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## IMPLEMENTING THE NEW FISCAL POLICY ACTIVISM

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Implementing the New Fiscal Policy Activism Alan J. Auerbach NBER Working Paper No. 14725 February 2009 JEL No. E62

## ABSTRACT

To many observers, the current recession provides compelling circumstances for renewed fiscal policy activism. But the strong support for fiscal policy intervention reflects a renewed belief in policy activism that had already appeared before the present crisis. However, the recent debate about possible fiscal policy interventions suggests that we are still relying on the approaches to discretionary policy used in past periods of policy activism. It is not surprising that there have been few advances in discretionary policy design, given the lack of favor such policy suffered over many years. But if we are going to practice fiscal discretionary policy on a large scale, then more attention to policy design is sorely needed.

Alan J. Auerbach Department of Economics 508-1 Evans Hall, #3880 University of California, Berkeley Berkeley, CA 94720-3880 and NBER auerbach@econ.berkeley.edu In August 1982, after a year in a deep recession that had several months left to run, Congress passed the Tax Equity and Fiscal Responsibility Act (TEFRA), scaling back the large Reagan tax cuts that had been enacted just over one year earlier as part of the Economic Recovery Tax Act (ERTA). Legislation over the same period cut near-term federal spending, with reductions in nondefense spending swamping additions to defense spending (Congressional Budget Office 1983, Table 8). Together, the spending reductions and TEFRA were estimated to have increased the fiscal-year 1983 primary surplus by \$50 billion, or about 1.5 percent of GDP.

During the next U.S. recession, in October 1990, a budget summit meeting of President Bush and Congressional leaders produced legislation aimed at reducing the cumulative deficit by \$500 billion over five fiscal years, including \$33 billion in fiscal-year 1991. The summit also produced the Budget Enforcement Act (BEA), introducing new budget rules aimed at controlling budget deficits and discretionary spending. As in the previous recession, budget deficits captured the attention of policy makers and strongly influenced their fiscal policy actions.

As 2008 drew to a close one year into the most serious U.S. recession at least since 1982, Congress and the incoming Obama administration were moving toward adopting legislation of a fiscal stimulus package of federal tax cuts and expenditure increases that could well exceed 5 percent of GDP, with little apparent influence exerted by fiscal imbalances that, at least prospectively, are much more severe than those that policy makers faced in 1982 or 1990. The general consensus in support of a large fiscal stimulus represents a marked change from the 1982 and 1990 episodes. There are many potential explanations for this policy shift, including the potential severity of the current recession and the challenges facing monetary policy. But the move toward more active countercyclical fiscal policy predates the policy discussions of the past few months. Late in the 2001 recession, for example, Congress considered and eventually passed legislation introducing "bonus depreciation" investment incentives, and bonus depreciation reappeared again early in 2008 along with individual income tax rebates, well before the current recession was official. The bonus depreciation provisions are particularly noteworthy as they represent the first instances of such investment incentives since the elimination of the investment tax credit by the Tax Reform Act of 1986 (TRA).

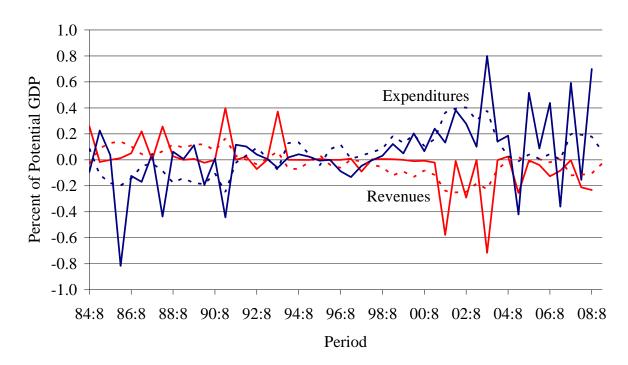


Figure 1. Changes in Revenues and Expenditures Actual (solid) and Predicted (dashed)

Figure 1 provides a simple overview of the evolution of U.S. fiscal policy in recent decades. The series in the figure are the actual and predicted values of legislated changes in federal revenues and non-interest expenditures as a percentage of potential GDP at roughly semiannual intervals spanning the period from summer, 2004 (represented as August, 1984, or 1984:8) through summer, 2008 (2008:8). The series for actual revenue and expenditure changes are compiled from Congressional Budget Office (CBO) publications, and are weighted averages of the legislated changes during the period covering the fiscal year in which the changes were

enacted plus the following four fiscal years. The predicted series come from simple linear models based on the same specification I have used in previous papers, beginning with Auerbach (2002), explaining the actual series with the beginning of period average (using the same weights) CBO forecast of the current and subsequent four years' projected budget surpluses and the most recent quarter's output gap.<sup>1</sup> The figure also presents out-of-sample predicted values of revenue and expenditure changes for winter, 2009, the current period as of this writing, for which the explanatory variables are already available.

