

## The Effects of Automatic Stabilizers on the Federal Budget as of 2015

**D**uring recessions, federal tax liabilities and, therefore, federal revenues automatically shrink because of the reductions in the taxable income of individuals and corporations that accompany downturns in the economy's total output of goods and services. In addition, some federal outlays—payments of unemployment benefits, for example—automatically increase in a recession. Such reductions in tax collections and increases in outlays help bolster economic activity during downturns—thus they are known as automatic stabilizers—but they also temporarily boost budget deficits. By contrast, when real (inflation-adjusted) output—the nation's gross domestic product (GDP)—moves closer to the economy's maximum sustainable output (called potential GDP), revenues automatically rise and outlays automatically fall. Under those circumstances, automatic stabilizers provide less of a boost to economic activity. (In both cases, the effects of automatic stabilizers are additional to the effects of any legislated changes in tax and spending policies.)

The Congressional Budget Office uses statistical techniques to estimate the automatic effects of cyclical movements in real output and unemployment on federal revenues and outlays and, thus, on federal budget deficits. According to CBO's estimates, automatic stabilizers added significantly to the budget deficit—and thereby substantially strengthened economic activity relative to what it would have been otherwise—in fiscal years 2009 through 2014. On the basis of CBO's economic and budgetary projections under current law, the agency expects that automatic stabilizers will continue to add significantly to the budget deficit and to support economic activity in 2015 but to decline in size in 2016 and 2017 as the economy strengthens further. For the period from 2018 to 2025, CBO projects that GDP will fall slightly short of potential GDP, on average, which causes the automatic stabilizers to add small amounts to the projected budget deficit during those years. (See Chapter 2

for a discussion of CBO's economic projections for the next 10 years.)

### How Large Were the Budgetary Effects of Automatic Stabilizers Last Year?

In fiscal year 2014, automatic stabilizers added \$192 billion to the federal budget deficit, an amount equal to 1.1 percent of potential GDP, according to CBO's analysis (see Table D-1 and Table D-2).<sup>1</sup> That outcome marked the sixth consecutive year that automatic stabilizers added to the deficit by more than 1 percent of potential GDP—the longest such period over the past 50 years (see Figure D-1 on page 142). (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.)<sup>2</sup>

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 a methodology for estimating automatic stabilizers that is similar to CBO's methodology, see Darrel Cohen and Glenn Follette, "The Automatic Fiscal Stabilizers: Quietly Doing Their Thing," *Economic Policy Review*, Federal Reserve Bank of New York, vol. 6, no. 1 (April 2000), pp. 35–68, <http://tinyurl.com/pcxcohz>. See also Glenn Follette and Byron Lutz, *Fiscal Policy in the United States: Automatic Stabilizers, Discretionary Fiscal Policy Actions, and the Economy*, Finance and Economics Discussion Series Paper 2010–43 (Board of Governors of the Federal Reserve System, June 2010), <http://tinyurl.com/nl6qc6e>.
2. For CBO's previous estimates of the automatic stabilizers, see Congressional Budget Office, *The Budget and Economic Outlook: 2014 to 2024* (February 2014), Appendix E, [www.cbo.gov/publication/45010](http://www.cbo.gov/publication/45010). Revisions to estimates since that publication stem from the July 2014 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 the automatic stabilizers.

**Table D-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		GDP Gap <sup>a</sup>	Unemployment Gap (Percent) <sup>b</sup>
						Without Automatic Stabilizers			
						Revenues	Outlays		
1965	-1		4		-5	114	119	10	-0.7
1966	-4		11		-15	122	137	35	-1.7
1967	-9		11		-20	141	161	34	-2.0
1968	-25		10		-36	146	182	31	-2.0
1969	3		13		-10	178	188	36	-2.4
1970	-3		6		-9	191	200	12	-1.9
1971	-23		-4		-19	192	211	-10	-0.2
1972	-23		-2		-21	210	231	-2	-0.1
1973	-15		11		-26	222	248	39	-0.9
1974	-6		10		-16	257	273	24	-1.2
1975	-53		-20		-33	297	330	-63	1.2
1976	-74		-26		-48	317	365	-60	1.8
1977	-54		-15		-39	366	404	-37	1.1
1978	-59		-1		-58	400	458	-7	*
1979	-41		7		-48	458	506	9	-0.4
1980	-74		-21		-53	536	589	-68	0.6
1981	-79		-33		-46	624	670	-74	1.2
1982	-128		-78		-50	677	727	-210	3.0
1983	-208		-104		-104	673	777	-249	4.1
1984	-185		-34		-151	689	840	-92	1.8
1985	-212		-12		-200	740	940	-47	1.2
1986	-221		-9		-212	772	985	-34	1.0
1987	-150		-14		-136	866	1,001	-50	0.4
1988	-155		4		-159	907	1,066	5	-0.3
1989	-153		19		-172	976	1,148	47	-0.7
1990	-221		9		-230	1,026	1,256	16	-0.5
1991	-269		-57		-212	1,107	1,319	-177	0.8
1992	-290		-73		-217	1,152	1,369	-185	1.7
1993	-255		-67		-188	1,209	1,397	-174	1.5
1994	-203		-51		-153	1,301	1,454	-130	0.9
1995	-164		-40		-124	1,389	1,513	-122	0.3
1996	-107		-40		-68	1,490	1,558	-113	0.2
1997	-22		-3		-19	1,588	1,606	-16	*
1998	69		25		44	1,702	1,658	63	-0.5
1999	126		72		54	1,764	1,710	191	-0.7

