Grading Government: A Deficit Management Scorecard*

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Abstract

Before 2004, Congress reduced the deficit when the projected deficit rose. We use Congress's pre-2004 fiscal feedback rule to grade its recent deficit management. We find that recent Congresses managed the deficit worse than most others, with one half-year being the worst on record. Stochastic modeling implies that fiscal sustainability requires Congress to make annual deficit reductions as a share of GDP starting with 0.3% next year and summing to 1.7% by year ten – 0.3 percentage points larger than the tenth-year requirement just two years ago. Our "deficit management scorecard" can grade Congress semiannually with each new budget outlook.

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1 Introduction

How can economists and budget analysts grade Congress's management of the deficit? On the one hand, qualitative observations fail to quantify how far Congress's actions deviate from fiscal responsibility, such as observing that Congress over a certain period increased rather than decreased the deficit. On the other hand, grading Congress according to whether it enacted full debt stabilization compares Congress to an ideal it has rarely met historically. This paper proposes a deficit management "scorecard" that grades Congress's recent behavior against the benchmark of past fiscally-responsible Congresses and estimates the incremental year-by-year Congressional action needed going forward to achieve fiscal sustainability.

Any baseline fiscal path can be sustainable in the long run if there is sufficiently strong fiscal feedback, i.e., if future fiscal policy responds sufficiently strongly to high deficits. Auerbach (2003) found that Congress engaged in substantial fiscal feedback in the 1984-2003 period: when the Congressional Budget Office (CBO) projected higher deficits, Congress subsequently reduced the deficit. Congress's implied fiscal feedback rule in the 1983-2004 period was strong enough to ensure fiscal sustainability with high probability, even in the face of large transitory deficit shocks like the COVID-19 pandemic and persistent interest rate shocks (Auerbach and Yagan 2024). Since then, however, Congress has changed its behavior: fiscal feedback was statistically absent in the 2004-2024 period (Auerbach and Yagan 2024).

We use updated fiscal feedback estimates for the 1984-2003 period to provide a deficit management scorecard for recent Congresses. We grade government performance based on the extent to which legislation has conformed or deviated from the strength of fiscal feedback predicted based on the 1984-2003 period, when policy followed a path of fiscal sustainability. Every half year or so, CBO estimates the amount by which the last half year's enacted legislative changes will reduce the projected deficit, which we summarize using a weighted average of primary deficit reduction impacts over the coming five years. For each half-year, we subtract that five-year actual deficit reduction from the deficit reduction prescribed by the pre-2004 fiscally sustainable rule. A large positive value means that the half-year Congress failed to appropriately manage the deficit.

The enactment of the One Big Beautiful Bill Act (OBBBA) provides an illustrative example. In January, 2025, CBO projected that annual budget deficits averaging around 6% over the coming decade (CBO 2025, Table B-1). With the economy strong, the time might have seemed right to consider some measure of fiscal consolidation, which the pre-2004 fiscal rule suggested should have equaled nearly 0.75% of GDP. Yet, in July, 2025, Congress passed and President Trump signed into law the One Big Beautiful Bill Act (OBBBA), which along with other enacted legislation will increase the primary deficit by nearly 1.5% of GDP on average over the coming five years. Subtracting -1.5% from 0.75% yields a deficit reduction deviation from the pre-2004 rule equal to more than 2% of GDP, larger than any other deviation on record.

We close the paper by updating the simulation exercise from Auerbach and Yagan (2024) to determine the minimum feedback strength needed to achieve fiscal sustainability, based on the most recent CBO long-term projections. We quantify what this feedback would imply for deficit reduction over the next decade relative to the CBO baseline. Fiscal sustainability requires Congress next year to enact a relatively small "down payment" primary deficit reduction of nearly 0.3% of GDP, to which Congress must add over time to yield a 2036 primary deficit that is 1.7% of GDP lower than baseline. The magnitude of required deficit reduction has increased substantially over the last two years because

fiscal conditions have deteriorated. While the necessary consolidations are still quite feasible relative to the size of the economy, their magnitude is largely unprecedented at least since the early 1980s, when our data begin, and indicate that, over the next ten years, achieving sustainability would nearly require closing the traditionally measured fiscal gap of roughly 2% of GDP.

2 A Standard Approach to Grading Congress: Did Congress Close the Fiscal Gap?

A standard approach to grading Congress's deficit management is to ask whether Congress reduced the fiscal gap, e.g. Auerbach and Gale (2026a). The fiscal gap is the immediate and permanent change to the primary deficit that would stabilize the debt-GDP ratio under deterministic current law. We provide a simple approximation of the fiscal gap based on the most recent CBO outlook (CBO 2026a) and discuss its limitations as a benchmark for grading Congress.

Following Yagan (2025), let b_t denote the debt-GDP ratio at the end of fiscal year t, r_t denote the average nominal interest rate on government debt, g_t denote the nominal GDP growth rate, s_t denote the primary surplus (revenue minus non-interest spending) as a share of GDP, and m_t denote other means of financing (e.g., reducing Treasury cash balances). Define r_t as net interest in year t divided by debt at the end of year $t-1$.[1] The debt-ratio evolves as:

$$b_t - b_{t-1} = \frac{r_t - g_t}{1+g_t} \cdot b_{t-1} + m_t - s_t \tag{1}$$

which shows that the debt-ratio rises when the interest rate exceeds the growth rate, when the government uses other means of financing, and/or when the government runs a primary deficit.

Table 1A exactly decomposes CBO's February 2026 ten-year outlook for the debt-GDP ratio into the three components specified in equation 1. From 2026 to 2036, CBO projects that the debt-GDP ratio b_t will rise by nearly 20 percentage points, from 99.4% to 118.0%. None of that increase is due to excess interest $(r_t - g_t)/(1+g_t) \cdot b_{t-1}$: net interest payments as a share of GDP $r_t/(1+g_t) \cdot b_{t-1}$ are entirely offset by growth dividends $-g_t/(1+g_t) \cdot b_{t-1}$, which are the amounts by which GDP growth reduces the debt-GDP ratio as in (Bohn 1998). Other means of financing m_t is also slightly negative. Instead, the entire 20-percentage-point rise in the debt-ratio is attributable to the primary deficit.

When the excess interest rate $(r_t - g_t)/(1+g_t)$ and primary surplus s_t are constant and other means of financing m_t is zero, a simple formula specifies the primary surplus s^* that holds the debt-GDP ratio constant at a level b:

$$s^* = \frac{r-g}{1+g} \cdot b \tag{2}$$

In CBO forecasts, other means of financing quickly goes to nearly zero and the excess interest rate tends to stabilize within five years, after the near-term business cycle dissipates and the economy returns to trend. Thereafter, the primary reason that the excess interest rate changes over the long run in CBO's forecasts is the sensitivity of interest rates to a rising debt-GDP ratio, an issue to which we return below. Under hypothetical Congressional action that closes the fiscal gap and stabilizes the

[1] This definition differs from a literal average interest rate on debt, in particular because a primary deficit in t generates net interest in t. Our definition keeps the math simple and internally consistent. Moreover, primary deficits are small relative to the stock of outstanding debt, so net interest from current-year primary deficits is relatively small.

debt-GDP ratio, the excess interest rate would largely stabilize as well. Hence, assuming stability in r_t and g_t and thus the excess interest rate $(r_t - g_t)/(1 + g_t)$ at their five-year-out levels is useful for the exercise of calculating the fiscal gap.

