

[Fiscal Policy, Past and Present]. Comments and Discussion

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Comments and Discussion

William G. Gale: Alan Auerbach's paper provides a comprehensive review of issues and significant new evidence relating to the conduct of fiscal policy. The paper finds that standard measures of fiscal policy have been responsive to the state of the economy and the budget outlook in the past. For a variety of technical reasons, however, it is difficult to pin down the impact of fiscal policy on the economy. It is even more difficult to determine appropriate fiscal policy in the current environment because of several unusual features of the short-term economic picture and the long-term budget outlook.

The most intriguing of Auerbach's results are the regressions that relate federal and state fiscal policy changes to the state of the economy and the budget. The paper shows that states' fiscal responses, in the aggregate, are sensitive to the lagged aggregate state budget surplus but not to the business cycle. These results are sensible, given that almost all states have balanced-budget rules and are unlikely to be able to engage in countercyclical policy. Given the magnitude of the states' current budget problems, the results imply that the states' responses to those problems could produce a significant drag on the national economy in the near term. On the other hand, the regressions showing massive responses at the federal level on a quarterly basis require some explanation. It is difficult to believe that these equations are picking up true policy responses, given the lags in information, the delays with which Congress acts, and the infrequency of major fiscal actions.

The most interesting regressions for federal policy dynamics are in Auerbach's tables 2 and 3. The main regressions show that an increase of 1 percent of GDP in a five-year budget deficit projection (with smaller

weights given to the more distant projections) generates policy changes in the current six-month period that reduce the same weighted deficit projection by 0.14 percent of GDP, including spending reductions of 0.086 percent of GDP and tax increases of 0.055 percent of GDP. Taken at face value, these coefficients imply that the average policy response to an earlier change in policy, or to a shock, that has created a permanent increase in the deficit eliminates 26 percent of that initial increase in the first year, 45 percent after two years, 60 percent after three years, and 78 percent after five years. Although judgments may differ, this strikes me as a fairly rapid response, much more rapid than one might have guessed given the casual observation that nagging deficits persisted from the early 1980s to the middle of the 1990s.

The regressions also imply that spending cuts have historically represented about 60 percent of the policy response. This finding matters because how tax cuts are financed influences their effects on economic growth. Tax cuts financed by future spending cuts can raise future national income, even when the same tax cuts financed by future tax increases have the opposite effect.¹

It is hard to know how much weight to put on these regressions, however, especially for predictive purposes. First, the sample size is small by necessity. Second, factors omitted from the analysis are likely to affect fiscal policy choices. Budget rules, such as Gramm-Rudman-Hollings, are likely to have influenced fiscal outcomes, but including them in the regression is difficult both because of the small sample size and because the rules themselves are endogenous. Likewise, the source of the change in the budget outlook may matter; policymakers may respond differently to exogenous shifts in the outlook than to changes that their own tax and spending policies created. Ideology also plays a role. President George W. Bush, for example, proposed a tax cut in 1999, pushed it through as legislation in 2001, and then proposed that it be accelerated and made permanent in 2003, despite the fact that the budget and economic situations in those three years varied dramatically.

A third concern is that major tax increases and tax cuts are discrete and sporadic events. That is, there may be discontinuities between events and processes that generate no tax change and those that generate small tax

1. See Auerbach (2002c), Congressional Budget Office (2002b), Elmendorf and Reifschneider (2002), and Gale and Potter (2002).

changes. In addition, the factors generating tax increases may be quite different from those generating tax cuts. Yet the paper's regressions model tax changes as a continuous and symmetric process. Fourth, the definition of policy changes may be suspect. The regressions equate changes in current policy with legislated changes in outlays or taxes. In contrast, the discussion later in the paper on why it is difficult to show how fiscal policy affects the economy emphasizes the difficulty of defining current policy and therefore of identifying the change in policy. How the change in current policy is defined in the regressions may have an important impact on the results. At the very least, however, it should be clear that the regressions use a definition of current policy whose problems are clearly explained later in the paper.