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Table D-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		GDP Gap <sup>a</sup>	Unemployment Gap (Percent) <sup>b</sup>
						Without Automatic Stabilizers			
						Revenues	Outlays		
2000	236		115		121	1,923	1,802	295	-1.0
2001	128		57		71	1,944	1,873	101	-0.7
2002	-158		-44		-114	1,890	2,004	-139	0.7
2003	-378		-94		-284	1,862	2,146	-266	1.0
2004	-413		-55		-357	1,923	2,281	-132	0.6
2005	-318		-15		-303	2,164	2,467	-30	0.2
2006	-248		11		-259	2,399	2,658	19	-0.3
2007	-161		-7		-154	2,583	2,737	-58	-0.5
2008	-459		-70		-389	2,592	2,980	-249	0.3
2009	-1,413		-320		-1,093	2,365	3,458	-1,012	3.5
2010	-1,294		-373		-921	2,443	3,364	-944	4.6
2011	-1,300		-336		-964	2,550	3,514	-857	3.9
2012	-1,087		-272		-815	2,650	3,465	-713	3.0
2013	-680		-247		-432	2,968	3,400	-662	2.1
2014	-483		-192		-291	3,183	3,474	-522	1.0
2015	-468		-124		-343	3,303	3,646	-353	0.2
2016	-467		-61		-406	3,518	3,923	-164	0.1
2017	-489		-19		-470	3,606	4,075	-49	*
2018	-540		-13		-527	3,727	4,254	-40	*
2019	-652		-33		-620	3,893	4,513	-91	0.2
2020	-739		-43		-696	4,062	4,758	-108	0.2
2021	-814		-46		-768	4,242	5,010	-113	0.2
2022	-948		-47		-901	4,428	5,329	-117	0.2
2023	-953		-49		-904	4,631	5,536	-122	0.2
2024	-951		-51		-900	4,846	5,745	-127	0.2
2025	-1,088		-53		-1,034	5,073	6,108	-132	0.2

Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) output 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).

