# TAX POLICY AND THE SIZE OF GOVERNMENT

*Donald Marron* and *Eric Toder*
Urban Institute and Urban-Brookings Tax Policy Center

## INTRODUCTION

How big a role the government should play in the economy is always a central issue in political debates. But measuring the size of government is not simple. People often use shorthand measures, such as the ratio of spending to gross domestic product (GDP) or of tax revenues to GDP. But those measures leave out important aspects of government action. For example, they do not capture the ways governments use deductions, credits, and other tax preferences to make transfers and influence resource use.

We argue that many tax preferences are effectively spending through the tax system. As a result, traditional measures of government size understate both spending and revenues. We then present data on trends in U.S. federal spending and revenues, using both traditional budget measures and measures that reclassify "spending-like tax preferences" as spending rather than reduced revenue. We find that the Tax Reform Act of 1986 reduced the government's size significantly, but only temporarily. Spending-like tax preferences subsequently expanded and are now larger, relative to the economy, than they were before tax reform.

We conclude by examining how various tax and spending changes would affect different measures of government size. Reductions in spending-like tax preferences are tax increases in traditional budget accounting but are spending reductions in our expanded measure. Increasing marginal tax rates, in contrast, raises both taxes and spending in our expanded measure. Some tax increases thus reduce the size of government, while others increase it.

## MEASURING GOVERNMENT SIZE

Any effort to measure the size of government must address three issues. The first is deciding which government activities to include. The federal government collects tax revenues, provides goods and services not produced by the private sector, engages in commercial-type activities, makes cash and in-kind transfers to families and businesses, and pays interest on its debts. It provides explicit and implicit financial guarantees against various risks, including natural disasters, terrorist attacks, and financial meltdowns. It regulates economic activity. And it implements monetary policy through the Federal Reserve. A comprehensive measure of government size would account for all these activities. But that is beyond our current effort. Instead, our goal is to develop measures that accurately reflect the scope of the government's fiscal policies. That focus is incomplete; but, given the importance of fiscal policy, we believe it valuable for policy makers and analysts to have more accurate measures of the government's explicit fiscal size.

The second issue is deciding whether to measure government spending or revenue. These differ, sometimes substantially, because of government borrowing. In rough terms, a focus on spending emphasizes the economic resources whose use the government directs through fiscal policy. A focus on revenue, in contrast, emphasizes the resources that the government currently collects from taxpayers. People use both measures, so our framework considers both approaches. We believe, however, that spending is the better measure of government size. Barring default, taxpayers must eventually pay for all spending; debt financing today merely shifts that burden into the future.

The third issue is deciding what accounting concept to use when measuring government activities. The federal government currently publishes three sets of accounts that could provide such a foundation: the official Budget of the United States Government (Office of Management and Budget (OMB), 2011), the government's financial statements, which adjust budget figures to more closely resemble the accrual accounting concepts used in the private sector (Department of Treasury, 2010), and the national income and product accounts (NIPA) used to track macroeconomic aggregates, such as gross domestic product and personal income (Bureau of Economic Analysis, 2010-11).

These accounting systems differ in significant ways. The budget primarily tracks the government's cash flows — the outlays on spending programs and the receipts from taxes — with a few accrual-type adjustments for activities for which cash accounting would be particularly misleading (e.g., loans and loan guarantees). The financial statements make much greater use of accrual accounting. For example, they measure annual capital expenses based on estimates of how much structures, equipment, and software depreciate each year, while the budget records outlays on any new investments. The NIPAs, finally, treat the government as a producer and consumer of goods and services. They rely more on accrual accounting than does the budget, and they count as receipts some payments, e.g., regulatory fees that are treated as negative spending in the budget.[1]

One can make good arguments for greater use of accrual concepts in federal decision-making. For example, an emphasis on cash accounting understates the cost of federal employees who are accruing future retirement benefits and emphasizes the upfront cost of new capital investments while ignoring depreciation of existing capital. However, official budget measures dominate fiscal policy discussions in the media, in academia, and inside the Beltway. For that reason, we focus on ways to improve the traditional budgetary measures of government size.

## BUDGET MEASURES UNDERSTATE GOVERNMENT SIZE

Policy makers have long recognized that many social and economic goals can be pursued using tax preferences, not just government spending programs. Such preferences are recorded as revenue reductions, making the government appear smaller, but often have the same effects on income distribution and resource allocation as equivalent spending programs (Bradford, 2003; Burman and Phaup, 2011; Marron, 2011). A complete measure of government size should treat these preferences as spending, not revenue reductions. Doing so raises measures of both spending and revenues, without affecting the deficit, and gives a different picture of the economic resources that the government directs.