The estimates themselves, given in Table 1, show that both revenue and expenditure polices have been countercyclical and budget-stabilizing, with larger responses on the expenditure side. But, as the figure shows, policy volatility has varied over time, with a very quiet period during the mid-1990s sandwiched in between more active periods before and after.

Independent Variable	Revenues	Expenditures
Constant	-0.002	0.002
	(0.000)	(0.001)
GDP Gap (-1)	-0.076	0.117
	(0.023)	(0.036)
Projected	-0.077	0.111
Surplus	(0.016)	(0.026)
$\overline{R}^{2}$	.296	.289
Number of Observations	49	49

## Table 1. Determinants of Policy Changes, 1984-2008

(standard errors in parentheses)

As discussed in Auerbach (2008), the reduced activity during the 1990s is to some extent explained simply by the equation itself, with the lack of a recession weakening the case for intervention and the transition from budget deficits to surpluses pushing toward pro-deficit policies only toward the end of the decade. Budget rules – or perhaps the sentiment that led to their adoption, for the rules themselves are endogenous with respect to the budget process – also seemed to play a role in the changing patterns of policy responses, helping to explain the existence of *procyclical* policy interventions during the Gramm-Rudman-Hollings period of fixed deficit targets in the late 1980s and a more restrained stance while the Budget Enforcement Act was in effect during the 1990s; for example, one may note in Figure 1 the lack of significant tax cuts during the late 1990s even with the full-sample equation predicting tax cuts. Indeed, coefficient estimates of the equations in Table 1 for separate sample periods are all larger in absolute value for the post-BEA period than for the BEA period itself, especially the GDP gap coefficients associated with countercyclical policy (Auerbach 2008).

Thus, whether because of changes in budget rules or changes in other factors as yet unexplored, the stage was already set for policy decisions during the current recession, although even the equations based on the post-BEA period do not come close to forecasting the magnitude of the fiscal policies now being formulated.

### I. Explaining the New Activism

Budget rules aside, what other potential explanations might exist for the renewed use of discretionary fiscal policy? One is that the strength of automatic stabilizers has been weakened over time by the indexation of the individual income tax and reductions in marginal tax rates.

Figure 2 provides estimates of the change in payroll and individual income taxes in response to a unit change in income, updating a figure first presented in Auerbach and Daniel

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Feenberg (2000) and using the same methodology.<sup>2</sup> The cumulative impact of changes in tax legislation is evident, as the sensitivity of taxes to income during the period 2003-7 was lower than at any time since the 1960s. Estimates for 2008 and thereafter do show an increased responsiveness, but these estimates reflect tax law as in effect midway through 2008 and therefore a stronger bite from the Alternative Minimum Tax (AMT), the encroachment of which has been continually delayed by annual legislation in recent years, and eventual repeal of essentially all of the Bush tax cuts enacted in 2001 and 2003. One might think that the growing importance of state and local taxes over this period would have partially offset the decline in federal marginal tax rates, but with essentially all states facing some form of balanced-budget requirements, the necessary tax increases and spending cuts would have undone this potential cushioning effect.

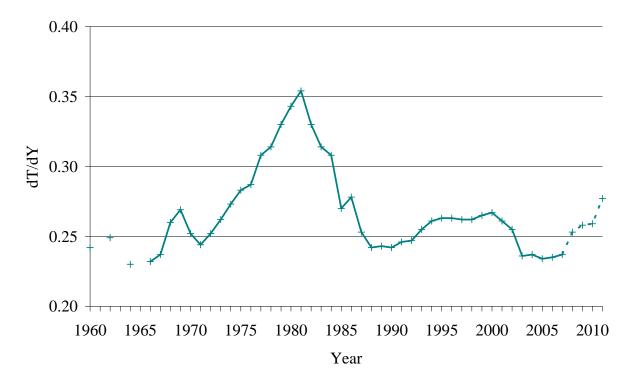


Figure 2. Automatic Responsiveness of Federal Taxes to Income

Another factor possibly at work is an evolving view of Robert Lucas' celebrated (1976) critique. The extremely important recognition that rational agents should respond to changes in the policy environment clearly had a role in tempering the potential use of countercyclical fiscal policy in the 1980s and 1990s. But in addition to the now widespread acceptance and appreciation of the Lucas critique, there is also a general acceptance that the critique need not negate the benefits of all potential fiscal policy interventions in an environment in which market imperfections induce nominal rigidities and liquidity constraints and credit-market disruptions can wreak havoc among businesses and households.

