

## US EXPERIENCE WITH FEDERAL BUDGET RULES

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### Introduction

In its 2009 fiscal year, the United States will experience a federal budget deficit that could reach 12 percent of GDP or more,<sup>1</sup> an event unprecedented since the end of World War II. At the same time, long-term fiscal imbalances loom ever larger, as the ongoing demographic shift raises the old-age dependency ratio and medical expenditures continue to rise rapidly. Much of this year's deficit is attributable to the very severe recession, as a consequence of both automatic stabilizers and countercyclical discretionary fiscal policy actions already taken. But the US fiscal position had deteriorated even before the onset of recession at the end of 2007, as the federal budget surpluses of a decade ago gave way to substantial deficits that reached around 3.5 percent of GDP during the healthy fiscal years of 2003 and 2004.

What role have US budget rules played in this evolution of the fiscal picture, and what lies in store for the United States, as a new president and Congress confront the simultaneous challenges of recession and fiscal misalignment? A review of the experience of the United States under different budget regimes, and of the evolution of the regimes themselves, provides some clues as to how the situation may unfold.

### Budget rules in the United States

Like the European Union under the Stability and Growth Pact (SGP), the United States has imposed

fiscal rules in attempting to impose a degree of fiscal discipline on the political process of budget determination. But, in large part because of the differences in federal structure, the set-up in the United States differs from that in Europe. US budget rules are much more inflexible at lower levels of government than at the national level. Relatively tight rules apply in virtually all US states, where some sort of annual balanced budget requirement applies to current expenditures and incipient deficits must be dealt with either within the fiscal year or soon thereafter. These strong budget restrictions have induced strong state fiscal response to budget shocks.<sup>2</sup> Note that these state budget procedures are not imposed on the states by the US constitution or by other legislative mandates at the national level. Rather, they have been adopted individually by the states themselves and survived in the US political and economic environment that features substantial cross-state mobility and no explicit mechanism for policy co-ordination among the states. Thus, even though the state and local share of overall government activity has been rising over time in the United States, countercyclical fiscal policy remains within the purview of the federal government.

At the US federal level, there are no overriding provisions such as those of the SGP governing annual debt and deficits. Attempts over the years, particularly in the 1970s and 1980s, to pass a balanced-budget constitutional amendment never succeeded. Instead, the federal government has operated under a series of budget control regimes, typically featuring many components. Some components are of no apparent consequence, such as the federal debt limit (which must be raised when the government increases the amount of outstanding debt). Other components, discussed further below, may well have influenced fiscal policy choices. But none of the components have constitutional standing; they can easily be modified by the same government that is subject to them, and this is a main source of skepticism about their potential impact. US federal budget rules are also complex, owing to the separation of powers between the President



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<sup>1</sup> The Congressional Budget Office (CBO 2009) projects a deficit of 11.9 percent, including the large fiscal stimulus worked out in early 2009. US fiscal years begin on October 1 of the previous calendar year.

<sup>2</sup> See Bohn and Inman (1996), Poterba (1997), Auerbach (2003).

and Congress and also to the separate operating rules and procedures within Congress between the House of Representatives and the Senate. Thus, some space is necessary to characterize the key elements of the different budget regimes before discussing evidence of their possible effects.

### Federal budget regimes

In 1974 Congress passed the Congressional Budget Act (CBA), introducing the first significant restraints on the US federal budget process. The CBA established a Budget Committee in each house of Congress and created the CBO to provide budget projections needed to implement the legislation. Under the CBA, both houses of Congress passed a resolution laying out limits on revenues and spending for the coming year, and subsequent legislation was supposed to adhere to these limits. The CBA provided a co-ordination mechanism for Congressional budget actions, and also introduced the practice of providing multi-year budget projections to Congress, a practice that eventually would play a role in the formulation of budget rules. However, the CBA did not restrict the size of government or the ability of government to increase spending or cut taxes. Indeed, by the 1980s, the United States was experiencing historically large (as of the time) peacetime budget deficits, with the deficit hitting 6 percent of GDP in 1983.