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

**Table D-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 <sup>a</sup>	Unemployment Gap (Percent) <sup>b</sup>
						Revenues	Outlays		
1965	-0.2		0.5		-0.7	16.3	17.0	1.5	-0.7
1966	-0.5		1.5		-1.9	16.4	18.3	4.7	-1.7
1967	-1.1		1.4		-2.5	17.5	20.0	4.3	-2.0
1968	-2.9		1.2		-4.1	16.8	20.9	3.6	-2.0
1969	0.3		1.4		-1.1	18.8	19.9	3.8	-2.4
1970	-0.3		0.6		-0.8	18.4	19.3	1.1	-1.9
1971	-2.0		-0.3		-1.7	17.0	18.7	-0.8	-0.2
1972	-1.9		-0.2		-1.7	17.2	18.9	-0.2	-0.1
1973	-1.1		0.9		-2.0	16.8	18.8	2.9	-0.9
1974	-0.4		0.7		-1.1	17.6	18.7	1.6	-1.2
1975	-3.2		-1.2		-2.0	17.7	19.7	-3.8	1.2
1976	-4.0		-1.4		-2.6	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	-0.3	*
1979	-1.6		0.3		-1.9	17.9	19.8	0.3	-0.4
1980	-2.6		-0.7		-1.9	18.7	20.5	-2.4	0.6
1981	-2.5		-1.0		-1.4	19.4	20.9	-2.3	1.2
1982	-3.6		-2.2		-1.4	19.2	20.6	-6.0	3.0
1983	-5.5		-2.7		-2.7	17.8	20.5	-6.6	4.1
1984	-4.6		-0.8		-3.7	17.0	20.8	-2.3	1.8
1985	-4.9		-0.3		-4.6	17.1	21.8	-1.1	1.2
1986	-4.8		-0.2		-4.6	16.9	21.6	-0.7	1.0
1987	-3.1		-0.3		-2.8	17.9	20.7	-1.0	0.4
1988	-3.0		0.1		-3.1	17.6	20.7	0.1	-0.3
1989	-2.8		0.3		-3.1	17.7	20.8	0.8	-0.7
1990	-3.7		0.2		-3.9	17.4	21.3	0.3	-0.5
1991	-4.3		-0.9		-3.4	17.6	21.0	-2.8	0.8
1992	-4.4		-1.1		-3.3	17.4	20.7	-2.8	1.7
1993	-3.7		-1.0		-2.7	17.3	20.0	-2.5	1.5
1994	-2.8		-0.7		-2.1	17.8	19.8	-1.8	0.9
1995	-2.1		-0.5		-1.6	18.0	19.6	-1.6	0.3
1996	-1.3		-0.5		-0.8	18.4	19.3	-1.4	0.2
1997	-0.3		*		-0.2	18.7	18.9	-0.2	*
1998	0.8		0.3		0.5	19.1	18.6	0.7	-0.5
1999	1.3		0.8		0.6	18.9	18.4	2.1	-0.7

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**Table D-2.****Continued****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 <sup>a</sup>	Unemployment Gap (Percent) <sup>b</sup>
						Revenues	Outlays		
2000	2.4		1.2		1.2	19.5	18.3	3.0	-1.0
2001	1.2		0.5		0.7	18.6	17.9	1.0	-0.7
2002	-1.4		-0.4		-1.0	17.2	18.2	-1.3	0.7
2003	-3.3		-0.8		-2.4	16.1	18.5	-2.3	1.0
2004	-3.4		-0.5		-2.9	15.7	18.7	-1.1	0.6
2005	-2.5		-0.1		-2.3	16.7	19.1	-0.2	0.2
2006	-1.8		0.1		-1.9	17.6	19.5	0.1	-0.3
2007	-1.1		*		-1.1	18.0	19.0	-0.4	-0.5
2008	-3.1		-0.5		-2.6	17.3	19.9	-1.7	0.3
2009	-9.2		-2.1		-7.1	15.3	22.4	-6.6	3.5
2010	-8.2		-2.4		-5.9	15.5	21.4	-6.0	4.6
2011	-8.0		-2.1		-5.9	15.7	21.6	-5.3	3.9
2012	-6.5		-1.6		-4.9	15.8	20.7	-4.3	3.0
2013	-3.9		-1.4		-2.5	17.2	19.7	-3.8	2.1
2014	-2.7		-1.1		-1.6	17.9	19.5	-2.9	1.0
2015	-2.5		-0.7		-1.9	18.0	19.8	-1.9	0.2
2016	-2.5		-0.3		-2.1	18.5	20.7	-0.9	0.1
2017	-2.5		-0.1		-2.4	18.3	20.6	-0.2	*
2018	-2.6		-0.1		-2.6	18.1	20.7	-0.2	*
2019	-3.0		-0.2		-2.9	18.1	21.0	-0.4	0.2
2020	-3.3		-0.2		-3.1	18.1	21.2	-0.5	0.2
2021	-3.5		-0.2		-3.3	18.1	21.4	-0.5	0.2
2022	-3.9		-0.2		-3.7	18.2	21.9	-0.5	0.2
2023	-3.8		-0.2		-3.6	18.2	21.8	-0.5	0.2
2024	-3.6		-0.2		-3.4	18.3	21.7	-0.5	0.2
2025	-3.9		-0.2		-3.7	18.4	22.1	-0.5	0.2

Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) output and unemployment.