Making these adjustments requires caution, however. It is tempting, for example, to simply add together all the provisions that the federal government identifies as "tax expenditures" and treat those as effectively spending. But that goes too far. Not all tax expenditures are the functional equivalent of spending.

The Congressional Budget Act of 1974 defines tax expenditures as "revenue losses attributable to provisions of the federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of liability." The key word in this definition is *special*. Identifying tax expenditures requires defining a theoretical baseline tax system, including all general tax provisions, and then identifying any deductions, credits, and other provisions that are exceptions to the general rules. The original definition of a "normal" tax baseline was meant to include provisions needed to implement a practical and broad-based income tax.[2] The system allows for the deduction of ordinary and necessary business expenses, for example, as well as graduated rates for individual taxpayers, alternative ways of defining the tax-paying unit (separate or joint filing for married couples), and personal exemptions to adjust for the effect of family size on ability to pay.

However, the normal tax baseline also allows some departures from a comprehensive income base. For example, it excludes accrued but unrealized capital gains from the tax base,[3] includes inflationary gains, and allows a separate corporate income tax in addition to individual taxes on income from corporations.

A number of authors have suggested distinguishing between tax expenditures that represent disguised spending and those that represent structural departures from a comprehensive income base, but do not replace any clearly identifiable direct spending program (Fiekowsky, 1980; Kleinbard, 2010; Shaviro, 2004; Toder, 2005; Marron, 2011). Although these authors use different formulations and labels, they all focus on a subset of tax expenditures that replace subsidies or transfer payments that could otherwise be delivered as outlays. In this view, which we share, it is only those "spending-like tax preferences" that should be included in a "spending" total designed to measure the size of government.

Unfortunately, it is not always straightforward to decide which provisions should be classified as spending substitutes and which are fundamental tax policy choices. We provide a few clear examples, while noting that it is sometimes hard to distinguish the two categories.

### Clear Spending Substitutes

Clear spending substitutes are those tax expenditures that encourage selected activities or aid specific groups of taxpayers and could be replaced by similar programs delivered as direct outlays. Examples are renewable energy credits, the home mortgage interest deduction, the exclusion from tax of employer-provided health insurance and health benefits, and tuition tax credits. All these provisions subsidize identifiable activities (renewable energy, housing investment, health insurance, and college tuition), try to promote definable social goals (reduced greenhouse gas emissions, increased home ownership, broader health insurance coverage, and increased college attendance), and could be designed as outlays administered by program agencies (e.g., the Departments of Energy, Housing and Urban Development, Health and Human Services, and Education).

### Broad Choices of Tax Structure

Other provisions represent broad choices in tax policy design, but are not associated with any clear spending objective. For example, many economists favor consumption instead of income as a tax base, and our current income tax can be thought of as a hybrid between consumption and income taxation. The treatment of saving in qualified retirement saving plans, which allows most workers to defer tax on contributions until the proceeds of their contributions and investment earnings are withdrawn from the account, is an example of a provision that taxes the return to saving based on consumption instead of income tax principles.[4]

Other large tax expenditures represent basic choices in how to design an income tax, not hidden spending in the tax code. For example, the deferral of taxation of foreign source income until repatriation is identified as a tax expenditure provision, because the normal income tax would include in the base all worldwide income of corporations as accrued. But, with the single exception of Brazil, no country in the world taxes the income of the controlled foreign corporations of its resident multinational corporations on a current basis. Elimination of deferral may be better policy, but the failure to enact an idealized international tax rule that virtually no one else uses can hardly be characterized as a disguised spending program.

Similarly, the preferences for realized capital gains and dividends represent a compromise between taxing all sources of realized cash income at the same rate and the fact that accrued, but unrealized, capital gains escape tax entirely (so that taxing realizations creates a "lock-in" effect) and that dividends and a portion of capital gains have already borne some income tax at the corporate level. Again, these provisions represent possibly flawed choices of income tax design but are not substitutes for an identifiable direct spending program.