Table 1: Understanding the CBO's Deterministic Outlook for the Debt-GDP Ratio

Panel A. Exact Decomposition of the 10-Year Debt-GDP Trajectory in the February 2026 CBO Outlook

	2026 (1)	2027 (2)	2028 (3)	2029 (4)	2030 (5)	2031 (6)	2032 (7)	2033 (8)	2034 (9)	2035 (10)	2036 (11)	2027–2031 (12)	2032–2036 (13)	2027–2036 (14)
Beginning-of-year debt-GDP ratio (% of GDP)	99.4	100.6	102.1	104.1	105.8	107.7	109.6	111.5	114.0	116.2	118.0			
End-of-year debt-GDP ratio (% of GDP)	100.6	102.1	104.1	105.8	107.7	109.6	111.5	114.0	116.2	118.0	120.2			
Change in debt-GDP ratio (pp of GDP), equal to:	1.2	1.5	2.0	1.7	1.9	1.8	2.0	2.5	2.2	1.8	2.2	9.0	10.6	19.6
Excess interest (% of GDP)	−1.5	−0.9	−0.5	−0.2	−0.1	0.0	0.2	0.2	0.2	0.3	0.3	−1.7	1.2	−0.5
Plus: Other means of financing (% of GDP)	0.2	0.1	0.4	−0.4	−0.1	−0.1	−0.1	0.3	−0.1	−0.6	−0.1	−0.1	−0.7	−0.8
Plus: Primary deficit (% of GDP)	2.6	2.3	2.1	2.3	2.1	1.9	1.9	2.0	2.1	2.1	2.1	10.7	10.1	20.8
Memo (%):														
Excess interest rate $(r_t - g_t)/(1 + g_t)$	−1.5	−0.9	−0.5	−0.2	−0.1	0.0	0.2	0.2	0.2	0.2	0.3	−0.3	0.2	−0.1
Avg. nominal interest rate r_t on gov. debt	3.4	3.5	3.6	3.7	3.8	3.8	3.9	4.0	4.0	4.0	4.0	3.7	4.0	3.8
Nominal GDP growth rate g_t	5.1	4.4	4.1	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.0	3.8	3.9

Panel B. Key Milestones

	Year (15)	Years after 2026 (16)
When $r > g$ (debt begins to spiral on its own)	2031	5
When debt-GDP ratio reaches 125%	2039	13
When debt-GDP ratio reaches 150%	2048	22
When debt-GDP ratio reaches 175%	2056	30
When debt-GDP ratio reaches 200%	2063	37
When debt-GDP ratio reaches 225%	2069	43
When debt-GDP ratio reaches 250%	2073	47

Panel C. Debt-GDP Ratio at Salient Intervals

	Years after 2026							
	0 (17)	10 (18)	20 (19)	25 (20)	30 (21)	50 (22)	75 (23)	100 (24)
End-of-year debt-GDP ratio (% of GDP)	100.6	120.2	144.5	159.0	175.1	279.6	2145.7	∞

Notes: Panel A uses values from the February 2026 CBO Budget Outlook to exactly decompose its ten-year path for the debt-GDP ratio into the three components of equation 1. Excess interest equals net interest plus the growth dividend, which the decline in the debt-GDP ratio due to GDP growth. Other means of financing includes reductions in Treasury's cash balance. The primary deficit equals non-interest spending minus revenue. Panels B list key milestones and key values of the debt-GDP ratio in the February 2025 CBO Long-Term Budget Outlook, extended beyond 2056 as detailed in Section 5: fixing the primary surplus and other means of financing at their 2056 values and allowing the excess interest rate to evolve assuming two-basis-point feedback of the debt-GDP ratio into the excess interest rate.

Looking at year 2030, Table 1A lists that CBO forecasts that the excess interest rate $(r_t - g_t)/(1+g_t)$ will be nearly zero (-0.1%). With the debt-ratio nearly equal to one, equation 2 delivers the simple finding that stabilizing the debt-GDP ratio requires the primary surplus to be approximately zero: $s^* = -0.1\% \cdot 1 = -0.1\%$, or a primary deficit equal to 0.1% of GDP. CBO forecasts that the primary deficit over the next thirty years will average 2.1% of GDP under current law. Hence, the fiscal gap is approximately 2.0% $(= 2.1\% - 0.1\%)$: Congress would stabilize the debt-GDP ratio if it immediately and permanently reduced the deficit by 2.0% of GDP.[2]

Though the fiscal gap is a powerful benchmark, there are three limitations to the standard approach

[2]By comparison, Auerbach and Gale (2026b) estimate a fiscal gap using the same CBO outlook over the same thirty-year horizon of 2.3% of GDP. They use the forecasted CBO path of a rising excess interest rate, while we assume that the excess interest rate remains fixed because the fiscal consolidation prevents the debt-GDP from rising and thus prevents feedback of the debt-GDP ratio into the excess interest rate.

of grading recent Congresses according to whether they closed the fiscal gap. First, while the CBO outlook is deterministic, the real world is uncertain: the excess interest rate could move favorably or unfavorably for secular reasons, and we may be lucky or unlucky with respect to new "deficit disasters". A prudent Congress may wish to smooth its deficit changes over time as uncertainty resolves. Second and related, political constraints may make immediate deficit reductions of 2.0% of GDP unrealistic, and indeed Congress has almost never undertaken such a large deficit reduction at least since the early 1980s, when our data begin. Third, the standard of closing the fiscal gap ignores countercyclical policy needs: a prudent Congress may not wish to slash the deficit if the economy is already operating below potential.

3 Feedback Rules: Methodology and New Estimates

As an alternative to asking whether fiscal policy closes the fiscal gap, one can evaluate the extent to which policy, on an ongoing basis, reacts to fiscal conditions, while taking account of the economic environment that might limit or reinforce the desirability of fiscal consolidation. Auerbach (2003) considered a year-to-year fiscal feedback rule that well-approximated Congress's actual behavior during the 1984-2003 period. When the projected deficit rose, Congress reduced the deficit by less than the fiscal gap, leaving additional deficit reduction for the following period if the projected deficit continued. As part of the same estimation, Auerbach (2003) found a strong countercyclical fiscal policy response, indicating that Congress followed an easier fiscal policy when economic conditions dictated. Auerbach and Yagan (2024) found that such year-to-year adjustments to projected budget deficits between 1984 and 2003 were more than strong enough to keep the debt-GDP ratio below 250% over a 100-year horizon with a 95% probability, which they took to be an indication of fiscal sustainability. But they also found that this behavior changed thereafter, so that, for the period 2004-2024, there was essentially no legislative response to the size of projected deficits. Below, we provide updated estimates of the fiscal feedback rule for 1984-2003, which we use as our standard for grading recent Congressional behavior because of its effectiveness at ensuring fiscal sustainability.

The methodology we use here follows that in Auerbach (2003), updated by Auerbach and Yagan (2024). We measure fiscal policy changes based on semiannual estimates by CBO of the fiscal impacts of new legislation during the relevant period of observation. Usually twice per fiscal year since 1984 – typically first in the winter then again in the summer – CBO updates its deficit forecast. It separates each update into three sources of changes: legislative, economic, and technical. Legislative impacts comprise changes caused by legislation enacted since the last update. Economic impacts comprise changes caused by updates to CBO's macroeconomic forecast since the last update, for example changes to the GDP growth or interest rate forecast. Technical impacts comprise changes caused by new information on expected revenues and outlays conditional on the macroeconomic forecast, such as new information on benefit take-up or the distribution of income.[3] The CBO data sources for each of our historical observations through 2024 are provided in the Appendix to Auerbach and Yagan (2024).

