

A RECONSIDERATION OF TAX EXPENDITURE ANALYSIS
(excerpts)

Edward D. Kleinbard
The Staff of the Joint Committee on Taxation

I. OVERVIEW OF JCT STAFF TAX EXPENDITURE PROJECT

A. Original Goals of Tax Expenditure Analysis

In 1967, Assistant Secretary of the Treasury for Tax Policy Stanley Surrey introduced to U.S. tax policy discussions the phrase “tax expenditures.” Surrey used the term to refer to provisions of the Internal Revenue Code that are deliberate departures from generally accepted concepts of net income (usually by way of special exemptions, deductions, credits or exclusions) and that affect the private economy in ways that usually are accomplished by direct government spending.² In Surrey’s view:

The federal income tax system consists really of two parts: one part comprises the structural provisions necessary to implement the income tax on individual and corporate net income; the second part comprises a system of tax expenditures under which Governmental financial assistance programs are carried out through special tax provisions rather than through direct Government expenditures. This second system is grafted on to the structure of the income tax proper; it has no basic relation to that structure and is not necessary to its operation. Instead, the system of tax expenditures provides a vast subsidy apparatus that uses the mechanics of the income tax as the method of paying the subsidies.³

Surrey believed that a close analysis of tax expenditures could lead to better “expenditure control” by the Congress, through a more complete accounting for government expenditures regardless of their form. Surrey further anticipated that tax expenditure analysis would be helpful in fashioning “tax reform” policies.⁴

Surrey’s “expenditure control” theory rested on his belief that tax expenditures escaped the scrutiny applied to actual appropriations programs. Surrey hoped that the regular publication of a “tax expenditure budget” would induce Congress to abandon narrowly-constructed tax incentives and subsidies.⁵ He anticipated that, once tax expenditures were identified and clearly displayed as government spending substitutes, subsequent dissection would reveal them to be poorly targeted or inefficient, when compared either to an actual government spending program,

² Stanley S. Surrey, Excerpts from remarks before The Money Marketeers on *The U.S. Income Tax System -- the Need for a Full Accounting*, November 15, 1967, in United States Department of the Treasury, *Annual Report of the Secretary of the Treasury on the State of the Finances for the Fiscal Year Ended June 30, 1968* (Washington, D.C., Government Printing Office, 1969) at 322.

³ Stanley S. Surrey, *Pathways to Tax Reform* 6 (Cambridge, Mass., Harvard University Press, 1973).

⁴ Excerpts from remarks before the Money Marketeers, *supra*; see also *Pathways to Tax Reform*, *supra*, at 30-49 (describing uses of a tax expenditure budget).

⁵ See Stanley S. Surrey, *The Federal Tax System--Current Activities and Future Possibilities*, (speech before Boston Economic Club, May 15, 1968), in *Annual Report of the Secretary of the Treasury on the State of the Finances for the fiscal year ended June 30, 1968*, *supra* at 313.

or (in most cases) when compared to not expending government resources at all. In this way, the “expenditure control” agenda would be advanced.⁶

Surrey also saw tax expenditure analysis as playing a vital role in tax policy debates. In particular, Surrey believed that many tax expenditures violated consensus principles of tax equity, economic efficiency or ease of administration. Surrey hoped that, by rephrasing “tax incentive” proposals as “tax expenditures,” and then by analyzing the equity, efficiency and administrative consequences of those proposals as if they were spending requests, policymakers would recognize that many such proposals were inconsistent with the goal of a fair, efficient and simple income tax system.⁷

In the forty years since Surrey introduced the term to U.S. tax policy discourse, policymakers have relied on tax expenditure analysis to judge the policy implications of individual tax proposals, to gauge the overall health of the Federal income tax system, and to measure the aggregate governmental resources devoted to particular policies. Since 1974, Federal law has required the Congressional Budget Office (“CBO”) and the Treasury Department annually to publish detailed lists of tax expenditures. (In light of the traditional expertise of the JCT Staff in respect of revenue matters, and a separate statutory requirement that Congress rely on JCT Staff estimates when considering the revenue effects of proposed legislation,⁸ the CBO has always relied on the JCT Staff for the production of this annual tax expenditure publication.) Other Federal organizations (e.g., the Congressional Research Service) also employ the principles of tax expenditure analysis when analyzing Federal income tax policies.

⁶ Stanley S. Surrey and Paul R. McDaniel, *Tax Expenditures* 32-37 (Cambridge, Mass., Harvard University Press, 1985).

⁷ *Id.* at 25-27, 69-98.

⁸ P.L. 93-344 §201(g), codified at 2 USC 601(f).

B. Has the Enterprise Succeeded?

Surrey's original hope that tax expenditure analysis would have a salutary effect on budget transparency (and through that, on actual budget outlays) has not been realized, for several reasons. First, tax laws and appropriations follow completely different paths through Congress, and in particular are developed by different substantive committees. As a result, in practice one type of legislation does not substitute for the other.⁹ Second, many tax expenditures have vaguely similar distributional effects to those achieved through spending programs, but the two delivery systems are so different that in many cases each is a highly imperfect economic substitute for the other. Third, as a result of contemporary "pay-as-you-go," or "PAYGO" requirements, policymakers today typically pair tax expenditures against tax revenue-raising measures, rather than proposing them as a direct substitute for spending programs. Finally, many commentators believe that, as budget and other pressures have made it more difficult to advance policies through the appropriations process, policymakers have wholeheartedly embraced tax expenditures as a second best means of implementing their policy agendas.

In fact, Congress's use of tax expenditures has accelerated over the years. In 1972, for example, the JCT Staff's first description of tax expenditures totaled some 60 items.¹⁰ Our 2007 pamphlet, by contrast, while employing essentially the same methodology as that of our first description 35 years earlier, listed 170 tax expenditures.¹¹

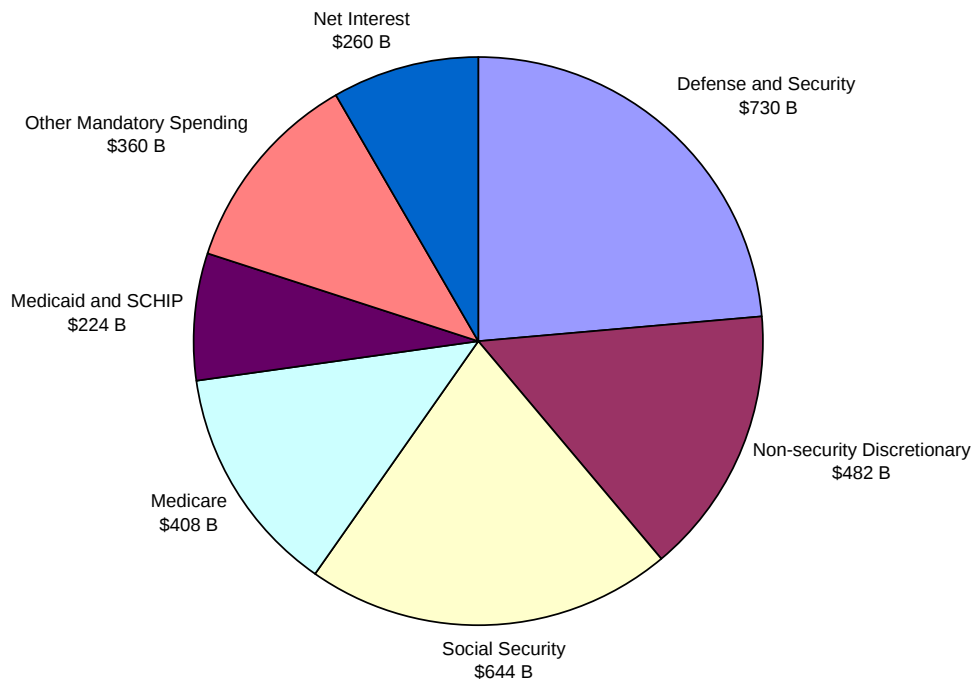
The importance of tax expenditures in dollar terms can be seen by comparing actual Federal discretionary outlays to the aggregate amount of tax expenditures. Figure 1, below, shows estimated budget outlays by spending category for fiscal year 2009. In fiscal year 2009, the Federal government projects annual total outlays of more than \$3.1 trillion. Of this amount, roughly \$1.6 trillion will go to mandatory spending programs including Social Security, Medicare and Medicaid; \$730 billion will go to defense and national security programs; and \$260 billion will go to service the national debt. This leaves a projected \$482 billion for non-defense discretionary spending of all types.

⁹ See Emil Sunley, *Tax Expenditures in the United States: Experience and Practice* 155, 166, in Hana Pulackova Brix, Christian M.A. Valenduc, and Zhicheng Li Swift, eds., *Tax Expenditures—Shedding Light on Government Spending Through the Tax System* (2004) ("I can recall only one time when Congress traded off a tax expenditure [tax deduction for adoption expenses] for a direct spending program, and that trade-off was possible only because the tax-writing committees also have jurisdiction over welfare and income support.").

¹⁰ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Calendar Years 1967 through 1971* (JCS-28-72), October 4, 1972.

¹¹ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2007-2011* (JCS-3-07), September 24, 2007.

**Figure 1.—FY2009 Estimated Budget Outlays by Category
Amounts in Billions of Dollars**



JCT Staff published tax expenditure calculations cannot be compared directly with these projected actual expenditures, because our tax expenditure figures calculate the nominal revenues forgone by the existence of the rule in question, not the revenues that would be raised by repealing the rule; the two are not the same because actual repeal would have behavioral consequences that would affect post-repeal revenue collections. Moreover, tax expenditures are not additive, due to behavioral and other issues. Nonetheless, an indication of the relative magnitude of tax expenditures can be ascertained from the JCT Staff estimates contained in the CBO publication *Budget Options*, which are the revenue estimates.¹²

For fiscal year 2009, implementation of ten of these options developed by CBO, chosen for both quantitative importance and the degree to which they match up with the JCT Staff's most recent tax expenditure list, would increase revenue by about \$250 billion (without taking into account potential interactions between the provisions).¹³ Some of these options do not

¹² Congressional Budget Office, *Budget Options* (February 2007), <http://www.cbo.gov/doc.cfm?index=7821>.

