Comments and Discussion

COMMENT BY

STEVEN J. DAVIS In this paper Christina Romer and David Romer investigate the hypothesis that tax cuts curtail government spending. To do so, they study the experience of the federal government since 1945. They stress, quite rightly, that the empirical relationship between tax changes and spending changes depends greatly on why the changes occurred. Some tax change episodes are potentially informative about the hypothesis, and others are not.

This observation underlies their two-step empirical strategy. First, Romer and Romer use contemporaneous narrative sources to determine the motives for legislated tax changes. The goal is to identify tax changes that aim to spur productivity growth or promote other long-run objectives. They argue that such tax changes are less likely to be correlated with other factors that drive government spending and, hence, are more informative about the effect of tax changes on government spending. In the second step, they examine the response of government spending to these informative tax change episodes. They consider a variety of statistical specifications, and they supplement the statistical analysis with a detailed examination of four large tax changes.

The authors execute this empirical strategy with considerable care and skill. They conclude that the results provide “virtually no evidence” that tax cuts restrain government spending. Instead, the results suggest that tax cuts motivated by long-run objectives are largely offset in the ensuing years by tax increases. They provide a balanced summary of these and other results in their concluding section.

1. I encourage the reader to consult their closely related paper (Romer and Romer 2009) to gain a fuller appreciation for the care and skill that they bring to the first step of their empirical strategy.
In my view, legislated tax cuts have done little to restrain U.S. government spending in the postwar era. I reach this view based mainly on the arguments sketched in Romer and Romer’s section III.C. These arguments rely on economic reasoning about the force of the mechanisms that link current tax cuts to future government spending. I place less weight on the results of the two-step empirical strategy outlined above. The strategy is a sensible one, but it does not yield sharp inferences in a sample focused on the postwar U.S. experience. This fact shows up as large standard errors for the estimated spending responses to tax cuts. In addition, and despite the authors’ careful effort, it is hard to fully dispel concerns about the classification of tax change episodes and concurrent developments that influence the estimates.

Section III.C describes two mechanisms whereby tax cuts might curtail future government spending. One mechanism works through the link between current tax cuts and future debt-servicing costs. In particular, a deficit-financed tax cut today means higher debt-servicing costs in the future, leading future policymakers to choose a lower level of noninterest government spending than otherwise. A second mechanism rests on the political and economic costs of reversing a tax cut.

To assess the force of the first mechanism, assume linear marginal schedules for the costs and benefits of government spending:

\[
MC = 1 + cg, \quad c > 0, \\
MB = m - bg, \quad m > 0 \text{ and } b \geq 0;
\]

where \( g \) is the ratio of government spending to GDP, and \( c, b, \) and \( m \) are parameters. Treating output as exogenous and equating benefits and costs at the margin, the policymaker chooses \( g^* = (m - 1)/(b + c) \) for the size of government. This outcome need not be optimal from the perspective of the median voter or a utilitarian social welfare criterion. It simply reflects the policymaker’s preferred outcome in light of budgetary and political pressures.

When a policymaker implements a deficit-financed tax cut, this raises the MC schedule facing future policymakers. In the example offered in section III.C, the policymaker cuts taxes by 2 percent of GDP for five years, raising the debt-to-GDP ratio by about 10 percentage points. Given a real interest rate that exceeds the output growth rate by 2 percentage points a year, the implied rise in debt-servicing costs amounts to about 0.2 percent of GDP and 1.0 percent of government spending. Accounting for this upward
shift in the MC schedule, the effect is to lower future government spending by $c/(c + b)$ multiplied by 0.2 percent of GDP, that is, by at most 0.2 percent of GDP. This is a very small starve-the-beast effect. Relaxing the assumption of exogenous output and allowing for tax cuts to stimulate growth yields an even smaller restraint on government spending.

Since the example is similar in size to the largest tax cut episodes in the postwar U.S. experience, this analysis implies that tax cuts have not, through their effects on debt-servicing costs, significantly restrained government spending. It also implies that the mechanism is much too weak to be detected in a sample of postwar U.S. tax changes. Of course, the mechanism operates with greater force when there is a bigger rise in the debt-to-GDP ratio or the government faces a higher real interest rate. In the postwar U.S. setting, however, the first mechanism has little force.

