



The Automatic Stabilizers in the Federal Budget

Federal revenues and outlays regularly respond to cyclical movements in the economy in ways that tend to dampen those movements. When the economy is operating below its potential, personal income is less and other tax bases are smaller than they would have been if the economy was operating at its potential; as a result, federal revenues are lower as well. Meanwhile, outlays for unemployment insurance benefits and some other transfer programs are higher. Those changes in revenues and outlays tend to encourage private spending. By contrast, when the economy is operating above its potential, revenues are higher and transfer payments lower than they would have been if the economy was operating at its potential—changes that tend to restrain private spending. Those cyclical components of revenues and outlays are known as automatic stabilizers because they occur without any legislated changes in tax and spending policies and because they tend to dampen the magnitude of cyclical fluctuations in the economy.

The Congressional Budget Office estimates the automatic stabilizers in order to inform policymakers and analysts about the extent to which changes in the budget deficit are caused by cyclical developments in the economy and thus are likely to prove temporary. The automatic stabilizers are measured as the estimated effects of the cyclical components of gross domestic product (GDP) and the unemployment rate on federal revenues and outlays—and thus on federal budget deficits.¹ Those cyclical components are the difference or gap between GDP and potential (maximum sustainable) GDP and the gap between the rate of unemployment and the underlying long-term rate of unemployment.²

On the basis of CBO's current economic and budgetary projections, which incorporate the assumption that current law generally will not change, the agency projects that the automatic stabilizers would add to the budget deficit and support economic activity by small amounts throughout the period from 2016 to 2026. The automatic stabilizers are projected to shrink over the next three years as the GDP gap narrows and the unemployment rate falls below CBO's estimate of the underlying long-term rate of unemployment. In later years, CBO projects, the GDP gap and the unemployment gap would return to their average values, which would cause the automatic stabilizers to grow again, though their contributions to the budget deficit would remain small. (See Chapter 2 for a discussion of CBO's economic projections for the next 10 years.)

How Large Were the Automatic Stabilizers Last Year?

In fiscal year 2015, the automatic stabilizers added \$141 billion to the federal budget deficit, an amount equal to 0.8 percent of potential GDP, according to CBO's analysis (see Table C-1 and Table C-2).³ (The estimated sizes of the automatic stabilizers in different years are presented as percentages of potential rather than actual GDP because potential GDP excludes fluctuations that are attributable to the business cycle.) It was the first time since the conclusion of the last recession that the automatic stabilizers added less than 1 percent of potential GDP to the deficit (see Figure C-1 on page 128).

1. CBO's estimates of the 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 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.

2. The underlying long-term rate of unemployment is CBO's estimate of the rate that would occur when output was at its potential.

3. For CBO's previous estimates of the automatic stabilizers, see Congressional Budget Office, *The Budget and Economic Outlook: 2015 to 2025* (January 2015), Appendix D, www.cbo.gov/publication/49892. CBO's revisions to those estimates stem from the July 2015 annual revision of the national income and product accounts by the Bureau of Economic Analysis, changes to CBO's economic estimates and projections, and technical improvements in CBO's approach to estimating automatic stabilizers.

Table C-1.

Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, and Related Estimates, in Billions of Dollars

	Deficit (-) or Surplus With Automatic Stabilizers	-	Automatic Stabilizers	=	Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers		GDP Gap ^a	Unemployment Gap (Percent) ^b
						Revenues	Outlays		
1965	-1		3		-4	115	119	8	-0.7
1966	-4		10		-13	123	137	33	-1.7
1967	-9		10		-19	142	161	31	-2.0
1968	-25		9		-34	148	182	27	-2.0
1969	3		12		-8	180	188	31	-2.4
1970	-3		5		-7	192	200	8	-1.9
1971	-23		-4		-19	192	211	-12	-0.2
1972	-23		-2		-21	210	231	-3	-0.1
1973	-15		11		-26	222	248	39	-0.9
1974	-6		10		-16	257	273	26	-1.2
1975	-53		-19		-34	295	329	-61	1.2
1976	-74		-25		-49	315	365	-59	1.8
1977	-54		-14		-39	365	404	-36	1.1
1978	-59		*		-59	399	458	-4	**
1979	-41		9		-50	457	506	14	-0.4
1980	-74		-18		-56	532	588	-61	0.6
1981	-79		-30		-49	621	670	-66	1.2
1982	-128		-72		-56	670	726	-201	3.0
1983	-208		-97		-110	667	777	-238	4.1
1984	-185		-29		-156	685	841	-79	1.8
1985	-212		-8		-204	736	940	-35	1.2
1986	-221		-4		-217	768	985	-18	1.0
1987	-150		-7		-143	858	1,002	-27	0.4
1988	-155		12		-167	899	1,066	31	-0.3
1989	-153		27		-180	968	1,148	74	-0.7
1990	-221		18		-239	1,017	1,256	42	-0.5
1991	-269		-48		-221	1,098	1,319	-154	0.8
1992	-290		-68		-222	1,146	1,369	-170	1.7
1993	-255		-65		-190	1,208	1,397	-170	1.5
1994	-203		-56		-147	1,307	1,454	-149	0.9
1995	-164		-55		-108	1,405	1,513	-170	0.3
1996	-107		-61		-46	1,512	1,558	-174	0.2
1997	-22		-26		4	1,611	1,606	-80	**
1998	69		-2		71	1,729	1,658	-12	-0.5
1999	126		39		87	1,797	1,710	107	-0.7