¹³ Revenue Options 7b, 8a, 10, 13, 15, 18, 23, 28, 35, and 43. These items are, respectively: repeal of the mortgage interest deduction and conversion of the mortgage interest deduction to a credit for primary residence mortgages under \$400,000; elimination of the deductions of state and local taxes; limitation on the deductions for charitable giving to amounts exceeding two percent of adjusted gross

represent full repeal of the underlying tax expenditure; for example, the CBO revenue options list includes converting the home mortgage interest deduction to a tax credit at an effective 15 percent rate for primary residence mortgages below \$400,000, but preserves the tax benefits of home mortgage interest payments to that extent. Moreover, while these ten options are among the larger revenue raisers on the CBO list, these options do not correspond strictly to the ten largest tax expenditures contained in our most recent tax expenditure pamphlet. Yet even so, they amount to more than half of all government non-defense discretionary spending. Their magnitude illustrates the enormous importance of tax expenditures today, relative to actual non-defense discretionary appropriations.¹⁴

In sum, there is scant evidence that tax expenditure analysis has succeeded in its first mission of “expenditure control.” That does not mean, however, that tax expenditure analysis has failed, but rather that its principal utility appears to have been as a tool of tax policy and tax distributional analysis. The rhetoric of tax expenditure analysis, and the economic reasoning that underlies that rhetoric, in fact can provide a successful framework by which to judge the fairness, efficiency and administrative consequences of many “incentive” proposals. Policymakers further can look to tax expenditure analysis to provide insight into “base broadening” and similar measures.

For these reasons, as well as the practical points made earlier, we believe it appropriate to proceed on the basis that tax expenditure analysis today is most usefully described as primarily a tool of tax policy. This pamphlet in turn attempts to reinvigorate the utility of tax expenditure analysis in making tax policy decisions, by responding to the criticisms that have been leveled against it, and by describing the analytical power of its underlying economic reasoning.

income; inclusion of employer-paid premiums for income-replacement insurance in employees’ taxable income; reduction in the tax exclusion for employer-paid health insurance; elimination of the child tax credit; repeal of the expensing of exploration and development costs for extractive industries; repeal of the deduction for domestic production activities; and elimination of the source rules exception for exports.

¹⁴ We emphasize that these ten CBO options are listed simply to demonstrate the magnitude of tax expenditures today, not to suggest in any way that these particular revenue options necessarily represent desirable tax policy or should be adopted into law.

C. Why Revisit Tax Expenditure Analysis Now?

As currently applied, tax expenditure analysis is less helpful to policymakers in fashioning tax policy than might otherwise be the case, because the proponents of tax expenditure analysis generally have failed to respond convincingly to the important criticisms leveled against it. Tax expenditure analysis has always been controversial, and there is today a voluminous literature criticizing its premises and implementation as a tool of tax policy.

Many tax academics and policy experts have criticized tax expenditure analysis as resting on insufficiently rigorous foundations. These critics argue that the ideal “normal” tax system from which tax expenditures are identified does not correspond to any generally accepted formal definition of net income. Some observers further view tax expenditure analysis, in the form currently implemented, as a thinly veiled agenda for a specific form of tax reform. Under this view, the normative tax system at the heart of tax expenditure analysis is not simply an analytical tool, but is also an aspirational goal of the process. Others have questioned whether tax expenditure analysis serves any purpose at all, because the doctrine appears to these critics to rest on the unexamined premise that the tax laws should be uniquely “privileged,” through not being burdened by the political compromises and policy agendas reflected in appropriations legislation. Finally, some critics question the narrow focus on subsidies that are favorable to taxpayers, noting that there also are narrowly punitive provisions in the Internal Revenue Code. All these criticisms have gone largely unanswered.

The most important of these criticisms is the objection to the “normal” tax system.¹⁵ In current tax expenditure analysis, the “normal” tax plays three roles. First, it serves as the benchmark against which present law tax provisions are measured to determine whether they constitute tax expenditures. Second, the “normal” tax operates, at least in the view of some, as an implicit reproach to the current tax system, through being held up as an aspirational but achievable superior tax system. Third, the “normal” tax serves as the baseline from which to calculate the dollar magnitude of a particular tax expenditure.

The first two of these roles elevate the importance of the “normal” tax to a level it cannot support, because the “normal” tax is largely a commonsense extension (and cleansing) of current tax policies, not a rigorous tax framework developed from first principles. As a result, the “normal” tax cannot be defended from criticism as a series of ultimately idiosyncratic or pragmatic choices. If tax expenditure analysis is to enjoy broad support, it must be seen as *neutral* and *principled*; unfortunately, the “normal” tax satisfies these requirements only in the eyes of those who already believe that the “normal” tax accurately captures their personal ideal of a tax system.

To summarize, tax expenditure analysis can and should serve as an effective and neutral analytical tool for policymakers in their consideration of individual tax proposals or larger tax reforms. Its efficacy has been undercut substantially, however, by the depth and breadth of the criticisms leveled against it. Tax expenditure analysis no longer provides policymakers with

¹⁵ See, e.g., Boris I. Bittker, *Accounting for Federal “Tax Subsidies” in the National Budget*, 22 National Tax Journal 244 (1969).

credible insights into the equity, efficiency, and ease of administration issues raised by a new proposal or by present law, because the premise of the analysis (the validity of the “normal” tax base) is not universally accepted. Driven off track by seemingly endless debates about what should and should not be included in the “normal” tax base, tax expenditure analysis today does not advance either of the two goals that inspired its original proponents: clarifying the aggregate size and application of government expenditures, and improving the Internal Revenue Code. The JCT Staff therefore has begun a project to rethink how best to articulate the principles of tax expenditure analysis, in order to improve the doctrine’s utility to policymakers, reemphasize its neutrality, and address the concerns raised by many commentators.

D. Proposed New Approach

This pamphlet introduces a new approach to classifying tax provisions as tax expenditures. Our revised paradigm attempts in particular to respond to what we believe to be the most important consensus objections to the current articulation of tax expenditure analysis. First, in many cases, it is not possible to identify in a neutral manner the terms of the “normal” tax to which present law should be compared. Second, many observers believe that the “normal” tax has been fashioned, not simply to serve as the baseline from which to identify tax expenditures, but also to advocate the adoption of that “normal” tax into law, by presenting it as an aspirational but achievable tax system that is superior to the current Internal Revenue Code.

To address these concerns, the revised classification of tax expenditures divides the universe of such provisions into two main categories: tax expenditures in a narrow sense (as explained below), which we label “Tax Subsidies,” and a new category that we have termed “Tax-Induced Structural Distortions.” The two categories together cover much the same ground as does the current definition of tax expenditures, and in some cases extends the application of the concept further. The revised approach does so, however, without relying on a hypothetical “normal” tax to determine what constitutes a tax expenditure, and without holding up that “normal” tax as an implicit criticism of present law. The result should be a more principled and neutral approach to the issues.

Our approach to “Tax Subsidies” (that is, tax expenditures in a narrow sense) builds loosely on the work of Seymour Fiekowsky and others, by defining a “Tax Subsidy” as a specific tax provision that is deliberately inconsistent with an identifiable general rule of the present tax law (not a hypothetical “normal” tax), and that collects less revenue than does the general rule. (We refer to the converse case, of an exception that deliberately overtaxes compared to the general rule, as a “Negative Tax Subsidy.”) In practice, our conception of the compilation of general rules that together comprise our baseline for identifying Tax Subsidies corresponds closely to the Treasury Department’s “reference tax” baseline in its tax expenditure analyses.

The Tax Subsidy tax base is constructed by asking what constitutes the general rule, and what the exception, under actual present law. Our determination of Tax Subsidies in most cases thus is made, not by reference to an alternative and hypothetical “normal” tax chosen by the JCT Staff, but rather by reference to the face of the Internal Revenue Code itself (along with its legislative history and similar straightforward tools for identifying legislative intent).

We anticipate that our category of Tax Subsidies will comprise the preponderance of items that today are classified as tax expenditures. Some important provisions currently identified as tax expenditures, however, cannot easily be described as exceptions to a general rule of present law, because the general rule is not clear from the face of the Internal Revenue Code. In light of this ambiguity, such a provision cannot properly be classified as a tax expenditure (more accurately, a Tax Subsidy) in the proposed narrower sense. If the JCT Staff were to attempt to expand the scope of Tax Subsidies to address these important policy questions by arbitrarily selecting one taxing pattern or another as the general rule, the result would be the

same sort of subjective determinations that undermine the utility of a “normal” tax base in the current implementation of tax expenditure analysis.¹⁶

As an example, consider the present law’s “deferral” treatment of the earnings of foreign corporations owned by U.S. persons. To date, annual JCT Staff tax expenditure pamphlets have treated this provision as a tax expenditure, because the “normal” tax originally was defined to treat subpart F as the rule, and the deferral of “active” foreign earnings as the exception. This provision would not, however, be classified as a Tax Subsidy under our proposed definition, because present law can fairly be said to be ambiguous as to what constitutes the general rule for taxing foreign earnings.¹⁷

While they may not constitute Tax Subsidies, items like the “deferral” treatment of foreign earnings raise important tax policy issues. Moreover, present law’s treatment of these provisions can be criticized on strict economic efficiency grounds.¹⁸ Tax expenditure analysis as currently implemented identifies some of these issues, but does so by reference to the “normal” tax baseline. The result is a sterile debate as to the appropriateness of the choice of that base, which in turn obscures rather than illuminates the important economic efficiency problems that current policies embody.

Our response to the insufficiencies of an inappropriately narrow definition of tax expenditures is to create a second major category of tax expenditures alongside Tax Subsidies, which we have labeled “Tax-Induced Structural Distortions.” These we define as structural elements of the Internal Revenue Code (not deviations from any clearly identifiable general tax rule and thus not Tax Subsidies) that materially affect economic decisions in a manner that imposes substantial economic efficiency costs.¹⁹

As one example, the “deferral” treatment of foreign earnings will be classified as a Tax-Induced Structural Distortion. Another example is the differential taxation of debt and equity. The distinction between debt and equity encourages business firms to leverage their capital structures in ways that have large economic efficiency consequences, but the distinction is not a tax expenditure (Tax Subsidy) in the narrow sense, because there is no clear consensus as to what general rule of tax law, if any, the debt-equity distinction might violate.

¹⁶ See Victor Thuronyi, *Tax Expenditures: A Reassessment*, 1988 Duke Law Journal 1155, 1182-1186 (1988).

¹⁷ See J. Clifton Fleming, Jr. and Robert J. Peroni, *Reinvigorating Tax Expenditure Analysis and its International Dimension*, 27 Virginia Tax Review 101, 196-197 (2008).

¹⁸ Section V.A of this pamphlet explains the concept of economic efficiency in the context of tax expenditure analysis.

¹⁹ While tax expenditure analysis can be helpful in identifying equity and ease of administration issues as well as efficiency concerns, for reasons developed in Section IV our definition of Tax-Induced Structural Distortions looks only to the last of these criteria.