The ten largest tax expenditures in terms of 2012-16 budgetary costs (revenue losses plus outlays for refundable credits) identified by OMB (2011) will cost $4 trillion between 2012 and 2016 – about 65 percent of the cost of all tax expenditures over that period (table 1).[5] We classify six of them as spending substitutes: the exclusion of employer contributions for medical insurance and medical care, deductibility of mortgage interest on owner-occupied homes, exclusion of net imputed rental income on owner-occupied homes, deductibility of nonbusiness state and local taxes other than on owner-occupied homes, the earned income tax credit, and deductibility of charitable contributions, other than education and health. Five of these provisions are clear spending substitutes. The exclusion of employer contributions for medical insurance and medical care substitute for direct outlays to subsidize the purchase of health insurance. The deductibility of mortgage interest and exclusion of net imputed rental income on owner-occupied homes substitute for direct outlays to subsidize capital costs of home ownership.[6] The deductibility of charitable contributions substitutes for direct outlays that provide matching grants for contributions to eligible charitable organizations. The deductibility of nonbusiness state and local taxes substitutes for direct federal grants to state and local governments.

The earned income tax credit is a closer call. Arguably, it could be viewed as a component of the federal tax schedule that provides negative tax rates within certain income ranges, with the rate varying by number of children. While it subsidizes work effort, it does not subsidize any particular industry or sector. We choose instead to view it as a substitute for a transfer program that provides assistance to families that increase with the number of children, but limits that assistance to families with earnings and claws back the payments as income rises above threshold amounts.

*Table 1*
**Ten Largest Tax Expenditures, 2012-16**

| *Provision* | *Budgetary Cost, 2012-16* ($ Billion)* | *Classification* |
|---|---|---|
| Exclusion of employer contributions for medical insurance and medical care | $1,071 | Spending substitute |
| Deductibility of mortgage interest on owner-occupied homes | $609 | Spending substitute |
| Step-up in basis of capital gains at death | $357 | Tax policy choice |
| 401(k) plans | $356 | Tax policy choice |
| Exclusion of net imputed rental income** | $303 | Spending substitute |
| Deductibility of nonbusiness state and local taxes other than on owner-occupied homes | $292 | Spending substitute |
| Accelerated depreciation of machinery and equipment | $270 | Tax policy choice |
| Earned income tax credit | $266 | Spending substitute |
| Capital gains (except agriculture, timber, iron ore, and coal) | $256 | Tax policy choice |
| Deductibility of charitable contributions, other than education and health | $249 | Spending substitute |

*Equals the sum of revenue losses and outlays from refundable credits.

**We did not include imputed rental income on owner-occupied homes in our summary measures of tax expenditures. OMB has only reported this value in recent years, and the Joint Committee on Taxation (JCT) does not count imputed rent as a tax expenditure provision.

Source: Office of Management and Budget, *Budget of the United States Government, Analytical Perspectives, Fiscal Year 2012*, and authors' categorizations.

We classify the other four largest provisions – step-up in basis for capital gains at death, 401(k) plans, accelerated depreciation of machinery and equipment, and the special rate on capital gains (excluding other provisions that tax income in selected industries as capital gains) – as general tax policy choices instead of spending substitutes. Capital gains preferences do favor certain sectors (those with accruing asset values, such as new firms in the high-tech sector) over others, but we cannot think of a general rule for taxing capital gains that would be neutral across all possible margins. And we cannot think of a defined spending program that the capital gains preferences might replace. 401(k) plans do represent an exception to the rule that income is taxed as accrued under an income tax, but the provisions for retirement saving are so large and pervasive that we consider the ability in our system for workers to accrue tax free savings for retirement (as they would under a consumption tax) to be a general characteristic of the U.S. income tax. Accelerated depreciation of machinery and equipment is a closer call; it obviously favors investment in machinery over investment in structures and inventory. But it is a broad-based rule that applies across many firms and industries and, like the tax treatment of retirement accounts, it can be viewed as a compromise between income taxation (which would use economic depreciation) and consumption taxation (which would allow immediate expensing). In addition, it is not obvious what the alternative correct depreciation rule should be

