Controlling Leviathan through tax reduction*

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1. Introduction

The observation that governments have a proclivity toward growth has attracted growing attention on the part of economists. Due in part to recent growth in budget deficits, tax burdens and public expenditures, researchers have forwarded many proposals for better controlling government size. These include balanced budget rules, fiscal decentralization, privatization and tax reduction.[1] All of these proposals have been promoted as controls over public sector size.

This paper argues that tax reduction is an effective means of *reducing* government size. Three reasons are presented in support of tax reduction. First, tax reduction, *ceteris paribus*, unambiguously lowers the ability of governments to spend. Second, tax reduction offers a tangible *quid pro quo* effect that compensates citizens for benefits lost from spending reduction. Three, given our political process, tax reduction carries a relatively high likelihood of success at reducing government size. While we acknowledge that simultaneous reduction in tax revenues and net debt issue is theoretically superior to a policy of *only* lowering tax revenues, the former is argued to be an unacceptable choice within the current political environment.

2. Budget constraint facing government

Effective control of government size requires control over funding levels. The current ability of government to spend is

$$B = T + D \tag{1}$$

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where T = tax revenue and D = net debt issue. Tax revenue refers to legislated taxes and, as described in Friedman (1971), taxes derived from inflation. Net debt issue is the current period's net addition to the national debt. The sum of T and D represents the government's budget constraint.

This model is developed in more detail in Marlow (1987) and follows ideas previously elaborated in Friedman (1972, 1978). Assuming that government decisionmakers prefer more spending to less, the government maximizes its use of both tax revenue and net debt issue. All methods of finance satisfy the spending desires of public spenders and, consequently, the level in (1) represents an optimal combination of funding level and mix. For example, government decisionmakers may be constrained by relative tolerance limits that taxpayers place on each form of finance. If taxpayers lower their tolerance for deficit finance relative to tax finance, government decisionmakers will alter the funding mix and level toward tax finance and away from deficit finance. While this model does not determine the optimal level and mixes of finance, it demonstrates the importance of the government's budget constraint in the process of government growth.[2]

Government decisionmakers determine their optimal funding level in (1) and set expenditures E

$$E = T + D \tag{2}$$

so that government consumes all available resources and shows no propensity toward surpluses. Some empirical support for this assumption of causality running from funding levels to expenditures is found in Manage and Marlow (1986), Blackley (1986) and Marlow and Manage (1987).[3] Under this causal assumption, policy changes that lower (raise) the actual funding level in (1) also lower (raise) government spending. Clearly, tax reduction and balanced budget legislation which serves to lower net debt issue are candidates for lowering the budget constraint of government. These policies lower the 'allowance' of government and allow fewer spending opportunities.

A policy of complete control over spending is one that controls legislated tax revenues, forces a balanced budget and forbids the Central Bank to inflate. Such policy is identical to policy that sets a maximum allowable size of government since both sides of (1) are identical. Such a policy framework greatly lessens the importance of the funding mix when proposing policy actions to lower the size of government. However, public policy discussions avoid addressing the issue of government size so clearly, simply and bluntly. Instead, programs are evaluated on a piecemeal basis for signs of merit and questions concerning the appropriate size of government are often co-mingled with discussions of deficit reduction and tax increases. Very rarely do analysts make reducing government size the ultimate policy objective.[4]

We suggest that, as long as policy discussion avoids the issue of setting maximum constraints on government size, policy should seek second-best proposals that control a subset of funding parameters. That is, with discussion not focused on the LHS of (2), proposals must deal with a subset of the policy parameters on the RHS of (2), if we are to control government size.

Equation (1) demonstrates that tax revenues and net debt issue are the two candidates for controlling the public funding level.[5] Three arguments suggest that control of tax revenue offers greater control over government size than policies aimed at net debt issue.[6] *One*, as cited above, there exists some empirical support for the hypothesis that tax increases, *ceteris paribus*, lead to larger government expenditures. The converse is, of course, that tax reduction, *ceteris paribus*, leads to smaller expenditures. The causal empirical nature of this relation suggests that changes in tax revenue are not negated by simultaneous changes in net debt issue of the opposite direction.[7] That is, when taxes are increased, reductions in net debt issue do *not* occur to such an extent so as to wash out the pro-spending effects of tax increases. The empirical evidence suggests that either net debt issue reinforces the pro-spending effects or undergoes a relatively small decrease in size.

Two, in terms of sheer magnitude, tax revenue constitutes a majority of the total funding level and future tax revenue – whether legislated or derived from inflationary policies – must ultimately pay off current rising net debt issue burdens. In terms of the U.S. government's total funding level in 1986, approximately 78% of total expenditures were funded by tax revenue.