Concern about budget deficits led in late 1985 to the passage of the Gramm-Rudman-Hollings (GRH) bill, for the first time laying out specific deficit targets, which followed a declining path until a target of zero was called for in fiscal year 1991. The legislation required that the budget the President submitted each year be consistent with that year's deficit target and that Congress pass legislation in accord with the deficit target. If legislated policy was projected to miss the deficit target, then an automatic "sequestration" process would ensue, cutting the budget according to a specified allocation rule in order to meet the deficit target. The sequestration procedures were modified in 1987 after the first version of GRH was found unconstitutional by the Supreme Court. The 1987 legislation also relaxed the target deficit reduction path to one in which a zero deficit was to be achieved in 1993, rather than in 1991.

The idea behind the sequestration process was that it would represent so negative an outcome that the threat of its application would force Congress to

come to an agreement on legislation satisfying the deficit targets. In principle, sequestration was intended to have an important impact without ever actually being implemented, and the sequestration process never was initiated during the GRH period. However, as the revision of the trajectory of deficit targets in 1987 indicated, this approach to deficit control lacked an effective political mechanism for producing the desired results when the gap that needed to be closed was too big. Also, unlike the SGP, which provides some flexibility to accommodate the need to respond to economic downturns, GRH specified unconditional nominal deficit targets. So, as a recession began in the summer of 1990 and the tax system's automatic stabilizers caused revenue to decline, the difficulty of meeting GRH's ever-shrinking deficit targets forced a change in regime. In the fall of that year, a protracted "budget summit" meeting of President George H. W. Bush and leaders of Congress generated two important results: (1) a package of spending reductions and tax increases; and (2) the replacement of GRH with the Budget Enforcement Act (BEA), ushering in a new budget regime that was thought to overcome some of the problems of GRH.

The BEA eliminated annual deficit targets and instituted targets for discretionary spending, a category that excludes spending for health care, Social Security (public retirement and disability pensions), unemployment insurance and other "entitlement" programs. For the budget as a whole, BEA specified "pay-as-you-go" (PAYGO) restrictions on taxes and entitlement spending (other than Social Security), requiring that legislation on such items does not increase the deficit, in the aggregate. Except for discretionary spending, therefore, the budget rule now applied to legislated changes in policy, rather than to actual levels of spending or revenue. Changes in taxes or entitlement spending that resulted from economic growth, inflation, shifts in the income distribution or any other economic factors not directly attributable to policy actions were ignored when determining if the budget rules were satisfied. Thus, any cyclical or trend movements in the deficit, revenues or expenditures, except those associated with discretionary spending, were left outside the process. Given that discretionary spending by its nature involves little automatic response to the overall level of economic activity, this change meant that the need under GRH to offset automatic fiscal stabilizers was largely eliminated. On the other hand, the lack of an overall deficit target also meant that there was no "error-correction" mechanism to alter policy following an unstable

fiscal trajectory. Different underlying growth rates of taxes and spending, for example, faced no restrictions under BEA.

The BEA also introduced the use of a multi-year budget “window”, requiring initially that the PAYGO requirement be satisfied over a five-year period, based on CBO projections, rather than just for the immediate fiscal year in which legislation was enacted. The aim was to incorporate the future effects of policy actions and to reduce the scope for using short-term timing changes to meet a one-year deficit target, a practice that had been encouraged by the structure of GRH. The BEA originally applied through 1995, but it was extended to 1998 and then to 2002 by legislation in 1993 and 1997, respectively, before officially expiring in 2002.

For much of the period during which the BEA was in force, the Senate followed additional rules with respect to its own operations, including a longer horizon (ten years) for the PAYGO rule and which made subject to a point of order (requiring a supermajority of 60 votes out of 100 to override) proposals that would increase the deficit beyond the budget window. This so-called “Byrd rule” became quite relevant in 2001, when the tax cuts proposed by President George W. Bush were adopted for only a ten-year period. Because of the possibility that Republicans would be unable to muster 60 votes to override the point of order based on the Byrd rule, the tax cuts were enacted to apply only during the budget window. Although there have been subsequent modifications to some provisions of the 2001 legislation, the law as of the beginning of 2009 still specifies that marginal income tax rates will rise in 2011 to their pre-2001 levels, and that the federal estate tax, having been fully phased out in 2010, will reappear in 2011 in its pre-2001 form. This case study provides compelling evidence of the impact of budget rules on the shape of legislation, although not necessarily on broader aggregates of spending, revenues and deficits.