Finally, a consideration clearly influencing policy decisions as of the beginning of 2009, if not earlier in the decade, is the zero-nominal-interest rate bound facing monetary policy. Even though the Fed has already demonstrated its ability and willingness to go well beyond interest rate policy in attempting to provide stimulus and liquidity to the economy in recession, it still faces challenges not encountered in other recent recessions.

Conditioned by the growing recent use of countercyclical fiscal policy and facing a very significant recession in which monetary policy confronts unusual challenges, we are about to adopt an unprecedented peacetime fiscal stimulus. It is useful to ask at this juncture how well our fiscal plans align with the lessons of economic theory and evidence – whether our fiscal ideas are as "shovel-ready" as some of the projects we will be funding. Given space constraints, I will focus on one important issue, the design of investment incentives.

#### **II. Investment Incentives and Stabilization Policy**

Business fixed investment is volatile and forward-looking. The former characteristic makes investment an obvious target for stabilization policy while the latter characteristic suggests the need for caution in adopting any such policy. The fifteen years after TRA saw no

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significant changes in the tax provisions affecting corporate investment, as depreciation schedules remained fixed, the investment tax credit repeal held, and the corporate tax rate changed only once, in 1993 from 34 to 35 percent. Since then, bonus depreciation was introduced as a temporary measure in 2002 (retroactive to September 11, 2001) allowing a 30 percent immediate write-off of qualifying investments, was expanded to a 50 percent write-off in 2003, expired at the end of 2004, and was reintroduced at 50 percent as a temporary provision again in 2008, its announced expiration at the end of 2008 now subject to amendment.

 Table 2. Ordered Probit Analysis of Changes in the User Cost of Capital, 1962-2008

Independent Variable	Coefficient
Constant	0.654
Constant	(0.367)
	-27.073
GDP Gap (-1)	(11.303)
	(11.505)
$\mathbf{C} = 1  (1)$	-31.800
Surplus (-1)	(15.212)
$\Delta$ Equipment	182.978
Investment (-1)	(61.372)
_	
Scaled $R^2$	.423
Number of	47
Observations	<b>Ξ</b>

(standard errors in parentheses)

Such incentives aim to increase investment, of course, but even if well-timed, their anticipation might be destabilizing, as provisions targeted at new investment can discourage investment prior to enactment. Table 2 presents updated estimates of an ordered probit model from Auerbach (2003), explaining changes in the user cost of capital using annual data from

1962-2007. The dependent variable takes on three possible values, depending on whether tax policy adopted in that year increased, decreased, or neither increased nor decreased the user cost by at least 0.5 percentage points. Explanatory variables are the lagged GDP gap, the lagged federal budget surplus, and the lagged change in equipment investment, scaled by potential GDP. Figure 3 plots the actual series of policy changes (right scale) against predicted changes (left scale), as measured by the difference between the probabilities of an increase and of a decrease.

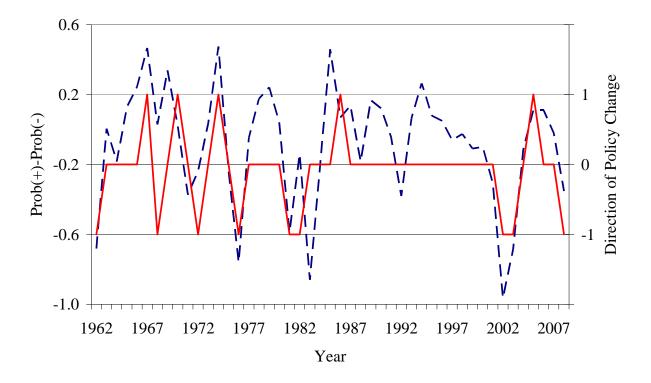


Figure 3. Investment Policy Changes: Actual and Predicted

The table suggests that government policy changes can be predicted to a considerable extent. In the figure, two patterns are noticeable. First, even without strong fundamentals pushing for a change in policy, the 1986-2001 period is still striking for its lack of any changes. Second, the years since have seen stronger reasons for policy changes and but also changes that

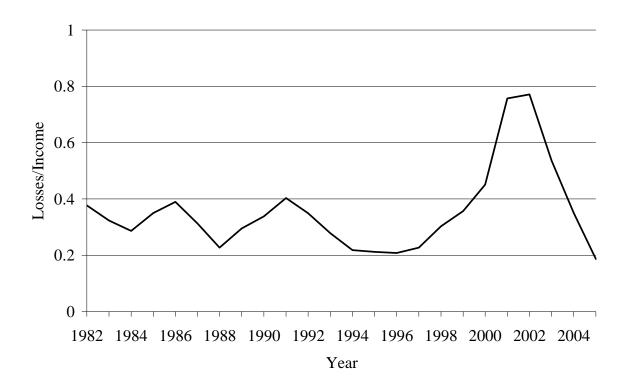
were very predictable, suggesting that incentives to invest in the years just prior to 2002 and 2008 could have been compromised considerably.