For our main specification, we estimate the impact of projected surpluses on legislated surplus changes, while controlling for the output gap and scaling all values by potential GDP:

[3] An advantage of using estimates of the effects of legislation, rather than changes in the regular or primary budget deficit, even adjusted for the state of the business cycle, is that it excludes such technical changes rather than treating them inaccurately as changes in policy.

$$\Delta s_t = \alpha + \beta \mathbb{E}\left[s_{t-1}\right] + \gamma y_{t-1} + \epsilon_t \tag{3}$$

where t denotes a semi-annual period, $\mathbb{E}\left[s_{t-1}\right]$ denotes CBO's forecast as of period $t-1$ of the weighted average surplus scaled by potential GDP over the coming five years beginning with period t, Δs_t denotes CBO's estimate at the end of period t of the impact of legislation enacted during period t on the average primary surplus scaled by potential GDP over the coming five years beginning with period t, and y_{t-1} denotes the output gap (defined to be positive when output is below potential) during the last full quarter before period t, equal to the difference between CBO's estimate of actual and potential GDP as a share of potential GDP. We use a discount factor of 0.5, weighting five-year averages such that each successive fiscal year's surplus is accorded half of the weight of the prior fiscal year's.[4,5]

Across the 38 observations between the second period of 1984 and the first period of 2003 (the original Auerbach 2003 sample), estimating equation 3 indicates that when the projected surplus declined by 1% of GDP, Congress in the average period legislated increases to the primary surplus that averaged 0.12% of GDP over the coming five years (Table 2). That is, $\hat{\beta} = -0.117$ with a robust standard error of 0.024, implying a t-statistic of nearly 5.[6] The -0.117 coefficient is smaller in magnitude than the -0.146 coefficient reported in Auerbach and Yagan (2024), reflecting updates since then to the CBO's historical estimates of potential GDP.[7]

As already discussed, responsiveness to projected deficits disappeared in later years. The last two columns of Table 2 illustrate this finding, showing estimates of equation 3 from observation 2004a through the most recent observation, 2026a (detailed below), where "a" and "b" correspond to the first and second observations ending in a given fiscal year. The second column of the table, including all observations for this later period, shows no significant response to either projected deficits or the output gap, with the response to projected deficits having the wrong sign. The last column of the table provides estimates for the same period while excluding zero-lower-bound (ZLB) observations: those in which the Federal Reserve was either bound by the zero lower bound (2009b-2016a and 2020b-2022a) or had opened the emergency discount window soon before hitting the zero lower bound (2008b-2009a). In these observations, Congress may have needed to provide greater fiscal stimulus in response to a given output gap than that estimated in equation 3 in the 1984b-2003a period, when the ZLB never applied and the emergency discount window remained closed.[8] Excluding these twenty observations, there is essentially no response at all either to projected deficits or the output gap.

The green data points and best-fit line of Figure 1 display a version of the regression results from the first column of Table 2 for the period 1984b-2003a. The green data points are residuals of a regression of the legislated primary deficit reduction (i.e., our primary surplus increase dependent variable) on the lagged output gap, versus residuals from a regression of the projected deficit (i.e., the

[4]For observations ending in the winter, the weights used for changes in year t, $t+1$, ..., $t+4$ are (to two decimal places) 0.52, 0.26, 0.13, 0.06, and 0.03. For observations ending in the summer, the year t observation's weight is divided by 2 (because part of the fiscal year had already occurred before the beginning of the observation period), with all other observations' weights scaled up proportionally so that the weights still sum to one.

[5]In Auerbach and Yagan (2024), we also estimated a version of the feedback rule based on the existing or projected debt-GDP ratio, more closely aligning with the specification in Bohn (1998), but found that only projected budget surpluses had significant explanatory power when both were included as regressors. Hence, we do not consider that alternative specification here.

[6]The fiscal response to the output gap $\hat{\gamma}$ is also significant and of similar magnitude.

[7]See Auerbach and Yagan (2024) for numerous robustness checks.

[8]We leave a fuller treatment of deficit management during emergency and zero-lower-bound periods to future work.

Table 2: Congress's Average Fiscal Feedback Across Sample Periods

	Legislated Change to the Primary Surplus		
	(1)	(2)	(3)
Projected surplus	-0.117	0.093	0.002
	(0.024)	(0.081)	(0.064)
Lagged output gap	-0.112	-0.029	0.000
	(0.041)	(0.091)	(0.107)
Constant	-0.002	-0.001	-0.002
	(0.000)	(0.002)	(0.002)
Starts in 1984b	X		
Starts in 2004a		X	X
Ends in 2003a	X		
Ends in 2026a		X	X
Excludes zero-lower-bound observations			X
N	38	44	24
r^2	0.43	0.05	< 0.01

Notes: This table use CBO data to report coefficients from linear regressions of Congress's legislated changed to the five-year weighted-average primary surplus on the projected five-year weighted-average surplus as of the prior period, the lagged output gap, and a constant as defined in equation 3. Robust standard errors are in parentheses. Each column corresponds to a distinct sample period as indicated. Each observation is an interval between CBO outlooks, typically a half year. The -0.117 coefficient means that in the pre-2004 period, when the projected deficit rose by 1 percentage point, Congress reduced the primary deficit by 0.117% of GDP – also illustrated in Figure 1.

negative of our projected surplus explanatory variable) on the lagged output gap, having added back the respective mean to each. The upward-sloping line reflects fiscal feedback: when CBO projected high deficits, Congress reacted by reducing the deficit. The 0.117 slope of the best-fit line exactly equals the negative of our $\hat{\beta} = -0.117$ coefficient, as the x-axis is the projected deficit rather than the projected surplus.

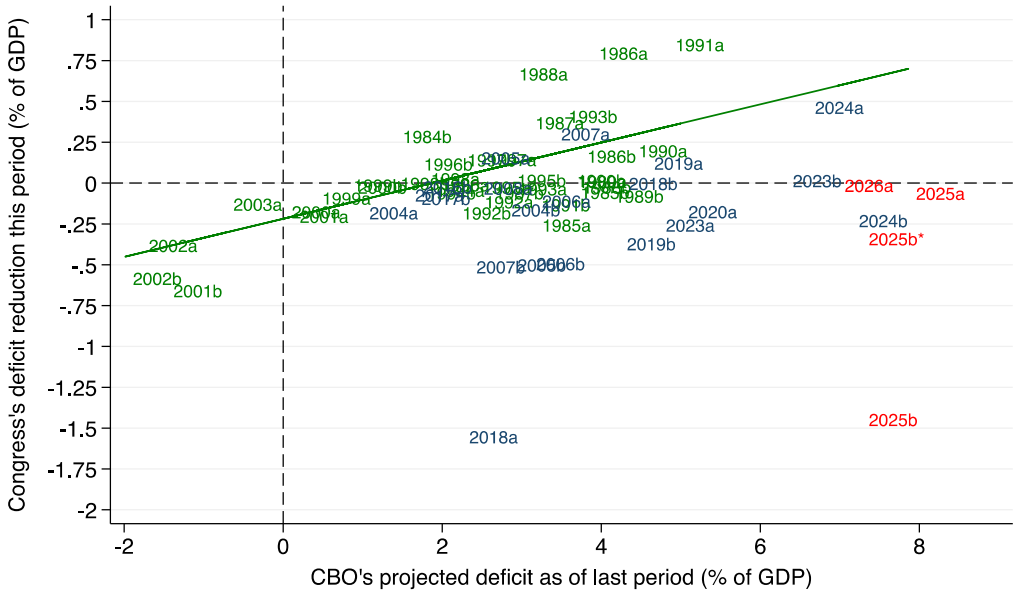
4 Grading Recent Performance

We propose to grade Congress's recent deficit management performance by the standard of pre-2004 Congresses. Specifically, we seek to quantify the difference between each recent Congress's actual legislated deficit reduction and the legislated deficit reduction called for by the fiscal feedback rule of 1984-2003 Congresses.

While the residualized data points (i.e., residualized by the output gap) from the actual estimation period are represented in green, Figure 1 also includes residualized data points from the period 2004a-2024b, represented in blue, for which Auerbach and Yagan (2024) found a lack of feedback. In residualizing the post-2004 data points, we use the pre-2004 relationship between the output gap and the two variables of interest (the projected deficit and the legislated deficit reduction), essentially holding fixed Congress's pre-2004 reaction function to the output gap. Doing so lets Figure 1 illustrate Congress's fiscal feedback behavior since 2004 in an apples-to-apples way. Note that all figures exclude ZLB observations, based on the rationale given above.