Though officially in place through 2002, BEA began to erode after 1998, the fiscal year in which the United States had its first budget surplus since the 1960s. At first, the erosion took the form of procedures used to get around the BEA’s restrictions, such as a large increase in 1999 in “emergency” discretionary spending that was not subject to the BEA caps on discretionary spending (CBO 1999). Eventually, however, Congress simply changed the budget rules as it went, adjusting the discretionary spending caps to conform to actual

spending and setting aside the PAYGO rules on a case-by-case basis. For example, Congress adopted the large tax cut proposed by President George W. Bush in 2001 without any offsetting revenue increases or entitlement spending reductions, even though these were required by BEA, which was still officially in force.

In the years immediately after 2002, Congress acted essentially without budget rules of the type embodied in GRH or BEA, even though it continued to use the annual budget plans the CBA requires to impose limits on the budget effects of certain legislation, as in 2003, when, in an episode discussed further below, a ten-year budget cost of USD 350 billion was imposed before the details of a tax cut were worked out. The 2007 change in the control of Congress led to a renewal of interest in budget rules, and more recent events, including President Obama’s election and the severe recession and ballooning budget deficit, have left the potential future use of budget rules very much up in the air.

#### **Can voluntary budget rules affect behavior?**

The repeal of GRH in 1990 and the gradual collapse of BEA after 1998 both illustrate a characteristic of US federal budget rules: the rules cease to operate once they deviate too far from consensus policy. In 1990, GRH called for deficit reduction far greater than Congress wished to enact. After 1998, adherence to BEA would have resulted in significant budget discipline at odds with the politics of the time, given that the federal budget was in surplus and CBO was projecting even larger surpluses for the years to come. It is not surprising that the rules failed, given that they could be repealed by majority vote. The question is whether they had any significant impact at all.

It is possible, however, that a change in the budget process, even if adopted by simple majority, can change budget outcomes by altering each legislator’s incentives. For example, suppose that each legislator prefers a low overall deficit to a higher one, but also wishes to promote his or her own spending priorities. With no budget rule in place, there may be no commitment mechanism in place to facilitate co-operation on keeping spending low. An overall spending limit could lead to an equilibrium outcome with proportionately lower spending and a low deficit, an outcome that legislators would prefer to the high-deficit-high-spending outcome with no budget rule. Thus, the outcome achieved under a budget rule might be consistent with

the contemporaneous wishes of the majority, while at the same time representing a different outcome than would occur without the budget rule in place.

### The impact of US budget rules

Even if voluntary budget rules can have an effect by helping to sustain an equilibrium of fiscal responsibility, identifying the impact of such rules is made difficult by the rules' endogeneity. Changes in budget rules may be induced by the same factors that affect fiscal policy directly, so it is difficult to estimate the independent impact of the rules themselves without some independent source of variation in the rules, for which obvious candidates are lacking. With this obstacle in mind, my research has focused on more subtle types of behavioral responses, looking not at how overall deficits, revenues, and spending behaved during different budget regimes, but rather on the behavior of different components of revenues and spending, and on the responses of fiscal policy to macroeconomic and fiscal conditions. The argument is that the different budget rules should have predictable effects on these elements of behavior that simple changes in the degree of fiscal responsibility would not be expected to have. Put another way, there are a variety of coincidental effects of budget rules that one may view as exogenous, since they are distinct from the overall objectives of fiscal discipline.

As reviewed above, one can distinguish five periods: (1) the pre-CBA era, when no explicit budget rules

applied; (2) the CBA period, from the 1974 CBA adoption until the 1985 passage of the first GRH Act, with co-ordinated budget policy but no exogenous restrictions on spending or taxes; (3) the GRH period, from late 1985 until the late-1990 adoption of the BEA, during which explicit one-year deficit targets were specified; (4) the BEA period, from adoption of BEA until its effective demise around 1999, during which discretionary spending caps and PAYGO rules for taxes and entitlement spending were in force; and (5) the post-BEA period from 1999 until recently, during which limited budget rules applied.

### Non-defense discretionary spending

Non-defense discretionary spending is perhaps the most susceptible to budget restrictions, given that entitlement spending is not directly driven by annual appropriations, and defense spending depends very strongly on factors external to the budget process. Moreover, discretionary spending has figured differently in the various budget regimes identified. Absent any explicit budget rules, we might expect discretionary spending to increase with the health of the budget, as measured by the most recent budget surplus, if the surplus provides a signal of the resources available to the government. We might also expect discretionary spending to increase with the size of the output gap between potential and actual GDP, reflecting Keynesian objectives to stimulate the economy during periods of slow growth.