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Table C-1.

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Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, and Related Estimates, in Billions of Dollars

	Deficit (-) or Surplus With Automatic Stabilizers	-	Automatic Stabilizers	=	Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers		GDP Gap ^a	Unemployment Gap (Percent) ^b
						Revenues	Outlays		
2000	236		78		158	1,960	1,802	217	-1.0
2001	128		27		101	1,975	1,873	23	-0.7
2002	-158		-64		-94	1,910	2,004	-215	0.7
2003	-378		-102		-275	1,871	2,146	-319	1.0
2004	-413		-61		-352	1,929	2,281	-169	0.6
2005	-318		-22		-296	2,171	2,467	-59	0.2
2006	-248		2		-250	2,407	2,658	-8	-0.2
2007	-161		-11		-149	2,587	2,736	-74	-0.4
2008	-459		-65		-393	2,585	2,978	-238	0.4
2009	-1,413		-291		-1,122	2,333	3,455	-992	3.6
2010	-1,294		-343		-952	2,413	3,364	-922	4.7
2011	-1,300		-304		-996	2,518	3,514	-820	4.0
2012	-1,087		-235		-852	2,610	3,462	-648	3.2
2013	-680		-239		-440	2,951	3,392	-698	2.5
2014	-485		-202		-283	3,181	3,464	-585	1.5
2015	-439		-141		-298	3,370	3,668	-423	0.6
2016	-544		-89		-455	3,462	3,917	-294	-0.1
2017	-561		-34		-528	3,552	4,080	-124	-0.4
2018	-572		-3		-570	3,643	4,213	-21	-0.3
2019	-738		-9		-729	3,757	4,487	-33	**
2020	-810		-31		-779	3,943	4,722	-88	0.2
2021	-893		-41		-852	4,109	4,961	-109	0.2
2022	-1,044		-42		-1,002	4,278	5,280	-114	0.2
2023	-1,077		-43		-1,034	4,455	5,490	-119	0.2
2024	-1,089		-45		-1,045	4,646	5,691	-124	0.2
2025	-1,226		-47		-1,180	4,855	6,035	-129	0.2
2026	-1,366		-49		-1,318	5,074	6,391	-135	0.2

Source: Congressional Budget Office, using data from the Office of Management and Budget.

Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in GDP and unemployment.

Shaded amounts are actual deficits or surpluses.

GDP = gross domestic product; * = between zero and \$500 million; ** = between -0.05 percent and 0.05 percent.

a. The GDP gap equals actual or projected GDP minus 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 the underlying long-term rate of unemployment.

Table C-2.

Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, and Related Estimates, as a Percentage of Potential Gross Domestic Product