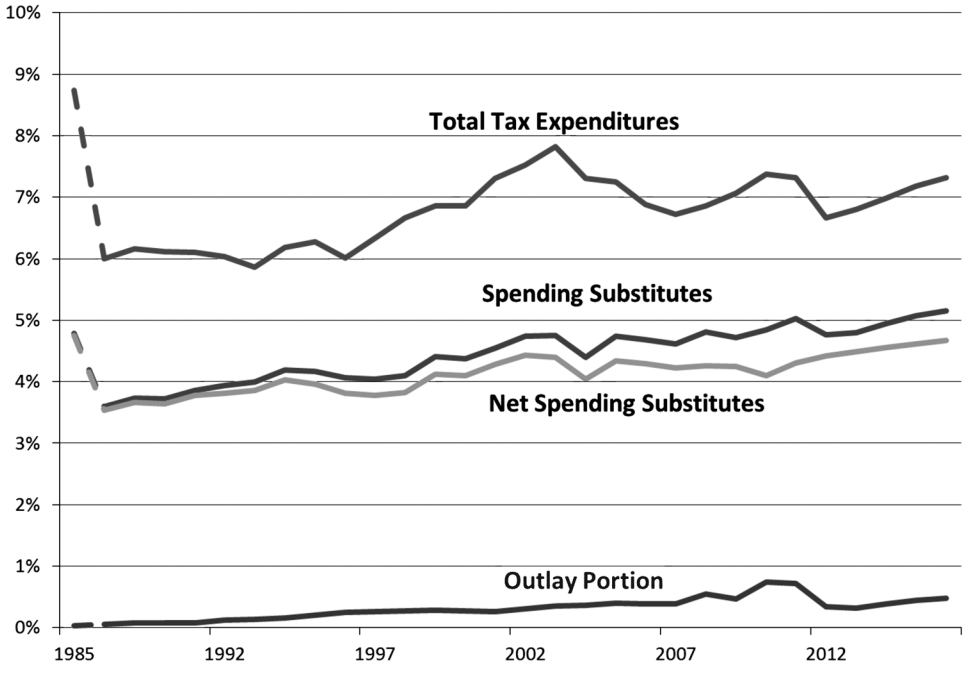
under a normal income tax or what a substitute spending program designed to encourage investment in machinery would look like.[7]

### TAX EXPENDITURES SINCE 1985

Figure 1 tracks the size of tax expenditures, relative to GDP, from 1985 through 2016. These figures come from Rogers and Toder (2011), who created a tax expenditure database based on figures from OMB and consultations with Treasury staff. The most notable feature is the sharp drop in tax expenditures after the passage of the Tax Reform Act of 1986 (TRA86). Between 1985 and 1988, tax expenditures dropped from 8.7 percent of GDP to 6.0 percent. Many large tax expenditures were eliminated, including the investment tax credit, accelerated depreciation on rental housing, and preferential rates for capital gains, while others were substantially scaled back. In addition, lower marginal tax rates reduced the value of remaining individual and corporate income tax expenditures structured as exclusions, exemptions, deductions, and deferrals. Since then, however, tax expenditures have grown as policy makers enacted new provisions, as marginal tax rates increased, and as certain sectors (e.g., health insurance) grew faster than the economy.

Figure 1 also tracks our estimates of the tax expenditures that we identify as spending substitutes. In making this distinction, we exclude any provisions that we classify as general structural tax policy choices (table 2). TRA86 reduced both types of tax expenditures, but the decline among general structural policies was larger. As result, spending-like provisions increased from 55 percent to 60 percent of total tax expenditures between 1985 and 1988. Since then, "spending substitutes" have become a larger share of overall tax expenditures. Indeed, by 2008, spending substitutes were a larger share of GDP than they had been in 1985. This reflects a change in the composition of tax expenditures, with much of the new growth coming from new and expanded social programs in the tax code (the child credit, an expanded earned income tax credit, tuition credits, and others) and growth in the cost of some older tax spending programs

*Figure 1:* **Tax Expenditures as a Percent of GDP, 1985-2016**




Source: Authors' calculations based on the database created by Rogers and Toder (2011).

*Table 2*
**Tax Expenditures Classified as Structural Tax Provisions**

| *Provision* | *Revenue Loss, 2010 ($ billions)* |
|---|---|
| Deferral of Income from Controlled Foreign Corporations | 38.1 |
| Deferred Taxes for Certain Financial Firms on Certain Income Earned Overseas | 2.3 |
| Excess bad debt reserves of financial institutions | repealed |
| Treatment of qualified dividends | 31.1 |
| Capital gains (except agriculture, timber, iron ore, and coal) | 36.3 |
| Step-up basis of capital gains at death | 18.5 |
| Carryover basis of capital gains on gifts | 1.4 |
| Accelerated depreciation of buildings other than rental housing | -11.1 |
| Accelerated depreciation of machinery and equipment | 40.0 |
| Making work pay credit | 60.3 |
| Distributions from retirement plans for premiums for health and long-term care insurance | 0.3 |
| Net exclusion of pension contribution and earnings | |
| Employer plans | 39.6 |
| 401(k) plans | 52.2 |
| Individual retirement accounts | 12.4 |
| Keogh plans | 13.8 |
| Social Security benefits | |
| Retired workers | 21.4 |
| Disabled workers | 7.0 |
| Spouses, dependents, survivors | 3.9 |

Source: Authors' calculations, based on data reported in Office of Management and Budget, *Budget of the United States Government*, Fiscal Years 1987-2012.

