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A DISTRIBUTION-NEUTRAL PERSPECTIVE ON TAX EXPENDITURE LIMITATIONS

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ABSTRACT

A recent wave of literature, partly motivated by presidential campaign tax reform plans, analyzes tax expenditure limitation proposals. These reforms are often advanced not only, or even primarily, because they reduce distortions caused by favoritism for some types of expenditures over others. Largely they are urged for a number of other reasons: on distributive grounds, because the resulting broader base enables lower marginal tax rates and hence less distortion of labor effort and other margins, and to raise revenue without requiring higher marginal tax rates. It is generally recognized that the particular results on these dimensions are heavily dependent on what sorts of rate adjustments are used to return the proceeds to taxpayers. Often, revenue neutrality is assumed. This essay advances a complementary, distribution-neutral perspective on the analysis of tax expenditure limitations. Distribution-neutral implementation provides an illuminating benchmark against which to understand prior analysts' large number of results and, more importantly, clarifies the analysis, particularly of the distribution-distortion tradeoff. The central lessons contradict the common belief that one can have less distortion of labor supply through lower marginal tax rates while also maintaining or enhancing progressivity.

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I. Introduction

Tax expenditure limitations have been proposed ever since Surrey (1973) drew attention to the subject, and they were implemented as a central part of the Tax Reform Act of 1986. More recently, they have been featured in presidential campaign tax reform plans and play a central role in those advanced by prominent tax reform commissions. The subject has concomitantly drawn the attention of tax policy analysts. Feldstein (2015) finds that a cap that limits tax expenditure benefits to 2% of adjusted gross income (AGI) would raise substantial revenue, modestly increase progressivity, and somewhat reduce marginal tax rates for affected taxpayers. Burman, Toder, Berger, and Rohaly (forthcoming) compare the revenue, distributive, and incentive effects of different types of global limitations on tax expenditures. See also, for example, Schizer (2015) and Toder, Rosenberg, and Eng (2013).

Traditionally, proposals to limit tax expenditures were advanced for a familiar microeconomic reason: greater efficiency results from the reduction in distortions induced by the relative preference for some types of expenditures over others. Nevertheless, much of the modern impetus for limiting tax expenditures derives from other purported sources of benefit: efficiency gains from enabling lower marginal tax rates on account of the broader tax base; improvements in the distribution of income on account of overturning the "upside down" effect of deductions and exclusions that are more valuable to higher-income individuals; and increases in revenue.

The analysis of tax expenditure limitations, however, has not been grounded in the well-developed optimal taxation framework. This essay explains how substantial illumination of both positive and normative effects of tax expenditure limitation proposals can be provided by modern extensions of this framework that employ a distribution-neutral methodology for assessing tax reforms. The results upset much conventional wisdom on the subject and highlight the need for a qualitatively different analytical approach going forward.

Section II describes the methodology. It begins with the Mirrlees (1971) optimal taxation model as augmented by Atkinson and Stiglitz (1976) to incorporate commodity taxation. Tax expenditures provide subsidies to different commodities and hence are encompassed by this formulation. Most of the discussion in this section is devoted to the extensions developed in my own prior work (e.g., Kaplow 1996, 2004, 2006, 2008, 2012) that employ a distribution-neutral framework. As a normative matter, this approach enables the analysis of the welfare consequences of all manner of tax reforms without requiring either that the initial income tax is optimal or that the reform under consideration moves all the way to an optimum with regard to either the income tax or tax expenditures.

Section III, the core of this essay, uses this distribution-neutral approach to disentangle the distinctive efficiency consequences due to the reform of tax expenditures from the efficiency, distribution, and revenue consequences of changing overall features of the tax system—changes that can be made independently of whether tax expenditures are reformed. This mode of analysis clarifies the positive effects of tax expenditure reduction proposals as well. Without imposing distribution neutrality, it is difficult to discern distributive and distortionary effects of such

proposals because there are so many ways to disburse the revenue raised as a result of tax expenditure limitations, including an infinite variety of possible adjustments to the income tax schedule to rebate some or all of the proceeds. (Imposing revenue neutrality alone still leaves many degrees of freedom.) The distribution-neutral approach sharpens the analysis of different overall reform packages by providing a simple decomposition that distinguishes their core features and enables apples-to-apples comparisons. A complementary benefit is that the proffered methodology also suggests a clearer way to display graphically the distributive and distortionary effects of different reforms.

In the course of clarifying the positive and normative features of tax expenditure reforms, the analysis reveals how a number of commonly held views are misleading or incorrect. Prominent analysts argue that limiting tax expenditures enables society to enjoy a free lunch, such as by: raising revenue without raising marginal tax rates, reducing the distortion due to high marginal tax rates, and enhancing progressivity without raising the distortion ordinarily associated with redistributive taxation:

- Feldstein (2015): "Limiting tax expenditures would raise revenue without increasing marginal tax rates." (1) "The two percent cap would also lower the marginal tax rate of all the affected taxpayers." (5)
- Burman, Toder, Berger, and Rohaly (forthcoming): Tax expenditures "require tax rates to be higher than they would otherwise be, which exacerbates the efficiency cost of taxation." (34) "Tax expenditure limitations combined with rate reductions can be designed that make the tax system more progressive [and] reduce marginal tax rates on work and saving . . . ." (37)

Unfortunately, these lunches are not free and, as often served, are not even available at a discount.

The distribution-neutral framework elaborated in this essay is quite general. It is, of course, subject to various qualifications, many of which are familiar from the literature on optimal taxation and various extensions in prior work. In this respect, changing a tax expenditure is no different from adjusting a differential commodity tax or subsidy rate. Because this essay aims to elaborate the broad framework, these issues will largely be set to the side. It should be emphasized, however, that the approach is fully encompassing in two senses. First, although simple examples will often be employed for ease of exposition (such as the use of a linear income tax and a uniform proportional reduction in tax expenditures), the framework readily encompasses a highly complex income tax and transfer scheme and even fairly idiosyncratic proposals for tax expenditure limitations. Second, the refinements that would be required to incorporate qualifications are fairly generic. As a result, the distribution-neutral perspective provides a robust methodology for the positive and normative analysis of tax expenditure limitation proposals.

II. Framework

A. Optimal Income and Commodity Taxation

Mirrlees (1971) launched the modern study of optimal income taxation, and his approach has provided the backbone for much subsequent work in public economics that seeks to ground policy analysis in first principles. In the standard formulation of the problem, the government seeks to raise revenue for public goods and, in the process, maximize a social welfare function that embodies concerns for the distribution of income. This optimization is subject not only to the technological feasibility constraints of the economy itself but also, centrally, to the information constraint that the government can observe only individuals' incomes and not their varying productivities or the degrees of labor effort that generate those incomes. As a consequence, income taxation (rather than a tax based directly on individuals' productivities) must be employed, and this is the source of the distortion of labor effort. (For those unfamiliar with Mirrlees, it is important to mention that his income tax schedule may be negative, and optimally would be so for the poor if there were nontrivial distributive concerns. Accordingly, his "income tax," and that to be discussed below, is an aggregate of both income and related taxes and also all transfer programs.)