Fifth, the results are somewhat sensitive to relatively minor specification changes. Auerbach's table 3 shows that the results in table 2 are robust to sample splits based on which party holds the White House, but may not be robust to splits based on decades, even though the classification of data points in the two sample splits is almost the same. His table 4 shows that the response of annual discretionary spending to the budget situation is unstable over the period, but that is probably because defense spending responds largely to other factors. Nondefense discretionary spending responds to the budget outlook in a somewhat more stable manner. Even so, the implied response to a 1-percent-of-GDP increase in the weighted deficit projection is an offset of 0.13 percent of GDP for nondefense discretionary spending in 1984–92 and 1993–2002 separately, but an offset of just 0.03 percent of GDP over the combined period. A minor quibble is that the discretionary spending equations might have been improved by looking at changes in budget authority rather than actual outlays. Authority is what Congress most closely controls; outlays typically follow authority changes with variable lags, depending on the type of spending.

For all of these reasons, it is not clear that the regression provides reliable predictions for likely policy responses in the future. Besides the regressions, the paper raises a wide variety of other issues. I will comment on four of them.

The first is whether it is important to think about long-run issues when considering short-run fiscal stimulus. Some would argue that the long run is just a series of short runs, implying that there is no distinction between the two. But the paper is correct to explore the two issues simultaneously,

because long-run considerations impose constraints and raise issues that do not exist in the short run. The most obvious is that a sustainable budget can be wildly out of balance in the short run, but it cannot be wildly out of balance in the long run. In addition, policies that stimulate the economy in the short run can hurt economic growth in the long run. In the short run, in an economy operating with excess capacity, increases in aggregate demand can raise output and income even without increasing the capital stock. In the long run, economic growth reflects expansions in the capacity to produce goods and services. Such expansions, in turn, require increases in the amounts of labor and capital, improvements in their allocation, or technological advances. As a result, policies that raise consumer spending can raise short-term output in a slack economy, but if they continue to raise aggregate demand after the economy has reached full employment, they will reduce future national income by reducing the saving that can finance future capital accumulation. Another key link between the short and the long run is that expectations of future fiscal policy actions help determine the short-run impact of a policy, and those expectations in turn can depend on the future budget outlook.

A second broad issue is the difficulty in determining what constitutes current policy, as noted above.² The Congressional Budget Office's baseline projection is useful—indeed, necessary—because Congress needs a benchmark against which to measure the costs of proposals that change the tax law, spending rules, or spending amounts. But the baseline is only a mechanical projection that is intended to serve as a “neutral benchmark . . . according to rules [that are] set forth in law and long-standing practices. . . .”³ It is not intended to be a realistic or substantive projection of current policy, and indeed it falls short of that in several ways.

The first area where the CBO's baseline assumptions do not appear to be a good reflection of current policy involves discretionary spending, which represents slightly more than a third of total outlays. Discretionary spending typically requires new appropriations by Congress every year. That is, current laws generally do not determine what discretionary spending will be in future years, and this raises the issue of what levels the

2. For citations and supporting details for the discussion in the remainder of these comments, see Burman, Gale, and Rohaly (2002) and Gale and Orszag (2003a, 2003b, 2003c, 2003d).

3. Congressional Budget Office (2002b).

budget projections should assume for such spending. The CBO routinely assumes that real discretionary spending will remain constant at the level prevailing in the first year of the ten-year budget period. Because population, the price level, and income grow over time, applying this assumption to the current budget implies that, by 2012, discretionary spending will have fallen by about 9 percent in real per capita terms and by more than 20 percent relative to GDP. Although judgments may reasonably differ about future spending choices, the CBO's assumption is unrealistic both as a measure that holds current policy constant and as a prediction of likely spending outcomes. I believe that a more appropriate assumption would be that real discretionary spending will grow at the same rate as the population—incidentally the same criterion endorsed by then-Governor George W. Bush in the 2000 presidential campaign.