(e.g., the exclusion of employer-provided health insurance).

Finally, figure 1 also tracks the budgetary effect of the refundable portion of tax credits. Those costs are already reported as spending, rather than revenue reductions, in official budget accounts. When we create our broader measure of government size — adding spending-like tax preferences to traditional spending — we need to ensure that the refundable portion of tax credits are not double counted. The outlay portion of refundable credits, while relatively small, has increased steadily. TRA86 expanded the earned income tax credit, and there were further expansions in 1990, 1993, 2001, and 2009. The child credit was initially enacted in 1997 and included only a small refundable portion for families with three or more children. But the credit was doubled in 2001 and was made generally refundable for families with earnings above a threshold amount. The scheduled expiration of the 2001, 2009, and 2011 increases in credits at the end of 2012 will reduce outlays associated with the child credit and the earned income credit beginning in 2013; however, much of this reduction will be offset by a new premium support health insurance credit that was enacted in the Patient Protection and Affordable Care Act (PPACA) in 2010 and is scheduled to go into effect in 2013.

## TRENDS IN OUR BROADER MEASURE OF GOVERNMENT SIZE

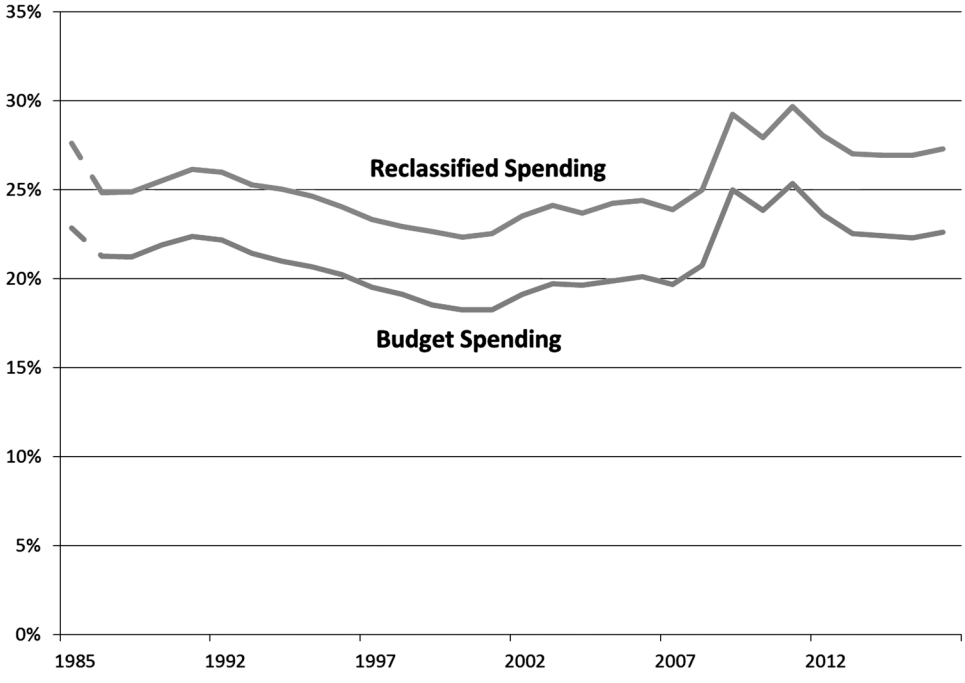
We use these estimates of spending-like tax preferences to construct a revised series of total fed-

eral spending and revenue in 1985 and from 1988 through 2016. To do this, we define gross spending as outlays as measured in the budget plus spending-like tax preferences minus the refundable portion of those tax expenditures (since they are scored already as outlays). Gross revenues are similarly calculated as revenues in the budget plus spending-like tax expenditures minus the refundable portion of those tax expenditures. This accounting approach does not change the deficit — gross spending and revenues increase by the same amount. It does recognize, however, that the government raises significant revenues and then spends them without the money ever reaching the U.S. Treasury. Accounting for those resources, the federal government has been around 4 percent of GDP larger in recent years than budget figures indicate.