Atkinson and Stiglitz (1976) offered an important extension that combines the Mirrlees optimal income tax problem with commodity taxation. In particular, their interest was in the optimality of differential commodity taxation. Note that differential commodity taxation includes the case of relative subsidies (the commodity taxes may be negative, and it includes systems such as a VAT that provides preferential rates or exclusions). Moreover, the notion of "commodities" is understood broadly as encompassing all forms of expenditures and hence, combined with the first point, readily incorporates tax expenditures. Indeed, this application does not really extend the commodity tax framework but rather merely recognizes that tax expenditures are in fact a means of differential commodity taxation.[1]

Atkinson and Stiglitz's central result was that, when individuals' utility functions (taken to be common) are weakly separable in labor—which is to say, utility can be written as a function of labor and a composite subutility function of all commodities—then it is optimal to employ uniform commodity taxation. (This is equivalent to no commodity taxation and a normalizing shift in the income tax schedule.) The basic intuition comes from principles of second best analysis. Although sometimes sloppily taken to mean that "anything goes" once there is at least one distortion in the economy, in fact second-best logic is that, when there is a

[1] Much of the literature on commodity taxation takes each commodity tax or subsidy to be a linear function of expenditures that is imposed at a common rate for all individuals. For subsidies, this would correspond to a refundable income tax credit. The preference resulting from an income tax deduction or exclusion depends on an individual's tax bracket and hence varies across individuals, and, for a given individual, the rate need not be linear because one's tax bracket is endogenous to the level of expenditure (and other choices). Matters like itemization and phase-outs further complicate the picture. Nevertheless, the conceptual framework remains applicable, and the lessons to be presented here are robust to these complications, although further effort may be required with regard to the construction of a distribution-neutral approach.

preexisting distortion, introducing a second one will be helpful if and only if it helps to offset the initial distortion. Here, the preexisting distortion, caused by income taxation, is of the labor-leisure choice. Hence, with weak separability—meaning that relative changes in an individual's consumption bundle do not affect labor supply directly—there is nothing to be gained by any distortion of consumption allocations. All that remains is the simple efficiency cost of consumption distortion from differential commodity taxation.[2]

A simple example helps to explain the nature of this separability assumption. Suppose, to the contrary, that dishwashers are a leisure substitute: they free up time, thereby reducing the marginal value of leisure and hence the marginal disutility of labor supply. In that case, a relative subsidy on dishwashers, although introducing a consumption distortion, would help encourage labor supply and thereby reduce the preexisting distortion of the labor-leisure choice. Some such subsidy would be efficient. For the remainder of this essay, this and other qualifications (except for externalities) are set to the side. For an informal catalogue and explanation of many of the more important qualifications, see Kaplow (2008, ch. 6.C).

As a matter of intellectual history, it should be noted that both Mirrlees's analysis of the income tax and Atkinson and Stiglitz's extension to incorporate commodity taxation involve characterizations of the second-best optimum. These analyses make use of first-order conditions. Accordingly, the results, strictly speaking, apply only at an optimum, and what Atkinson and Stiglitz teach us about optimal commodity taxation applies only regarding the optimum itself (and thus not partial reforms of nonuniform taxation) and only if the income tax is optimized as well. However, starting with an important (and underappreciated) paper by Hylland and Zeckhauser (1979), there now exists substantial work that extends many of the results to cases of partial reforms of all manner of government policies and that does not require the assumption that the income tax is optimized. This is accomplished using a distribution-neutral framework, one that also pays other substantial dividends.

B. Distribution-Neutral Approach

There is a longstanding tradition in public economics of employing a *revenue*-neutral approach when assessing reform proposals (other than those aimed at raising or reducing revenue). The motivation is that, if revenue is not held constant, revenue effects themselves become entangled with the distinctive features of the reform under consideration. This complicates the analysis and confounds the interpretation of any results. Much more effort would be necessary if every analysis of every policy had to determine how to assess changes in revenue, including such matters as to how different levels of debt would ultimately be paid, how the financing of deficits would influence interest rates and investment, and so forth—much of which would require the introduction of additional, controversial assumptions that were unrelated to the reform under consideration. Moreover, it would be difficult to compare the

[2] Readers familiar with Ramsey principles of commodity taxation should appreciate that they are displaced by Atkinson and Stiglitz's analysis. This shift can be attributed to the introduction of an income tax, in particular, the feasibility of a uniform lump-sum grant component. See Kaplow (2008, ch. 6.D).

conclusions from different analyses of the same reform because differences in analyses of the distinctive effects of the reform would be entangled with different assumptions and methodologies regarding the assessment of the revenue consequences. Accordingly, economists have often insisted on revenue-neutral analysis.

In a similar spirit, some work—and much of my own writing over the past two decades—has advanced a complementary, *distribution*-neutral approach. See, for example, Kaplow (1996, 2004, 2006, 2008, 2012). This subsection briefly describes its core features, and the remainder of this essay applies this distribution-neutral approach to the analysis of tax expenditure limitations, illustrating the benefits of the methodology in this important setting.

In a nutshell, the distribution-neutral approach combines a reform proposal with an adjustment to the income tax schedule that is designed to be distributively offsetting at all income levels. As will be explained, this framework (unsurprisingly) eliminates distributive effects and also (in a benchmark case) has the further consequence of holding labor supply constant and thereby eliminating the need to consider the other half of the familiar distribution-distortion tradeoff. What remains are what may be viewed as the distinctive, efficiency-related consequences of the reform. For example, the repeal of an inefficient subsidy on some form of expenditure would have as its only effect the elimination of the expenditure distortion that the subsidy had caused.

Moreover, when two different studies employ this methodology to evaluate the same reform, any differences in conclusions will correspondingly reflect differences in the assessment of these distinctive features of the core reform rather than different choices in how to balance the budget. If two studies of the repeal of an expenditure subsidy had a different bottom line, the disagreement could only be attributed to differences in the direct effects of the subsidy and not to different assumptions about the incentive effects of income taxation, the desirability of changes in the income distribution, the need for revenue, and so forth—that is, if both studies employed the distribution-neutral approach.

More broadly, the distributive and distortionary consequences of a given tax expenditure limitation proposal depend importantly on how the revenue is rebated. Even with revenue-neutrality, there is an infinite variety of ways to balance the budget, with all manner of consequences for distribution and distortion (although, as will be explained, the two are tightly related). Hence, the gains from disentangling the analysis of particular tax expenditure reforms from these broader fiscal issues are immense.

To elaborate the distribution-neutral framework, consider some contemplated reform. As stated, distribution-neutral implementation involves an adjustment of the income tax schedule that is designed to offset the reform's distributive effects for all levels of income. More precisely, the tax schedule adjustment at each level of before-tax income is calibrated to leave unchanged individuals' level of utility under the assumption that their labor supply remains the same. (Whether individuals would wish to keep their labor supply at the same level will be considered momentarily.)