**Table 1**

#### Determinants of non-defense discretionary spending changes, 1963-2006

Dependent variable: Annual change in spending relative to potential GDP  
(standard errors in parentheses)

Independent variable	Sample period					
	1963–2006	1963–1974 (Pre-CBA)	1975–1985 (CBA)	1987–1990 (GRH)	1992–1998 (BEA)	1999–2006 (post-BEA)
Constant	0.0011 (0.0005)	0.0036 (0.0007)	-0.0002 (0.0033)	0.0052 (0.0008)	-0.0012 (0.0014)	0.0010 (0.0003)
Budget surplus (-1)	0.0525 (0.0215)	0.1783 (0.0398)	-0.0199 (0.1431)	0.1605 (0.0232)	-0.0042 (0.1228)	0.0684 (0.0275)
GDP Gap (-1)	0.0278 (0.0171)	0.0668 (0.0165)	-0.0250 (0.0829)	0.0203 (0.0256)	0.0597 (0.1773)	0.0748 (0.0340)
$\bar{R}^2$	0.084	0.719	-0.229	0.953	0.155	0.377
Number of observations	44	12	11	4	7	8

Data Source: Congressional Budget Office.  
Source: Auerbach (2008).

Table 1 provides estimates, based on annual fiscal year data,<sup>3</sup> of the impact of the prior year's budget surplus and output gap on the change in non-defense discretionary spending from the previous year, with all series scaled by potential GDP. The first column of the Table presents estimates for the full sample period, for which the expected relationship holds weakly. The relationship is much stronger for the period prior to the Congressional Budget Act, as illustrated in the next column of Table 1, and then disappears entirely during the CBA period. During the very short GRH period,<sup>4</sup> the very strong relationship of spending to the budget surplus reappears, but the response to the GDP gap does not. Although so short a sample period makes any conclusions tentative, both of these results are quite consistent with what one would expect, given the way that the GRH rules worked. As each year's budget surplus was required to hit a pre-specified target, any improvement in the condition of the budget made more resources available for spending increases or tax cuts. But an increase in the output gap had no such effect, because the deficit targets were not cyclically adjusted.

The behavior of discretionary spending under BEA was similar to that under CBA, not responsive to the budget surplus and not significantly responsive to the GDP gap. With discretionary spending caps in place, spending could only respond to the economy or to the budget if the caps themselves could respond, or if exceptions (such as emergency spending) could be arranged. The estimates suggest that neither of these channels was significant during the period, even though the caps were revised in 1993 and 1997 when the provisions of BEA were extended to later years. In the most recent period, after the effective demise of BEA, discretionary spending has reverted to a pattern of significant responses to both the budget surplus and the GDP gap. The response to the surplus is weaker than under GRH, but this makes sense, given that there is no explicit deficit target.

These results are consistent with budget rules having had some impact on non-defense discretionary spending. Except perhaps for the lack of responsiveness during the CBA period, the patterns are consistent with the restrictions imposed during the differ-

ent budget periods, and so represent a more subtle form of evidence than that based on levels or the composition of spending, which might more easily be explained by alternative hypotheses.

#### *Legislated changes in spending and revenue*

Some elements of budget rules have involved levels of the deficit or its components. For example, GRH had deficit targets and BEA had caps on discretionary spending. But BEA also placed limits on legislated changes in spending and revenues, under its PAYGO rules. Thus, we should observe changes in patterns of these legislated changes if BEA had an impact. To construct measures of legislated changes in revenue and expenditure, I utilize data and procedures developed in earlier papers, including Auerbach (2008). CBO typically publishes two major revisions in its projections of revenue and spending each year, in late January or early February, and in August or September. Each revision indicates the changes from the previous forecast and divides these changes into components due to legislation and to other factors.

By accumulating changes attributed to legislative action between each of these forecasts, I derive continuous, roughly semiannual series of forecast revenue and spending policy changes. For each observation, I measure the policy change with respect to revenue and non-interest spending. As each update includes legislative changes for the current fiscal year and several subsequent years, these must be combined in some manner to provide a measure of the legislation's overall effect. I form the discounted sum of changes adopted during the interval for the current and subsequent four fiscal years (relative to each year's corresponding measure of potential GDP), with the five weights normalized to sum to 1 and a discount factor of 0.5.<sup>5</sup> Just as current policy changes have effects in future fiscal years, policy may respond to anticipated future fiscal conditions as well. Thus, as an alternative to the most recent budget surplus, I have found that a better fit results if one uses a measure based on the budget surpluses projected over the budget period, which are included in the CBO projections. To be consistent with the aggregate policy measure just developed, I aggregate the projected surplus for the current and next four fiscal years, as of the beginning of the period of observation, using the same discount factor as in the policy measure.