We recognize that a few items that today are classified as tax expenditures may not fit neatly either as Tax Subsidies or as Tax-Induced Structural Distortions. We propose to continue to carry those items on our tax expenditure tables to preserve continuity with all of our prior work in this area. We will reevaluate this decision periodically, in light of the success (or failure) of the new approach proposed here.

Finally, the JCT Staff's revised approach to tax expenditure analysis further expands the traditional definition by identifying special provisions that increase the tax burden (above what the general rule would impose) as "negative" tax expenditures. (As previously noted, we label these provisions "Negative Tax Subsidies.") Limitations directly linked to various positive tax expenditures, the alternative minimum tax, and the limitation of itemized deductions are not classified as negative tax expenditures but instead are considered reductions in those positive expenditures.

E. Subcategories of Tax Subsidies

The JCT Staff believes that it would be helpful to policymakers to divide Tax Subsidies (i.e., tax expenditures in the narrow sense) into three subcategories. Section IV explains our thinking behind these divisions in more detail.

We propose these subdivisions with some reservations, because plausible arguments can be made to categorize many items in more than one subcategory, and we would not wish for classification arguments again to rob tax expenditure analysis of its productive power. We therefore emphasize that these subcategories are meant only to help policymakers to compare Tax Subsidies of like kind to one another. Regardless of the subcategories to which we have assigned them, all Tax Subsidies rely on the same fundamental definition.

The subcategories of Tax Subsidies are as follows:

1. Tax Transfers

Tax Transfers generally are payments to persons made without regard to their income tax liability, usually because there was no income tax liability to begin with, or because the person's income tax liability was eliminated by another tax subsidy.²⁰ In contrast, Tax Subsidies other than Tax Transfers only reduce (or increase, in the case of Negative Tax Subsidies) a taxpayer's income tax liability.

The subcategory of Tax Transfers today comprises the refundable portions of the earned income tax credit, child tax credit and the 2008 rebate. These provisions usually are based on perceived need as measured by income. The provisions authorizing these payments are the clearest examples of hybrid tax/spending programs, i.e., they are essentially direct government spending programs that use the tax system for distribution.²¹

2. Social Spending

This subcategory of Tax Subsidies includes Tax Subsidies that are unrelated to the production of business income and Tax Subsidies related to the supply of labor. These Tax Subsidies often are intended to subsidize or induce behavior (for example, charitable giving) that generally is considered to be unconnected to the production of business income. Examples include the itemized deduction for healthcare expenses, Individual Retirement Account ("IRA") deductions (or exclusions, in the case of Roth IRAs), and the nonrefundable portion of the child tax credit. This category also includes the portions of the earned income credit, child tax credit and 2008 rebate that are not refundable.

²⁰ For evaluation purposes, the refundable portion of a tax expenditure is considered separately from the nonrefundable portion.

²¹ Tax Transfers are also among the tax expenditures that are close substitutes for existing direct government spending programs. For example, the refundable portion of the earned income credit and child tax credit are similar to non-tax-related government programs (both Federal and State and local) that address financial need and encourage employment of low-income persons.

In cases where a provision has potentially both business and non-business statutory incidence, we classify the provision based on a judgment about the effect and/or the intent of the provision. Thus, for example, we treat working-condition fringe benefits, which are excludible from employee income (but deductible by businesses), as Tax Subsidies in the Social Spending category rather than in the Business Synthetic Spending category (described below) because this treatment of fringe benefits is generally viewed by analysts as affecting labor supply more than general business decisions.²² By the same token, IRAs, owing to their role in capital accumulation, are Tax Subsidies that have a link to Business Synthetic Spending. Nevertheless, we classify them as Social Spending, because so much of their design, including their mandatory distribution requirements, is geared toward income support for retirement.

When legislative intent is not readily discernible, the item generally will be classified according to whether or not it is linked directly to production of business income. Thus, we will classify most education subsidies as Social Spending, while various capital income subsidies will be classified as Business Synthetic Spending (or in some cases these items will show up in the other first-order category, as Tax-Induced Structural Distortions).

Owner-occupied housing preferences can rationally be categorized either as Social Spending or in the subcategory of Business Synthetic Spending, depending on whether one views home ownership as primarily a consumption activity or as a substitute for an income-producing investment. On balance, we believe that they are better described here. Doing so acknowledges that preferences for owner-occupied housing reflect a social policy agenda that transcends the tax law. Moreover, it is more straightforward for non-economists to understand the tax treatment of housing as an exception to the general rule for personal expenditures (no deduction of interest expense or other costs) than it is to see the homeowner as forgoing the rental income that could have been obtained were the housing made available for arm's-length rental.

3. Business Synthetic Spending

This category includes Tax Subsidies intended to subsidize or induce behavior directly related to the production of business or investment income but excludes any Tax Subsidies related to the supply of labor. Examples of Business Synthetic Spending include the section 199 deduction for income attributable to domestic production activities, the completed contract method of accounting rules, various energy subsidies, the last-in-first-out method of accounting and the expensing of soil and water conservation payments.

²² The legislative and executive branch histories of enactment and implementation of these provisions also support this incidence assumption, because this tax treatment of fringe benefits primarily was considered to affect decisions about labor supply and other laborer concerns such as health and retirement.

F. Estimating the Magnitude of Tax Expenditures

The JCT Staff's current quantification methodologies for tax expenditures are not tantamount to revenue estimates, for two critically important reasons. First, our annual tax expenditure tables do not take into account the many large interactive effects that would be observed if Congress were simultaneously to repeal all the many tax expenditures that appear on our tables. Second, by tradition, tax expenditures are calculated on a static basis: that is, the behavioral consequences that would follow from repeal are ignored. By contrast, the JCT Staff's actual revenue estimates fully reflect anticipated behavioral effects of the proposal under consideration, subject only to the constraint that in the usual case we do not model any macroeconomic growth effects from the proposal.²³

While the principal thrust of the JCT Staff's revised approach to tax expenditure analysis is to deemphasize the relevance of the "normal" tax as much as possible, the new approach must still define a baseline from which to measure the magnitude of tax expenditures. As previously described, current tax expenditure analysis employs the "normal" tax as the baseline from which the JCT Staff can calculate the dollar magnitude of a particular tax expenditure.

By contrast, there is no single objective unit of measurement for determining the magnitude of all the provisions that fall within the two-pronged definition of tax expenditures recommended here. The revenues forgone by Tax Subsidies can be calculated by reference to the general rules of the Internal Revenue Code, but by definition this strategy does not work for Tax-Induced Structural Distortions, which are so classified specifically because there is ambiguity as to what is the present law general rule and what is the exception.

On balance, we believe that the most feasible approach, and the one most consonant with the original legislative history of the Congressional Budget Act of 1974 is to follow general present-law tax rules (what the Treasury Department calls its reference tax base) for Tax Subsidies. We will further supplement that information with data for those Tax-Induced Structural Distortions that today are analyzed as tax expenditures by applying our current definition of the normal tax, as reflected in our recent annual tax expenditure pamphlets, *solely* for purposes of this quantification exercise.²⁴ The end result is a bit complex, but has several practical benefits.

First, we believe that the most important benefit of tax expenditure analysis is that it provides a useful framework from which to evaluate the equity, efficiency and administrative issues raised by a new proposal or present law. For this purpose, the *categorization* of the rule in question (as a Tax Subsidy, a Tax-Induced Structural Distortion, or not a tax expenditure at all) is more important than the *quantification* of the revenue forgone by the provision. Second, unless we are to quantify the forgone revenues only of Tax Subsidies, some baseline that is more

²³ *Inside the JCT Revenue Estimating Process*, A presentation by the Chief of Staff of the Joint Committee on Taxation to the New York State Bar Association, January 29, 2008. Revised January 30, 2008, <http://www.house.gov/jct/Inside_Revenue_Estimating.pdf>.

²⁴ Section VI of this pamphlet expands on these points.

inclusive than present law is needed, and this one has been developed (and modeled) for many years. Third, as described above, the quantification of tax expenditures is not, and has never been, intended to serve any purpose beyond providing rough rank ordering of the relative importance of different tax expenditures; because the quantification of a tax expenditure has never been presented as tantamount to a revenue estimate, the use of the “normal” tax as the baseline in a limited number of cases does little practical harm. Finally, this approach preserves continuity with our quantitative presentations of tax expenditures in prior years, which we believe to be helpful to policymakers and researchers alike.

G. Outline of Subsequent Work

We envision this pamphlet as the first of several on this topic that we intend to publish in the coming months. The next pamphlet will comprise our annual list of tax expenditures, reclassified along the lines described in this document, but limited to those items that we describe herein as Tax Subsidies. That pamphlet also will discuss some of the specific reasoning that led us to classify a particular Tax Subsidy in one subcategory or another.

The subsequent document will present a preliminary discussion of selected Tax-Induced Structural Distortions. That pamphlet will not recommend any particular solutions, but instead will attempt to identify critical economic inefficiencies embedded in the current tax system, and then to describe the range of possible solutions (as well as their attendant costs). Of necessity, both the list of Tax-Induced Structural Distortions that we set out, and our analyses of them, will be preliminary in nature, and we envision substantially revising this pamphlet in particular in years to come. Subsequent pamphlets will explore important ancillary themes, like the expansion of tax expenditure analysis to excise taxes.