This income tax adjustment can better be understood by decomposing it into two components. First, it washes out any effects on taxes paid (or transfers received) as a mechanical

consequence of the reform under consideration. For a tax expenditure limitation, one computes how much more taxes individuals at each level of income now pay and adjusts (reduces) income tax rates accordingly.[3] Second, because the income tax adjustment is, in principle, designed to hold individuals' *utility* constant, the full income tax adjustment must also offset any other effects of the core reform on utility. Suppose, for example, that a tax expenditure proposal reduces only inefficient subsidies on certain forms of consumption. In that case, the utility consequence of reducing consumption distortion is to raise utility.[4] Hence, the complete adjustment would involve somewhat higher income tax rates than those described in component one—just high enough at each level of income to absorb the corresponding utility gain from the reduction in distortion. (As a practical matter, for some purposes one might employ approximations for this second component or even omit it.[5] The discussion to follow, however, will assume that the full, utility-based distributive offsets are made.)

Having described what the distribution-neutral experiment *is*, let us now examine its consequences. Regarding distribution, it is obvious that there are no effects, by construction.

Next, consider labor supply, which is usually taken to be a first-order factor for many policies, including significant reforms of tax expenditures. Under a distribution-neutral approach, however, labor supply effects recede. More precisely, if one assumes that labor effort is weakly separable in individuals' utility functions, as in Atkinson and Stiglitz's (1976) demonstration of when uniform commodity taxation is optimal (and as will be assumed in this

[3] The exposition ignores heterogeneity at a given income level. With preference heterogeneity, distribution neutrality only holds on average for individuals earning each amount of income. See Ng (1984). Of course, in reporting distributive effects of reforms, it is common to aggregate—usually, at a much higher level. For example, Burman, Toder, Berger, and Rohaly (forthcoming) display distributive effects by quintile, with further disaggregation at the top. Note also that if one wished to compute the requisite offsetting income tax adjustment for this component, one could start with the bottom bracket and adjust it to generate a zero effect in the first quintile and proceed up the tax brackets to hit this target for each subsequent group. If the number of groups being considered is more refined than the number of tax brackets, including if breaks in groups are at different points from breaks in tax brackets, one could introduce further brackets for this income tax schedule adjustment. Keep in mind that the distribution-neutral approach is primarily advanced as a thought experiment to aid analysis, not an actual proposal, so there is no reason to avoid such a mechanical adjustment for purposes of displaying results (as discussed further in subsection III.F). If one instead is actually implementing a distribution-neutral reform, such as with the Tax Reform Act of 1986, one would adjust the tax brackets accordingly.

[4] To elaborate, after some tax expenditures are curtailed, an individual can continue to consume the same consumption bundle as before on account of the first component of the income tax adjustment. However, because relative prices are changed, the individual will prefer to adjust expenditures, spending less on those items that are now subject to a reduced preference and more on others. It is the increase in utility from this consumption reallocation that constitutes the efficiency gain and determines the magnitude of the second component of the income tax adjustment, in this instance a rate increase to absorb the utility benefit, leaving individuals (at each level of income) at their pre-reform utility levels. See Kaplow (2006).

[5] If one did omit this second component of the adjustment to the income tax schedule, then the result would be equivalent to performing the complete distribution-neutral experiment followed by a rebate of the proceeds, as discussed below, in a pattern that matched the efficiency benefits from the reform. If, for example, everyone benefitted somewhat from the distortion reduction, there still would be a Pareto improvement, although the gains would be distributed in accordance with initial incidence of the gains from the distortion reduction rather than, say, pro rata. More broadly, all aspects of the incidence of any reform are taken into account in the distribution-neutral experiment because it absorbs (offsets) all effects of the reform on the *utility* of taxpayers at each income level. In practice, when the actual incidence is uncertain, one performing distribution-neutral analysis would base the second component of the income tax schedule adjustment on estimated incidence.

essay), then labor supply effects are nil. To explain, when choosing labor effort, individuals trade off the disutility of labor with the utility of consumption. The distribution-neutral implementation, recall, *holds utility constant for each level of earnings and hence for every level of labor effort that individuals might choose*. Therefore, whatever level of labor effort maximized utility before the reform, that same level will be optimal afterward. For further exposition, see Kaplow (2004, 2006, 2008).[6]

Finally, what is the effect of this distribution-neutral reform package on revenue? Note that reform package is constructed to be distribution neutral rather than revenue neutral. To determine the revenue effect of this manner of implementation, we simply need to reexamine the two components of the distribution-offsetting adjustment to the income tax schedule. The first component is a wash: at each level of income, we adjust income tax rates to offset the mechanical effects of the core reform on taxes paid. For proposals that reduce the availability of tax expenditures, revenues rise as a direct consequence, so income tax rates are accordingly reduced to, in essence, rebate the proceeds. Examining this component alone, taxpayers at every income level pay the same taxes as they did before.

The second component of the income tax adjustment absorbs the utility consequences of the reform (aside from the aforementioned mechanical effect of the change in tax payments). As explained, for a tax expenditure limitation that reduces consumption distortion, utility rises. Hence, the second component of the income tax adjustment involves raising the income tax schedule so as to absorb this utility gain at each level of income. Regarding this component, everyone's tax payments rise. Combining the two components for this case, we therefore have an unambiguous increase in revenue (in spite of the fact that no one's utility falls).

Observe that this revenue gain under the distribution-neutral package corresponds to a dollar measure of the efficiency gain from the reform. Had we instead considered a reform that increased consumption distortion, the second component of the income tax adjustment would have been a tax rate reduction, to compensate taxpayers at each income level for the utility cost of that distortion. In that event, the hypothetical reform package would have been a revenue loser.

In sum, the net revenue effect of the distribution-neutral reform package is the *only* effect of the overall reform, and it corresponds to the efficiency gain or loss produced. How this revenue change is dealt with is, strictly speaking, outside the distribution-neutral experiment. For efficient reforms, which raise revenue, one might choose to distribute the surplus pro rata, generating a Pareto improvement. (If the reform is inefficient, we could make up the deficit by

[6] As elaborated in prior work, this perhaps surprising result—which might seem limited to special cases involving lump-sum taxation or perhaps particular restrictions on income or substitution effects—holds quite generally. One way to describe the labor supply effects of the overall reform package is that the combination of both the income and substitution effects, of each of the initial reform and the income tax adjustment, net to zero. Restated, the combined income and substitution effects of the constructed income tax adjustments are the mirror image of those of the initial reform. Although these statements are valid, they are not as intuitive as the core concept presented in the text. Specifically, the distribution-neutral income tax adjustment, as explained, is *constructed* so as to keep an individual's utility level constant for each choice of labor income. When that is done, how utility changes with the choice of labor effort is precisely the same after the combined reform as it was initially. Since this function mapping labor to utility is unaltered, the choice of labor effort that maximizes this function does not change.

raising taxes somewhat at every income level, making everyone worse off. Obviously, reversing such a reform—or moving incrementally in the opposite direction—would produce a surplus that could finance a Pareto improvement.)