Now consider the second mechanism. If tax cuts are hard to reverse for political or economic reasons, it is easy to see that they exercise more restraint on future government spending. Building on the previous example, if it takes five years for a new policymaker to reverse a previous tax cut, so that it remains in effect for ten years rather than five, the starve-the-beast effect roughly doubles. In the extreme case where tax cuts cannot be reversed, government spending cuts must eventually absorb the entire adjustment. Clearly, then, tax cuts can produce large starve-the-beast effects if they are sufficiently sticky. Thus, the force of the second mechanism depends on the difficulty of reversing tax cuts in practice.

Romer and Romer address this issue in their section III.B. Figures 9 and 10 provide strong evidence that tax hikes usually follow in the wake of tax cuts motivated by long-run concerns. The final panel of figure 9 suggests that about three-quarters of the tax cut is reversed within five years, and it provides little evidence against the hypothesis of full reversal. This evidence, coupled with the analysis above, indicates that tax cuts of the sort that dominate the postwar U.S. experience are not sticky enough to generate large starve-the-beast effects.

In short, neither mechanism operates with much force under the conditions that have prevailed in the postwar United States. This conclusion has important implications for economic policymaking and for models of fiscal behavior, as the authors discuss. However, the conclusion also has limited scope. In particular, it does not apply to tax changes or other fiscal policy actions that are hard to reverse. My remaining remarks develop this point.

Most developed economies rely on a national value added tax (VAT) as a major source of government revenue. The United States is a large outlier...
in this respect. Many, perhaps most, economists look on the VAT with favor because of its broad tax base, ease of administration, and pro-saving incentive effects. These observations motivate many proposals to introduce a national VAT or other broad-based consumption tax in the United States.

In contrast, Gary Becker and Casey Mulligan (2003), among others, question the desirability of introducing a broad-based consumption tax, which in their view would lead to substantial increases in federal spending. I share this view, and I see it as fully consistent with the evidence produced by Romer and Romer’s two-part empirical strategy and with my analysis of the mechanisms whereby tax cuts restrain government spending.

Two observations are important in this regard. First, I expect that a new national consumption tax, once introduced, would be hard to reverse. In all likelihood, it would become a permanent feature of the U.S. fiscal landscape. In this respect, U.S. experience with “routine” tax changes in the postwar era is not a good guide to the reversibility of a new national consumption tax. Second, I agree with most other economists that the VAT and other broad-based consumption taxes rank highly on standard economic efficiency criteria. In addition, the VAT is less visible and less salient to taxpayers than the personal income tax and hence less likely to generate political pressure for lower taxes. For this reason, as well, the VAT generates lower marginal costs of government revenue as perceived by the policymaker.

To parameterize the effects of introducing a broad-based consumption tax, rewrite the marginal cost schedule for government revenues as

\[ MC' = 1 + (1 - \gamma)c. \]

The new parameter \( \gamma \) captures the effect of introducing the VAT on the marginal cost of funds, again as perceived by the policymaker. Comparing outcomes under MC and MC', it is easy to show that the introduction of a VAT increases the size of government by

\[ \frac{\Delta g}{g} = \frac{b + c}{b + (1 - \gamma)c}. \]

As an example, suppose \( \gamma = 0.2 \), which corresponds to a reduction in the marginal cost of funds from 1.5 to 1.4 with \( c = 0.5 \). Using the formula above and \( \gamma = 0.2 \), the introduction of a VAT causes government spending to rise by 25 percent when \( b = 0 \), and by 11 percent when \( b = c \). Obviously, these are large effects on the size of government.
There is certainly room to improve and deepen this analysis by embedding it in a fuller model and by grounding the choice of parameter values. The analysis is sufficient, however, to support two conclusions. First, there are good reasons to anticipate that the introduction of a national consumption tax would lead to a large expansion in the size of government. Second, this first conclusion is fully consistent with the evidence in this paper and with my analysis of the mechanisms that link current tax cuts to future government spending.

As a final remark, it should be clear that a similar analysis applies to other new sources of government revenue that lower the marginal cost of government revenue from the perspective of policymakers. Cap-and-trade proposals to limit carbon emissions and other pollutants are a good case in point. These proposals have the potential to raise large amounts of government revenue in ways that are opaque to most taxpayers and that will make it easy for politicians to deflect the blame for higher energy costs onto energy producers, electric utilities, and others. These features of cap-and-trade proposals are likely to lower the marginal cost of government revenue from the perspective of policymakers and to lead to higher government spending as a result.