<sup>3</sup> All annual data are from the CBO.

<sup>4</sup> I exclude the fiscal year during which GRH was adopted (1986), as adoption was accompanied by a large spending cut that is difficult to attribute to the budget rule. I follow the same procedure below in excluding the fiscal year of the adoption of BEA (1991), which came out of a budget summit that also produced spending cuts and tax increases.

<sup>5</sup> That is, each successive future observation receives half the weight of the observation one period earlier. This discount factor was chosen in my earlier work based on goodness of fit.

**Table 2**
**Determinants of policy changes, 1984-2007**

Dependent variable: Semiannual policy change in revenue or non-interest spending relative to potential GDP (standard errors in parentheses)

Independent variable	Sample period and dependent variable							
	1984:2–2007:2		1986:2–1990:2 (GRH)		1991:2–1999:1 (BEA)		1999:2–2007:2 (post-BEA)	
	Revenue	Spending	Revenue	Spending	Revenue	Spending	Revenue	Spending
Constant	–0.0012 (0.0003)	0.0021 (0.0005)	–0.0002 (0.0034)	0.0025 (0.0067)	–0.0010 (0.0007)	0.0006 (0.0005)	–0.0014 (0.0005)	0.0022 (0.0007)
GDP gap (–1)	–0.0700 (0.0210)	0.1198 (0.0308)	0.0659 (0.0755)	–0.0219 (0.1502)	–0.0860 (0.0504)	0.0501 (0.0381)	–0.1028 (0.0463)	0.1449 (0.0650)
Projected surplus	–0.0714 (0.0154)	0.1125 (0.0225)	–0.0297 (0.1142)	0.1126 (0.2272)	–0.0802 (0.0412)	0.0384 (0.0311)	–0.0857 (0.0407)	0.1193 (0.0571)
$\bar{R}^2$	0.298	0.335	0.242	–0.073	0.111	–0.018	0.164	0.164
Number of observations	47	47	9	9	16	16	17	17

 Data Source: Congressional Budget Office.  
 Source: Auerbach (2008).

Table 2 presents results based on these constructed measures, starting with those for the full period, beginning with the observation for change in projections from winter to summer 1984, labeled 1984: 2, and ending with the changes in August, 2007. The explanatory variables are the beginning of period weighted projected surplus and the estimated GDP gap in the most recent quarter before the policy change being explained. The first column in Table 2 presents results with revenue as the dependent variable; the second column has the same specification but with non-interest spending as the dependent variable. Both columns show significant policy responses to both the budget surplus and the output gap, in the anticipated directions, with deficit-increasing policies resulting from higher projected surpluses or a higher output gap.

Data availability permits us to consider the performance of these equations for the three most recent budget regimes, GRH, BEA and post-BEA. The results for each of these regimes are presented in the remaining columns in Table 2.<sup>6</sup> For GRH, none of the coefficients are significant, but it is interesting to note that the coefficients on the GDP gap actually have the wrong sign, and do so only during this period.<sup>7</sup> As discussed above in relation to a similar finding for dis-

cretionary spending, with deficit targets not adjusted for the level of economic activity, there is no scope for countercyclical policy. Indeed, given that automatic stabilizers cause revenue to fall as output falls, the only way to keep the deficit from actually rising is to pass legislation to increase taxes or reduce spending as output falls – precisely the pro-cyclical legislative policy reactions estimated here.

Under the BEA regime, for which these particular data on legislative changes are perhaps the most relevant, significant impacts for both output and surplus variables are restored on both the revenue side and the spending side. This result appears at first to be somewhat puzzling. After all, if the PAYGO rules are in place, then how can changes in the projected budget surplus or the output gap have any net impact on legislated changes in the deficit? A potential answer to this puzzle is that the PAYGO restrictions did not apply directly to the revenue and spending variables being measured here.<sup>8</sup> First, the restrictions applied to legislation enacted in any given fiscal year, whereas the variables measured here are semiannual. Second, the PAYGO rules did not apply to the weighted sum of five years' revenue or spending changes but to unweighted sums over periods of different length. Thus, legislation was only partially restricted, so we might expect the overall response based on the five-year weighted average to be small-

<sup>6</sup> As before, I leave out the observations including the adoption of GRH (1986:1) and BEA (1991:1) to avoid attributing concurrent policy changes to the rules just being adopted.