III. Application

A. Different Types of Tax Expenditures

Income measurement: At the risk of oversimplification, this essay will distinguish three categories of purported tax expenditures. First are those income tax provisions that are best understood not as true tax expenditures but rather as refinements to income measurement. Classification is controversial, most notably because of disagreement about the proper normative baseline. In particular, many tax expenditures under a Haig-Simons income tax are proper under a cash-flow consumption tax, and indeed they may not go far enough in excluding capital income. On a different dimension, provisions such as the EITC may be taken as part of the tax rate schedule, and personal exemptions, child credits, and some other preferences may best be thought of as an attempt to employ a different tax schedule for different family configurations. Given the purpose of this essay, such questions will be set to the side, and the analysis to follow will suppose that the tax expenditures that are to be limited are deviations from whatever baseline is thought to be normatively appropriate.[7]

Junk: Second are those provisions that provide inefficient subsidies to certain forms of consumption. The existence of such provisions is usually explained on political grounds (perhaps lobbying by special interest groups or optics that make unwise provisions seem appealing to voters). These preferences are referred to here as junk and are what most have in mind when proposing tax expenditure limitations. Because it may be politically difficult simply to repeal them one by one or even all together, many have proposed various across-the-board tax expenditure limitations that would impose some sort of common reduction to groups of these provisions.

This essay is primarily interested in this second category, so the reader should assume that any limitations under discussion are limitations on such junk. Application of section II's

[7] The text presents a conventional view of the subject. Under a more rigorous optimal income tax analysis, such taxonomic questions have no direct role, and instead the optimal treatment of any item is whatever comes out of the mechanism design exercise. Nevertheless, the familiar categories are useful even in that setting. Moreover, the analysis to follow holds under standard simplifying assumptions that are implicitly incorporated here for ease of exposition: weak separability of labor, common utility functions, and the entailed supposition that the utility of various forms of consumption does not directly depend on unobservable ability. There is also a substantial literature on optimal capital taxation in the presence of an income tax that takes into account uncertainty in a dynamic formulation of the problem. Because most work analyzing global tax expenditure limitations largely sets capital taxation matters to the side, the proper way to address that subject is not examined further in this essay. One can, however, undertake a simple extension of the distribution-neutral framework to consider the further requirement of holding fixed the overall burden on capital income, which allows one to focus on how to achieve a given effective tax rate on capital income most efficiently. See Kaplow (2008, ch. 9).

framework to such reforms is straightforward. As explained, the distribution-neutral approach involves an adjustment to the income tax schedule that has two components. First, tax rates are reduced sufficiently at each income level to leave taxpayers with as much disposable income as before their tax expenditures were limited. Second, tax rates are increased sufficiently at each income level to absorb the utility gain from eliminating the distortion to individuals' expenditure decisions. Distribution-neutrality holds by construction. With regard to revenue, the first component alone entails revenue neutrality, and the second component results in a revenue gain that equals (in dollars) individuals' aggregate utility gains from the reduction in expenditure distortion. As mentioned, how these proceeds are used is outside the distribution-neutral framework itself, but it is helpful to imagine that they are returned in some fashion to individuals at all income levels, generating a Pareto improvement.

Correction of externalities and internalities: The third category of tax expenditures, which will be considered briefly here and then set to the side, consists of those that correct otherwise distorted behavior. The core case is externality correction. For example, the charitable contribution deduction may be seen as a Pigouvian subsidy on a class of expenditures that generates positive externalities.

Analysis of this case involves a modest extension of section II's basic framework. See Kaplow (2004, 2012). To accomplish this, one combines the policy—the introduction of a charitable contribution deduction, or, of interest here, a proposal to limit it in some fashion—with an adjustment to the income tax schedule that holds utility constant at every level of income. The first component, which absorbs the mechanical revenue effect of the policy, is the same as before. The second component, which absorbs the utility effect, is the same at a high level of abstraction but the specifics involve a key additional piece. Here, changes in individuals' expenditure decisions affect not only their own utility, as before, but also the utility of others. This is just the definition of an externality. As a consequence, this component of the tax schedule adjustment would in principle include as well the impact of the change in the level of the externality on all individuals. Note that, once again, this means that the overall distribution-neutral package is truly distribution-neutral, in that it takes into account the distribution of all the costs and benefits from changes in the level of externalities.

Similar to our earlier results, there will be a revenue gain from the package as a whole if and only if the change in the tax expenditures that involve externalities moves the level of the subsidy closer to the optimal Pigouvian subsidy.[8] If the charitable deduction provided too much

[8] Note also that, contrary to a commonly held view, this characterization holds without regard to the fact that many individuals' contributions are inframarginal (amounts that would be given without regard to the subsidy). Under distribution-neutral implementation, the revenue, distribution, and efficiency effects would be washed out in any event. Suppose, for example, that literally everyone's contributions to charity strictly exceeded 1% of AGI under a common subsidy rate of 25%. A 1% floor might seem "efficient" because these funds are "wasted" on donors that would have given those amounts anyhow. But imposing a 1% AGI floor in this case is identical in its consequences to raising everyone's marginal tax rate by 0.25%. Indeed, if this reform—introduction of the floor—was designed in a distribution-neutral manner, the offsetting income tax adjustment would lower income tax rates by just that. (Because expenditures do not, by assumption, change, the second component of the income tax adjustment would be nil.) The package would be distribution-neutral, revenue-neutral, and externality-neutral. That is, it would do nothing. See Kaplow (1994). (However, if some individuals gave less than 1% of AGI, and the subsidy rate was at

of a benefit, then limiting it would produce a gain, whereas if the deduction provided too little benefit, then further limitation would generate a loss.[9]

One might also include in this third category those tax expenditure provisions that are designed to correct "internalities," i.e., individuals' decision infirmities, such as the tendency to be myopic or to underestimate certain types of harm to oneself. See, for example, Gruber and Koszegi (2001). Similar corrective principles apply, although there are some notable differences. Most important for thinking about tax expenditures are that many internalities impose nonlinear harm, so that the more an individual is induced to adjust consumption toward the true optimum, the less the marginal benefit from further adjustments.[10] Also, heterogeneity is likely to be substantial. In addition, many individuals may not be misoptimizing, so taxing or subsidizing them may introduce new distortions. As a result, the optimal design of corrective policies is more challenging, but these matters are set to the side here, as the main focus is on the second category, junk tax expenditures.

B. Non-Distribution-Neutral Reforms

To many, one of the most apparent and disturbing features of tax expenditures is what Surrey (1973) referred to as their "upside-down" effect. As is familiar, exclusions and deductions have a value determined by individuals' marginal tax rates (MTRs) and hence are more valuable to higher-income individuals under a graduated income tax. For this and other reasons, many tax expenditures are significantly more favorable to the upper-middle-class and the rich, often in terms of the dollar benefit of tax reductions and sometimes as a percentage of income or of taxes owed.