Three, in the current political environment, balanced budget rules appear to offer two choices: spending reduction and tax increases. If balanced budget rules encourage the political response of raising taxes, such rules appear to encourage changes in the budget constraint that are in the direction opposite as that required to lower government expenditures. If balanced budget rules cause taxes to rise, politicians are tempted to use these resources to make up for the negative stream of utility associated with higher taxes. Moreover, as is clear from (2), the political response of raising taxes is identical to a response that mutes the spending-reducing effects of balanced budget rules. Combined with the empirical evidence suggesting a positive causal link running from tax revenue to public expenditures, these arguments suggest that balanced budget laws may promote government spending via the political response of tax increases.[8]

Problems associated with making the deficit the ultimate policy objective are shown in Figure 1. Iso-expenditure lines for politicians are shown for differing combinations of taxes and deficits. Here, we assume that tax increases are utilized to produce deficit reduction. The initial position is A, with T_0 taxes and D_0 deficits along iso-expenditure line E_0E_0. Assume that taxes are raised to T_1. If deficit reduction is 'incomplete' – that is, $\Delta T > \Delta D$ – then we move to a higher iso-expenditure line E_1E_1 and inhabit a position

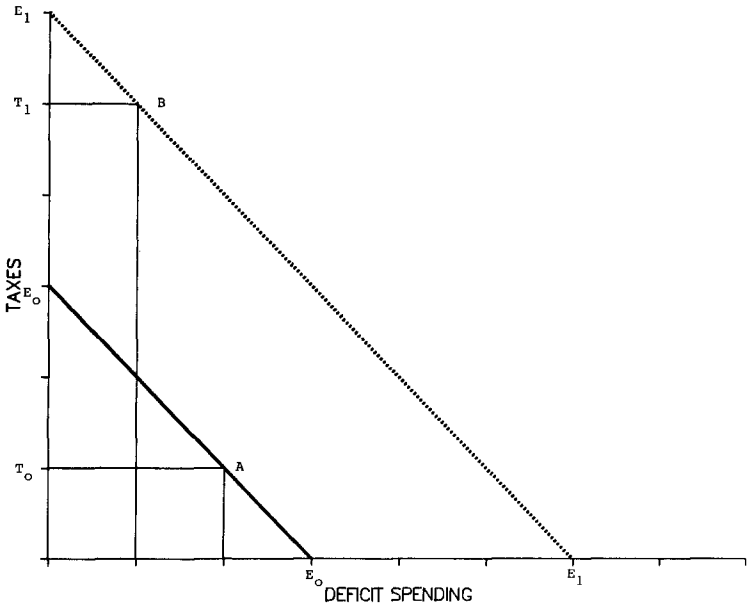

Figure 1.

such as B. We may expect deficit reduction to be incomplete due to the positive wealth-income effect generated by higher taxes for politicians and the tendency to deflect the negative utility stream generated by the higher taxes on voters by placating blocs of special interests with more spending. The message is that prime focus on deficit reduction may backfire since it will likely lead to higher taxes and, since the political spending constraint is enlarged, the dynamics are set for greater, not less, public spending.

3. Fiscal illusion complexities

While tax reduction induces important budget constraint effects that exert anti-spending influences, some argue that there may also be an associated 'false' substitution effect with a pro-spending influence. This 'fiscal illusion' effect is a major reason for why Buchanan and Wagner (1977) argue for a balanced budget amendment as the ultimate means of controlling government size.[9] The fiscal illusion argument is that, dollar per dollar, taxes hurt taxpayers more than deficits. Accordingly, policies that trade-off tax reduction for higher deficits lower the perceived price of public spending, even though the true resource cost of a given level of government spending remains the same. Fiscal illusion theorists maintain that deficit finance and monetary debasement associated with filling the void left by tax reduction is continually dis-

counted by the public and, as a perverse consequence, tax reduction makes it appear that public spending is now cheaper thus leading the public to increase their quantity demanded of public spending. Interestingly, this scenario suggests that tax reduction leads to higher deficits and larger public sectors.

The fiscal illusion argument presents a conclusion opposite to the one presented here. The important policy questions are: (1) whether or not fiscal illusion exists and (2) if it exists, whether or not to the pro-spending effects stemming from the 'false' substitution effect out-weigh the anti-spending effects stemming from the budget constraint effects of tax reduction. That is, even if fiscal illusion exists, the important question concerns its magnitude. If the level of fiscal illusion is relatively small, then the net effect of tax reduction may still be on the side of expenditure reduction.