The bonus depreciation provisions adopted in 2002, 2003 and 2008 were all explicitly temporary, reflecting not just the belief that the provisions were only needed temporarily, but also the understanding that temporary investment incentives can exert a more powerful short-run impact by encouraging the speed-up of projects. Taking account of the impact of future repeal makes sense, but it makes just as much sense to account for expectations regarding initial enactment, particularly when policy changes are relatively predictable. There are many potential ways of dealing with such expectations, including the expanded use of retroactive effective dates and a shift toward policies that *encourage* investment when anticipated, like announced corporate tax rate reductions, which in some cases could work even better than if the reductions were adopted immediately. But these considerations have been generally absent from policy discussions since the move toward more active policies beginning in 2001.

Also missing from the design of investment incentives have been provisions for dealing with companies without taxable income, a condition always present but more significant in recessions, just when investment incentives are being introduced. Bonus depreciation increases the incentive to invest by increasing the present value of depreciation deductions. It might have an advantage over other investment incentives that do not affect the timing of tax payments if private discount rates substantially exceed the government's discount rate, as might be especially true at the moment. But the key to any scheme of accelerated depreciation is the acceleration, since there is no net increase in the nominal deductions taken over time. Thus, for firms without taxable income that may become taxable only years later, bonus depreciation is of little value. This may be an important issue now than in earlier decades, given the sharp and as yet not fully

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understood surge in losses observed earlier in this decade. Figure 4, taken from Rosanne Altshuler et al. (2008), shows the ratio of current losses (among companies with net losses) to income (among companies with net income) for all nonfinancial C corporations for the period 1982-2005. This ratio peaked in 2001-2 at a value of nearly 0.8, far above the peaks reached in 1982 and 1991, and a peak as high or higher in the current recession is a strong possibility.





There are two approaches to dealing with this situation. One is to adapt corporate tax rules to make them more symmetric with respect to the treatment of tax losses, such as through refundability, which also would make the corporate tax function better as an automatic stabilizer. Another is to adapt investment incentives themselves, such as through the adoption of schemes that allow for the transfer of the tax benefits associated with the incentive provisions. One such scheme, based on the formal structure of leasing, was introduced in 1981 in conjunction with

ERTA's accelerated depreciation provisions. This scheme had problems of its own<sup>3</sup>, but no further mechanism of addressing the issue has been attempted in the many years since.

Finally, it is somewhat surprising that, even as temporary investment incentives have come into favor as a way of influencing the timing of business purchases, no such provisions have appeared in the design of household tax rebates, which basically have functioned as lump-sum transfers and have been criticized as being ill-suited to stimulate demand because of their temporary nature and hence small income effects. Why such household tax cuts have not been constructed in a way that would influence the timing of household decisions, as through a temporary reduction in consumption taxes<sup>4</sup>, is not clear, except perhaps that such reductions were not contemplated or used in the earlier epoch of activist policy.

## **III.** Conclusions

To many observers, the current recession provides compelling circumstances for renewed fiscal policy activism. But the strong support for fiscal policy intervention reflects a renewed belief in policy activism that had already appeared before the present crisis. As the preceding discussion of investment incentives suggests, though, we are still relying on the approaches to discretionary policy used in past periods of policy activism. It is not surprising that there have been few advances in discretionary policy design, given the lack of favor such policy suffered over many years. But if we are going to practice fiscal discretionary policy on a large scale, then more attention to policy design is sorely needed.

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## Endnotes

<sup>1</sup> This paper provides further detail regarding the construction of variables used in the estimation.

<sup>2</sup> I am grateful to Dan Feenberg for providing these updated estimates using the NBER's

# TAXSIM model.

<sup>3</sup> See Alvin Warren and Auerbach (1982) for further discussion of this scheme, known as "safeharbor leasing."

<sup>4</sup> There are no broad-based consumption taxes at the federal level, but most states have broadbased sales taxes that could be reduced either through federal transfers to the states or federal rebates to individuals for state taxes paid.