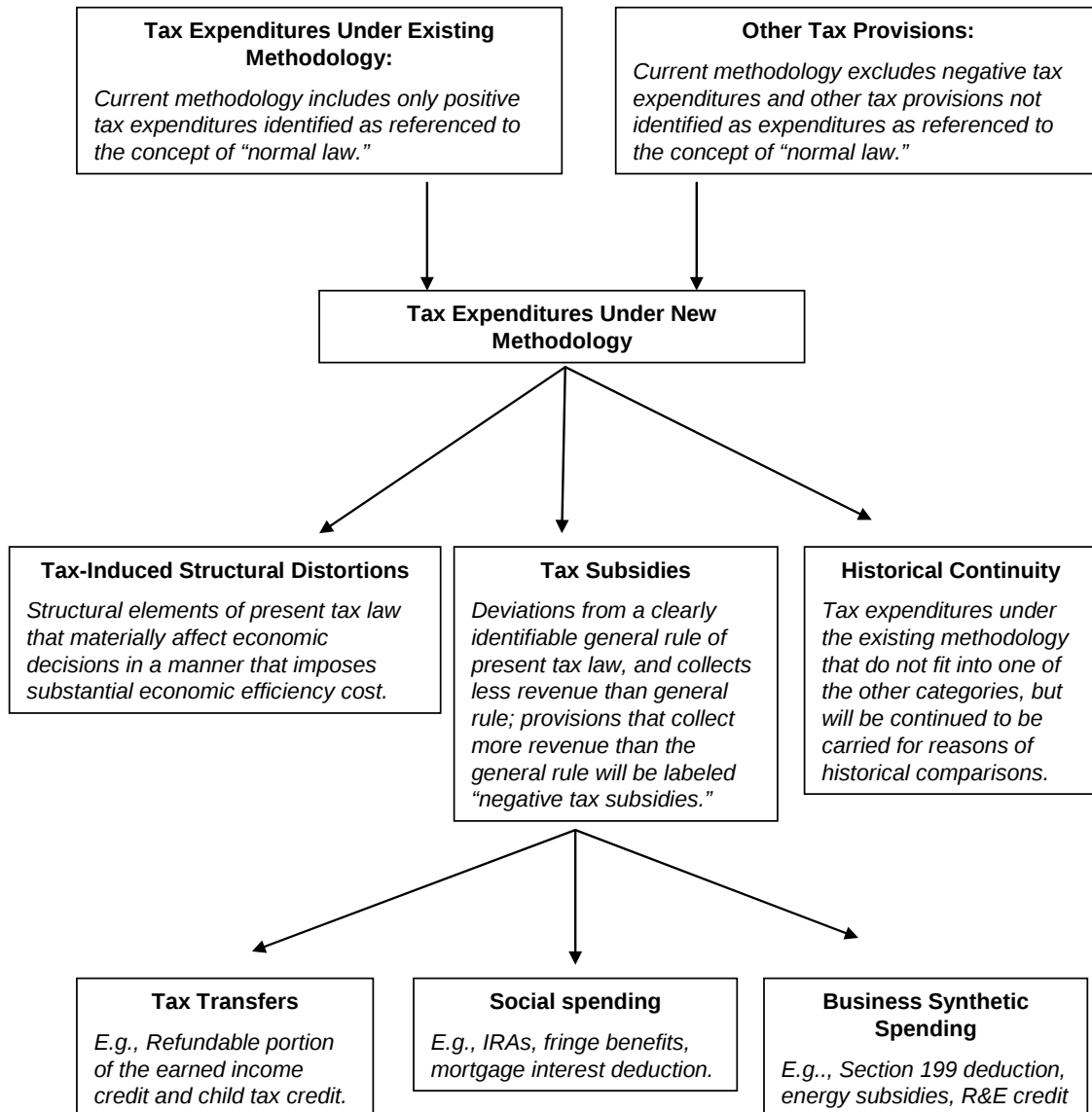
While we hope that our efforts to reduce the relevance of the idiosyncratic “normal” tax are viewed as responsive to the most serious criticisms of current tax expenditure practice, we acknowledge that no effort along the lines of a tax expenditure analysis can ever be entirely value-free. The unavoidable problem is that, by definition, tax expenditure analysis requires comparing actual rules to some hypothetical, whether that hypothetical is entirely exogenous to existing law, as in the case of the “normal” tax, or is inferred from circumstantial evidence and presented as a general rule in the law today, as advocated in our revised approach.

In this regard, we recognize that our specific implementation of tax expenditure analysis is firmly wedded to the view that the current Internal Revenue Code is at heart an income tax, because we employ that perspective when we attempt to identify what are the Code’s general rules, and what the exceptions thereto.²⁵ We believe that this approach is consistent with the language and history of the Code, as well as with the understanding of policymakers today. It of course is possible that subsequent policymakers may embrace a consumption tax as the fundamental starting point for a future Internal Revenue Code, at which point we would need to revisit many of the conclusions reached in the series of documents that we envision publishing over the next several months.

We welcome comments and suggestions on the contents of this pamphlet as well as the overall project.

²⁵ For an interesting examination of how tax expenditure analysis might change in a consumption tax environment, see Robert Carroll, David Joulfaian, and James Mackie, *Income versus Consumption Tax Baselines for Tax Expenditures*, Paper presented at NBER Conference on Tax Expenditures, March 2008.

Figure 2.—Comparison Chart of Tax Expenditure Methodologies



V. ECONOMIC CONSIDERATIONS IN TAX EXPENDITURE ANALYSIS

A. Introduction to the Economic Evaluation of Tax Expenditures

1. Overview

Analysts generally apply three principal economic criteria when judging the merits of any tax system: Does that tax system increase or decrease equity across taxpayers? Does it increase or decrease economic efficiency (that is, the extent to which market decisions are free of distortions introduced by the tax)? And can that tax system be easily administered? Tax expenditure analysis can apply these same criteria to evaluate the efficacy of any proposed tax expenditure, which reflects the status of a tax expenditure as both an exception to a general rule of tax law and as part of the fabric of the overall tax system.

The next several subsections therefore explain how economists use the terms “equity,” “efficiency” and “ease of administration,” and the application of these terms to tax expenditure analysis.¹⁰⁴ These concepts may sound subjective, but in fact economists have made a great deal of progress over the last several decades in expressing them in objective terms. By providing relatively robust answers to the questions suggested above, tax expenditure analysis can offer useful insights to policymakers called on to decide, for example, whether a proposed new tax expenditure is worth the revenue cost.¹⁰⁵

The ultimate goal of economic analysis is to provide guidance to policymakers in order to improve welfare – that is, the overall well-being of the members of a society. As a first-order approximation, economists often use wealth (or income, or sometimes consumption) as a proxy

¹⁰⁴ See *The Structure and Reform of Direct Taxation: Report of a Committee Chaired by Professor J. E. Meade* (George Allen and Unwin, London, 1978); James Banks and Peter A. Diamond, *The Base for Direct Taxation* (March 20, 2008), MIT Department of Economics Working Paper No. 08-11. These are not the only goals that might explain tax expenditures. The Meade Report and Banks and Diamond expand these categories by including international and transition goals, but the categories presented here are inclusive enough to cover a variety of aims. In addition, efficiency may also include concerns about competitiveness (a justification often offered for the foreign earned income exclusion under section 911) or national security (the income tax exclusion for certain military benefits), while equity concerns may include tax expenditures justified on the basis of common (or even international) law or treaties.

¹⁰⁵ The issues of equity, efficiency and ease of administration are equally relevant when applied to the non-tax mechanisms generally available to policymakers to intervene in the economy by subsidizing (or penalizing) one activity above others: direct spending and mandates (i.e., regulation). In many cases, there may be only minor differences in the equity or efficiency analysis of a proposed subsidy couched alternatively as direct spending or as a tax expenditure. (The relative ease of administration may, however, differ materially between the two.) Because the issues are the same, regardless of the type of intervention, policy analysts generally recommend that all three mechanisms (direct spending, tax expenditure and, where relevant, regulation) be considered before adopting one approach over the others. The nature of the legislative process, however, does not readily permit such comparisons always to be made.

for welfare, but they fully realize that this is an imperfect measure.¹⁰⁶ Given a fixed revenue constraint (i.e., a need for a fixed amount of tax revenues), analysts usually will conclude that a system that is more equitable in distributing the burden of taxation, more efficient (or less distorting) with respect to economic decision making, and easier to administer will result in increased welfare, including through increased productivity and increased wealth. Economists usually believe that the ordinary operations of the marketplace do a better job of allocating resources and opportunities than does a more regulated system. They accordingly believe that competitive markets are likely to improve welfare, by maximizing economic efficiency and productivity.

As a very general matter, therefore, economists ordinarily are skeptical about the value of tax expenditures and begin with the presumption that in most cases tax expenditures will diminish economic efficiency.¹⁰⁷ Economists recognize, however, that the welfare of society encompasses more than efficiency goals. As a result, if the tax expenditure has other redeeming attributes, then on balance it may enhance welfare. For example, a tax expenditure that diminishes economic efficiency may improve equity (or some other societal value) in ways such that the overall welfare of society is enhanced, notwithstanding the detriments to efficiency.¹⁰⁸ Ultimately, such decisions can only be resolved through the political process, because that is the vehicle that resolves competing and otherwise incomparable preferences of a society.

To take a well-known example, the Federal income tax today contains several large subsidies (incentives) for home ownership. Most economists would agree that these tax subsidies are welfare-diminishing. The tax expenditures can be described as introducing inequality of after-tax treatment between otherwise similarly-situated home owners and home renters. The incentives can also be seen as introducing inequities in another sense, by virtue of what Stanley Surrey called their “upside down” design – that is, the fact that these tax expenditures, by being structured as tax deductions, give proportionately greater government subsidies to taxpayers with higher incomes (because the value of a tax deduction is determined by the taxpayer’s marginal tax rate). Housing tax subsidies can also be viewed as inefficient, in at least three respects. First, they encourage private capital to be diverted into the housing sector from other investments that would have been made in a world without such incentives, thereby raising the cost of capital for the rest of the economy. Second, the revenues forgone by providing these tax subsidies must be made up by raising marginal tax rates, and those higher tax rates by themselves introduce

¹⁰⁶ Critics sometimes mistakenly argue that economists, by using wealth as a first-order proxy for welfare, ignore public goods like environmental protection. In fact, economists recognize that wealth should include measures of assets like the environment. Such assets will be inefficiently priced (undervalued) in market transactions and may justify government intervention to correct such mispricing. Economists have suggested ways to deal with these “externalities,” some of which are discussed in more detail below.

¹⁰⁷ Subsection V.A.3, below, briefly discusses the application of the theory of the second best in this context.

¹⁰⁸ Some tax expenditures, like savings incentives, may actually increase economic efficiency, by mitigating structural distortions inherent in an income tax, as described below.

distortions in behavior. Finally, current law's housing incentives certainly add significant complexity to our tax system.

Nonetheless, the political process has concluded that subsidizing home ownership is desirable. This conclusion can be explained as reflecting factors other than efficiency – for example, “externalities” such as the possible advantages to society of having its citizens feel more “invested” in their communities, and committed to the larger political system, that might stem from home ownership. Moreover, a simple application of tax expenditure analysis along the lines summarized above might be criticized in this context (when one is reviewing a longstanding tax expenditure) for assuming a world where decisions had not been distorted for many decades by these incentives; the technical analysis of what to do with those tax expenditures in light of that past history, or in light (in this case) of the market dislocations that this sector of the economy currently is suffering, might be completely different from the analysis that would be applied to a completely new proposed tax expenditure.