Because of this feature, many favor tax expenditure limitations because they augment the progressivity of the income tax. As emphasized by Griffith (1989), however, this perspective is overly simplistic. After all, the existing regime did not take some tax rate schedule from Plato or Pluto, set it in stone, and then have someone else (Congress) superimpose tax expenditures. Rather, a single political process generated all the features of the existing regime. Moreover, this regime is reformed from time to time: sometimes the tax rate schedule, sometimes various tax expenditures, and sometimes a combination. An example of particular note is the Tax Reform Act of 1986, which (speaking roughly) broadened the base by reducing tax expenditures and simultaneously lowered rates, and in a manner that linked the two together, specifically, to

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the efficient level, imposition of this floor would forgo efficient contributions from those individuals because the floor eliminates their marginal subsidy. In that case, eliminating such a floor could be implemented in a distribution-neutral fashion so as to generate a Pareto improvement.)

[9] As an aside, for what environmental economists refer to as an atmospheric externality—one that depends on aggregate activity and not any particular individual's contribution thereto—the optimal Pigouvian tax or subsidy equals the marginal external harm or benefit, as the case may be. As a consequence, the optimal rate is the same for every individual. Therefore, if a Pigouvian subsidy for this sort of externality is administered through the income tax, it would optimally take the form of a refundable credit (with no limit).

[10] Schizer (2015) further explores the distinction between corrections of aggregate externalities and of those pertaining to the well-being of individual taxpayers.

achieve distribution neutrality (as well as revenue neutrality).[11] In such a case, there is by construction no relationship between the level of tax expenditures and progressivity.

Suppose, however, that one wishes to understand and assess non-distribution-neutral reform packages, perhaps of the sort that some reformers envision under which tax expenditures would be significantly limited but the tax rate adjustments would result in a greater degree of redistribution. As will now be explained, the distribution-neutral framework remains a useful lens for analysis.

The pertinent extension of the distribution-neutral methodology employs a *two-step decomposition*. See Kaplow (1996, 2004, 2008). Begin with any reform package—such as one of the many combinations of tax expenditure limitations and income tax reductions analyzed in recent work. Any such non-distribution-neutral reform can be decomposed as follows:

> *1. Distribution-neutral implementation*: Combine the tax expenditure limitation component with a distribution-neutral income tax schedule adjustment of the sort examined throughout.

Then, an instant after this is to be enacted, and with the same effective date, do the following:

> *2. Pure redistribution*: Implement an adjustment to the income tax schedule that moves from the distribution-neutral schedule to the actual schedule in the overall proposal under consideration.

To analyze any non-distribution-neutral reform, one can simply combine the analysis of these two steps.

Analysis of the first step is straightforward from the previous discussion. It is distribution neutral by construction. It does not affect labor supply in our benchmark case. Its only consequence is the pure efficiency effect of the tax expenditure limitation with regard to reducing individuals' consumption distortions. (Keep in mind that we are focusing on junk tax expenditures.)

Analysis of the second step is readily understood once one appreciates what it is: step two constitutes a purely redistributive change to the income tax system. In the motivating example, this would be an increase in redistribution, but in other settings, it may be a decrease.[12] In any event, because this step is purely redistributive, the correct analysis is generic: it is that from the standard optimal income tax problem of Mirrlees (1971). We know that if step two involves an increase in redistribution, for example, we have whatever social gains are deemed to be associated with that change and also the social cost of increased distortion. A related point, to be elaborated in subsection III.D, is that if effective MTRs fall and hence distortion falls, then we know that we have less redistribution (setting aside cases where we start past the top of the Laffer curve).

[11] It is familiar that this is an oversimplification, among other reasons because the reform in part shifted taxes from the personal income tax to the corporate income tax, and also because many of the changes (a nonrandom subset) eroded subsequently, some of which may well have been anticipated by those enacting the reform.

[12] And in many, there may be no simple classification. For example, the middle class might gain at the expense of the rich and the poor.

Recognizing that this second step is generic, involving a pure change in redistribution, it is apparent that it could be achieved in a variety of ways, including without regard to tax expenditure limitations. That is, step two—some particular reform to the income tax schedule that involves purely a change in redistribution—could be implemented by itself. Or packaged with a change in the military budget, spending on highways, or the regulation of greenhouse gas emissions.

The distribution-neutral framework, even when one is not examining an actually distribution-neutral reform package, facilitates specialization and clarifies communication. If a single study aims to analyze the total effects of a non-distribution-neutral package—whether of tax expenditure limitations, road construction, or a gasoline tax—it must take on all the burdens of those who analyze optimal income taxation: making assumptions about elasticities, choosing a social welfare function, and so forth. If it instead analyzes the distribution-neutral version, it can focus on the distinctive features of the subject at hand. Any distributive effects of the overall package might be displayed, but left for others to analyze and evaluate.

Closely related, it can be very difficult to compare two studies of the same subject if distribution-neutral implementation is not employed. First, the studies may differ in what they actually suppose step two will be. There are many (indeed an infinite number of) ways to achieve revenue neutrality. The use of distribution-neutral implementation provides a common metric that enables apples-to-apples comparisons. Studies that do differ in the extent of assumed redistribution can generate different evaluations that make the aggregate, heterogeneous packages hard to compare. Perhaps the first study is favorable and the second unfavorable in its bottom line, but the first may actually have found the distinctive features of the reform to be less desirable than did the second and nevertheless come to its positive conclusion because of desirable aspects of the redistribution involved. Second, even if the two studies make the same assumption about what redistribution is involved (they are analyzing the same overall package), it may be difficult to disentangle whether, say, the first study's more favorable bottom line is due to its more positive assessment of the distinctive features of the reform or perhaps a more negative assessment of those but a more positive view of the resulting change in redistribution. If different studies fail to disaggregate—that is, if they neither impose distribution-neutrality nor employ the suggested two-step decomposition—the results cannot readily be compared and, accordingly, our understanding of each element will progress much more slowly.

C. The Relationship between Tax Expenditure Limitations and MTRs

Whereas the previous subsection elaborated on distribution, this one will focus on the distortion side of the familiar distribution-distortion tradeoff in redistributive taxation. The two-step decomposition makes clear that changes in both distribution and labor supply distortion will be located in the second, purely redistributive step of a reform. Unfortunately, this linkage is often insufficiently appreciated. In particular, some proponents of tax expenditure limitations believe that they can have their cake and eat it too—in economists' parlance, that there exists a

free lunch (rather than dessert). Upon more careful analysis, we should not be surprised to discover that such is not the case.