Represented in red and defined in the same way are three observations that extend beyond those considered by Auerbach and Yagan (2024). Observation 2025a is the last observation of the Biden Administration and is estimated based on CBO (2025). Observations 2025b and 2026a are from the first year of the second Trump Administration and estimated based on CBO (2026a) using the

Figure 1: The Projected Deficit and Congress's Deficit Reduction



Notes: The figure plots the relationship between Congress's deficit reduction and the lagged projected deficit, controlling for the lagged output gap based on pre-2004 relationships. Specifically, each green (1984b-2003a) data point is a residual from a regression for the period 1984b-2003a of the legislated primary deficit reduction on the lagged output gap, versus the data point's residual from a regression of the projected deficit on the lagged output gap, having added back the mean to each residual. For the navy (2004a-2024b) and red (2025a-2026) data points, residuals are computed with predicted values obtained using the same coefficients and mean. Colors indicate time periods: green (1984b–2003a), navy (2004a–2024b), and red (2025a–2026a). The green fitted line is based on the 1984b–2003a period only and has slope 0.117 as reported in Table 2. The 2025b* data point is computed treating policy changes in revenues due to tariffs as legislative changes.

process described in detail in the Appendix which splits CBO's full-year estimates into two half-years. Also included is an alternative observation for period 2025b, labeled 2025b* in the figure, which treats the large increases in tariffs under President Trump during that period as having resulted from Congressional legislation which Congress effectively gets to take credit for, even though this policy change resulted from executive action and has since been amended by the Supreme Court without Congressional input. We consider this alternative classification given the unprecedented nature of this policy change's size and scope.

The vertical distance between each post-2004 data point and the pre-2004 regression line is our measure of each recent Congress's deficit management success. As Figure 1 shows, almost every blue or red data point lies well below the green best-fit line, indicating that most recent Congresses fell short of the deficit reduction called for by Congress's pre-2004 fiscal feedback behavior. The post-2004 deviations from the pre-2004 regression line, even though we exclude those from the exceptional episodes when strong fiscal expansions may have been called for, are nearly all negative. Not only was fiscal policy unresponsive to the size of projected deficits, as discussed in relation to the third column of Table 2; it was also generally much looser, increasing deficits through legislative action in most cases, sometimes quite substantially. The most negative deviation during the period through 2024b was for observation 2018a, incorporating the effects of the Tax Cuts and Jobs Act (TCJA), signed into law at the end of 2017.

The observations for 2025a and 2026a show very small deficit increases resulting from legislative changes. While one might be tempted to view them as benign in terms of fiscal sustainability, they represent large negative deviations from the pre-2004 regression line: small increases in budget deficits are quite far from the fiscal tightening that the responsive fiscal policy of the pre-2004 period would have dictated at these times, when projected deficits were large relative to GDP and the economy strong.

The two versions of the second observation for Fiscal Year 2025 – 2025b and 2025b* – include the One Big Beautiful Bill Act (OBBBA) and show a more deficit-increasing legislative change in policy than either of the other new observations. The version of the observation that accounts only for actual legislative changes – 2025b – is the largest residual in the figure. This observation is second only to the TCJA observation in terms of the size of its deficit increase, but undertaken at a time when projected deficits and hence predicted policy reactions would have involved much more fiscal consolidation. Treating tariffs as if they were legislative changes – in observation 2025b* – substantially reduces the size of the policy-induced increase in the deficit, highlighting the importance of how one classifies the adoption of tariffs. Still, even under this alternative policy characterization, the observation involves a notable increase in deficits when a responsive feedback rule would have predicted a large fiscal consolidation.

The change in behavior since the 1984b-2003a period is perhaps even more clearly illustrated in Figure 2, which plots the (smoothed) distributions of vertical deviations between the data points and the pre-2004 best-fit line plotted in Figure 1. The distribution of deviations from the period 2004a-2024b exhibits much more dispersion and lies mostly to the right of the distribution from the earlier period. The observations starting in 2025 are depicted in the figure by red vertical lines. As just noted, the 2025a and 2026a observations, although involving relatively small legislative increases in projected deficits, are nevertheless large outliers relative to the 1984b-2003a distribution: the 2025a and 2026a Congresses undertook less deficit reduction than would have occurred for *any* pre-2004 observation, given the large size of the projected deficits in 2025a and 2026a. Indeed, these two observations lie well above the median residual even for the 2004a-2024b period.

As for observation 2025b, when excluding tariff revenues, Congress deviated from the pre-2004 fiscal feedback rule more than any previous non-ZLB Congress since the CBO data begin in 1984.[9] Even relative to a period characterized by a lack of fiscal discipline, this episode stands out. With tariff revenues treated as if they occurred through legislation (2025b*), the deviation would still be in the top 5% of the distribution of residuals between 2004a and 2024b and in the top 2% since the CBO data begin.

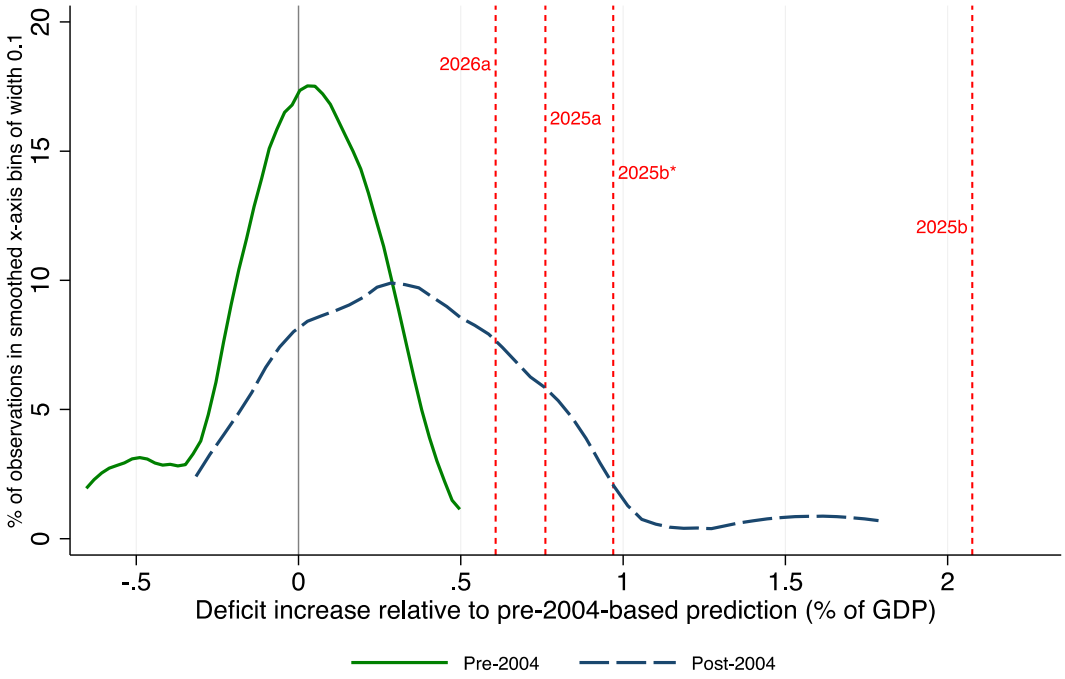
5 Estimating the Scale of Deficit Reduction Needed

In this section, we use stochastic simulations to estimate the minimum feedback strength necessary to achieve fiscal sustainability in the presence of stochastic shocks and then estimate what such feedback would imply for legislative changes relative to the most recent 10-year CBO baseline, which by construction assumes no legislative changes.