This reclassification does not change the basic story of how receipts and outlays have changed over the past quarter century, but there are differences (figures 2 and 3). For one thing, adding spending-like tax preferences to both outlays and receipts makes the burden of government look bigger, whether measured by spending or revenues. Budget spending ranged from 18.2 percent of GDP in 2000 to 25.0 percent in 2009, while gross spending ranged from 22.3 percent in 2000 to 29.6 percent in 2011. Receipts ranged from 14.4 percent in 2011 to 20.6 percent in 2000, while gross receipts range from 24.7 percent in 2011 to 18.7 percent in 2000.

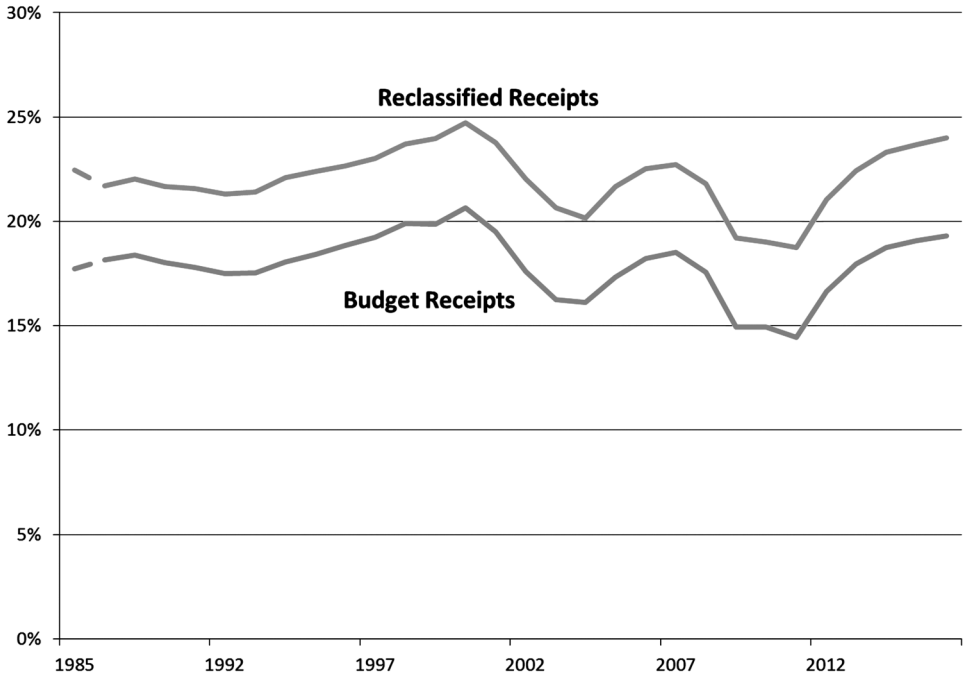
The trends in gross spending and receipts are roughly similar to trends in budget spending and receipts. The only clear qualitative difference occurred right after TRA86. Spending fell between 1985 and 1988 due to a decline in defense and non-defense discretionary spending under the Gramm-Rudman spending restrictions, but gross spending declined even more due to the cut in tax expenditures in TRA86. Revenues increased between 1985 and 1988 as the economy boomed, but nonetheless gross revenues declined slightly because of the cut in tax expenditures. By this measure, then, TRA86 significantly reduced the size of government.

*Figure 2:* **Spending Measures as a Percent of GDP, 1985-2016**




Source: Office of Management and Budget (2011) and authors' calculations.

*Figure 3:* **Revenue Measures as a Percent of GDP, 1985-2016**




Source: Office of Management and Budget (2011) and authors' calculations.

During the Clinton years (1993-2000), spending-like tax preferences, net of refundable credits, increased from 3.8 percent of GDP to 4.1 percent, but this did not qualitatively alter the general story of declining spending and rising receipts during that period. They increased again (to 4.3 percent of GDP) between 2000 and 2008, but that did not change the basic Bush years' story of rising spending and falling receipts. Looking forward from 2008 to 2016, OMB projections show a further increase in reclassified receipts to 4.7 percent of GDP. But, while this accentuates the trend a bit, it does not alter the long-term story of increases in both outlays and receipts as a percentage of GDP over that period.

## HOW TAX POLICY CHANGES AFFECT GOVERNMENT SIZE

When we take spending-like tax preferences into account, the federal government appears much larger than standard measures suggest. Traditional budget measures understate both the amount that the government effectively collects in revenue and the amount that it effectively spends in pursuit of social and economic goals.