REFERENCES FOR THE DAVIS COMMENT

COMMENT BY
JEFFREY A. MIRON  
I was delighted to be asked to discuss this paper, in part because I enjoy reading anything by Christina Romer and David Romer, and in part because I believe this is an important topic. Although I had not spent a significant amount of time thinking about the starve-the-beast hypothesis before taking up the paper, my hunch had always been that the standard version was probably correct. I think my gut instinct, however, came from thinking about the hypothesis in terms that are the reverse of the way Romer and Romer state it: that is, my guess was that if some event provides policymakers with additional tax revenue, they will spend it, not save it. If one assumes that the effect is symmetric, then the standard starve-the-beast conclusion follows. So, implicitly assuming symmetry, I took the hypothesis as at least plausible.
The paper thus initially presented me with a dilemma, since I am hard pressed to think of a paper by either or both of these authors that I did not find convincing. In particular, I liked the precursor to this paper (Romer and Romer 2009), for two reasons. On the one hand, that paper made a solid case for their approach to identifying the effects of tax cuts. On the other, that paper’s result was consistent with my prior, which is that tax cuts should increase output because, on average, tax cuts mean lower tax rates, and that means improved incentives.

My goal in reviewing the current paper, therefore, is to determine whether some aspect of their interpretation might not be the whole story, or whether instead my instincts about the starve-the-beast hypothesis were just wrong. In the end, my conclusion merges a bit of both possibilities. I will explain this by first discussing the aspects of the paper that I do not wish to dispute, and then by presenting a modified interpretation of certain key results that I think can reconcile their results and my priors.

OVERALL EVALUATION. The first aspect of the paper that I do not wish to challenge is the authors’ strategy for identifying the effects of tax cuts. This is not to say that I regard that strategy as beyond all possible quibbling. For example, policymakers’ stated reasons for a particular tax change might differ from their actual reasons, and even their stated intentions might be ambiguous in some cases. Nevertheless, no approach to identification is beyond reproach. On the whole, I find the authors’ strategy far more convincing than most of those commonly used.

The second aspect of their paper that I find myself unable to challenge is the thoroughness of their empirical investigation. That is, I have not identified ways in which some aspect of that analysis seems inappropriate or incomplete. On the contrary, every time I thought I had discovered a possible weakness, such as some alternative specification that might yield a different answer, I discovered a page or two later that they had already addressed the issue and that it did not make much difference to their overall results.

One such issue might be worth mentioning, however, since I actually missed their treatment of it the first time through and therefore spent some effort, courtesy of their data, examining it on my own. I have long had the hunch that divided government (gridlock) might be a significant factor in slowing expenditure, reducing the deficit, and even improving output growth. I thought the authors’ failure to find a starve-the-beast effect might be due to omission of this factor. In fact, I could not find any gridlock effect, and the authors had in fact tested this hypothesis themselves and come to the same conclusion.
So, given this assessment, it might seem that reconciliation of their results with my priors requires me to update my priors. That will be part of the resolution, but not the whole story. To show this, I will examine two specific results in more detail.

INTERPRETING THE RESULTS ON LONG-RUN TAX CHANGES. The first of the authors’ results that I think bears additional scrutiny is their baseline result, reported in table 1 and figure 2, which indicates that exogenous tax cuts (what they call long-run tax changes) do not appear to lead to reductions in expenditure. Indeed, the authors find mild evidence that these tax cuts lead to increased expenditure over the five-year horizon, although this effect seems to disappear over the ten-year horizon (see their figure 3).

A possibly relevant objection, however, is that virtually all the exogenous changes in taxes in their data are tax cuts, not tax increases. The top panel of their figure 1, which plots the exogenous tax variable, shows mainly decreases in taxes throughout the sample period, with only a few examples of increases. This makes sense, since Romer and Romer identify exogenous tax changes as those motivated by a desire to shrink government or improve incentives, and it is not obvious why these motivations would favor tax increases.

One can confirm that their main result is dominated by the exogenous tax cuts rather than the exogenous tax increases by rerunning their baseline regression using only those tax changes that are decreases. Figure 1 below, which is virtually the same as their figure 2, shows the results. Tax cuts do not appear to starve the beast and may even feed it.