Our simulations closely mirror those in Auerbach and Yagan (2024), except for two differences

[9]When including ZLB observations, the largest deviation was the 2020b observation, covering the most intense months of the COVID-19 pandemic and policy responses to it.

Figure 2: The Deficit Management Scorecard for Recent Congresses



Notes: For each data point in Figure 1, we compute actual deficit reduction minus the deficit reduction predicted by Congress's pre-2004 fiscal feedback rule, which in that figure visually equals the distance from each data point to the green best-fit line (data points below the line have positive distance). The present figure graphs the distribution of those deficit reduction deviations from the pre-2004 rule. The green solid line plots deficit reduction deviations from the pre-2004 period (1984b–2003a) using the standard smoothing procedure of Epanechnikov kernel density estimates with bandwidth selected by Silverman's rule of thumb. The blue dashed line plots the analogous smoothed distribution of deficit reduction deviations from the post-2004 period (2004a–2024b). The y-axis is scaled such that the height of either curve at any point equals the approximate percentage of observations in the given time period that fell in a 0.1 percentage-point-wide interval centered at that point. Red short-dashed vertical lines indicate the location of 2025a, 2025b, 2025b*, and 2026a deviations. The 2025a, 2025b, 2025b*, and 2026a deviations fall at the 90^{th}, 100^{th}, 95^{th}, and 75^{th} percentiles of the unsmoothed post-2004 distribution; at the 100^{th}, 100^{th}, 100^{th}, and 100^{th} percentiles of the unsmoothed pre-2004 distribution; and at the 97^{th}, 100^{th}, 98^{th}, and 91^{st} percentiles of the unsmoothed both-periods-combined distribution, respectively. See the notes to Figure 1 for further details.

that even more closely match the baseline assumptions of the Congressional Budget Office. First, we adopt a deterministic baseline that exactly matches rather than merely closely matches CBO's most recent thirty-year budget outlook (CBO 2026a). Second, for years beyond the thirty-year horizon and for shocks to the baseline fiscal path, we adopt a long-run debt sensitivity of interest rates that mirror's CBO stated assumption: an increase in the excess interest rate of two basis points for each percentage point increase in the debt-GDP ratio (CBO 2026b).[10]

Rewriting equation 1 and allowing for an error term, the debt-GDP ratio b evolves from year $t-1$

[10]Technically, CBO reports that it estimates that a one-percentage-point increase in the debt-ratio raises the long-run 10-year Treasury rate by "almost" two basis points while raising the long-run 3-month Treasury rate by "almost" 1.5 basis points. Since the average duration of outstanding Treasury debt is less than ten years (Executive Office of the President of the United States and Office of Management and Budget 2026), the true long-run feedback effect on the average interest rate on government debt r_t likely lies between 1.5 and two basis points. However, higher interest rates crowd out investment and reduce GDP growth g_t, which pushes the long-run effect on the excess interest rate $(r_t - g_t)/(1 + g_t)$ toward two basis points.

to t as:

$$b_t = b_{t-1}(1 + \rho_t) + m_t^{CBO} - s_t + \varepsilon_{st} \tag{4}$$

where $\rho_t \equiv (r_t - g_t)/(1 + g_t)$ is the excess interest rate, m_t^{CBO} equals CBO's forecast for other means of financing as a share of GDP, s_t is the primary surplus excluding ε_{st} as a share of GDP, and ε_{st} is a Poisson shock to the debt-GDP ratio, meant to represent the occurrence of a rare event like the Great Recession that causes a jump in the debt-GDP ratio. We set $m_t^{CBO} = m_{2056}^{CBO}$ for years $t > 2056$ as the CBO forecast ends in 2056; m_t^{CBO} is nearly zero after 2026.

We model a fiscal feedback rule akin to equation 3, with Congress reducing the primary deficit by a fraction c of the debt-GDP increase that would prevail next year if Congress did nothing:

$$s_t = s_t^{CBO} + \Delta s_t + \sum_{t'=2027}^{t-1} \Delta s_{t'} \tag{5}$$

where:

$$\Delta s_t = c \left[\rho_t \cdot b_{t-1} + m_t^{CBO} - \left(s_t^{CBO} + \sum_{t'=2027}^{t-1} \Delta s_{t'} \right) \right] \tag{6}$$

and where s_t^{CBO} is the CBO primary surplus (with $s_t^{CBO} = s_{2056}^{CBO}$ for $t > 2056$) and $\sum_{t'=2027}^{t-1} \Delta s_{t'}$ is sum of all Congressional fiscal-feedback adjustments through $t - 1$.

The excess interest rate ρ_t equals $(r_t - g_t)/(1 + g_t)$ where r_t is the nominal interest rate on government debt and g_t is the nominal GDP growth rate. The excess interest rate evolves as:

$$\rho_t = \rho_t^{CBO} + \beta_1 \cdot (\rho_{t-1} - \rho_{t-1}^{CBO}) + \beta_2 \cdot (b_{t-1} - b_{t-1}^{CBO}) + \varepsilon_{ut} \tag{7}$$

where ρ_t^{CBO} is the CBO excess interest rate, β_1 governs an AR(1) mean-reversion process, β_2 governs feedback from the debt-GDP ratio into the excess interest rate, and ε_{ut} is a Normal shock. To compute the CBO excess interest rate 2026-2056 using the CBO long-term budget outlook (CBO 2026a), we compute r_t as the ratio of net interest in year t to debt in year $t - 1$, and we compute g_t using its GDP forecast. For years $t > 2056$, we set $\rho_t^{CBO} = \rho_{2056}^{CBO}$.

Following Auerbach and Yagan (2024), we set $\beta_1 = 0.576$ based on the historical AR(1) persistence in the excess interest rate in the United States 1972-2023. Deviating from Auerbach and Yagan (2024), we set $\beta_2 = 0.00848$ such that the steady-state effect on the excess interest rate of an increase of debt-GDP ratio equals CBO's typical assumption of two-basis-points-per-percentage-point-of-higher-debt-GDP-ratio: $\beta_2/(1 - \beta_1) = 0.02$. Auerbach and Yagan (2024) used a smaller value (0.008), so simulations here have more explosive debt dynamics.

Equation 7 is constructed in changes relative to the CBO long-term-budget-outlook values through their terminal year of 2056, with the assumptions above for years beyond 2056. As a result, when modeling the deterministic debt-GDP path with no fiscal feedback – i.e., setting ε_{st}, ε_{ut}, and c to zero – we exactly replicate the CBO long-term budget outlook through 2056, while transparently extending the forecast indefinitely beyond.

Table 1B lists key milestones in that indefinitely long deterministic outlook that exactly matches CBO for the first thirty years. The excess interest rate turns positive in 2031, at which point debt begins to spiral on its own. Even with a primary deficit of zero after 2031, the debt-GDP ratio would grow at an accelerating rate due to the excess interest rate being positive and there being positive

feedback of the debt-GDP ratio into the excess interest rate. The debt-GDP ratio reaches 150% in 2048, 200% in 2063, and 250% in 2073. Table 1C reports that the debt-GDP ratio one hundred years from now is infinite (technically, greater than 10^{38}).

For stochastic simulations with fiscal feedback, we draw transitory deficit disaster shocks ε_{st} from a Poisson distribution with $\lambda = 0.02$ such that the expected number of shocks per century equals 2, and with the size of such shocks equaling 0.25. These values were motivated by the approximate persistent increase in the debt-GDP ratio around the Great Recession and COVID-19 recessions of 25 percentage points each, without such large persistent impacts after earlier recessions (Auerbach and Yagan 2024). We draw shocks ε_{ut} from a Normal distribution with mean zero and standard deviation 0.023 based on historical data 1972-2023. We vary fiscal feedback c in increments of .01. For each value of c, we simulate one thousand economies over the next century, each with a different draw of shocks.