The CBO baseline also makes unrealistic assumptions about expiring tax provisions. The CBO assumes that Congress will extend expiring spending programs but that all temporary tax provisions (other than excise taxes dedicated to trust funds) will expire as scheduled. The assumption regarding spending is reasonable, since spending programs with expiration dates are normally renewed. But the assumption regarding taxes is not reasonable in most cases. The Internal Revenue Code currently contains several sorts of expiring tax provisions. The first includes the provisions of the Economic Growth and Tax Relief Reconciliation Act (EGTRRA, the 2001 tax cut). All of these provisions end automatically (sunset) by 2010, and some end sooner than that. The second category includes the elements of the 2002 economic stimulus package. The third involves the provisions of the Jobs and Growth Tax Relief Reconciliation Act (JGTRRA, the 2003 tax cut). The fourth is the alternative minimum tax (AMT), discussed below. The fifth includes a variety of other tax provisions that have statutory expiration dates but are routinely extended for a few years at a time as their expiration date approaches. To understand the full implications of recent and current fiscal policy choices, the most accurate assumption, on balance, would be that all these provisions will be extended. This is not a statement of desired or optimal policy, but simply a conjecture about the current stance of policy.

The AMT offers a dramatic example of how the baseline projections generate outcomes that are inconsistent with any but the most mechanistic view of current policy. The AMT was designed in the late 1960s, and then

strengthened in 1986, to curb excessive use of tax shelters and other forms of tax avoidance.⁴ The AMT runs parallel to the regular income tax system. It uses a somewhat different measure of income, permits fewer deductions, and applies a flatter schedule of marginal tax rates than does the regular income tax. In theory, all taxpayers must compute their tax liability under both the conventional income tax and the AMT and pay the greater of the two. In practice, the AMT currently generates a larger liability for so few taxpayers—about 3 million—that few filers, other than the tiny minority who might be affected, bother with it. But because the AMT is not adjusted for inflation, whereas the ordinary income tax is, the AMT applies to ever more taxpayers as prices rise. In addition, EGTRRA, which cut the ordinary income tax but not the AMT, will greatly increase the number of people subject to the AMT. All told, by 2010 an estimated 33 million filers will have become subject to the AMT under current law. This result is troubling in large part because the AMT is significantly more complex than the regular tax. Policymakers will therefore be under powerful pressure to modify it. Although specifying current policy toward the AMT is difficult, I assume for illustrative purposes that provisions of the AMT that are slated to expire before the end of the budget window are granted a continuance and that the AMT becomes indexed for inflation and allows dependent exemptions, which it currently does not.

These adjustments for alternative measures of current policy are important because they are huge. Over the ten-year budget horizon, they would reduce revenue by almost \$2.2 trillion; counting interest payments, they would reduce the ten-year undiscounted sum of budget surpluses by more than \$2.5 trillion. Perhaps a clearer way of portraying the long-term magnitude is to note that, by 2013, extending the expiring provisions in current law and fixing the AMT as I have assumed would reduce revenue on a permanent basis by 3.0 percent of GDP.⁵

A third broad issue raised in the paper is how our current fiscal problems and tax choices compare with those in the past. The good news is that, under the current ten-year budget outlook, projected deficits and debt held by the public, as percentages of GDP, would be well within the range experienced during the past forty years. The bad news is that these comparisons are not particularly relevant or informative, for several reasons

4. Burman, Gale, and Rohaly (2002).

5. Gale and Orszag (2003b, table 3, and 2003d, table 1).

besides the technical issues already mentioned. Most obviously, the official debt and deficit figures ignore the looming problems in Social Security and Medicare. The liabilities of these programs represent a form of implicit federal debt. Even the administration in its fiscal year 2004 budget proposal points out that current “long-run budget projections show clearly that the budget is on an unsustainable path.”⁶

Comparisons with the 1981 tax cut are particularly germane. Against a comparable baseline, the administration’s proposed tax cuts would roughly equal the net size of the Reagan tax cuts as a share of the economy. But the situation today is far different from what it was in the early 1980s. The nation was much better prepared in the 1980s and early 1990s to deal with the fiscal deficits stemming from large tax cuts than it is now. National saving was significantly higher in the early 1980s than in recent years. The United States was an international creditor in the early 1980s but is a substantial debtor today. And in the early 1980s the retirement of the baby-boom generation was still more than twenty-five years away, giving the nation time to recover before facing the intense fiscal pressures of that demographic tidal wave. The economic benefits of cuts in marginal tax rates were also higher in 1980, because marginal tax rates were significantly higher then.