	Deficit (-) or Surplus With Automatic Stabilizers	-	Automatic Stabilizers	=	Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays Without Automatic Stabilizers		GDP Gap ^a	Unemployment Gap (Percent) ^b
						Revenues	Outlays		
1965	-0.2		0.4		-0.6	16.3	17.0	1.1	-0.7
1966	-0.5		1.3		-1.8	16.5	18.3	4.4	-1.7
1967	-1.1		1.3		-2.3	17.6	19.9	3.9	-2.0
1968	-2.9		1.0		-3.9	16.9	20.8	3.1	-2.0
1969	0.3		1.2		-0.9	18.9	19.8	3.3	-2.4
1970	-0.3		0.4		-0.7	18.5	19.2	0.8	-1.9
1971	-2.0		-0.4		-1.7	17.0	18.6	-1.1	-0.2
1972	-1.9		-0.2		-1.7	17.2	18.9	-0.3	-0.1
1973	-1.1		0.8		-2.0	16.9	18.8	3.0	-0.9
1974	-0.4		0.7		-1.1	17.6	18.7	1.8	-1.2
1975	-3.2		-1.1		-2.1	17.7	19.7	-3.6	1.2
1976	-4.0		-1.3		-2.7	17.1	19.7	-3.2	1.8
1977	-2.6		-0.7		-1.9	17.7	19.6	-1.8	1.1
1978	-2.6		*		-2.6	17.5	20.1	-0.2	*
1979	-1.6		0.3		-1.9	17.9	19.8	0.6	-0.4
1980	-2.6		-0.6		-2.0	18.6	20.6	-2.2	0.6
1981	-2.5		-0.9		-1.5	19.4	20.9	-2.1	1.2
1982	-3.6		-2.0		-1.6	19.1	20.7	-5.7	3.0
1983	-5.5		-2.6		-2.9	17.7	20.6	-6.3	4.1
1984	-4.6		-0.7		-3.9	17.0	20.9	-2.0	1.8
1985	-4.9		-0.2		-4.7	17.1	21.8	-0.8	1.2
1986	-4.9		-0.1		-4.8	16.9	21.6	-0.4	1.0
1987	-3.1		-0.1		-3.0	17.9	20.8	-0.6	0.4
1988	-3.0		0.2		-3.3	17.5	20.8	0.6	-0.3
1989	-2.8		0.5		-3.3	17.6	20.9	1.3	-0.7
1990	-3.8		0.3		-4.1	17.3	21.4	0.7	-0.5
1991	-4.3		-0.8		-3.5	17.5	21.0	-2.5	0.8
1992	-4.4		-1.0		-3.4	17.4	20.7	-2.6	1.7
1993	-3.7		-0.9		-2.7	17.3	20.1	-2.4	1.5
1994	-2.8		-0.8		-2.0	17.8	19.8	-2.0	0.9
1995	-2.1		-0.7		-1.4	18.1	19.5	-2.2	0.3
1996	-1.3		-0.8		-0.6	18.5	19.1	-2.1	0.2
1997	-0.3		-0.3		0.1	18.8	18.8	-0.9	*
1998	0.8		*		0.8	19.3	18.5	-0.1	-0.5
1999	1.3		0.4		0.9	19.1	18.2	1.1	-0.7

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Table C-2.

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Deficit or Surplus With and Without CBO's Estimate of Automatic Stabilizers, and Related Estimates, as a Percentage of Potential Gross Domestic Product

	Deficit (-) or Surplus With Automatic Stabilizers	-	Automatic Stabilizers	=	Deficit (-) or Surplus Without Automatic Stabilizers	Revenues and Outlays		GDP Gap ^a	Unemployment Gap (Percent) ^b
						Without Automatic Stabilizers			
						Revenues	Outlays		
2000	2.4		0.8		1.6	19.7	18.1	2.2	-1.0
2001	1.2		0.3		1.0	18.7	17.8	0.2	-0.7
2002	-1.4		-0.6		-0.8	17.2	18.1	-1.9	0.7
2003	-3.2		-0.9		-2.4	16.1	18.4	-2.7	1.0
2004	-3.4		-0.5		-2.9	15.7	18.6	-1.4	0.6
2005	-2.5		-0.2		-2.3	16.8	19.1	-0.5	0.2
2006	-1.8		*		-1.8	17.6	19.4	-0.1	-0.2
2007	-1.1		-0.1		-1.0	18.0	19.0	-0.5	-0.4
2008	-3.1		-0.4		-2.6	17.2	19.9	-1.6	0.4
2009	-9.2		-1.9		-7.3	15.1	22.4	-6.4	3.6
2010	-8.2		-2.2		-6.1	15.3	21.4	-5.9	4.7
2011	-8.0		-1.9		-6.1	15.5	21.7	-5.1	4.0
2012	-6.5		-1.4		-5.1	15.6	20.8	-3.9	3.2
2013	-4.0		-1.4		-2.6	17.2	19.7	-4.1	2.5
2014	-2.7		-1.1		-1.6	17.9	19.5	-3.3	1.5
2015	-2.4		-0.8		-1.6	18.5	20.1	-2.3	0.6
2016	-2.9		-0.5		-2.4	18.4	20.8	-1.6	-0.1
2017	-2.9		-0.2		-2.7	18.3	21.0	-0.6	-0.4
2018	-2.8		*		-2.8	18.1	20.9	-0.1	-0.3
2019	-3.5		*		-3.5	17.9	21.4	-0.2	*
2020	-3.7		-0.1		-3.6	18.1	21.7	-0.4	0.2
2021	-3.9		-0.2		-3.8	18.1	21.9	-0.5	0.2
2022	-4.4		-0.2		-4.2	18.1	22.3	-0.5	0.2
2023	-4.4		-0.2		-4.2	18.1	22.3	-0.5	0.2
2024	-4.3		-0.2		-4.1	18.1	22.2	-0.5	0.2
2025	-4.6		-0.2		-4.4	18.2	22.6	-0.5	0.2
2026	-4.9		-0.2		-4.7	18.3	23.0	-0.5	0.2