<sup>7</sup> The results for GRH are similar when the lagged budget surplus, an arguably more relevant measure for this budget regime, is substituted in the equation for the weighted projected surplus.

<sup>8</sup> See Auerbach (2008) for further discussion.

er than with no restrictions but not zero. The last two columns of the Table are consistent with this conclusion, showing that all four policy responses strengthened after the demise of BEA. In summary, the strength and signs of legislative policy responses under different budget regimes are consistent with how the budget rules in each regime worked: pro-cyclical policy responses under GRH, full policy responses after BEA and muted policy responses under BEA.

#### *Further effects on legislative behavior*

The post-BEA period offers additional lessons concerning the effects of budget rule design. In particular, the long budget window used by the Senate during its post-BEA deliberations appears to have had an impact on the pattern of tax legislation, making so-called “sunset” provisions more common in tax legislation. Even though the PAYGO rule was no longer in force at the time, deliberations leading up to the 2003 tax cut included negotiations over the size of the tax cut and its components. An agreement was reached by the (Republican) leaders to limit the tax cut to a total revenue cost of USD 350 billion over the ten-year budget window, the total revenue cost being calculated using a simple sum over the ten years. This calculation method meant that there was a trade-off under the cap between the annual cost of the tax cut and the number of years over which the tax cut applied: a temporary tax cut could have a larger annual cost. Also, with no discounting of future revenue costs, tax cuts that applied only during the early years of the ten-year period were larger relative to the size of the economy than those that applied only later in the ten-year period. This lack of discounting, along with the greater uncertainty that future tax cuts could be sustained, made temporary tax cuts that applied early in the budget window more attractive to tax-cut proponents than tax cuts that were to be phased in only toward the end of the budget window. The 2003 outcome was a temporary tax cut expiring before the end of the budget window, illustrating that even weak budget procedures can affect the shape of legislation. One sees a similar impact looking at the GRH period: when only the immediate fiscal year was relevant to budget rules, deficit-reducing measures tended to be concentrated in that year (Auerbach 2008).

The objective in 2003 was to limit the size of the tax cut, not to encourage temporary policies. Likewise, the designers of GRH were interested in more than

temporary deficit reduction. In each instance, a multi-year budget window with discounting of future revenue costs might have led to a more rational outcome; it would have provided some credit for future years’ deficit reduction under GRH, and would have reduced the cost of future tax cuts under the budget cap in 2003. Indeed, such a window is what is suggested by a model in which competing parties run deficits when in power to commit resources to their preferred objectives (Auerbach 2006), although the ideal parameters of such a mechanism would depend on a number of factors, such as the stability of government and the rigidity of existing policies.

#### **What should budget rules accomplish?**

It is difficult to determine the effects that US budget rules have had on aggregate spending, revenues, or deficits because of the endogeneity of the budget rules themselves as well as the many other political changes that occurred contemporaneously. The previous discussion does suggest, however, that the rules have exerted influences on fiscal behavior in ways consistent with what one would predict. In some cases, though, as with induced pro-cyclical policy under Gramm-Rudman-Hollings or the 2003 sunset provisions, there were some clear negative side-effects. These negative effects highlight that achievement of the underlying objectives of budget rules requires not only that the rules matter, but also that the rules are aligned with these underlying objectives.

Budget rules presumably are meant to relate to the growth of government and to the tendency to shift financial responsibilities to future generations. But none of the US budget rules studied here incorporates the implicit liabilities associated with the long-term commitments of entitlement programs. As a consequence, the entire period witnessed large increases in future implicit liabilities that had only limited impacts on short-term budget measures. Further, none of the measures have successfully solved the problem of how to incorporate a commitment to fiscal discipline with the need to maintain short-run flexibility to deal with macroeconomic conditions, a challenge that has dogged the SGP.<sup>9</sup> Both of these drawbacks of past budget regimes are now in the spotlight as the US fiscal policy confronts a recession and a long-run fiscal imbalance, each of great severity.

<sup>9</sup> In Auerbach (2006) I consider how this problem might be attacked in the context of a multi-year budget window by imposing shadow prices rather than absolute restrictions on annual deficits.

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