To conclude this example, tax expenditure analysis can shed helpful light on the costs (in the broad sense, including, as noted above, environmental costs and similar externalities) of tax subsidies associated with owner-occupied housing, or can propose ways of rethinking the subsidies that might reduce their costs (for example, the replacement of housing-related tax deductions with tax credits). The ultimate decision as to the net societal welfare to be gained by subsidizing home ownership, however, can only be resolved through the political process.

The remainder of this Subsection V.A. amplifies the above themes, by describing in more detail the principal economic criteria used to evaluate tax systems or tax expenditures: equity, efficiency and ease of administration. These are the criteria by which economists would argue that the desirability of most tax expenditures should be judged.

Subsection V.B. is a higher-level presentation that grounds the economic considerations of tax expenditure analysis in contemporary economic research literature. This subsection requires some background in academic economics.

Subsection V.C. then poses and answers a related but slightly different question: once a decision has been reached to implement a tax expenditure, how can that expenditure be designed so as to minimize its equity, efficiency, and administrative deficiencies? This subsection introduces three analytical criteria to help with that design question: transparency, targeting and certainty.

Finally, Subsection V.D. applies the principles developed in Subsections V.A. and V.B. to this pamphlet's new paradigm for categorizing tax expenditures.

2. Equity

Equity denotes a concept of fairness, particularly as relates to the distribution of wealth or the burden of taxation.¹⁰⁹ Equity includes the notions of horizontal and vertical equity.

¹⁰⁹ Another concept of equity relates to the choice of business organizational form. That is, tax provisions should treat businesses in different organizational forms the same. See Roger H. Gordon and

Horizontal equity is the idea that taxpayers who are similarly situated with respect to their ability to pay taxes should pay similar amounts of tax. That is, "taxes should bear similarly upon all people in similar circumstances."¹¹⁰ Vertical equity suggests that taxpayers with different abilities to pay should be treated differently, or those with a greater ability to pay should pay more.¹¹¹ Together, these two ways of looking at equity suggest that "the ideal tax base should be equivalent to whatever is determined to be the appropriate measure of ability to pay."¹¹² In practice, of course, difficulties arise in determining when taxpayers are similarly situated—that is, what constitutes the correct measure of ability to pay.

The concept of vertical equity by itself does not answer the question of whether the tax system should be used to reduce income inequality in society. A “proportional” income tax – a flat tax imposed at a single specified rate on taxable income – would, for example, collect five times as much revenue from a taxpayer with \$100,000 of taxable income as from one with \$20,000, and to that extent would honor the principle of vertical equity. That flat income tax would also leave intact the pre-tax inequality in income between the two taxpayers (because the after-tax incomes of each would still be in a ratio of 5:1).

In reality, the Federal income tax has always been used to address income inequality in society, through its “progressive” rate structure. Economists define a progressive tax as one in which the *average* tax rate rises with income.¹¹³ An average income tax rate is the taxpayer's total income tax liability divided by his total income. Mechanically, this is accomplished by applying higher *marginal* tax rates as incomes increase. A marginal income tax rate is the rate of tax imposed on an additional, or marginal, dollar of income earned by the taxpayer.¹¹⁴

Jeffrey K. MacKie-Mason, *Tax Distortions to the Choice of Organizational Form*, 55 *Journal of Public Economics* 279-306 (1994).

¹¹⁰ Henry Simons, *Federal Tax Reform* 8 (University of Chicago Press, 1950).

¹¹¹ Richard Musgrave, *The Theory of Public Finance* (McGraw Hill, 1959).

¹¹² Diane Lim Rogers, *Federal Income Tax Policy: Issues of Distribution and Equity* 579-607, in *Handbook on Taxation*, eds. W. Bartley Hildreth & James A. Richardson (Marcel Dekker, Inc., 1999).

An alternative view of equity suggests that taxes should be paid in proportion to the benefits received. See Adam Smith, *Wealth of Nations* (1776). The property tax may also embody this concept of equity in which the taxpayer gets what he pays for and pays for what he gets. There are efficiency advantages as well to this construction of equity. See James R. Hines, Jr. *What is Benefit Taxation?*, 75 *Journal of Public Economics* 483-492 (2000).

¹¹³ Louis Kaplow, *Taxation and Redistribution: Some Clarifications*, 60 *Tax Law Review* 58 (2007).

¹¹⁴ Statutory tax rates in the Code are marginal tax rates. While the current Federal tax system has both rising marginal and rising average tax rate rates, a tax may be progressive, even if marginal rates are declining at higher levels of income.

For example, if a hypothetical income tax imposed a tax rate of 20 percent on the first \$50,000 of taxable income, 30 percent on the next \$50,000 of income, and 40 percent on all income beyond that, then a taxpayer who had precisely \$50,000 of taxable income would have an *average* tax rate of 20 percent (because the taxpayer's tax bill would be \$10,000), but would face a *marginal* tax rate on his next dollar of income of 30 percent. Similarly, a taxpayer who earned \$100,000 in taxable income would pay tax at an *average* rate of 25 percent (not 30 percent, because the first \$50,000 of income was taxed at only 20 percent), and would face a *marginal* tax rate on her next dollar of income of 40 percent.

While any particular level of progressivity is a matter for society to judge, economic analysis can provide measures of progressivity to inform this political process. One way to measure progressivity is to measure the difference between pre-tax and after-tax income inequality. One common tool that public policy economists have employed to measure income inequality (whether pre-tax or after-tax) is the "Gini coefficient." The Gini coefficient summarizes the characteristics of how society's aggregate income is distributed among its members in a single number. This measure equals 1.0 when all income in an economy is attributable to one taxpayer (that is, the system is as unequal as possible), and 0.0 when all income is equally distributed among the members of the society. The Gini coefficient by itself, however, does not provide information about the equity of the tax system.¹¹⁵

Tax expenditures interact with the notion of equity in various ways. Some tax expenditures may be designed to provide a better measure of what Congress deems to be the correct measure of "ability to pay," and thereby improve horizontal equity. For example, the deduction for medical expenses in excess of 7.5 percent of adjusted gross income may reflect a determination that two taxpayers with the same gross income are not similarly situated if one has high medical expenses and the other does not.

Tax expenditure design also can have a significant effect on vertical equity. For example, tax expenditures formulated as deductions will generally reduce the progressivity of the tax system, by reducing average tax rates more for higher marginal rate taxpayers than for lower marginal rate taxpayers. (This is what Stanley Surrey termed the "upside down" subsidy effect of tax expenditures structured as deductions.) In contrast, tax expenditures structured as credits would generally increase the progressivity of the tax system. A credit will create uniform incentives and provide uniform benefits to all individuals if it is structured as a refundable credit.¹¹⁶ Gini coefficients and similar tools can be used to compare the after-tax income inequality (i.e. tax progressivity) consequences of complex trade-offs among different packages of tax expenditures and/or tax revenue raising provisions.

¹¹⁵ See Michael J. Graetz, *Paint-by-Numbers Tax Lawmaking*, 95 Columbia Law Review 609, 620-624 (1995), for a more detailed discussion of uses of the Gini coefficient to evaluate tax laws. For example, a tax system may be judged by comparing pre-tax and post-tax Ginis. Changes in tax laws may be assessed by comparing post-tax Ginis before and after a tax change.

¹¹⁶ Lily L. Batchelder, Fred T. Goldberg, Jr., Peter R. Orszag, *Efficiency and Tax Incentives: The Case for Refundable Tax Credits*, 59 Stanford Law Review 52-57 (2006).

3. Efficiency

To an economist, the “efficiency” of a tax does not relate to the ease with which it is collected. Instead, a tax system is more “efficient” if it does not distort, or if it actually improves, the economic decisions that individuals and businesses make. A tax system is perfectly efficient if individuals and firms make the same decisions in the presence of the tax as they would if the tax did not exist, subject only to the fact that they are less wealthy by virtue of paying the tax. (That is, even an efficient tax that is not immediately returned to the taxpayer in the form of government services reduces a taxpayer’s wealth – otherwise it would not be a tax.)

No practical tax system can be wholly efficient, because distortions in behavior will follow whenever the taxpayer’s actions can determine the base on which he is taxed.¹¹⁷ For example, confronted with an income tax cost to working more and earning more money, some taxpayers will choose (untaxed) leisure instead. The result, to an economist, is a distortion, because the taxpayer has chosen, in light of the imposition of taxes on his wages, to work less than he would in a world without such taxes.¹¹⁸ These non-neutralities can cause taxpayers to

¹¹⁷ Joel Slemrod, *Which is the Simplest Tax System of Them All?* 355, in Henry J. Aaron and William G. Gale, eds., *Economic Effects of Fundamental Tax Reform* (Brookings Institution 1996). Thus, the usual example of a perfectly efficient tax is a “poll” tax, i.e., one imposed at the same rate on every individual, regardless of wealth or other distinguishing feature. Such a tax cannot be avoided, and therefore does not change behavior. It is also plainly inequitable, and in the United States at least suffers from Constitutional infirmities.

¹¹⁸ As described in the text below, it is well known among economists that any income tax—even an “ideal” income tax — introduces two important economic inefficiencies. First, an income tax, like any tax measured by effort or output (including a consumption tax), distorts an individual’s decisions with respect to how to divide his time between labor and leisure. Second, an income tax distorts an individual’s choice as to whether to consume his after-tax earnings currently, or to postpone that consumption for the future. (This second distortion follows from the fact that an income tax generally taxes the returns earned by the individual from investing his after-tax earnings pending his future consumption of them.)

Economists also have developed what is referred to as the “theory of the second best.” As applied to taxation, this important theory argues that, where a tax (like an income tax) itself creates economic inefficiencies, actions to *partially* correct those inefficiencies (in some cases, but not others, for example) may actually compound the problem, not mitigate it. Instead, the theory argues, the total economic effects of the tax system before the proposed correction must be compared to the total effects afterwards.

The theory of the second best has direct relevance to the examination of tax expenditures, because it implies that a particular tax expenditure might not be as detrimental from an economic efficiency perspective as might at first appear to be the case (or, theoretically, might actually improve matters). For example, when Congress provides investment incentives for some types of capital investment but not others, that legislation will distort the allocation of capital, when compared to an income tax that treated all capital investment identically, but might possibly reduce the income tax’s aggregate distorting effects on savings. Such legislation thus might (or might not) lead to a net welfare gain.

In the practical context of considering pending legislation, however, analysts (including the JCT Staff) tend not to emphasize the relevance of the theory of the second best, for several reasons. First, most tax expenditures on their face introduce new and very narrow incremental inefficiencies on top of the

make decisions that result in an inefficient use of their own and the economy's resources. By reducing taxpayer welfare, these distortions diminish the performance of the economy, and the welfare of society as a whole.¹¹⁹

Economists use the term “deadweight loss” as a synonym for the distortions in economic decision-making caused by taxes. Thus, the “deadweight loss” of a tax is the welfare cost to society of the tax, beyond the actual cash payments made to the government, that are attributable to hours not worked, investments not made, or the like, because of the tax burden that would be imposed on those affirmative acts.