Source: Congressional Budget Office, using data from the Office of Management and Budget.

Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in GDP and unemployment.

Shaded amounts are actual deficits or surpluses.

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

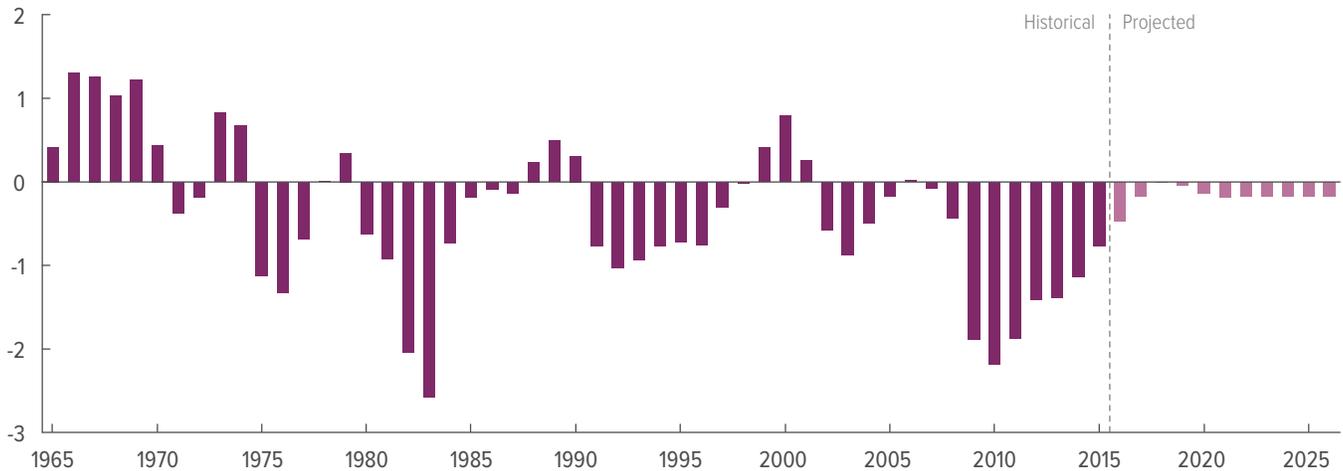
a. The GDP gap equals actual or projected GDP minus CBO's estimate of potential GDP (the maximum sustainable output of the economy), expressed as a percentage of potential GDP.

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

Figure C-1.

Contribution of Automatic Stabilizers to Budget Deficits and Surpluses

Percentage of Potential Gross Domestic Product



Source: Congressional Budget Office.

Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in gross domestic product and unemployment.

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

Data are fiscal year values.

How Large Would the Automatic Stabilizers Be Over the Next Decade?

CBO expects that, if current law generally did not change, the automatic stabilizers would be much smaller in future years than they were in the seven preceding years, reflecting the projected declines in the GDP gap and the unemployment gap. For this fiscal year, the agency projects that the automatic stabilizers will add \$89 billion to the federal budget deficit, an amount equal to 0.5 percent of potential GDP, after adding, on average, an amount equal to 1.5 percent of potential GDP over the period from 2009 to 2015. In later years, the automatic stabilizers are projected to shrink further—to essentially zero in 2018 and 2019—and then to increase slightly, adding to the deficit an amount equal to 0.2 percent of potential GDP, as the GDP and unemployment gaps return to their average values of -0.5 percent and 0.2 percent, respectively.⁴

How Large Would Budget Deficits Without the Automatic Stabilizers Be Over the Next Decade?