So, given that their results are dominated by episodes of tax cuts, it is clear that they do not necessarily address my prior that a windfall tax increase might cause expenditure to increase. One could assume that the relationship is symmetric, in which case the latter proposition follows from the former, but there is no a priori reason why the effect has to be symmetric. Given sufficient observations on exogenous tax increases, one could examine the possibility of asymmetry directly. It seems unlikely that such an exercise would be fruitful in their dataset, however, because there are so few exogenous increases in their sample period. More generally, given the classification system they have used, it seems unlikely that one could ever examine this asymmetry, since it is not obvious that policymakers would ever announce that their intention is to make incentives worse.

The bottom line on this first result is therefore the following: I take the authors’ result as convincing when stated as they state it, that is, that exogenous tax cuts do not starve the beast. The results are silent, however, on whether exogenous tax increases feed the beast.
The second result I want to consider in more detail is the finding that spending-driven tax cuts are followed by noticeable reductions in expenditure (see the panel labeled “Spending-driven tax changes” in the authors’ figure 6). Romer and Romer argue that this should not be taken as evidence in favor of the starve-the-beast hypothesis, because the correlation confounds a missing, unmeasured variable, namely, prior decisions to change spending. Such decisions plausibly move spending and taxes in the same direction, independent of any causal impact of taxes on spending.

The authors’ argument for not regarding this as evidence for the starve-the-beast hypothesis is appropriate given the way that its advocates have typically stated the hypothesis, arguing that any tax cut is good because it helps shrink government. This view suggests an independent effect of tax cuts, but one can only estimate that effect by controlling for other factors, like antigovernment sentiment, that might also reduce spending.

Again, however, it is useful to examine this result a bit more carefully, and to pose the question as the reverse of the way the authors present it. In their sample, most spending-driven tax changes are increases, not decreases.
(again see their figure 1). Hence, their result is mainly saying that when taxes increase because policymakers want to increase spending, expenditure in fact goes up. Figure 2 below shows this explicitly simply by presenting the mirror image of the analogous graph in the paper.

Even more important, this figure shows that for an expenditure-driven tax increase, expenditure increases by well more than one for one. Specifically, a tax cut of 1 percent of GDP equals about 5 percent of government spending, and the estimates suggest that even 20 quarters out, a spending-driven tax increase of that magnitude raises government expenditure by 10 percent. Thus, the long-term increase in spending is about twice the initial increase in taxes.

Why might this occur? The obvious explanation is that initial estimates of program costs are systematically below the eventual costs. Congress, for example, might systematically underestimate costs in order to get programs adopted, or political forces might lead to the expansion of programs once they have been adopted, whether or not the initial costs were fair estimates of the future costs. As a result, if the size of the tax increase was chosen to match the initial estimate of program costs, the actual costs incurred will...
far exceed the tax increase. Whatever the mechanism, the implication is
that spending-driven tax increases feed the beast, or at least allow the beast
to feed itself.

Thus, my interpretation of these results is more nuanced than the authors’
interpretation. I agree with their assessment that exogenous tax cuts do not
starve the beast. Their evidence would still appear to be consistent, however,
with my prior and with the broader concern of small-government advocates,
which is that when policymakers have ready access to tax revenue, they
spend it.

A simple story to account for this combination of results goes as follows.
Politicians want to spend money because that helps them get reelected. The
kind of spending they seek differs from politician to politician according
to the political preferences of their districts, but logrolling and earmarking
allow everyone to be happy when money is free and easy. Thus, if politi-
cians are flush with cash, the temptation to spend is huge. If instead politi-
cians are pushed to reduce spending, they resist, because they usually get
more benefit from higher spending than from tax cuts, and so they find
ways to raise taxes back up when they can. This simple “model” does not
validate the claim that all tax cuts are good tax cuts because they starve
the beast, but it does suggest that concerns over letting children play with
matches—that is, giving politicians access to increased tax revenue—
are valid. Thus, advocates of small government would seem to have good
reason to oppose tax increases.

 HOW SHOULD ADVOCATES OF SMALL GOVERNMENT RESPOND TO THESE RESULTS?
One final issue is whether advocates of small government should be unhappy
or happy with the authors’ results, taking them as correct. The fact that
attempts to shrink government through tax cuts do not seem to work might
at first blush strike small-government types as frustrating. Much of the
citizenry has some interest in tax cuts, and politicians are sometimes inter-
ested in running on a tax-cutting platform, so this might appear an easy
way to accomplish the goal of shrinking government, if the starve-the-beast
hypothesis were correct.

