0.3	-0.1	-0.2	-0.8	-0.6
2019	16.3	20.9	-4.6	16.5	21.1	-4.6	-0.2	-0.1	*	-0.5	-0.8
2020	15.6	29.9	-14.3	16.8	29.5	-12.7	-1.1	0.4	-1.6	-4.4	2.8
2021	17.6	29.7	-12.1	18.6	29.4	-10.8	-1.0	0.3	-1.3	-2.6	1.5
2022	19.5	23.7	-4.2	19.7	23.8	-4.1	-0.1	*	-0.1	-0.2	-0.5
2023	18.8	22.6	-3.8	18.5	22.7	-4.2	0.3	-0.1	0.4	0.8	-0.9
2024	18.2	22.1	-3.9	17.9	22.2	-4.3	0.3	-0.1	0.4	0.7	-0.8
2025	17.7	22.3	-4.7	17.6	22.5	-4.9	0.1	-0.1	0.2	0.3	-0.6
2026	18.0	22.7	-4.7	18.1	22.8	-4.7	-0.1	-0.1	*	-0.1	-0.4
2027	18.2	22.8	-4.6	18.4	22.9	-4.5	-0.2	*	-0.1	-0.4	-0.2
2028	18.1	23.5	-5.5	18.3	23.5	-5.3	-0.2	*	-0.2	-0.5	0.1
2029	18.0	23.1	-5.0	18.2	23.0	-4.8	-0.2	*	-0.2	-0.5	0.2
2030	18.0	23.6	-5.6	18.2	23.6	-5.4	-0.2	*	-0.2	-0.5	0.2
2031	18.0	23.9	-5.8	18.2	23.8	-5.6	-0.2	*	-0.2	-0.5	0.3
2032	18.1	24.2	-6.1	18.2	24.1	-5.9	-0.2	*	-0.2	-0.5	0.3

Data sources: Congressional Budget Office; Office of Management and Budget. See www.cbo.gov/publication/58495#data.

Automatic stabilizers are budget mechanisms that automatically help stabilize the economy by changing revenues and outlays in response to cyclical movements in GDP and unemployment.

Shaded values are actual amounts.

Projected deficits with automatic stabilizers are CBO's current baseline projections of the federal budget deficit as presented in Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032* (May 2022), www.cbo.gov/publication/57950.

GDP = gross domestic product; * = between -0.05 percent and 0.05 percent; ** = between -0.05 percentage points and 0.05 percentage points.

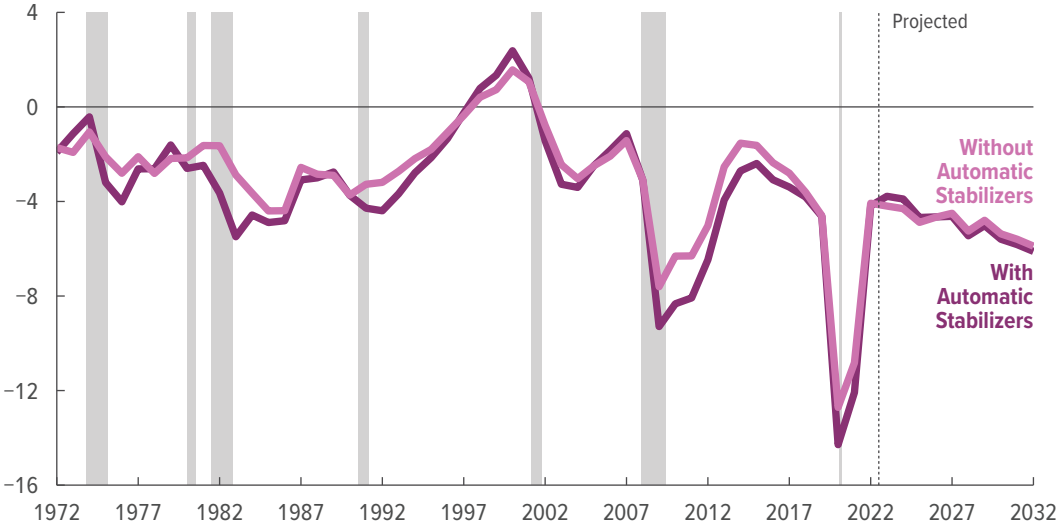
a. The GDP gap equals the difference between actual or projected GDP and CBO's estimate of potential GDP (the maximum sustainable output of the economy).

b. The unemployment gap equals the actual or projected rate of unemployment minus CBO's estimate of the underlying long-term rate of unemployment.

Figure 2.

Budget Deficit or Surplus With and Without Automatic Stabilizers

Percentage of Potential Gross Domestic Product



Data sources: Congressional Budget Office; Office of Management and Budget. See www.cbo.gov/publication/58495#data.

Automatic stabilizers are budget mechanisms that automatically help stabilize the economy by changing revenues and outlays in response to cyclical movements in gross domestic product and unemployment.

A negative value indicates a deficit, and a positive value indicates a surplus.

Projected deficits with automatic stabilizers are CBO's current baseline projections of the federal budget deficit as presented in Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032* (May 2022), www.cbo.gov/publication/57950.

Potential gross domestic product is CBO's estimate of the maximum sustainable output of the economy.

Shaded vertical bars indicate the duration of recessions. (A recession extends from the peak of a business cycle to its trough.)

Data are fiscal year values.

cyclically adjusted deficit would vary less over the next decade and would increase steadily after 2027.

Despite the exclusion of the estimated effects of cyclical movements in output and unemployment, the deficit without automatic stabilizers as a percentage of potential GDP is correlated with the business cycle. In particular, the deficit without automatic stabilizers has tended to increase during recessions and in the early phases of recovery periods. One reason for that correlation is that during times of recession or high unemployment, policymakers have often passed legislation to support a weak economy—such as cutting taxes or increasing government spending—that increased the deficit, as they did in 2020 and 2021. Because such changes require legislation and are not automatically built into existing law, their budgetary effects are not attributable to automatic stabilizers. After times of recession or high unemployment, the cyclically adjusted deficit has typically shrunk. That pattern was evident from 2009 to 2014, although the deficit without automatic stabilizers has grown since then and is projected to reach 5.9 percent of potential GDP by 2032.

Another reason that the deficit without automatic stabilizers appears to be correlated with the business cycle may be that CBO's methods for estimating the effects of automatic stabilizers only partially remove the budgetary effects of certain changes. For example, large fluctuations in the stock market, which have a notable effect on federal revenues from capital gains taxes, have not had a sufficiently regular relationship with business cycles to be considered primarily cyclical in nature.

This report supplements *The Budget and Economic Outlook: 2022 to 2032,* which is available on the Congressional Budget Office's website at www.cbo.gov/publication/57950. 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, John Seliski, and Jeffrey Werling (formerly of CBO).

Mark Doms and Jeffrey Kling reviewed the report, Caitlin Verboon edited it, and R. L. Rebach created the graphics and prepared the text for publication. The report is available at www.cbo.gov/publication/58495.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

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