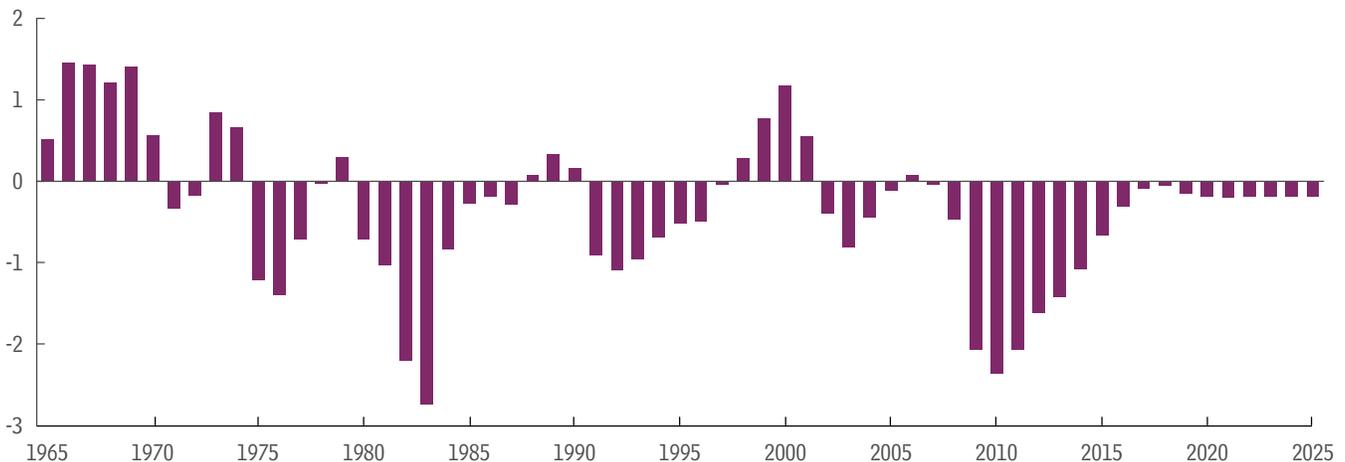
Shaded amounts are actual deficits or surpluses.

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

- 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, expressed as a percentage of potential GDP).
- The unemployment gap equals the actual or projected rate of unemployment minus the underlying long-term rate of unemployment.

**Figure D-1.****Contribution of Automatic Stabilizers to Budget Deficits and Surpluses**

Percentage of Potential Gross Domestic Product



Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) output and unemployment.

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

**How Large Will the Budgetary Effects of Automatic Stabilizers Be Over the Next Decade?**

According to CBO's projections under current law, the contribution of automatic stabilizers to the federal budget deficit will fall to 0.7 percent of potential GDP in fiscal year 2015. That amount accounts for a bit more than a quarter of the estimated deficit this year, just a little below the average share between 2009 and 2014.

CBO expects that the budgetary effects of automatic stabilizers will be significant this year but smaller than in the six preceding years because of the continued—albeit diminishing—weakness in the economy. Specifically, CBO projects that the gap between actual and potential GDP will amount to about 2 percent of potential GDP in fiscal year 2015, compared with roughly 3 percent in 2014 and more than 5 percent, on average, for the period from 2009 through 2013.

The contribution of the automatic stabilizers to the budget deficit is projected to fall further in 2016 and 2017—to 0.3 percent and then to 0.1 percent of potential GDP—as the output gap continues to narrow. That contribution is then projected to remain at 0.1 percent of

potential GDP in 2018, before settling at 0.2 percent of potential GDP in 2019 and later years.<sup>3</sup> CBO projects that GDP will be one-half of a percent below potential GDP, on average, during the 2020–2025 period (although in any particular year the gap could be larger or smaller than one-half of a percent).<sup>4</sup> As a result, the automatic stabilizers are estimated to continue to add to budget deficits in those years.