Further reflection, however, should make advocates of small government
fully comfortable with these results. The cut-taxes-first approach is at some
level dishonest; it tries to shrink government while avoiding discussion of
the fact that lower taxes mean less government. Advocates of small gov-
ernment should pride themselves on being honest about their intentions and
have confidence that their criticisms of government are sufficiently convinc-
ing to carry the day without resort to trickery. That means reducing govern-
ment by debating specific policies and programs on their merits.
The result that tax cuts are not sufficient to reduce government is also consistent with the view that institutional “tricks” are rarely successful at producing substantial and sustained changes in the way governments operate. Balanced-budget amendments are one such trick, but they founder on the fact that governments have access to innumerable accounting gimmicks for appearing to balance a budget while not really doing so (for example, by providing off-budget subsidies to Fannie Mae and Freddie Mac). Similarly, laws that allegedly establish central bank independence do not seem to bind in practice (Campillo and Miron 1997). This is not to say that institutions are irrelevant or to deny that having institutions that nudge in the right direction might help generate better outcomes. Institutions and tricks nevertheless do not seem to fundamentally change outcomes by themselves.

Finally, advocates of small government need not shed their view that tax cuts are desirable. After all, the very same methodology that invalidates the starve-the-beast hypothesis also suggests that tax cuts stimulate output substantially. What advocates of tax cuts presumably should do, however, is focus their attention not on any and all tax cuts, independent of their merit, but instead on those tax cuts that make sense from an efficiency perspective. At the same time, they need to refocus their efforts on convincing the populace that government spending is too high. If they can do that, lowering taxes should be easy.

REFERENCES FOR THE MIRON COMMENT


GENERAL DISCUSSION George Perry suggested that the introduction of inflation indexing of income tax brackets about halfway through the authors’ sample period may have had a noticeable effect on the hypothesis they examine. In the years before indexing, politicians had the luxury of deciding what to do with the “fiscal dividend” that gradually arose. In the early 1960s it provided fiscal room for a major tax cut without the need to restrain spending, and in the early 1970s it permitted an outrageous enhancement of Social Security benefits. Once tax brackets were indexed, discretionary tax cuts or spending increases would have been more constrained, and if starve-the-beast effects were significant, they should have become more evident.
Robert Shiller questioned the paper’s implicit assumption that the starve-the-beast impulse takes the same form in all periods, suggesting instead that it was a Reagan invention. He noted that the largest long-run tax cut other than Reagan’s during the sample period came in 1948 and could be attributed to postwar demobilization. The subsequent increase in spending could be explained by the Korean War. Both factors might offset the paper’s results.

Robert Hall argued for analyzing the relationship between spending and taxation in the context of the level of U.S. national debt. Unlike some European countries whose debt is large enough to be in danger of falling below investment grade, the United States has maintained a persistently low debt-to-GDP ratio and a credit rating well above triple-A. Spending could indeed be much higher than it is, given the fiscal headroom provided by a small national debt. He suggested that a factor that contributes to keeping spending low in the United States but not in European countries is the former’s racial and ethnic diversity, which may discourage spending on social programs if such spending tends to favor one group over another.

Benjamin Friedman agreed with Hall and with Steven Davis that the level of the national debt should be included in the analysis, and he proposed another, related factor to consider, namely, the relationship between the interest rate on the debt and the growth rate of the economy. Although the theoretical literature assumes that the real interest rate will exceed the real growth rate, the opposite was true during most of the authors’ sample period. If the economy grows at a rate above the real interest rate, the ratio of the national debt to GDP will decline over time, weakening the tax burden argument that underlies the supposed starve-the-beast mechanism.

Caroline Hoxby noted that reducing the standard errors on the paper’s main findings would be challenging given that there are essentially only four observations of the long-run tax cut variable. She also observed that testing the starve-the-beast hypothesis becomes nearly impossible if reductions in top marginal tax rates increase the rate of economic growth. Increased growth brings increased tax revenue without an increase in tax rates. For example, during the Reagan years marginal tax rates fell yet revenue increased significantly.