In Auerbach and Yagan (2024) and basing the analysis off of the 2024 CBO long-term budget outlook, we found that fiscal feedback $c^* = 0.14$ was the minimum fiscal feedback sufficient to achieve fiscal sustainability, defined as at least 95% of stochastic simulations having year-100 debt less than 250% of GDP. In this paper's simulations based on the same 2024 data but with the stronger debt sensitivity of the excess interest rate, we find that stronger fiscal feedback $c^* = 0.18$ is required for fiscal sustainability. Updating the data to use the 2026 CBO long-term budget outlook, we find that the even stronger feedback $c^* = 0.19$ is needed for fiscal sustainability.

Table 3 shows the deficit reduction over the next ten years implied by the minimum feedback necessary to achieve fiscal sustainability. Panel A lists the February 2026 CBO forecast for primary deficits, deficits, and debt as a share of GDP, with the primary deficit hovering around 2% of GDP and the deficit climbing from 5.7% to 6.7% as debt service rises with increasing debt and interest rates. Panel B reports the reductions in the primary deficit, and thereby the deficit and the debt-GDP ratio, that are required by the minimum fiscal feedback $c^* = 0.19$ that achieves fiscal sustainability. Those rows follow the feedback rule described in equations 5 and 6, with the excess interest rate evolving according to equation 7 (with ε_{st} and ε_{ut} set equal to 0), starting from CBO projections as of the end of 2026.[11] Panel C equals Panel A minus Panel B and shows the path of primary deficits, deficits, and debt required to achieve fiscal sustainability.

The 2027 column of Panel B shows that the first year's required primary deficit reduction is 0.28% of GDP, equivalent to just over $1 trillion over ten years based on CBO's GDP forecast. Such deficit reduction is relatively small; for example, it is less than half of the ten-year primary deficit increase of the OBBBA. However, the size of the required deficit reduction grows over time, with each year's additional consolidation being added to those that have already occurred (and which are assumed to be permanent). Colloquially, the fiscal feedback rule requires a relatively small immediate deficit reduction "down payment", on top of which Congress must add incrementally over time. By 2036, the required reduction in the primary deficit is 1.70% of GDP, with the full deficit reduced by the greater value of 2.28% thanks to lower interest.

Ten-year deficit reduction equal to 1.7% of GDP would represent a historic magnitude of cumulative deficit reduction by a sustained fiscal consolidation. By comparison, Auerbach and Yagan (2024) found that the largest three-year cumulative fiscal consolidation during our entire sample occurred between

[11] The deficit row assumes that deviations in the excess interest rate occur entirely via changes to the interest rate r_t rather than the GDP growth rate g_t.

Table 3: Minimum Required Deficit Reduction Over the Next Ten Years

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2027–2031	2032–2036	2027–2036
Panel A. CBO baseline fiscal path													
Primary deficit	2.34	2.13	2.27	2.06	1.90	1.91	1.99	2.08	2.08	2.08	2.14	2.03	2.08
Deficit	5.66	5.64	5.95	5.89	5.89	6.06	6.26	6.47	6.57	6.67	5.81	6.40	6.11
Debt/GDP	102.1	104.1	105.8	107.7	109.6	111.5	114.0	116.2	118.0	120.2	105.9	116.0	110.9
Panel B. Minimum reductions from CBO baseline required to achieve fiscal sustainability													
Primary deficit	0.28	0.61	0.82	1.02	1.17	1.31	1.51	1.62	1.62	1.70	0.78	1.55	1.17
Deficit	0.28	0.63	0.86	1.11	1.31	1.52	1.80	1.99	2.10	2.28	0.84	1.94	1.39
Debt/GDP	0.28	0.89	1.72	2.76	3.97	5.34	6.95	8.69	10.47	12.37	1.92	8.76	5.34
Panel C. Fiscal path after minimum reductions required to achieve fiscal sustainability													
Primary deficit	2.06	1.52	1.46	1.03	0.73	0.60	0.48	0.46	0.46	0.38	1.36	0.48	0.92
Deficit	5.39	5.02	5.09	4.78	4.58	4.54	4.46	4.48	4.47	4.39	4.97	4.47	4.72
Debt/GDP	101.8	103.2	104.1	105.0	105.6	106.2	107.0	107.5	107.5	107.9	103.9	107.2	105.6

Notes: Our stochastic simulations found that in order for the United States to achieve fiscal sustainability – which we define as keeping the debt-GDP ratio under 250% in one hundred years with 95% probability – Congress would need to reduce the primary deficit each year by 19% of the projected debt-GDP ratio change ($c^* = 0.19$). Panel B applies that fiscal feedback rule to the February 2026 CBO baseline fiscal path listed in Panel A. Panel C lists Panel A minus Panel B. All values are expressed as a percent of GDP. For example, the first cell of Panel B indicates 0.28% of GDP required primary deficit reduction in 2027, equal to 0.19 times 1.5 where 1.5 is the percentage-point change in the debt-GDP ratio from 2026 to 2027 in the CBO baseline (Table 1). After 2027, the required primary deficit reduction takes into account the reduced debt-GDP ratio change relative to the CBO baseline due to prior years' deficit reductions, which are assumed to be permanent. The required total deficit reduction exceeds the required primary deficit reduction due to reduced interest due to the reduced debt-GDP ratio.

the first period of 1986 and the first period of 1988, when CBO estimated that enacted legislation would reduce the deficit by roughly 2% of GDP. Moreover, the required ten-year deficit reduction of 1.7% of GDP is quite close to the simple fiscal gap estimate of 2.0% estimated above. Hence, while year-to-year fiscal feedback calls for a small immediate "down payment" relative to the full immediate deficit reduction called for by closing the fiscal gap, both standards call for similarly strong fiscal feedback over the course of the coming decade.[12]

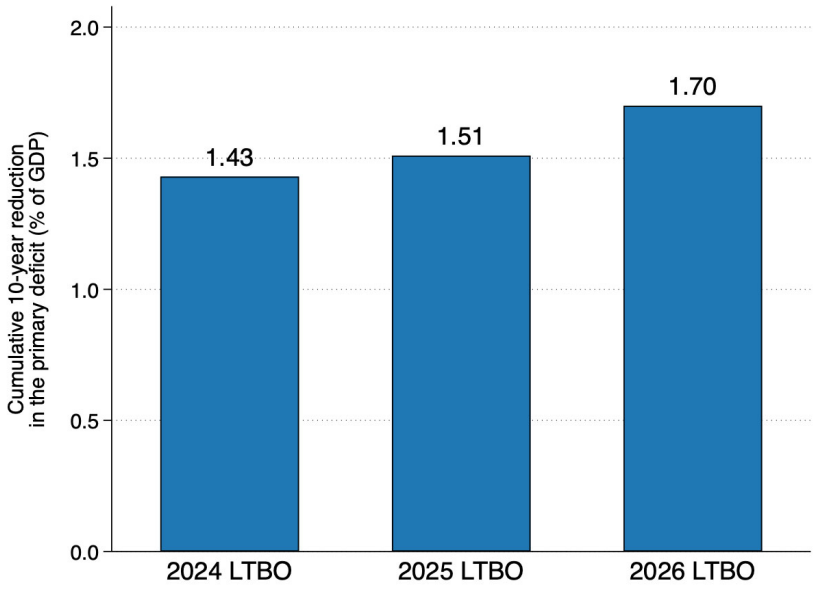
Figure 3 shows how the cumulative ten-year deficit reduction needed for fiscal sustainability in our paper's simulations have evolved over the last three years, as CBO's budget outlook has progressively worsened. As of the 2024 CBO long-term budget outlook, the necessary primary deficit reduction equaled 1.43% of GDP. As of the 2025 CBO long-term budget outlook, the necessary primary deficit reduction had risen to 1.51% of GDP. As of the 2026 CBO long-term budget outlook, the necessary primary deficit reduction had risen to 1.70% of GDP, as reported in Table 3. The scale of the deficit management challenge has risen considerably in just two years.