In addition, the adverse fiscal effects of the 1980s tax cuts were attenuated by several policy responses and fortuitous, exogenous events that soon followed but seem unlikely to be repeated. The policy responses include the raising of taxes in 1982, 1983, 1984, 1990, and 1993 and the institution of budget rules that helped keep spending constant or declining as a share of GDP. The fortuitous events include the breakup of the Soviet Union in the 1980s, which generated a substantial peace dividend: of the 2.5-percentage-point decline in noninterest spending as a share of GDP from 1990 to 2000, 2.2 percentage points came from defense. In the 1990s a surge in productivity helped boost revenue.

Today, in contrast, defense spending is slated to rise. Mandatory entitlement spending is also expected to rise markedly: unlike in the 1980s, the retirement of the baby-boomers is now imminent. Rather than attempting to close the budget shortfall, the administration is pursuing still more tax cuts. Under the administration’s budget proposals, projected federal revenue in 2004 would fall to 16.9 percent of GDP, its lowest

6. Office of Management and Budget (2003a, page 31) and (2003b, page 40).

share since 1959. Even if nondefense discretionary spending were cut to zero, the savings would not come close to offsetting the increases in mandatory and defense spending and the proposed reduction in taxes. As a result, along many dimensions, the fiscal situation is much more troubling now than it was in the early 1980s.

The fourth issue raised by the paper is identifying “the real fiscal danger.” It is now well understood that Social Security and Medicare face substantial long-term shortfalls. As noted, extending all of the administration’s tax cuts, the other expiring provisions, and fixing the AMT would reduce long-term revenue by 3.0 percent of GDP over the next seventy-five years. That is more than three times the actuarial deficit in Social Security, and significantly larger than the combined actuarial deficits in Social Security and Medicare’s Hospital Insurance program over the same period. Examining only the value of the future cash flows does not change the fundamental conclusions. Even with a horizon that extends beyond seventy-five years to examine permanent changes, the cost of the tax cuts still exceeds the Social Security shortfall. By these measures, the administration’s tax-cutting agenda deserves at least equal billing with the entitlement shortfalls on the list of policies accounting for “the real fiscal danger.”

Auerbach’s paper is constructive in bringing a wide variety of interesting evidence and perspective to bear on all of these issues. The paper represents an important contribution to our understanding of what we know about fiscal policy—and what we still have to learn.

William D. Nordhaus: Alan Auerbach has written a useful paper reviewing the fiscal troops as the United States emerges from war with Iraq and continues its war on terrorism. There is much in the paper to compliment and little to complain about. Especially interesting are the estimates of fiscal reactions of federal and lower-level governments to economic conditions. But in the venerable tradition of discussants I will concentrate on complaints—primarily about the core of the paper, which discusses the history of fiscal policy over the last two decades.

The major contribution of Auerbach’s paper is its review of the relationship between the federal budget and the economy, concentrating on the effects of the economy on policy. He correctly notes that changes in the budget can have sources other than policy changes. The Congressional Budget Office breaks down changes in the budget into legislative,

economic, and technical sources, on both the revenue and the expenditure side. Only the legislative sources of fiscal changes are under the direct control of fiscal policymakers, but Auerbach notes that nonlegislative changes often give rise to quite large changes in the budget. For example, in the January 2003 CBO projection, the ten-year budget moved toward deficit by \$385 billion, but only \$64 billion of that was due to legislative decisions. Most of the revisions were “technical.” Indeed, technical revisions, at \$388 billion, more than accounted for the total change; \$140 billion came from revisions to revenue projections. Auerbach therefore turns to a new and very revealing way of gauging changes in policy, focusing only on the legislative changes in the budget between consecutive CBO reports. To do this, he collates CBO estimates of the changes in revenue and expenditure from each of the biannual reports starting in 1981.

CBO scorekeeping raises certain issues. Many supply-side and other proto-economists argue that the CBO should engage in “dynamic scoring” to take into account the higher investment and growth in hours worked that come from lowering marginal tax rates. In March of this year the CBO issued a first report on dynamic scoring, which found that dynamic scoring made only a small difference to the budget projections and, more interesting, that four of the seven models it tested showed larger rather than smaller deficits under dynamic scoring.