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

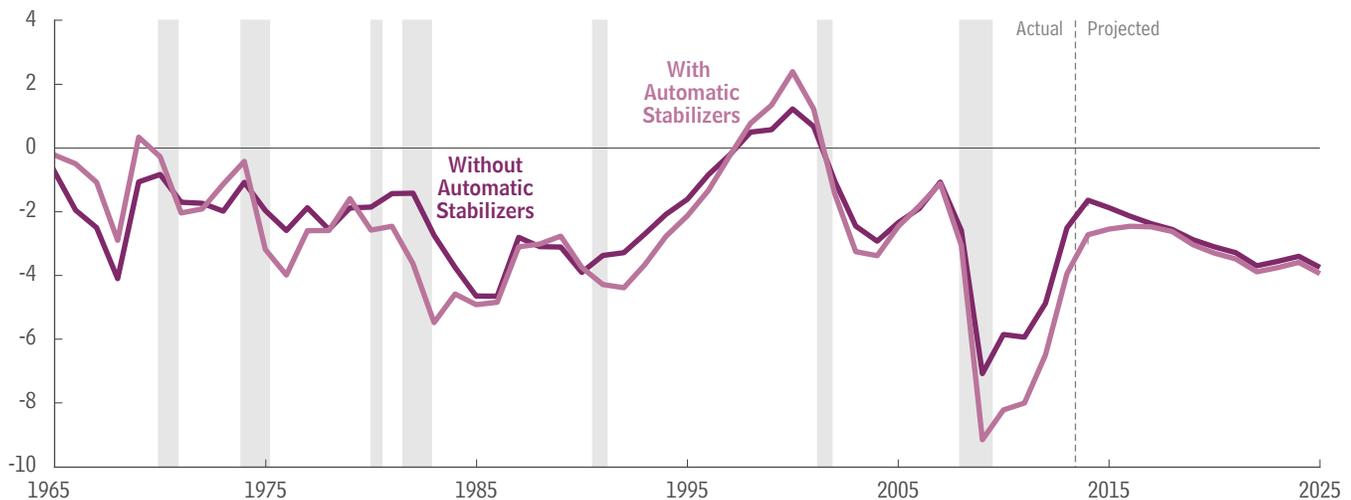
The federal budget deficit or surplus with the effects of automatic stabilizers filtered out is an estimate of what the deficit or surplus would be if GDP was at its potential, the unemployment rate was at its underlying

3. The estimated budgetary impact of automatic stabilizers is smaller in 2017 and 2018 than in subsequent years because CBO projects that the GDP gap will temporarily be narrower than it will be, on average, in later years.
4. That difference 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 Chapter 2.

**Figure D-2.****Budget Deficits and Surpluses With and Without Automatic Stabilizers**

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.

Percentage of Potential Gross Domestic Product



Sources: Congressional Budget Office; Office of Management and Budget.

Notes: Automatic stabilizers are automatic changes in revenues and outlays that are attributable to cyclical movements in real (inflation-adjusted) output and unemployment.

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

long-term rate, and all other factors were unchanged. (The budget deficit without automatic stabilizers also has been called the cyclically adjusted or structural deficit.) That measure, when compared with the budget deficit with automatic stabilizers, is useful for analysts who wish to evaluate the extent to which changes in the budget deficit or surplus are caused by cyclical developments in the economy and thus are likely to prove temporary rather than enduring.

Under current law, CBO projects, the budget deficit without automatic stabilizers will equal 1.9 percent of potential GDP in fiscal year 2015, up from 1.6 percent in 2014, but still well below the values in the period from 2008 through 2013 (see Figure D-2). The increase between 2014 and 2015 results from a projected rise in outlays without automatic stabilizers relative to potential GDP. That rise can be attributed primarily to an increase in the estimated cost of the insurance coverage provisions of the Affordable Care Act that outweighs the declines relative to potential GDP that are anticipated for discretionary outlays and interest payments.

For the decade after 2015, CBO projects ongoing increases in the budget deficit without automatic stabilizers: By 2025, the projected budget deficit without automatic stabilizers equals 3.7 percent of potential GDP. (Small declines projected for 2023 and 2024 are the result of shifts in the timing of certain payments that occur when scheduled payment dates fall on weekends or holidays.) Essentially all of the anticipated increase in the deficit without automatic stabilizers between 2016 and 2025 under current law can be attributed to increases in mandatory spending without automatic stabilizers and in 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 Automatic Stabilizers Are Filtered Out?

Despite adjustments to revenues and outlays for the estimated effects of the business cycle, the estimated deficit without automatic stabilizers exhibits movements that appear to be correlated with the business cycle. In

particular, the estimated deficit without automatic stabilizers tends to increase during times of recession and early in a recovery.

That pattern probably reflects several factors. One factor is that estimates of the budgetary impact of automatic stabilizers may only partly remove the 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. Another factor is that policymakers often choose to support a weak economy by cutting taxes or increasing government spending, both of which increase the deficit (or reduce

the surplus). Such responses to recessions and high unemployment require legislation, so their budgetary effects are not automatic, and they are not viewed as automatic stabilizers. During the past several years, for example, lawmakers have enacted the Tax Increase Prevention Act of 2014 (Public Law 113-295); the American Taxpayer Relief Act of 2012 (P.L. 112-240); the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312); the American Recovery and Reinvestment Act of 2009 (P.L. 111-5); the Emergency Economic Stabilization Act of 2008 (P.L. 110-343); and the Housing and Economic Recovery Act of 2008 (P.L. 110-289).