No practical tax, whether a consumption tax or an income tax, can avoid the deadweight loss associated with distorting taxpayers’ preferences for how they would divide their time between work and leisure in the absence of taxes. In addition, an income tax, by taxing both wage income and any return on the wage-earner’s after-tax savings, decreases the present value of future consumption compared to present consumption. This in turn creates a bias against saving. (On the other hand, by taxing investment returns from savings, income taxes can have lower marginal and average tax rates than an otherwise comparable consumption tax, which may have compliance or other economic advantages.)

Distortions to the decision to save rather than to spend thus are an inevitable consequence of choosing an income tax. It follows that many savings incentives should be classified as tax expenditures, in the sense that they are exceptions to the general income tax rule, but at the same time these tax expenditures may actually increase economic efficiency.

Importantly for tax expenditure analysis, the concept of deadweight loss also includes the welfare costs to society of affirmative decisions to change behavior (whether of consumption, or investment, or other acts), to avoid or reduce tax burdens. That is, tax expenditures may create distortions (deadweight loss) by influencing the allocation of resources.

systemic inefficiencies of an income tax, and it is highly likely that a more sophisticated analysis would lead to the conclusion that these highly targeted provisions in fact lead to an increase, rather than a mitigation, of existing systemic inefficiencies. Second, it can be argued that the practical goal in general of economic analysis of income tax proposals, in the absence of some conscious decision to the contrary, should be to preserve the known systemic inefficiencies of the income tax, and measured from this baseline (as opposed to the ideal of a perfectly efficient world), the theory of the second best has less relevance. Finally, it is much easier to determine the direct distortion of a new provision than its indirect effects on pre-existing distortions. As a consequence, most policy analysts addressing practical legislative proposals invoke second-best considerations only when the effects are clear.

¹¹⁹ An additional consideration for efficiency is the extent to which a tax system promotes overall economic growth. See Richard Abel Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice* (Fifth ed., McGraw Hill, February 1989). Designing a tax system that encouraged economic growth was one of the primary objectives of the Treasury Department’s study of fundamental tax reform in 1984. See Treasury Department, Office of the Secretary, *Tax Reform for Fairness, Simplicity, and Economic Growth: The Treasury Department Report to the President, Vol 1: Overview* (1984). If capital is allocated more efficiently across sectors of the economy, the result will be more productive investment and growth will accelerate.

Thus, imagine that a taxpayer on a limited budget today prefers peanut butter to cream cheese, and a subsidy then is created for production of the latter through the adoption of tax expenditures aimed at cheese makers. In light of the now-lower subsidized price of cream cheese, the taxpayer (and others like her) may choose to switch some of her peanut butter consumption to cream cheese. Proponents of the cheese tax expenditure would point to the surge in cream cheese production and consumption as demonstrating that an untapped need had been filled, but economists apprised of the facts would conclude that the concomitant decline in peanut butter consumption told a sadder story of deadweight loss, in which peanut butter fanciers distorted their pretax preferences to reduce their tax liabilities.

As another, and weightier, example, income from investments in corporate equity generally is subject to a corporate-level tax when earned and to individual-level tax when distributed, while interest from certain State and local securities is exempt from tax. This creates a bias against corporate equity investment and a bias in favor of investment in State and local debt securities. Such non-neutralities may distort investor decisions, thereby reducing the efficiency of capital markets in allocating capital to its most highly valued uses. Similarly, the exclusion of employer-provided health benefits from taxable income may lead employees to consume more health care and less other goods than they otherwise would.

Progressive tax structures may increase vertical equity, but they also increase the distorting effect of taxes on the work-leisure decision, by imposing ever-greater tax burdens as taxpayers earn more money. In general, as marginal tax rates become higher, the deadweight losses (the distorting effects of taxes) imposed on society increase, because the higher marginal rates impel stronger taxpayer reactions. As a result, in designing a tax system or a tax expenditure there frequently is a direct tradeoff between equity and efficiency goals.

For a fixed government revenue constraint (that is, for a fixed amount of taxes that need to be raised), the introduction of tax expenditures necessitates higher marginal rates to raise the same amount of revenue. As a result, and in addition to whatever direct effects they may have, tax expenditures will amplify the distortions attributable to imposing higher marginal tax rates. It is important to remember both these direct and indirect consequences when measuring the deadweight loss attributable to a tax expenditure.

Some taxes may actually improve economic efficiency if they correct a market “externality.” Externalities are factors (positive or negative) that are not traded in any market or that influence any party not involved in a particular economic transaction. The best-known example of an externality is environmental degradation, which causes a real decline in all of society’s welfare, but which, in the absence of some mandate (regulation) or tax might not be reflected in the economic calculus of the parties causing that degradation. In response, economists might propose a “Pigouvian” tax, named for economist Arthur Pigou, who developed the concept of economic externalities.¹²⁰ In this case, a tax actually improves economic efficiency, by assuring that private marginal costs of an activity will equal (after consideration of

¹²⁰ Arthur C. Pigou, *A Study in Public Finance* (Third Edition, Macmillan, 1947).

the Pigouvian tax) society's marginal costs. To improve efficiency, not only must the externality exist, but also the tax must effectively discourage the targeted activity.

Just as there are Pigouvian taxes in the real world, so too there can be Pigouvian tax expenditures – that is, tax expenditures that, by compensating for an externality, actually improve economic efficiency. For example, one rationale for the research and experimentation credit is that a private firm may find it difficult to capture the full benefits from its research and prevent its competitors from using such benefits. Thus the firm will conduct too little research and experimentation relative to the full benefits such activity would provide to society as a whole. If this is so, then a Pigouvian subsidy in the form of a tax expenditure for such research is compatible with optimal resource allocation.¹²¹

4. Ease of administration

One of the common complaints about the current income tax system is that it is difficult to administer and extremely complex. The complexity leads to the use of resources to learn the rules of the tax and to prepare returns for the collection of the tax. Individuals, businesses, and the government all use resources in the process of collecting the tax revenue. Researchers have estimated the compliance burden at between \$90 billion¹²² and \$265 billion per year.¹²³ Expenditures by the government show up in the staffing and budget requirements. For fiscal year 2008, the Internal Revenue Service had a budget of more than \$10.8 billion, with over 91,000 full-time equivalent employees.¹²⁴ During fiscal year 2007, the IRS processed 235 million returns.¹²⁵ The IRS also processed 1.8 billion information returns in the course of its document-matching program.¹²⁶ These information returns relate to items such as wage, dividend, and interest receipts and are matched against individual income tax returns to identify income reporting discrepancies, unsubstantiated deductions, and nonfiling of returns. There were

¹²¹ See William J. Baumol, *On Taxation and the Control of Externalities*, 62 *American Economic Review* 307-322 (1972). A similar argument can be made for addressing negative externalities, such as pollution, with negative tax expenditures. In this case individuals may not fully incorporate the environmental costs they impose on society by certain activities, and thus indulge in them too much. A negative tax expenditure that raised the private cost of such activities to reflect the full social cost could enhance economic efficiency.

¹²² John L. Guyton, Adam K. Korobow, Peter S. Lee, and Eric J. Toder, *The Effects of Tax Software and Paid Preparers on Compliance Costs*, 58 *National Tax Journal* 439-448 (September 2005).

¹²³ Scott J. Moody, Wendy P. Warcholik, and Scott A. Hodge, *The Rising Cost of Complying with the Federal Income Tax*, Tax Foundation, Special Report No. 138, December 2005.

¹²⁴ Internal Revenue Service, *The Budget in Brief, Fiscal Year 2009* at 6.

¹²⁵ IRS Data Book, Fiscal Year 2007 (Pub. 55B), March 2008, Table 2 (hereinafter, "IRS Data Book").

¹²⁶ IRS Data Book, Table 14.

over 179 million income, estate, gift, and partnership returns filed in 2006. The IRS examined 1.5 million of those returns, for an audit rate of 0.86 percent.¹²⁷

Tax expenditures generally contribute to the compliance burden of the income tax. Some have suggested that not only do they make the tax system more complex because they require distinctions between subsidized and unsubsidized activities, but also they raise compliance costs, IRS costs of administration, and rates of noncompliance.¹²⁸ To the extent that individuals and businesses must devote resources to tracking tax-preferred activities due to tax expenditures, this raises compliance costs. Refining tax expenditures by better targeting them to their intended beneficiaries may have the unintended consequence of also increasing complexity.¹²⁹ Tax expenditures also increase the length of instructions and the time required to complete tax returns.

Some tax expenditures, however, particularly exclusions, may simplify administration of the tax system. For example, the exclusion from taxable income of *de minimis* working condition fringe benefits (e.g. employer-provided coffee) simplifies administration of the income tax.

¹²⁷ IRS Data Book, Table 9.

¹²⁸ Eric Toder, *Tax Expenditures and Tax Reform: Issues and Analysis*, in *Proceedings of the National Tax Association Ninety-Eighth Annual Conference* (2005) at 475.

¹²⁹ For a detailed discussion of these issues in the health context, see Janet Holtzblatt, *The Challenges of Implementing Health Reform through the Tax System*, Paper presented at the conference on Taxes and Health Insurance: Analysis and Policies, organized by the Tax Policy Center and the American Tax Policy Institute at Brookings Institution, February 29, 2008.

B. Theoretical Economic Research on Tax Expenditures

Some results from theoretical economic analyses of income taxes and tax expenditures have implications for the analysis of how tax expenditures fare in meeting the substantive goals of equity, efficiency, and ease of administration.¹³⁰ This research often is referred to as “optimal income tax” and “optimal tax expenditure” literature. This brief discussion emphasizes some of the consensus results of this theoretical research. This summary of the theoretical literature does not attempt to survey the important applied research on either the income tax or on tax expenditures, because of the volume of such studies and the difficulty in finding consensus results that would be useful at this stage of our reexamination of tax expenditures.¹³¹

Optimal income tax theory suggests that provided that equity and revenue generation issues are identical, one income tax structure is preferable to another income tax structure if it minimizes (1) potential negative labor supply response,¹³² and (2) the number of tax brackets. Optimal income tax theory also favors the imposition of transparent non-increasing tax rates over large ranges of income. With respect to this last result, these theoretical studies suggest that, again, if equity and revenue issues are somehow ameliorated, generally it would be better to have

¹³⁰ F. P. Ramsey, *A Contribution to the Theory of Taxation*, *Economic Journal* 47-61 (March 1927); James A. Mirrlees, *An Exploration in the Theory of Optimum Taxation*, 38 *The Review of Economic Studies* 175-208 (1971); A. B. Atkinson & J. E. Stiglitz, *The Design of Tax Structure: Direct versus Indirect Taxation*, 6 *Journal of Public Economics* 55-75 (1976). These theoretical studies broadly have focused on commodity and individual income taxes because at the theoretical level there is little justification for separate business or corporate income taxes once an individual income tax has been established.