Matthew Shapiro stated that even though he found the paper’s narrative believable, it did not match his understanding of the stylized facts. Around 1980 the U.S. political economy changed from one in which the debt-to-GDP ratio was steadily declining to one where, except during the Clinton administration, the debt-to-GDP ratio has been generally increasing. The fiscal restraint of the first six years of the Clinton administration clearly
arose in part because of concern about inherited deficits. He wondered why the authors’ regressions did not pick up these broad trends. Two possible reasons were, first, that the lags used are too short, and second, the difficulty in inferring effects from time series that consist of only several very persistent policy episodes.

Ricardo Reis remarked that although he appreciated the virtue of focusing on long-run tax cuts, given their exogenous nature, he worried that they are not representative of tax cuts in general. He suggested looking at the substance of tax cuts, in addition to their motivation, to determine whether the long-run cuts are really representative. Reis also noted that long-run tax cuts have only long-run benefits and therefore tend not to create short-run political advocates. As a result, these cuts are prone to reversal after a short while, with a change in administration or in the dominant ideology. Large, immediate cuts could avoid this problem and thus allow a starve-the-beast strategy a chance to force a correction of the resulting deficit through spending.

Gregory Mankiw credited Robert Reich and Henning Bohn with making him sympathetic toward the starve-the-beast hypothesis. Reich’s book Locked in the Cabinet documents that the Clinton administration had had great spending plans but was prevented by the inherited Reagan-Bush budget deficits from carrying them out. However, the events in the book occurred roughly 12 years (48 quarters) after the Reagan tax cuts, a lag much longer than used in the paper and possibly beyond the capability of any econometric study. Henning Bohn’s 1991 paper in the Journal of Monetary Economics also comes to a very different conclusion than the authors, and Mankiw suggested that the authors address that paper directly and explain why they believe Bohn was wrong.

Luigi Zingales agreed with Caroline Hoxby on the limitations imposed by using, in effect, only four observations. To get around this problem, he suggested looking at data from other countries with different levels of debt and different political constraints to determine whether a starve-the-beast strategy worked. Additionally, he noted that in corporate finance there is an analogy to the starve-the-beast hypothesis, namely, the free cash flow theory, which can be tested on micro rather than macro data and has found a lot of empirical support. Steven Davis agreed with Zingales but observed that extending the data internationally would entail a large amount of additional work. He also remarked that a desire to starve the beast could motivate many tax changes yet not significantly restrain spending. For example, a current policymaker might implement a deficit-financing tax cut to undo the strategic beast-starving efforts of its predecessor. If political power
changes hands every few years, then strategic tax cuts with a starve-the-beast motive can be both frequent and largely ineffective.

William Gale noted that the real-world experience in the United States since 1980 has been the opposite of what the starve-the-beast hypothesis predicts, unless a very long term story is told. The effect, if any, of tax changes on spending appears to be inverse: Ronald Reagan cut taxes and increased spending, Bill Clinton raised taxes and lowered spending, and George W. Bush cut taxes and raised spending again. Gale also cited a study he did with Brennan Kelly (published in *Tax Notes* in 2004) of the voting behavior of members of Congress who had signed the “no new taxes” pledge. That study found that among those who had signed the pledge, nearly all voted for the 2001 and 2003 tax cuts, 86 percent voted for Medicare Part D (the most expensive new federal entitlement in decades), and 90 percent voted for the pork-laden 2005 highway bill. Essentially, those who insisted that taxes must not be raised were the very people most willing to raise spending—evidence against the starve-the-beast hypothesis. Lastly, Gale suggested looking further into which tax features change in tax cuts and in subsequent tax increases. If the changes occur via marginal tax rates, which are cut first but end up rising later, that is inconsistent with optimal public finance theory, which shows that it is more efficient to keep tax rates constant than to shift them up and down.

Henry Aaron cited several established facts of political economy that, in addition to the inflation indexing of tax brackets mentioned by Perry, would make it difficult to find any statistically significant effects from four relatively small events. The first is that government spending as a share of GDP has been nearly flat for the past 50 years. Thus, the data likely contain too little variation to allow any strong effect to emerge. Second, the composition of spending has, in contrast, changed drastically, and these changes would likely mask the effect of modest fiscal policy changes. For example, defense spending declined from over 10 percent of GDP at the time of the Korean War to only 3 percent at its lowest point in the late 1990s. Non-defense discretionary spending declined significantly during the Reagan administration and has continued to decline since then. These spending changes imply large shifts in the political consensus on government spending over time and make it unlikely that any real impact of small tax changes on total spending at different points in time could be detected.