That insight has some surprising implications when we consider how various tax policy options might affect the size of government. To illustrate, we consider how the size of government would be affected by three deficit reduction options: introducing a broad-based carbon tax, eliminating the mortgage interest deduction, and increasing individual income tax rates.

Under traditional budget accounting, these proposals would all increase federal revenues and have no effect on federal spending. People who emphasize revenues as a measure of government size would view all three of these policies as expanding the size of government; people who emphasize spending would view them all as reducing the deficit, but having no effect on government size.

The three policies appear quite different, however, under our broader measure of government size (table 3). A new carbon tax would still be

*Table 3*
**How Tax Policy Changes Affect Government Size**

| | *Official Budget* | *Broader Measure that Reclassifies Spending-like Tax Preferences* |
|---|---|---|
| Introduce a broad-based carbon tax | Tax Increase | Tax Increase |
| Eliminate the mortgage interest deduction | Tax Increase | Spending Cut |
| Increase marginal individual income tax rates | Tax Increase | Tax Increase & Spending Increase |

viewed as a pure tax increase, with no effect on spending (as long as no special carve-outs created new spending through the tax system). Eliminating the mortgage interest deduction, however, would be a spending cut, not a tax increase. Under existing law, the federal government has asserted a claim to taxpayer resources, but has chosen not to collect them. Instead, it allows qualifying taxpayers to keep those monies as long as they do what the government wants — pay mortgage interest. Eliminating the mortgage interest deduction would reduce those payments (thus lowering the broader measure of spending), while having no effect on the amount of resources that the government has asserted a claim to (thus leaving the broader measure of revenues unchanged). Eliminating the mortgage interest deduction would thus reduce the size of government under the broader spending measure, even though the policy would be officially scored as a tax increase.

Increasing marginal tax rates is more complex still. Raising tax rates would boost taxes under both traditional budget accounting[8] and our broader measure including spending-like tax preferences. But that is not the only effect. Our current tax system has numerous exclusions, exemptions, and deductions whose value depends on marginal tax rates. If those rates go up, the value of those tax preferences goes up as well, thus boosting revenue (further) and spending. Raising marginal tax rates thus increases spending through the tax code and boosts the size of government under our broader spending measure.

The reverse also holds true. Cutting marginal tax rates reduces the size of government under our broader spending measure. Indeed, this is what happened following the Tax Reform Act of 1986. That act reduced spending through the tax code not only by cutting back on preferences, but also by lowering marginal tax rates. The idea of "starving the beast" through tax cuts has not fared well over the past decade; lower tax revenues do not appear to have driven official spending down. If one adopts our broader spending measures, however, "starving the beast" does have some effect if done through marginal rate cuts. All else equal, lower tax rates reduce spending through the tax code, albeit not enough to offset the reduction in government receipts.

## CONCLUSION

This paper illustrates how our understanding of government size changes when tax expenditures that represent spending substitutes are recognized as hidden spending (and revenues), rather than as tax cuts. When we include spending-like tax provisions as outlays (and revenues), the federal government in recent years appears about 4 percent of GDP larger than traditional budget figures indicate. Trends in "reclassified" spending and receipts mostly mirror trends in "budget" spending and receipts. The only qualitative difference in trends came between 1985 and 1988 when, following the Tax Reform Act of 1986, conventionally measured receipts as a percentage of GDP increased, but reclassified receipts declined due to the large drop in spending substitute tax expenditures.

Our broader measure of government size provides a different perspective on how policy changes the size of government. Eliminating spending-like tax preferences such as the mortgage interest deduction would raise conventional measures of federal revenue and leave outlays unchanged. Under our broader measure, in contrast, eliminating the deduction would reduce outlays and leave revenue unchanged. More broadly, budget reform proposals that reduce marginal tax rates and eliminate tax expenditures would be shown under this alternative measure to accomplish a much larger share of deficit reduction through spending cuts

instead of tax increases than they would under conventional measures.

## Notes

1 For a detailed discussion of the differences between the three accounting conventions, see Congressional Budget Office (2006, 2009).

2 OMB, although not the Joint Committee on Taxation (JCT), later added a concept called the "reference" tax baseline in which some provisions that departed from accurate income measurement, but were judged to be general provisions of the existing system, were included in the baseline. As a result, some provisions that Treasury calls tax expenditures relative to the "normal" tax baseline are not tax expenditures relative to the "reference" tax baseline.

3 JCT, but not OMB, also allows exclusion from the normal tax base of net imputed rental income from owner-occupied homes.