Finally, we note that Table 3's call for deficit reduction next year equal to 0.28% of GDP is far smaller than the deficit reduction called for by the empirically estimated pre-2004 fiscal feedback rule that we used to grade Congress in Figure 1.[13] A small part of the discrepancy is due to the fact that, as mentioned above, the minimum feedback necessary for fiscal sustainability $c^* = 0.19$ is smaller than the annual feedback implied by the pre-2004 rule. A larger part is due to specification differences. The pre-2004 fiscal feedback equation 3 is a function of the projected deficit, while our stochastic model's fiscal feedback equation 5 is a function of the projected debt-GDP ratio change. Debt-GDP

[12]Note that the fiscal gap analysis assumes a deterministic economy, while we estimate the minimum necessary fiscal feedback strength c^* in a stochastic economy. Auerbach and Yagan (2024) found that a deterministic economy requires much smaller fiscal feedback.

[13]Each observation in our empirical analysis is approximately a half year. Ignoring the output gap and with a projected annual five-year deficit of approximately 6% of GDP, the pre-2004 fiscal feedback coefficient of 0.12 would imply deficit reduction for the 2027 fiscal year equal to approximately $0.12 \cdot 6\% = 0.7\%$ of GDP in the first half of the year and $0.12 \cdot (6 - .7)\% = 0.6\%$ of GDP in the second half.

Figure 3: Cumulative 10-Year Deficit Reduction Required for Fiscal Sustainability



Notes: This graph plots the cumulative ten-year primary deficit reduction required to achieve fiscal sustainability as of the 2024, 2025, and 2026 Congressional Budget Outlook Long-Term Budget Outlooks (LTBOs). The 2026 bar equals the 1.70 value in the Primary deficit row under the 2036 (i.e., the tenth year in the budget outlook) column of Table 3. See the notes to that table for details. The 2024 and 2025 bars, respectively, equal the analogous tenth-year number when replicating Table 3 under the respective earlier year's LTBO and under the slightly weaker fiscal feedback parameter $c^* = 0.18$ needed to achieve fiscal sustainability in those years' LTBOs. More deficit reduction was required under the 2025 LTBO than under the 2024 LTBO despite the same fiscal feedback parameter because the budget situation had worsened between 2024 and 2025.

ratio changes are smaller than deficits because deficits include the growth dividend $g_t/(1+g_t) \cdot b_{t-1}$. As the debt-GDP ratio b has soared, deficits exceed debt ratio changes by much more than they did pre-2004: deficits now include large net interest that is offset by a large growth dividend, yielding deficits that are much larger than debt-ratio changes (Yagan 2025).

When empirically estimating the pre-2004 fiscal feedback rule as a function of debt-ratio changes, the immediate deficit reduction that it calls for going forward is much closer to the 0.28% of GDP called for in Table 3. Appendix Table A-1 replicates Table 2 when replacing the projected surplus variable with the projected debt-GDP-ratio-change variable used in the sensitivity analysis of Auerbach and Yagan (2024). Column 1 reports a feedback coefficient in the pre-2004 period of 0.093 with a t-statistic of 2.4: for every one percentage point higher projected annual debt-GDP ratio change over the coming five years, Congress reduced the deficit by 0.093% of GDP over the coming half-year. When applying that coefficient to the baseline 2027 debt-GDP ratio change of 1.5 percentage points (Table 1A), pre-2004 fiscal feedback behavior would imply deficit reduction of 0.27% of GDP – notably close to Table 3's prescription for 0.28%.[14] Appendix Figure A-1 shows that the 2025b observation remains the largest ever deviation under this alternative debt-ratio-based ("unified") fiscal feedback treatment, and the 2025a, 2025b*, and 2026a deviations remain above-median but less so than in the surplus-based ("standard") fiscal feedback treatment. We adopted the standard approach in Section

[14]That is, the 0.093 coefficient dictates a $0.093 \cdot 1.5\% = 0.14\%$ of GDP deficit reduction in the first half of the year and a $0.093 \cdot (1.5 - .14)\% = 0.13\%$ of GDP in the second half.

4 to align with established work that fits the historical data better.

6 Conclusion

This paper has detailed and applied a method for grading Congress's deficit management. This method should be straightforward to use again in the future with the release of successive new CBO budget updates, which we intend to work on going forward.

Based on data through early 2026, we find that recent Congresses' actual legislation has fallen far short of providing the deficit reduction that would have occurred under similar circumstances in the 1980s and 1990s. The legislation has also failed to produce the deficit reduction that will be needed to achieve long-run fiscal sustainability, which we have defined as the fiscal feedback needed to keep the national debt below a threshold value of 250% of GDP over the next hundred years with a 95% probability.

We estimate that the minimum necessary fiscal feedback strength would call for Congress to immediately cut the primary deficit by a modest "down payment" amount of nearly 0.3% next year in 2027, with additional primary deficit reduction in subsequent years summing to 1.7% of GDP by 2036. Just two years ago, the required tenth-year primary deficit reduction was only 1.4% of GDP, illustrating how the fiscal sustainability threshold has risen considerably in this short period of time. While year-to-year fiscal feedback calls for a small immediate down payment relative to the full immediate deficit reduction called for by closing the fiscal gap, both standards call for similarly strong fiscal feedback over the course of the coming decade. The required ten-year fiscal consolidation is of an order of magnitude not seen in several decades, highlighting the challenge now faced, especially in an era where any deficit reduction at all has been rare.

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Appendix

In this Appendix, we discuss the construction of two new observations examined in the paper, labeled 2025b and 2026a. Because CBO did not issue any updates of budget projections between CBO (2025) and CBO (2026a), we do not have a CBO-provided breakdown of what occurred in the second half of fiscal year 2025 and the first half of fiscal year 2026. However, we can approximate this breakdown based on the information provided in CBO (2026a).

For legislative changes, CBO (2026a), Chapter 5 indicates that essentially all revenues and mandatory spending legislative changes are attributable to the passage of OBBBA. Given that OBBBA became law in early July, 2025, we therefore assign all such changes to observation 2025b. This leaves only discretionary spending legislative changes to be allocated between the observations.

Consider first legislative changes for Defense, which account for an increase over the 10-year budget period (Table 5-1). According to the text on pp. 108-109, this is the result of two offsetting changes, the expiration of spending caps after 2025 (raising projections) and lower appropriations for 2026 than were expected as of 2025, leaving aside the impact of the spending caps. The latter occurred in the Fall of 2025, when spending was extended to keep the government open (see footnote 9). As to the former, it can said to have occurred when the caps expired at the end of Fiscal Year 2025, i.e., on Oct. 1, 2025. Both changes therefore occurred after a midyear update would have been issued, and hence we include them in observation 2026a.

Next, consider Nondefense Discretionary Spending (NDDS), projections of which are reduced substantially over the 10-year budget period relative to the previous projection. According to the text on page 109, the bulk of this occurred because the large emergency spending in 2025, which had been projected to be maintained, was sharply reduced thus far in Fiscal Year 2026. The rest – nonemergency spending – is lower for 2026 (and hence projected to be lower for the future as well) than was predicted in CBO (2025). We assign the first change to observation 2025b because the supplemental disaster funding in the American Relief Act 2025 (which CBO specifies as explaining "most" of the difference) expired in mid-March 2025 (i.e. the special emergency funding was not renewed by the Continuing Resolution that was passed then in order to keep the government funded through the end of Fiscal Year 2025). As to the change in nonemergency NDDS (which is an order of magnitude smaller than the change in emergency NDDS), we follow the same assumption as for Defense spending and allocate it to observation 2026a.