While we do not claim final answers, we suggest three reasons for why the complexities suggested by fiscal illusion may not dominate the anti-spending effects (via tax reduction) on the budget constraint. *One*, on the basis of the model presented here, in order for tax *reduction* to raise the level of government spending it must also cause a greater than one-for-one *increase* in deficit finance. That is, since

$$\Delta E = \Delta T + \Delta D \tag{3}$$

and with $\Delta T < 0$ and $\Delta D > 0$, then $|\Delta D| > |\Delta T|$ in order for $\Delta E > 0$. Therefore, the implied assumption underlying fiscal illusion is that tax decreases raise the budget constraint via deficit increases. This does not appear to be a sustainable property. Even if there exists some latitude to substitute *larger* deficit increases for *smaller* tax reductions, it is difficult to suggest that governments are not increasingly constrained, after some finite point, from engaging in such practices.[10] This ability to fool taxpayers rests on the actual-perceived cost dichotomy surrounding government deficits (as perceived by taxpayers) and is probably not uniform over time as deficit finance increases as a percentage of the total funding level. In other words, it is expected that taxpayers will learn, to some extent, over time and reduce the cost differential surrounding the actual-perceived dichotomy. The recent outcry over deficit growth may suggest that the degree of fiscal illusion is falling and therefore will serve to lessen the ability of fiscal illusion to promote spending expansion as tax revenues are reduced.

Two, casual empirical evidence demonstrates that every major industrial country has raised tax burdens over the past twenty-five years and it does not appear that higher tax-prices have deterred government growth. *Three*, as discussed below, deficit reduction is not an effective *quid pro quo* with which to trade public spending reduction compared to tax reduction.

4. Tax reduction and the *quid pro quo*

Tax reduction carries a *quid pro quo* element that is similar to the notion of the transitional gains trap in Tullock (1975), because it is a tangible payment to citizens for benefits lost from spending reduction and may eventually lower opposition to spending reductions. Without clear retribution, citizens would most likely be adamantly against loss of benefits associated with public spending reductions, or, at least, be indifferent for reasons associated with rational ignorance. Tax reduction is analogous to Tullock's cash bribe technique advanced to reform government regulation.

An interesting illustration of the *quid pro quo* effect emerges from James Madison's 'violence of the faction' – a reference to the process of budget expansion by special interest groups. Special interests promote expansion of their programs since that is where per capita benefits are largest. However, since the per capita costs of program expansion for each special interest are extremely small, the general public is unlikely to lobby to prevent program expansion which solely benefit special interest groups. For example, a $2 billion spending cut to 50,000 beneficiaries converts to a per capita loss of $4,000 to each program participant. In contrast, the same amount spread across the working population of approximately 100 million amounts to $20 per capita, or clearly a mere pittance in relation to annual average incomes or annual average tax burdens. Moreover, many citizens are rationally ignorant of budgetary issues since years of diligent study are necessary before becoming well informed about the myriad of government programs. This informational barrier provides tremendous incentives for special interests to promote their programs.

Choosing relatively large tax reductions may circumvent some of the hurdles stemming from concentrated benefits and dispersed costs. For example, a $40 billion dollar spending reduction translates into an average $400 gain per worker. Unless the per capita gain is sufficiently large, lobbying efforts of special interests may be expected to continue to dominate the budgetary process.

Tax reduction may also offer superior 'tangibility' properties when compared to deficit reduction. We argue that it is difficult for average taxpayers to recognize significant connections between deficit reductions and personal welfare. If lower deficits are to be effective in delivering benefits to taxpayers, they need to be tangible. Presumably, tangibility occurs in two ways: lower interest rates and smaller future debt burdens. Many problems obscure interest rate tangibility. Interest rates are affected by a variety of factors – the business cycle, international movements of credit, inflationary expectations and money demand and supply. If it is impossible for trained observers to untangle these factors, it is also debatable whether interest rates are causally related to deficits.[11] Another way of transmitting the benefits of deficit reduction is through a smaller debt burden to future generations. However, since a sizeable

portion of future generations are not yet old enough to vote, it requires a heroic assumption concerning intergenerational transfers for this factor to constitute an important perceived benefit for taxpayers.

By contrast, the mechanics of tax reduction are relatively straightforward. A good proxy has been recent marginal tax reduction. For example, Internal Revenue Service (1986) estimates that a $40 billion spending reduction package could be used to reduce taxes by the same magnitude and would translate into a 7.5% across-the-board reduction of personal income tax rates – enough to excite many taxpayers.