Others argue that the CBO’s expenditure assumptions are generally biased downward, particularly in the health care area. The CBO’s scoring methodology results in frequent upward “technical” corrections in spending on health or foreseeable “legislative” extensions of temporary tax provisions. But the CBO numbers have the great virtue of being put together by people who know how to count on more than one hand and with a set of rules that has changed little over the last two decades. I applaud Auerbach’s introduction of these numbers into the analysis.

Having introduced the data, however, Auerbach then posts with excessive speed to the econometric analysis. I would have preferred a pause to look at the data more closely. So, relying on the kindness of authors, I obtained the raw CBO data from Auerbach and did the scrutinizing myself.

There appear to have been three distinct regimes for expenditure over the last two decades. The first is from the early 1980s until 1992. During this period the deficit-to-GDP ratio was high, perceived to be high, and felt to be a major concern by both administrations and Congresses. There

were major cuts in expenditure during this period, but the cuts were sporadic: the CBO reports identify them as occurring in early 1986, 1988, 1990, and 1991. (Recall that budget caps and the “pay as you go” rules, which required that any additional spending or tax cuts be offset by tax increases or spending reductions elsewhere, were in effect from 1990 until they expired in September 2002.) From 1993 until 1997, by contrast, the budget was on a favorable trajectory, the budget caps were effective, and there were essentially no legislative changes in expenditure.

The final period occurred when the budget deficit moved toward surplus in 1998, at which point discipline over expenditure collapsed: every CBO report since the summer of 1998 has recorded legislative increases in expenditure. The time series is relatively short, but the two striking features of the expenditure history are that budget caps appear to have been effective on the expenditure side during the early 1990s and that, with or without budget caps, Congress abhors a surplus.

As an aside, it is worth noting that Congress appears to behave much like the private sector in its accounting. Auerbach’s table 7 shows how flawed the standard fiscal accounting is as a measure of change in net financial obligations. According to Auerbach’s numbers, the standard measure of the OASDI budget was off by \$878 billion in 2000. Yet the budget process does not appear to care, or for that matter even to know, about these numbers. Behavioral economics is clearly at work here: the budget system looks only at the bottom line of the measured surplus or deficit and ignores lockboxes and generational accounting, much as the stock market ignores the footnotes in corporate financial statements.

On the revenue side, the striking fact about the legislative changes is how infrequent they are and how little they seem to be explainable by economic conditions. The two major tax cuts of the last roughly forty years, in 1981 and 2001, occurred under diametrically opposite budgetary conditions and quite different economic conditions: with the budget in deficit in the first case, and in surplus in the second; and with an economy mired in stagflation in the first case, and growing robustly in the second. In contrast, the four tax increases that came between these two large tax cuts are plausibly related to the large (measured) fiscal deficits of the time. I suspect that a careful reckoning would indeed show that all the major tax increases of the last century (excepting increases in social insurance taxes) were triggered by deficits or, in wartime, the prospect of deficits. This history also shows that any politicometric treatment of taxes

should treat increases and decreases asymmetrically. Santa Claus is welcome every day of the year, whereas the IRS auditor is treated like ants at a picnic.

One of my worries about the paper is that the results do not appear robust to specification changes. Looking at tables 2 and 3, we see that coefficients differ by factors of four among different specifications. I tried some additional specifications using Auerbach's data and found even larger differences, depending upon the sample period and timing. Adding the Reagan tax cuts of 1981 made a big difference in the equations I estimated, and even changed the signs in some instances. I am not terribly surprised that Auerbach's results are not robust, particularly for revenue. Work on the political business cycle has shown that the determinants of fiscal policy vary greatly across time and across countries. Faced with a stagnant economy, President Kennedy proposed tax cuts, whereas President Clinton in the same circumstances proposed deficit reduction. Faced with a reelection campaign, President Nixon imposed wage and price controls, whereas President Carter decontrolled. Faced with surging budget deficits and escalating military spending in a first term, President Reagan worked to curb the deficit, whereas the current President Bush is moving to widen it. It is hard to find any pattern of behavior here, and I suspect this is why fiscal equations are so fragile.