Regarding the large increase in tariffs that occurred after observation 2025a, the direct impacts of these changes are included by CBO (2026a) in "technical" changes in Customs Duties, rather than as legislative changes, because they did not result directly from legislation, but through a series of executive orders by President Trump. Following our standard methodology, we would ignore these changes when measuring changes due to legislation. However, given their magnitude (an increase in revenues of $3.4 trillion over the 10-year budget period) and the unprecedented scope of executive action in the implementation of the tariffs, we also consider as an alternative the case, which we label observation 2025b*, in which these tariff changes are treated as if they resulted from legislation. Either way, we assume that this technical change in revenues from Customs Duties occurred during observation 2025b, as most of the ramping up of and information about tariffs had occurred by mid-to-late Summer, 2025.

As to what remains of the changes in the CBO budget forecasts between CBO (2025) and CBO (2026a) – all remaining technical changes and all "economic" changes (those due to changes in the

economic environment, including changes in tariff and non-tariff revenues arising from economic responses to the imposition of tariffs), lacking specific information we assign half of these to observation 2025b and half to observation 2026a.[15]

Table A-1: Fiscal Feedback as a Function of Projected Debt-GDP Changes

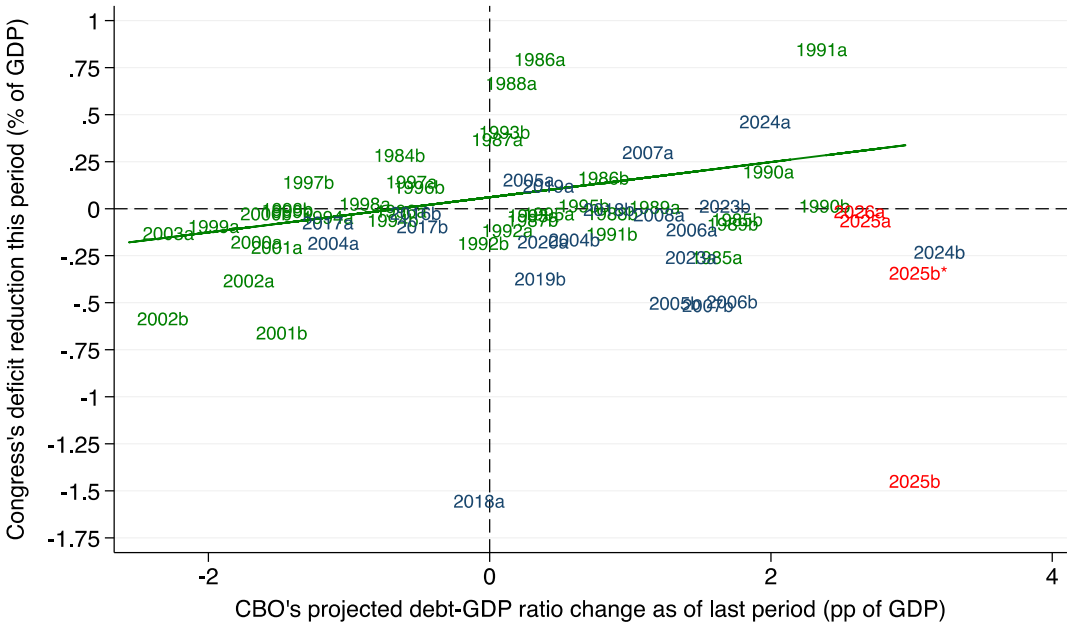
	Legislated Change to the Primary Surplus		
	(1)	(2)	(3)
Projected debt-GDP ratio change	0.093	-0.212	-0.289
	(0.039)	(0.165)	(0.194)
Lagged output gap	-0.078	-0.051	-0.025
	(0.056)	(0.098)	(0.103)
Constant	0.001	-0.003	-0.001
	(0.001)	(0.001)	(0.001)
Starts in 1984b	X		
Starts in 2004a		X	X
Ends in 2003a	X		
Ends in 2026a		X	X
Excludes zero-lower-bound observations			X
N	38	44	24
r^2	0.17	0.09	0.11

Notes: This table replicates Table 2, except that the five-year weighted-average projected surplus is replaced by the five-year weighted-average projected debt-GDP ratio change. See the notes to that table for more details.

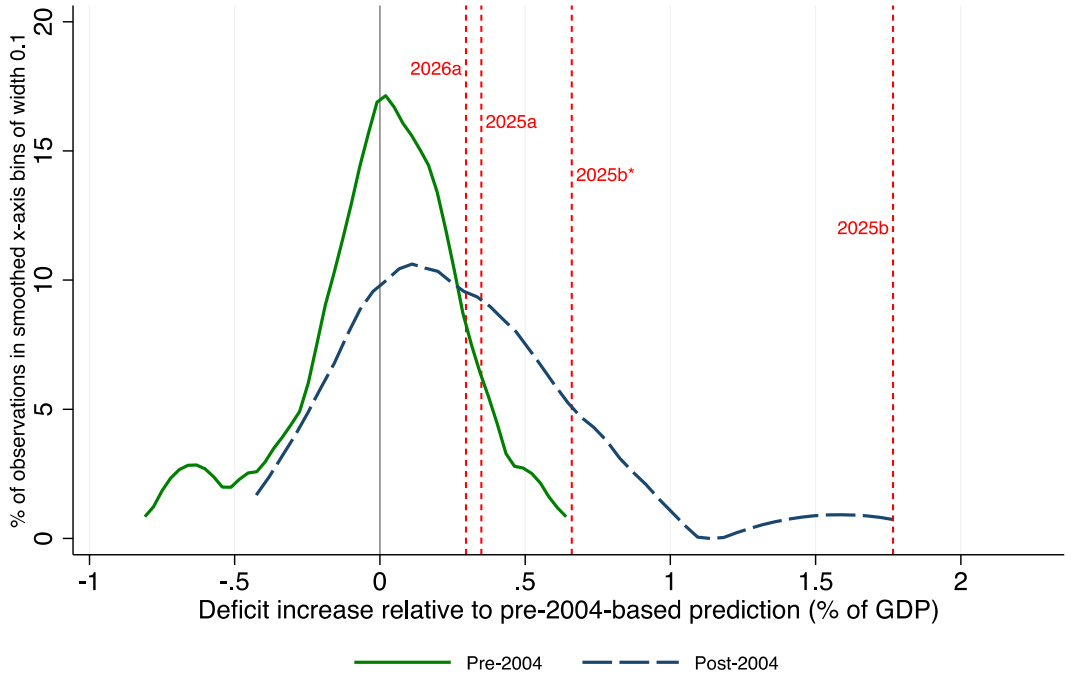
[15]It is necessary to allocate all components of the changes in forecast revenues and outlays, not just those resulting from legislation, in order to compute the implied deficit forecasts as of the beginning of observation 2026a, which are needed to calculate the residual for that observation.

Figure A-1: Grading Congress Based on the Projected Debt-GDP Ratio Change

(a) The Projected Debt-GDP Ratio Change and Congress's Deficit Reduction



(b) The Deficit Management Scorecard for Recent Congresses, Estimated Using Projected Debt-GDP Ratio Changes



Notes: This figure replicates Figures 1 and 2 when replacing the projected surplus with the projected change in the debt-GDP ratio. See the notes to those figures for additional details. In Panel B, the 2025a, 2025b, 2025b*, and 2026a deviations fall at the 65th, 100th, 80th, and 65th percentiles of the unsmoothed post-2004 distribution; at the 92nd, 100th, 100th, and 92nd percentiles of the unsmoothed pre-2004 distribution; and at the 83rd, 100th, 93rd, and 83rd percentiles of the unsmoothed both-periods-combined distribution, respectively.