Ultimately, promotion of tax reduction and realization of potential *quid pro quo* effects may change the rules of the budgetary game.[12] Tax reduction's *quid pro quo* element may promote taxpayer interest in spending reduction if it 'wakes' up taxpayers to the financial benefits associated with tax reduction. The key to the process stems from the size of the tax reduction and from the awareness of tax reduction possibilities – gains from trade – between taxpayers and Congress. By increasing taxpayer incentives to seek politicians promoting tax reduction, the new rules of the game may weaken the relative bargaining power exercised by special interests over Congress. Moreover, political competition could increase if politicians realize the potential vote power behind candidates promoting tax reduction. Heightened competition may promote smaller government, as the political market for favors now includes both pro-spending special interests and anti-spending taxpayers.

5. Conclusion

Our paper seeks the strategy that allows the greatest ability to reduce public sector size within a political environment that does not want us to directly set limits on public sector size. Tax reduction, through its *quid pro quo* effect, offers high tangibility to taxpayers and may raise political power of groups that seek both tax reduction and greater opposition to lobbies that seek spending increases for their narrowly-defined interests. Moreover, as Manage and Marlow (1986) argues, since the political response to balanced budget rules is likely to raise taxes, this political bias of tax hikes suggests that balanced budget rules are offered as a means of changing the funding mix and not the actual budget constraint of government.

Our analysis should not be construed as a statement promoting deficit finance. Preferred policy is one that forces tax reduction, a balanced budget and price stability. However, this is 'optimal' only in a world without political constraints and special interests seeking public funds. Hard second-best choices, based on available analytical and empirical evidence, suggest that tax reduction controls the most important element of the budget constraint and that we

should not rely solely on balanced budget rules to solve the underlying public sector growth problem.[13]

Notes

1. See, for example, Buchanan and Wagner (1977), Friedman (1978) and Marlow (1988a).
2. The model also assumes that changes in government size or growth do not affect the size of the economy. While conventional economics has often argued that government spending exerts a positive or neutral effect on economic growth, there exists a growing literature suggesting that government size and growth are negatively related to economic growth. See Orzechowski and Utt (1985), Marlow (1986) and Barth, Keleher and Russek (1987).
3. See Anderson et al. (1986) for evidence that fails to support the rising tax revenue-rising public expenditures hypothesis. Though not specifically using causality tests, von Furstenburg et al. (1986) finds no evidence of taxes leading spending and some evidence finding spending leading taxes. For a discussion of the evidence, see Marlow (1988b).
4. See Orzechowski and Conda (1985) for a discussion of this issue.
5. Our discussion aggregates legislated taxes and inflation-related taxes. For a disaggregated approach, see Marlow (1987).
6. Tollison and Wagner (1987) argue tax reduction emphasis is Hobbesian while deficits emphasis is consistent with the Lockean view of contractual governance. However, the authors note '... despite the clear contradiction between their intellectual foundations, tax limitation can be supported in conjunction with support for budget balance (p. 387).
7. Since $\Delta E = \Delta T + \Delta D$, the empirical evidence suggests that increases in T are 1) not completely countered by decreases in D or 2) associated with increases in D as well. That is, when $\Delta T > 0$, then $\Delta E > 0$ as well.
8. A related issue is discussed in Friedman (1978: 18): 'The typical historical process is that the spenders put through laws which increase government spending. A deficit emerges. The fiscal conservatives scratch their heads and say, "My God, that's terrible; we have got to do something about that deficit." So they cooperate with the big spenders in getting taxes imposed. As soon as the new taxes are imposed and passed, the big spenders are off again, and then there is another burst in government spending and another deficit.'
9. Some argue that the Ricardian Equivalence Theorem presented in Barro (1974) serves as an effective counter to the fiscal illusion hypothesis in Buchanan (1976), Buchanan and Wagner (1977) and Buchanan and Roback (1987).
10. See Buchanan (1987) for the argument that continued rapid increases in deficits must eventually succumb to the laws of compound interest and therefore cannot continue indefinitely.
11. See Evans (1985) for empirical evidence relating deficits.
12. We note that, unlike the traditional assumption in public choice theory that politicians prefer to lower taxes and increase spending, our view is that politicians may have weak incentives to promote tax reduction. With our emphasis on the total budget constraint, tax reduction is tantamount to voting a salary cut for politicians. Accordingly, we offer the *quid pro quo* effect as a partial counter to the natural proclivities for politicians to promote higher taxes (and higher spending).
13. While we acknowledge that deficit- and inflationary-financed funding of public spending are very important issues, one might expect, or hope, that voter-policing of the so-called safety valves of the funding process is sufficient.

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