¹³¹ The empirical research on tax expenditures largely focuses on specific questions about tax expenditures (e.g., the particular tax and income elasticities, substitutability or complementarity between the tax-subsidized activity and direct government provision), while our focus here is more general. Indicative of this applied research are the many empirical studies of specific tax expenditures, some recent (Altshuler and Dietz, *supra*) and some not so recent (e.g., L. C. Fitch, *Taxing Municipal Bond Income* (1950)). In particular, the tax treatment of charitable giving and tax-exempt charities (given great momentum by The Commission on Private Philanthropy and Public Needs, *Research Papers*, 5 Volumes, published by the Department of the Treasury (1977) and many studies over a long period of time by others, e.g., Burton A. Weisbrod, *The Nonprofit Economy*, Harvard University Press, Cambridge, MA, (1980), as well as earlier econometric studies, e.g., Michael K. Taussig, *Economic Aspects of the Personal Income Tax Treatment of Charitable Contributions*, 20 *National Tax Journal* 1-19 (1967); Martin S. Feldstein and Charles T. Clotfelter, *Tax Incentives and Charitable Contributions in the United States: A Microeconomic Analysis*, 5 *Journal of Public Economics* 1-26 (1976), and issues related to Federalism (particularly the tax treatment of interest from municipal bonds) have received empirical attention over the years (e.g., D.J. Ott and A.H. Meltzer, eds., *Federal Tax Treatment of State and Local Securities* (Washington, D.C., The Brookings Institution, 1963); Roger H. Gordon and Joel Slemrod, *A General Equilibrium Simulation Study of Subsidies of Municipal Expenditures*, 38 *Journal of Finance*, AFA Papers and Proceedings 585-594 (1983).) In addition, these two items, charitable giving and municipal bonds, were and are often used as examples in the general discussion of tax expenditures.

¹³² This result affirms the similar efficiency result discussed above in subsection V.A.3.

a tax rate structure composed of *decreasing* tax rates as income rises.¹³³ In practice, of course, the goals of equity and revenue generation make this unobtainable. Also, all else being equal, optimal income tax studies suggest that income that is less responsive to taxation should bear a relatively higher tax burden.¹³⁴

Economic studies of optimal tax expenditures focus on many questions that bear on the issues of efficiency and equity.¹³⁵ One such example is the nature of the activity that is being encouraged; this literature analyzes how private activity interacts with the form in which the government provides the encouragement in question (direct government provision of the good or service, tax expenditures, or other forms of both governmental intervention, such as regulation,

¹³³ The efficiency principle that it is better to have non-increasing marginal rates as income rises applies to the generation of business and labor income, and not to the treatment of expenses not directly related to the generation of this income. For example, a taxpayer's ability to deduct (rather than claim as a credit, or not obtain a tax preference at all) various Social Spending tax expenditures, such as the charitable contribution deduction, can be described as moderating the progressivity of the effective rate structure. Nonetheless, optimal tax theory would hold that this reduction in progressivity cannot be justified on the basis of the efficiency principle described in the text, because the rate reduction is achieved by non-business or non-labor related expenses and not solely as a result of the generation of more income. The fact that a moderation or decrease in marginal rates is achieved through the non-work-related expense deduction side muddles in a classic second-best sense the justification for the application of the non-increasing marginal rate principle.

¹³⁴ This optimality of the inverse relationship between tax rates and behavioral elasticity also applies to commodity and consumption taxes.

¹³⁵ The mathematical exploration of the general theoretical properties of tax expenditures logically followed from the interest in optimal taxation. Feldstein presented a theoretical model of charitable giving that was augmented by a stylized representation showing that the present law income tax deduction was economically efficient. Martin Feldstein, *A Contribution to the Theory of Tax Expenditures: The Case of Charitable Giving*, in Henry J. Aaron & Michael J. Boskin, eds., *The Economics of Taxation, Essays in Honor of Joseph Pechman* (Washington, D.C., The Brookings Institution, 1980) at 99-122. Driessen questioned this result, and Feldstein responded in defense of his result. See Patrick A. Driessen, *A Qualification Concerning the Efficiency of Tax Expenditure*, 33 *Journal of Public Economics* 125-131 (June 1987); Martin Feldstein, *The Efficiency of Tax Expenditures: Reply*, 33 *Journal of Public Economics* 133-136 (June 1987). For extensions of this theoretical research focused primarily on the tax expenditure for charitable giving, see Russell D. Roberts, *A Positive Model of Private Charity and Public Transfers*, 92 *Journal of Political Economy* 136-148 (1984); Theodore Bergstrom et al., *On the Private Provision of Public Goods*, 29 *Journal of Public Economics* 25-49 (Feb. 1986); and James Andreoni, *Impure Altruism and Donation to Public Goods: A Theory of Warm Glow Giving*, 100 *Economic Journal* 464-477 (June 1990). Saez updated the earlier research and generalized the results to extend beyond charitable giving. See Emmanuel Saez, *The Optimal Treatment of Tax Expenditures*, 88 *Journal of Public Economics* 2657-2684 (2004).

Some optimal income tax studies consider both income and other taxes including consumption and wealth taxes, e.g., Atkinson and Stiglitz (1980). Even within a framework restricted to income tax, the consideration of the differential treatment of capital and income can be explored. See Banks and Diamond, *supra*, provide a recent summary of results on this differentiation). The JCT Staff approach, following the narrow direction of the Budget Act, currently is restricted to the income tax.

mandates, or delegation). Sometimes direct government provision of a good or service and a tax expenditure may be very similar, as with the direct government provision of Temporary Assistance for Needy Families and a tax expenditure like the refundable earned income credit (both have work constraints and involve cash remission, although there are differences in eligibility and other areas).¹³⁶

Other tax expenditure issues concern the substantive goals of general tax policy that were noted previously.¹³⁷ For example, as subsidy instruments, tax credits are generally preferable to tax deductions on equity grounds.¹³⁸ Efficiency concerns alone suggest that the preferred subsidy rate is only by chance likely to be the same as the marginal income tax rate faced by a taxpayer; as a result the tax expenditure subsidy rate should not be linked to income but rather to something else such as specific consumption. Revenue generation concerns favor a tax system that limits the cost of subsidies and minimizes savings, investment, and labor supply distortions. Also, tax subsidies should be greater when targeted at more responsive positive behaviors,¹³⁹ and interactions with direct government spending and/or tax expenditure-induced behavior should be considered.

Thus in evaluating a tax expenditure, among the issues that one should consider are the societal preferences for the subsidized activity,¹⁴⁰ the substitutable or complementary relationship of direct government provision and other government policy options with the tax expenditure, the responsiveness of the favored activity to subsidy, the responsiveness of labor supply to any increases in marginal tax rates necessitated by the existence of the tax expenditure, the relative efficiency of private provision of the activity that the government seeks to encourage, including targeting and fundraising costs, the overall effects that the tax expenditure has on the societal preferences for income distribution, any participation benefits (“warm glow”) or costs (e.g., learning and compliance, envy) to the taxpayer of undertaking or others’ undertaking the subsidized behavior linked to the tax expenditure,¹⁴¹ and the interaction

¹³⁶ The earned income credit is discussed in detail in Section V.D.

¹³⁷ There are also some theoretical studies of tax and tax expenditure design, including Martin Feldstein, *On the Theory of Tax Reform*, 6 *Journal of Public Economics* 77-104 (July 1976).

¹³⁸ Therefore unless an expense is directly connected to the generation of business or labor income, for equity reasons it generally should be formulated as a credit rather than a deduction. In this regard, although Saez, *supra*, finds that the ideal subsidy a priori should not be linked to the income tax rate structure, he also finds that this linkage seems to detract surprisingly little from overall efficiency. The potential harm from linkage is limited largely because his area of focus, what we term Social Spending in this pamphlet, represents a relatively small part of overall economic activity, at least within the stylized model that Saez sets up.

¹³⁹ The targeting of tax subsidies to behaviors most susceptible to change is analogous to the Ramsey rule of inverse taxation. See Ramsey, *supra*.

¹⁴⁰ The propriety of the mechanisms for determining societal preferences, which are subjects of public choice and other schools of research, are beyond the limited scope of this inquiry.

¹⁴¹ J. Andreoni, *supra*.

of the tax expenditure with other private and government programs (including other tax expenditures).¹⁴²

¹⁴² Saez, *supra*, mathematically presents many of these and other results.

C. Evaluating the Design of Tax Expenditures

1. Overview

The previous two subsections addressed the substantive question of when, or whether, a tax expenditure might improve social welfare, as measured through the economic principles of equity, efficiency and ease of administration. Economic analysis also can help, however, to improve the design of any tax expenditure, regardless of its substantive merits in the eyes of economists.

Economists have developed a number of consensus principles that can help policymakers in designing a proposed tax expenditure. These principles take into account both the popular and academic analyses of tax expenditures over the years, including the variety of approaches taken in the study and presentation of tax expenditures. These design principles generally can be seen as applications of the substantive goals of equity, efficiency, and ease of administration presented in Section V.A. above.

Adherence to these design principles generally does not rely on any particular normative view about an income tax. Regardless of whether a particular income tax norm can achieve consensus, it is likely that those interested in the betterment of an income tax would agree that these non-exclusive general attributes presented below would be desirable in any tax expenditure.¹⁴³ Even when a provision has consensus support for its substantive aim, design problems may erode its value, as when a provision that society agrees should aid one group or encourage one type of behavior instead significantly compensates another group or encourages another type of behavior. Thus, to the extent that a tax expenditure has been created in an effort to achieve some combination of substantive goals, all parties likely would prefer that this tax expenditure be *transparent* in its application, that it be *targeted* narrowly to those taxpayers or activities that are the object of the expenditure, and that taxpayers will enjoy *certainty* in realizing the tax advantages through which the expenditure's goals are to be achieved.