4 Nonetheless, we view provisions that allow consumption tax treatment to a narrow class of investments, such as expensing of qualified equipment for small businesses under section 179 of the Internal Revenue Code, as spending substitutes.

5 Here and elsewhere, we add up individual tax expenditure estimates to derive a total cost. Strictly speaking, the sum of the costs of separate tax expenditures need not equal the cost of all tax expenditures; Treasury and JCT estimate the cost of each provision as if all other components of the tax law were in place. If some tax expenditures were eliminated, the cost of others would change. Toder and Baneman (2011) estimate that, taking account of interactions among provisions, the cost of all tax expenditures is roughly 10 percent higher than the cost that would be computed by adding up all the separate line items. Therefore, these figures understate, to some degree, the cost of tax expenditures. It should be noted, however, that there are negative as well as positive interactions; itemized deductions cost less than three-fourths of the cost calculated as the sum of all the separate deductions.

6 If the gross rental value of owner-occupied housing were taxed, the mortgage interest deduction would not be a tax expenditure line item. To capture the full cost of not taxing gross imputed rent, it is necessary to add together Treasury's estimates for the exclusion of net imputed rent (the net return on housing equity) and the mortgage interest deduction.

7 The tax treatment of capital investment illustrates some challenges of drawing a sharp line between spending-like provisions and tax provisions. First, there is the issue of how to handle exceptions from general rules. Even if accelerated depreciation generally is not a spending-like provision, reduced class lives for some assets, such as corporate jets, should be viewed as the equivalent of spending programs that favor a narrowly defined activity. Lacking information about such narrow provisions, we exclude them from our calculations. Second is the issue of how depreciation rules interact with the deductibility of interest. By itself, accelerated depreciation can be viewed as a compromise between income and consumption taxation. If investment is debt-financed, however, the combination of consumption tax treatment for investment and income tax treatment for borrowing can produce a significant subsidy for some types of capital investment. That happens because interest should be deductible under an income tax but should not be deductible under a consumption tax. Lacking data on the value of interest deductions, we exclude them from our measure.

8 As long as we are on the left side of the Laffer curve.

## References

Bradford, David. Reforming Budgetary Language. In Sijbren Cnossen and Hans-Werner Sinn, eds. *Public Finance and Public Policy in the New Century*. Cambridge, MA: MIT Press, 2003, pp. 93-116.

Bureau of Economic Analysis. NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts. 2010-11.

Burman, Leonard E. and Marvin Phaup. Tax Expenditures, the Size and Efficiency of Government, and Implications for Budget Reform. Cambridge, MA: National Bureau of Economic Research, 2011. National Bureau of Economic Research Working Paper 17268.

Congressional Budget Office. Comparing Budget and Accounting Measures of the Federal Government's Fiscal Condition. CBO Study. Washington, DC, December 2006.

Congressional Budget Office. The Treatment of Federal Receipts and Expenditures in the National Income and Product Accounts. CBO Report. Washington, DC, June 2009.

Congressional Budget Office. CBO's Projections of Federal Receipts and Expenditures in the Framework of the National Income and Product Accounts. Washington, DC, February 2011.

Department of the Treasury. Financial Report of the United States Government. Washington, DC, 2010.

Fiekowsky, Seymour. The Relation of Tax Expenditures to the Distribution of the Fiscal Burden. *Canadian Taxation* 2 (Winter 1980): 211-219.

Kleinbard, Edward. Tax Expenditure Framework Legislation. *National Tax Journal* 63 (June 2010): 353-382.

Marron, Donald. Spending in Disguise. *National Affairs* 8 (Summer 2011): 20-34.

Office of Management and Budget. The Fiscal Year 2012 Budget of the United States Government. Washington, DC, 2011.

Rogers, Allison and Eric Toder. Trends in Tax Expenditures, 1985-2016. Washington, DC: Urban-Brookings Institute, 2011. Urban-Brookings Tax Policy Center Research Report, September 16.

Shaviro, Daniel. Rethinking Tax Expenditures and Fiscal Language. *Tax Law Review* 57 (2004): 187.

Toder, Eric. Tax Expenditures and Tax Reform: Issues and Analysis. *National Tax Association Proceedings-Ninety-Eighth Annual Conference*, 2005, pp. 472-479.

Toder, Eric and Daniel Baneman. Distributional Effects of Individual Income Tax Expenditures: An Update. Presented at National Tax Association Meetings. New Orleans, LA, November 2011.