Removing CBO's estimate of the 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 was at its underlying long-term rate, and all other factors were unchanged. The budget deficit without the automatic stabilizers can help analysts evaluate the extent to which changes in the deficit are not caused by cyclical developments in the economy and thus are likely to prove enduring.⁵

If current law generally does not change, CBO projects, the budget deficit without the automatic stabilizers will equal 2.4 percent of potential GDP in fiscal year 2016, up from 1.6 percent in 2015 but still well below the values in the period from 2008 through 2013 (see Figure C-2). The increase between 2015 and 2016 results almost entirely from a projected rise in outlays without automatic stabilizers in relation to potential GDP.

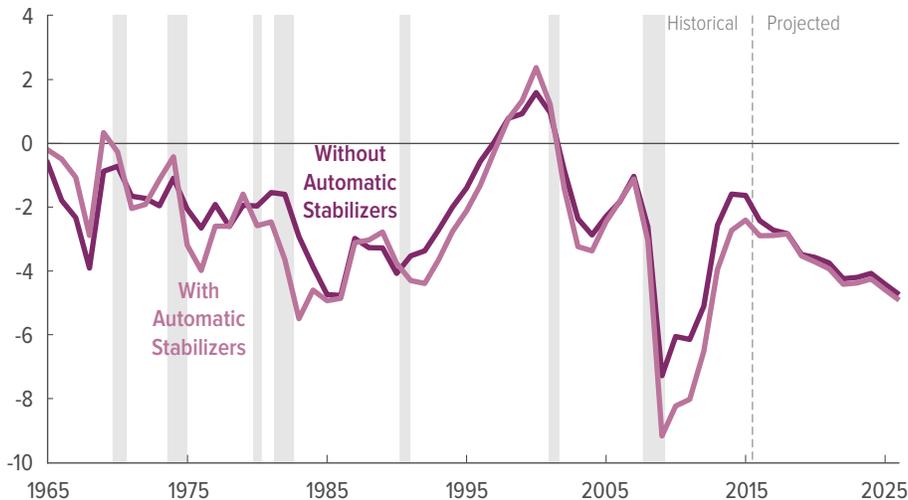
4. The average GDP gap is based on CBO's estimate that output has been that much lower than potential output, on average, over the period from 1961 to 2009. For further discussion, see Congressional Budget Office, *Why CBO Projects That Actual Output Will Be Below Potential Output on Average* (February 2015), www.cbo.gov/publication/49890. CBO's estimate of the average unemployment gap is consistent with its estimate of the average GDP gap.

5. The budget deficit without automatic stabilizers has also been called the cyclically adjusted or structural deficit.

Figure C-2.

Budget Deficits and Surpluses With and Without Automatic Stabilizers

Percentage of Potential Gross Domestic Product



The estimated deficit without automatic stabilizers has tended to increase during recessions and early in recoveries in part as a result of legislation enacted to boost the economy.

Source: Congressional Budget Office, using data from the Office of Management and Budget.

Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in gross domestic product and unemployment.

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

Data are fiscal year values.

For the decade after 2016, CBO's current-law projections show ongoing increases in the budget deficit without the automatic stabilizers. By 2026, the projected budget deficit without the automatic stabilizers equals 4.7 percent of potential GDP, and the deficit with the automatic stabilizers equals 4.9 percent of potential GDP. Essentially all of the anticipated 10-year increase in the deficit without the automatic stabilizers can be attributed to increases in mandatory spending without automatic stabilizers and increases in net interest payments that are only partly offset by a decline in discretionary spending (all measured as a percentage of potential GDP).

Why Do Budget Deficits Appear Cyclical Even After the Estimated Effects of the Automatic Stabilizers Are Filtered Out?

Despite the exclusion of the estimated effects of the business cycle, the deficit without the automatic stabilizers appears to be correlated with the business cycle. In particular, the deficit without the automatic stabilizers tends to

increase during times of recession and early in recoveries. One reason for that correlation is that during times of recession or high unemployment, policymakers often legislate changes to support the weak economy, such as cutting taxes and increasing government spending, that increase the deficit (or reduce the surplus). Those changes require legislation, so their budgetary effects are not automatic, and they are not viewed as automatic stabilizers. During the past decade, for instance, lawmakers have enacted the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010; the American Recovery and Reinvestment Act of 2009; the Emergency Economic Stabilization Act of 2008; and the Housing and Economic Recovery Act of 2008. Another reason for the correlation is that CBO's methods for estimating the automatic stabilizers may only partly remove the budgetary effects of certain changes, such as large fluctuations in the stock market, that have not had a sufficiently regular relationship to business cycles to be viewed as mostly cyclical.