As explained in the introduction and section II, the analysis is quite general, encompassing a wide variety of reform proposals—in fact, even intricate tax expenditure limitation plans. For ease of exposition, however, let us consider a simple illustration. First, assume that the tax system begins with a linear income tax with a marginal tax rate *t* and a lump-sum grant *g*. Furthermore, suppose that there are deductions or exclusions for certain expenditures—tax expenditures—that in aggregate are the fraction α of individuals' gross labor earnings *y* (linear Engel curves). Tax due, *T*(*y*), may be expressed as follows:

$$T(y) = t(1-\alpha)y - g.$$

Now, let us consider a global limitation on these tax expenditures. Specifically, suppose that the reform allows individuals to deduct or exclude only the fraction θ of their tax expenditures. That is, gross income of *y* is now offset by deductions and exclusions worth only $\theta\alpha y$ rather than αy. Suppose further that the resulting revenue is used entirely to fund a reduction in the tax rate *t*. And assume as well—again for ease of exposition—that individuals' expenditures on the tax-preferred items are unchanged. (That is, we are setting aside the efficiency gain from reducing consumption distortions and examining what remains.) The new, lower statutory tax rate would therefore be $\frac{1-\alpha}{1-\theta\alpha}t$. Tax due is now:

$$T(y) = \frac{1-\alpha}{1-\theta\alpha}t(1-\theta\alpha)y - g = t(1-\alpha)y - g.$$

After this tax expenditure limitation reform plan, the following are true: First, individuals at all income levels pay the same amount of tax that they did before: a lower statutory rate on a broader base. An implication is that the proposal is revenue-neutral. Second, note that this way of rebating the revenue gained from the tax expenditure reduction is also distribution-neutral. Third, and the present focus, we have two further consequences regarding the MTR: (1) the *statutory* MTR falls from *t* to $\frac{1-\alpha}{1-\theta\alpha}t$, which is a lower rate because we are assuming that $\theta < 1$, but also (2) the *effective* MTR stays the same, at $(1-\alpha)t$.

This latter point is key. Note that the statutory MTR of *t* was not the effective MTR to begin with. From our initial expression for *T*(*y*), it is apparent that the effective MTR was not the statutory MTR of *t*, but rather was $(1-\alpha)t$. After the reform, the effective MTR is unchanged: the new statutory MTR is $\frac{1-\alpha}{1-\theta\alpha}t$, which is applied to the fraction of income $1-\theta\alpha$, giving the same effective MTR of $(1-\alpha)t$.

To further illustrate this conclusion, consider a numerical example in the spirit of proposals to cap tax expenditures as a percentage of AGI. Focusing on those in the top bracket, suppose that their statutory MTR is 40% and that actual tax expenditures are 10% of AGI. Then, their current effective MTR on labor earnings is 40% × 90% = 36%. Next, consider a cap that

limits tax expenditures to 5% of AGI (which, note, limits the tax-reduction benefit of the tax expenditures to those in the 40% bracket to 2% of AGI). Their effective MTR rises to 40% $\times$ 95% = 38%. Likewise, if one wished now to lower the statutory rate to restore the original, lower effective MTR, one could reduce the statutory rate from 40% to approximately 37.9% (because 37.9% $\times$ 95% $\approx$ 36%). Like in the preceding example, this results in a lower statutory MTR but no reduction in the effective MTR.

The foregoing examples indicate the generality of the point that, under distribution-neutral implementation of tax expenditure limitation proposals, we have a fall in the statutory MTR but no change in the effective MTR. Therefore, suggestions that broadening the tax base through tax expenditure reform enables "lower MTRs" are either misleading or incorrect. If interpreted as reductions of the statutory MTR, they are accurate but convey the misleading impression that the effective MTR and hence the distortion of the labor-leisure margin are lower. If interpreted as reductions in the effective MTR, they are incorrect.

These illustrations are simple: a linear income tax, tax expenditures on forms of consumption with linear Engel curves, reforms consisting of a proportional reduction in tax expenditures or a percentage AGI cap, and no response in individuals' consumption allocations. Regarding all but the last assumption, the analysis can readily be generalized. And, indeed, prior work examining tax reforms using the distribution-neutral framework is entirely general. See, for example, Kaplow (2006, 2008). The final assumption—regarding the improvement in consumption allocations—is shown by the earlier analysis to indeed be the distinctive benefit of tax expenditure limitations. The analysis in this subsection focuses instead on the argument that the base-broadening that results from tax expenditure limitations directly enables lower MTRs.

The other key assumption in this illustration is that the proceeds from the reduction in tax expenditures are used to fund a reduction in the statutory MTR. This construction is employed to assess directly the purported benefit that these proposals enable a reduction in the MTR. And, as mentioned, in these examples such a manner of rebating the proceeds is also distribution-neutral, which, in accord with the prior analysis, proves to be highly illuminating. We will next consider arguments about potential increases in progressivity and how they relate to the foregoing discussion of effective MTRs.

D. Progressivity and Distortion

A recurring theme of this essay is that neither black magic nor tax expenditure limitations enable us to escape the distribution-distortion tradeoff inherent in redistributive taxation.[13] Distribution-neutral implementation leaves both distribution and labor supply distortion unchanged, features shared by the examples in the preceding subsection. Moreover, the two-step

[13] Prior work on other types of reforms (involving, notably, public goods and corrective taxation) often obscures this point, which can readily happen if one uses representative agent models and thus focuses only on the how changing effective MTRs influences distortion, without noticing that, say, lower effective MTRs imply a less redistributive fiscal system in a world in which individuals' productivities vary. See, for example, the discussion of previous studies of environmental policies in Kaplow (2012).

decomposition makes clear how deviations from distribution-neutrality can be isolated, leaving (as step two) a purely redistributive change to the tax system. And that is where our familiar distribution-distortion tradeoff resides. Because some proponents of tax expenditure limitations present a rosier picture of the possibilities—suggesting that one can enhance progressivity, for example, without raising or even while lowering the core distortion of the income tax—some elaboration is useful.

To begin, the immediately preceding analysis is strongly suggestive of the correct bottom line. Simply view it from the angle of redistribution. The posited tax reduction—using all the revenue from the tax expenditure limitation to fund a reduction in the statutory MTR—resulted in no change in distortion. And, notably, it was also distribution neutral. This immediately suggests that if we had wanted to increase redistribution rather than keep distribution constant, we would had to use some of the revenue from the tax expenditure limitation to finance a larger lump-sum grant *g*, which would have left us with less revenue to reduce the statutory MTR, leaving us with a higher effective MTR. Conversely, if we wished to have a lower effective MTR—which could only have been financed by reducing the lump-sum grant *g*—we would have had less redistribution. Indeed, these conclusions are quite general, as we now explore.

For concreteness, let us employ a standard definition of progressivity (PROG): rising average tax rates (ATRs).[14] That is, $PROG(y) = d\text{ATR}(y)/dy$. Taking that simple derivative, we have $PROG(y) = [\text{MTR}(y) - \text{ATR}(y)]/y$. In the present discussion, MTR(*y*) and ATR(*y*) are both taken to be *effective* rates, in light of the preceding subsection's analysis.

This expression teaches a straightforward lesson: the only way to increase the level of progressivity at a given income level—which is to say, to increase ATR(y) faster than before—is to push MTR(*y*) higher than before. Hence, the suggestion that we can increase progressivity while maintaining or reducing MTRs has to be mistaken. As subsection III.C just explained, a significant part of the problem may involve confusing statutory and effective MTRs.