Finally, there is an interesting and depressing lesson here for responsible political leaders who choose to run a budgetary surplus. In March 2000, then-Secretary of the Treasury Lawrence Summers eloquently provided the rationale for running a budget surplus:

By continuing to pay down debt within a framework that helps us meet our future commitments to Social Security and Medicare, we can help to maintain the virtuous cycle we have worked so hard to achieve. And we can re-load the fiscal cannon, preparing the government to respond to future contingencies such as recessions or threats from overseas.¹

One has to wonder whether Summers' policy advice—and President Clinton's acceptance of it—would have been different had they known that their hard-earned surpluses would soon be spent on abolishing the inheritance tax, repealing the tax on dividends, reducing the top income tax rates, and shooting off the remaining rounds of the fiscal cannon in the deserts of Iraq. I suspect that, had they foreseen these events, they would

1. Summers (2000).

have devised quite a different fiscal policy. In any case the lesson can hardly be lost on future administrations: I would guess that the next Democratic administration will be quick to use any fiscal resources left to it for what it believes to be major current priorities, rather than save them for some future administration to fritter away.

General discussion: Eric Leeper questioned the usefulness of the concept of unfunded liabilities. The term suggests that the current situation does not represent an equilibrium, and it raises puzzling questions about why long-term interest rates today are not higher than they are. But one *can* think of this situation as an equilibrium in the sense that individuals making decisions today form expectations about likely future policy actions to fund these liabilities. These actions lie on a continuum, and one can ask what set of unobserved beliefs about future policies might be consistent with the budget situation we observe today. Rather than remain puzzled about why long-term interest rates have not risen as we think they should have, given the unfunded liabilities, one could use this approach to indicate that the public expects future policy adjustments, and so correctly perceives these liabilities as funded in the long run. Auerbach granted that, as Leeper suggested, financial markets might be responding with confidence that the unfunded liabilities will be financed. Or they may simply not understand the true situation. As a parallel, he noted that corporations that do not want to value options more transparently are fighting with reformers and investors who want them to. Since the information about options already exists, the fact that this fight goes on suggests that agents would respond differently if the information were presented more clearly.

George Perry also questioned the usefulness of the unfunded liabilities concept. The paper suggests that the incorporation of unfunded liabilities into official budget projections would both help bestir policymakers and meaningfully inform the decisions of private agents. On the first point, although it would be desirable to address the future of entitlements programs sooner rather than later, Perry reasoned that the failure to do so reflected politicians' unwillingness to make unpopular changes rather than a misunderstanding about the size of the problem. On the second, he suspected that changes in the reporting of unfunded liabilities would have a negligible effect on the current behavior of private agents, in part because when and how politicians would respond is unknown, and in part

because, for a variety of reasons, agents do not react to possible shocks at distant horizons. He concluded that including unfunded liabilities in the presentation of current fiscal policy is likely to confuse rather than clarify how fiscal policy affects the economy.

Thomas Sargent suggested that the views of fiscal policy expressed by Leeper and Perry could be thought of as polar versions of possible equilibrium situations. If perfect commitment of the fiscal authority were possible, one could compute Ramsey policies—a sequence of efficient actions. By construction, such policies are feasible and the debt paths associated with them are sustainable. The analysis forces the government to think about the future when designing its policies. The resulting policies are credible because the government is assumed to abide by a commitment technology. Another possibility is that governments do not worry about the future, except to predict the actions of their successors. Each administration does the best it can given its predictions about future behavior. The policy outcomes of this kind of equilibrium are often improvable. Sargent noted that Marco Bassetto has recently analyzed these two polar cases and clarified their implications for the fiscal theory of the price level. Sargent also cited a half-serious proposal by Alan Blinder to establish an independent fiscal authority, as a way to overcome time inconsistency problems in the same way that independent central banks are thought to do.

Remarking on the present economic situation, Benjamin Friedman emphasized that the recent recession had been very mild, with unemployment rates staying at or below 6 percent, and GDP growing except in three quarters during 2001. Thus, although the recovery seems to be a jobless one, like that of 1992-93, the episode still ranks as only a mild downturn. Hence it is not surprising that the automatic fiscal stabilizers have not changed the budget by much, and, compared with many much more severe downturns in the past, the need for discretionary fiscal stimulus is not pressing. Friedman also remarked that since the data on state and local budgets go back only to the late 1970s, it is unclear to what extent recent budgetary changes in the state-local sector have been unusual, given the mildness of the downturn, and to what extent they simply continue a long trend toward more borrowing by states and localities.

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