Returning once again to our simple linear income tax is instructive. For that case (and ignoring any tax expenditures for even greater sharpness), $\text{ATR}(y) = t - g/y$. Therefore, $d\text{ATR}(y)/dy = g/y^2$. Consistent with the earlier explanation, it is apparent that raising PROG(*y*) requires raising *g*. And in our linear income tax with only two parameters, this means raising *t*, which is both the statutory and effective MTR in a world with no tax expenditures. If we brought tax expenditures and the possibility of tax expenditure limitation proposals back in, we would have essentially the same result: raising progressivity requires a higher effective MTR (except that *t* would no longer be that effective MTR, as previously discussed).

Where, then, is the free lunch from base broadening via tax expenditure limitations? As explained from the outset, reducing the amount of junk tax expenditures reduces expenditure distortions. This is precisely the gain from eliminating differentiation in commodity taxation. In

[14] Many refer instead to rising MTRs and hence a graduated rate system. I find this approach confusing if the concern is not with curvature but the degree of redistribution. For example, a very generous grant for the poor with a high phase-out rate would be deemed regressive, by comparison to providing nothing. And the most redistributive tax system possible—in a world with no incentive effects—is a flat tax of 100%, with all the proceeds rebated pro rata. But that is not progressive at all under the marginal rate interpretation.

the distribution-neutral implementation, we absorbed individuals' utility gains from this distortion reduction in the second component of our offsetting income tax schedule adjustment, which was calibrated to hold individuals to their pre-reform utility levels. The dollar value of this efficiency gain constitutes the revenue gain to the treasury. In the foregoing exposition, it was imagined that this gain was redistributed pro rata.

In this setting, the *effective* MTR does *not* change, a point that should now be quite clear. And this conclusion is consistent with the conclusion that, in baseline settings, distribution-neutral implementation has no effect on labor supply.

The only remaining wrinkle is how the efficiency gain might be distributed to the population—which is taken to be a choice that lies outside the distribution-neutral experiment. Note that if it was rebated pro rata, effective MTRs are unchanged but, actually, PROG rises because, like the lump-sum component of any tax schedule, an additional dollar is a greater percentage of income the lower is one's income. Hence, the core efficiency gain from tax expenditure reform does enable a free lunch. But that, indeed, is the entire point of basic efficiency analysis. When there are avoidable inefficiencies, we are not on the Pareto frontier. Correspondingly, if there exist policies that remedy the inefficiencies (without causing collateral damage), we then generate a surplus that can, in principle, be used to make everyone better off. Or, instead, one could rebate the proceeds in a more or less redistributive fashion than pro rata. Or one could use the funds to provide more public goods or reduce public debt. Free lunches do exist, and the hidden benefactor is whoever found and rectified the inefficiencies, in this instance, those resulting from junk tax expenditures.[15]

E. Raising Revenue

Raising revenue is another often-advanced goal of tax expenditure limitation proposals. This too is best understood by applying the distribution-neutral framework. With distribution-neutral implementation, as we were just reminded, revenue effects arise entirely on account of correcting the distortion caused by junk tax expenditures. And that revenue might be rebated in any pattern that policy-makers desire or retained to fund programs or deficit reduction.

Those who advance tax expenditure limitations on revenue-raising grounds, however, are not generally referring to this feature. Instead, they have in mind retaining some or all of the revenue mechanically raised by the tax expenditure limitations in order to fund programs or reduce the deficit. Regarding this motivation, the distribution-neutral framework is also illuminating.

In particular, to analyze a tax expenditure limitation proposal wherein some of the revenue is to be retained rather than rebated, consider the following variant of the two-step decomposition from subsection III.B:

[15] Or, as explained in subsection III.A, corrective tax expenditures that are adjusted in a manner that improves the precision of externality correction.

1. Distribution-neutral implementation: Combine the tax expenditure limitation component with a distribution-neutral income tax schedule adjustment of the sort examined throughout.

Then, an instant after this is to be enacted, and with the same effective date, do the following:

2. Pure revenue-raising: Implement an adjustment to the income tax schedule that moves from the distribution-neutral schedule to the actual schedule in the overall proposal under consideration.

If one compares this with the description of the original two-step decomposition, one will find that the above is identical except that the label "pure redistribution" is changed here to "pure revenue-raising." And there are similar benefits from clarity and specialization resulting from this decomposition. As always, the first step is just our pure distribution-neutral experiment, analyzed as such.

Here, the second step—a pure increase in (effective) tax rates to fund whatever—can be analyzed generically. That is, the analysis would be essentially the same if policy-makers implemented step two without regard to whether it had anything to do with a tax expenditure limitation proposal. Higher taxes may be a good thing. Or they may not. But the answer does not depend on whether taxes are raised in isolation, as part of a tax expenditure limitation, as part of the use of proceeds from a carbon tax, or in some other manner.

It might be thought that raising revenue is less distortionary, all else equal, after a tax expenditure limitation is implemented because one starts with lower MTRs. Because distortion rises nonlinearly with the MTR, it now appears to be less costly to raise revenue. The foregoing analysis indicates that this view is also mistaken because it confuses statutory and effective MTRs. Tax expenditure limitations, as elaborated in subsection III.C, reduce statutory MTRs but not effective MTRs—those are held constant in a distribution-neutral implementation (and, for present purposes, a revenue-neutral implementation as well). If one enacted the tax expenditure limitation and did not use the proceeds to reduce tax rates, as in the prior illustration, effective MTRs would rise rather than be constant. The only way to keep effective MTRs the same is to rebate the proceeds in a distribution-neutral fashion, leaving no revenue. (The key qualification, as already noted, is that the efficiency gains from the reduction in consumption distortion may be retained as added revenue without raising effective MTRs, but this important feature is distinct from what is ordinarily contemplated.)

There is, however, an important respect in which revenue-raising (and redistribution, if one so chooses) may become more economically efficient as a consequence of tax expenditure limitations. Even though the benchmark effective MTR on labor income is unchanged—no free lunch there—it is the case that when a tax system has a broader base, it may well be less distortionary to raise MTRs. In a pure income tax regime—one with no junk tax expenditures—raising the MTR distorts labor supply and nothing more.[16] In an income tax littered with junk tax expenditures—specifically ones that are in the form of exclusions and deductions and hence

[16] As mentioned previously (in note 7), this essay abstracts entirely from the savings margin and capital taxation. One could extend the framework accordingly, and similar conclusions would follow, although this and other statements in the text would need to be modified accordingly.

are a function of statutory MTRs—raising statutory MTRs causes additional consumption distortions as well as additional labor supply distortion. Although it is incorrect to simply count the number of distortions when performing second best analysis, when the additional consumption distortions are orthogonal to labor supply distortions (such as when there is weak separability of labor in individuals' utility functions, as assumed here), then this is indeed an added efficiency cost. Work by Kopczuk (2005) and Kopczuk and Slemrod (2002) elaborates this important point (which is more subtle than the foregoing suggests). Note that, once again, the source of potential gains from tax expenditure limitations resides, in the first instance, in the direct efficiency benefits from reducing consumption distortion, not in anything magic about enabling a lower statutory MTR.[17]

F. Distribution Neutrality as a Descriptive Benchmark

It has already been argued that a distribution-neutral benchmark is clarifying in a number of ways. This subsection suggests that distribution-neutral implementation helps in the presentation of descriptive findings as well. This subject is best illuminated by taking a concrete example. For this purpose, consider the recent paper by Burman, Toder, Berger, and Rohaly (BTBR, forthcoming). BTBR do an impressive job not only in modeling the effects of tax expenditures on revenue and tax burdens at various levels of income but also in displaying the results of their analysis, of which there are a huge number that depend on the particular permutation considered and which income group is examined.

Indeed, this multiplicity of findings presents a daunting challenge. Different formulations of tax expenditure limitations and different ways of rebating the revenue raised from such limitations have important effects on the resulting outcomes in multiple dimensions (distribution, incentives) for every point in the distribution of income. Moreover, the possibilities are multiplicative because we must intersect each limitation proposal with each method of using the revenue to cut tax rates. Even worse, there is an infinity of ways to do the latter for any given limitation proposal even if one imposes revenue neutrality, so it is necessary to choose somewhat arbitrarily a handful of possibilities for purposes of illustration. The resulting presentation, despite BTBR's helpful choices of cases to be considered and methods of displaying their findings, is quite challenging for a reader to absorb. How is one to make sense of the mix of revenue, distributive, and incentive effects, all of which change in interactive ways, at different points in the income distribution, as one varies each key component?

A distribution-neutral benchmark can be tremendously helpful in this regard. First, consider a particular tax expenditure limitation proposal, say, any of the three that BTBR analyze in detail. One simple way to display its consequences is to compare statutory MTRs under it to those under distribution-neutral implementation. The pattern of differences would show the distributive effect of the limitation proposal, setting aside its method of finance. Where MTRs

[17] Throughout, the analysis ignores how various forms of evasion and avoidance may depend on statutory MTRs. This point is analytically close to those just mentioned about how raising the statutory MTR may be less distortionary when the base is broader, even when starting from the same effective MTR.

fall more (less) under distribution-neutral implementation than under the limitation proposal, those income groups would be those that are hit harder (less) by the direct effect of the limitation, by comparison to the group whose income is somewhat lower.[18] Instead, one might graph total taxes paid as a function of income for each tax expenditure limitation proposal and also for distribution-neutral implementation (which is equivalent in this respect to the status quo).[19] This single graph would clearly depict the differing distributive effects. A picture is worth (at least) a thousand words, and the thousand words (numbers) can be absorbed more readily than when they appear in one or more dense tables.

Second, to compare the effect of various ways of reducing tax rates in order to rebate the revenues raised by a tax expenditure limitation proposal, one could proceed similarly. That is, one can present taxes paid as a function of income under distribution-neutral implementation and compare it to the schedule under some particular alternative. Where an alternative's schedule lies above (below) the schedule for distribution-neutral implementation, individuals at that income level pay more (less) tax to that extent. Likewise, one could present the distribution-neutral schedule and the schedules for each of the posited alternative means of returning the revenue on a single graph, making clear all the differences.

BTBR also consider how various packages might affect incentives, and here I will focus on labor effort. The aforementioned graphs provide this information as well. We know that, in the benchmark case, the distribution-neutral version leaves labor effort unchanged. Hence, wherever the slope of the tax schedule under an alternative scheme is steeper (flatter) than that under the distribution-neutral version, work incentives are reduced (increased).[20] Or, more directly, by graphing the effective MTRs under the distribution-neutral version and any other, one can immediately see how labor incentives change.

Note that each of these comparisons—between tax schedules under various combinations of expenditure limitation and tax rate reduction and tax schedules under distribution-neutral implementation of the corresponding tax expenditure limitation—are simply a depiction of the two-step decomposition introduced previously. Step one generates the distribution-neutral curve. Each of the other curves combines steps one and two. Hence, the difference between the distribution-neutral curve and another curve will depict step two—the purely redistributive component—in isolation.

Reflecting on all of these comparisons, we can see the link between distribution and labor supply distortion that has been emphasized throughout this essay. As just explained, the same graph that shows higher (lower) effective MTRs is showing greater (lesser) income redistribution. That is, these graphs—and specifically, comparisons of various reform curves

[18] The text refers to comparisons with the income group just below the one under consideration because the overall effect at a given income level is given by the sum (integral, if modeled continuously) of the effects of differing MTRs, starting at an income of zero. This motivates the next suggestion in the text: graphing the total taxes paid as a function of income.

[19] Note 3 sketches how construction of the distribution-neutral tax schedule might be accomplished.

[20] The text refers to the substitution effect because it is MTRs that are being compared. To capture the uncompensated change, one would also have to integrate the effects, or examine the schedules for total taxes paid, to extract the income change and then determine the income effect.

with their corresponding distribution-neutral-implementation curve—show exactly how distribution and distortion go hand in hand. Readers examining results displayed in this fashion would be unlikely to mistakenly conclude that some reform package both raises redistribution and reduces labor supply distortion simultaneously. In sum, there is likely to be a tight connection between the way one displays the results of reform packages and how well one understands their consequences. And displays are particularly informative when they make distribution-neutral implementation the benchmark for comparison. This point reinforces the utility of a distribution-neutral perspective even when none of the reforms under examination are in fact distribution neutral.

IV. Conclusion

The distribution-neutral framework for policy analysis that is developed in a body of work over the last two decades is an extremely powerful tool for the analysis of tax expenditure limitations. This conclusion should not be surprising because that methodology is quite general in embracing a range of fiscal tools, from taxes and transfers to regulation to expenditures on public goods. Moreover, the most basic version of the approach involves the assessment of commodity tax reform in the presence of an income tax. As explained, the methodology does not require that the initial (or final) income tax be optimal or that the commodity tax reform be a move all the way to the optimum (or that analysis be confined to a neighborhood of the optimum). Because tax expenditures are not merely analogous to but an instance of differential commodity taxation, application of the framework to tax expenditure limitations is direct.

The distribution-neutral framework proves to be highly illuminating with regard to tax expenditure limitation proposals and various ways of using the revenue derived therefrom. The analysis clarifies thinking. And the two-step decomposition allows one to isolate the distinctive effects of tax expenditure reform—the reduction of distortions in expenditure choices—from effects on distribution, labor supply distortion, and revenue. The analysis shows how a number of commonly advanced beliefs about the benefits of tax expenditure limitation proposals—including the view that there exists a free lunch, wherein one can reduce MTRs and simultaneously enhance revenue or redistribution—are largely illusory.

Finally, although outside the scope of this essay, a distribution-neutral approach may also have some bearing on the construction of politically feasible reform packages. The Tax Reform Act of 1986 ostensibly broadened the tax base via the reduction of tax expenditures in a manner that was not only revenue neutral but also distribution neutral. As explained, distribution-neutral packages result in Pareto improvements when the underlying reforms are efficient. Although Pareto improvements are not practically achievable in a world with substantial heterogeneity (largely set to the side here), it remains the case that a distribution-neutral reform that is efficient makes it possible to make those at every slice of the income distribution better off, on average. This possibility suggests that there may exist ways to improve the tax system that are politically viable.

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