2. Transparency

Transparency in the tax expenditure context refers to many design and measurement issues that affect both government oversight and taxpayer acceptance and usage of a tax expenditure. Perhaps the most commonly cited transparency concern is the degree to which the revenue costs of a tax expenditure are identifiable and publicized, and the identity of the provision's beneficiaries is clear. In addition, it is important for the potential benefits and possibly non-governmental costs of a provision to be ascertainable. A complex tax expenditure also can affect the use or "take-up" of the provision, and increase compliance costs associated

¹⁴³ Of course, someone who is opposed to any income tax, or any kind of tax, may not find these principles compelling.

with the provision. Similarly, obscure or interacting phase-outs may undermine both a provision's intent and taxpayer confidence.¹⁴⁴

The transparency of a tax expenditure to a taxpayer is enhanced by consistency in content and availability, the absence of confusing alternatives, and recurring taxpayer participation. For example, Congress first enacted the Hope Credit more than a decade ago. While that provision has been relatively consistent in content, the Hope Credit has at least one close substitute (the Lifetime Learning Credit) and another potential substitute (the tuition and fees deduction).¹⁴⁵ The Hope Credit also requires a potential user to learn about eligible expenses, whether a student is or can be claimed as a dependent, and how the credit interacts with other higher education financial programs. In addition, Hope Credit participation is likely to be cyclical or discontinuous for taxpayers – for example, the Hope Credit may require a parent's or student's attention for as little as one or two tax return years and then never again affect that taxpayer. By contrast, the home mortgage interest deduction typically is relevant for a continuous and long-term period, once a taxpayer purchases his first primary residence.

Transparency also is affected by issues of framing and advertising. Framing includes tax expenditure design issues such as the naming of a provision, Internal Revenue Code and tax form placement, and possible cross-referencing among forms. Naming a provision may seem mundane, but taxpayers and others may have a different reaction to something called, for example, the Earned Income Credit rather than the Earned Income Tax Credit, or it may be a surprise to some taxpayers that section 199, the deduction for “domestic production activities,” applies to certain income from services. Even with the pervasive use of tax software and paid return preparers, taxpayers often need to educate themselves about the existence of various provisions and the mechanics of how to claim them. Public and private advertising and promotion therefore increase tax transparency for taxpayers. While the outreach programs of the Internal Revenue Service are important, the advertising of the Hope Credit by educational institutions likely has contributed to the take-up of that credit in the same way that a vigorous publicity campaign undertaken by private financial entities may have increased Individual Retirement Account participation in the last 25 years.

In some cases transparency of costs and benefits for participants may conflict with another important goal – taxpayer confidentiality. For example, full identification of who uses

¹⁴⁴ See Thomas A. Barthold, Thomas Koerner, & John F. Navratil, *Effective Marginal Tax Rates Under the Federal Individual Income Tax: Death by One Thousand Pin Pricks?*, 51 National Tax Journal at 563 (1998) and Joint Committee on Taxation, *Study of the Overall State of the Federal Tax System and Recommendations for Simplification, Pursuant to Section 8022(3)B) of the Internal Revenue Code of 1986* (JCS-3-01), April 2001 at 88.

¹⁴⁵ An evaluation of the Hope Credit should be conducted in conjunction with an assessment of the Lifetime Credit and the tuition and fees deduction, as these provisions significantly interact. There are many other tax expenditures that also should be examined as part of a subgroup of tax expenditures that are substitutes and complements, and the grouping of tax expenditures by Federal outlay type, which we intend to continue in tandem with the new broad classifications described in Section IV, facilitates the recognition of these interactions.

what tax expenditure might have the positive effect of clearly identifying persons or businesses that are not taking advantage of tax benefits, but such identification could compromise both individual privacy or (in the case of businesses) confidential trade information.

3. Targeting

Targeting issues often are related to revenue concerns and the substantive goals of equity, efficiency, and ease of administration. Having decided to provide a certain subsidy, it is desirable to implement that subsidy by benefiting the intended parties with as little economic distortion and for as little cost in terms of forgone revenue as possible. These concerns are not limited to the specific tax expenditure provision under examination or even other governmental policies, but also include secondary consequences that may be broadly distributed. Examples of marginal, or “last dollar,” targeting include the use of thresholds (e.g., the 7.5 percent itemization threshold for medical and dental expenses) or the focus on increments above certain historic baselines (the research and experimentation credit.) While some limitations, such as historical and other threshold tests, may aid in targeting, others (e.g., the financial plan limitations under expired section 965) may be worse than no limitation because they may give the impression but not the reality of effective targeting.¹⁴⁶

One important and common targeting issue is when to use a deduction rather than a credit to deliver a tax expenditure. While as discussed in the prior section a credit generally is theoretically preferable to a deduction, a deduction is not necessarily inconsistent with good targeting. A deduction may be appropriate, for example, when the expense is directly related to the production of income, and some might argue that something like charitable giving is not entirely voluntary and therefore should be fashioned as a deduction.¹⁴⁷ However, it often is at least theoretically possible to design a tax credit that creates just as much overall incentive or relief as a deduction and that also avoids some equity issues caused by use of a deduction, although it is difficult in practice to design credit phase-outs that do not create high effective marginal tax rates.

Because of economic and demographic changes, targeting often requires adjustments that may create complexity and uncertainty. For example, the filtering function of the 7.5 percent threshold for itemizing medical and dental expenses contemplated by policymakers at the time of its enactment may take on a different meaning as the U.S. age structure changes and preferences and the need for health care spending change. Also, once a tax expenditure has been enacted, inertia, precedence, and interest group behavior may make repeal or scaling back difficult, even

¹⁴⁶ Negative Tax Subsidies also can be targeted imperfectly. For example, it is questionable how effective the \$1 million limit on executive compensation under Code section 162(m) is, as corporations appear to have responded by altering their methods of compensating executives in ways that do not seem to have greatly affected the targeted firms, investors, or executives. See Steven Balsam and David Ryan, *Limiting Executive Compensation: The Case of CEOs Hired after the Imposition of 162(m)*, Journal of Accounting, Auditing and Finance, September 2007.

¹⁴⁷ This is an argument by W. D. Andrews, *Personal Deductions in an Ideal Income Tax*, 86 Harvard Law Review 309-385 (1972).

if the original tax expenditure targeting rationale is impeached.¹⁴⁸ Additionally, electivity may cause tax expenditure targeting issues.

For example, at the time of initial enactment of the first IRA provisions, it was very difficult to predict how many taxpayers would take up the new program, in the absence of relevant prior experience. Aside from novelty, it is likely that exogenous changes (such as the advertising campaigns that financial institutions mounted when IRAs first were introduced) will affect electivity in ways that are difficult to foresee.¹⁴⁹

4. Certainty

Much attention recently has been focused on the pattern of short-term extensions of a large number of tax expenditures in a single “extenders” package. In practice, it can involve extending an expiring tax expenditure or blocking administrative action.¹⁵⁰ Many tax

¹⁴⁸ For example, part of the rationale for the additional deduction for the aged was relief for what has historically been a low-income demographic group (measured by gross, taxable, or disposable income.) While as a group the aged’s relative income standing has improved in recent decades, this longstanding tax expenditure has not been modified or repealed. Also, when an income tax structure is first imposed, a tax expenditure created at the outset may have faced less of a revenue or other test than subsequently enacted tax expenditures because incremental change tends to attract more scrutiny – this evolutionary institutional factor may be one reason to believe that not all current tax expenditures, given the timing and other difference surrounding their placement in the Internal Revenue Code, faced the same level and type of attention.

¹⁴⁹ In addition to the targeting issues raised by electivity, what could be termed secondary electivity often creates horizontal equity or business entity equity issues. If primary electivity is the decision to undertake an activity, such as investing or making a charitable contribution, then secondary electivity is the choice permitted in the Code that a person makes of how to treat the investment or charitable contribution for income tax purposes. Secondary electivity raises equity issues because it allows persons undertaking the same activity to obtain different tax results. Thus one business depreciates a capital purchase using the straight-line method while another business elects to expense under section 179, or one person itemizes a charitable deduction while another person chooses to take the standard deduction, or a U.S. investor may choose between operating overseas as a branch or controlled foreign corporation and thereby affect eligibility for deferral. Note that secondary electivity often involves a tax expenditure. This electivity, valued by taxpayers for the flexibility it permits, intentionally produces varied tax results. The Code sometimes attempts to ameliorate equity issues associated with secondary electivity by enforcing symmetry with respect to business or investment transaction (e.g., gain deferred in the disposition of an asset may result in downward basis adjustment of a replacement asset), but this remedy is often ad hoc and does not necessarily rectify the inequity arising from the secondary electivity. It is sometimes difficult to determine when secondary electivity is occurring because of the simultaneity of primary and secondary electivity. For example, some charitable giving and some investment might not occur in the absence, respectively, of the opportunity to itemize deductions and section 179 expensing, and thus it may not be possible to always isolate the equity effects of secondary electivity.

¹⁵⁰ For example, Congress temporarily blocked implementation of certain research and development allocation rules, used to calculate foreign tax credits, multiple times in the 1970s and 1980s.

expenditures that have been extended for short periods of time are relatively new.¹⁵¹ Short-term sunsets are understandable for new provisions lacking a basis for evaluation, and even older provisions are likely to need revisiting from time to time. In fact, one of the complaints about tax expenditures is that tax expenditures are not reconsidered enough, which cuts against the goal of certainty; this example demonstrates how some of the tax expenditure goals, substantive and design, can interact.

Some tax expenditures that are extended for short periods also may be perceived by some of those affected as “too big to expire” or at least expire for very long, and thus taxpayers may not be affected much by a short sunset period for those provisions, whereas taxpayer uncertainty about short sunsets for newer provisions may be warranted. Both pro- and anti-taxpayer retroactivity also reduce certainty, as do temporary tax reductions (or increases), tax holidays, tax amnesties, and sporadic enforcement of tax laws.

One indirect form of uncertainty is the fact that the value of a tax expenditure, particularly a deduction or exemption, changes whenever the general tax rates change, and also can change when other tax expenditures that interact with the first expenditure change. This type of uncertainty cannot be avoided unless Congress adjusts a wide range tax expenditures to hold taxpayers harmless every time general income tax rates change. The value of other items may change for exogenous reasons, for example, the value of the last-in-first-out method of accounting is affected by general and specific price changes. Finally, taxpayers may invite uncertainty by taking tax return positions that are either opposed, or at least not acquiesced in, by the Internal Revenue Service.

In summary, in addition to measuring how well tax expenditures fulfill the substantive goals of equity, efficiency, and ease of administration, all tax expenditures can be evaluated using the design criteria of transparency, targeting, and certainty.¹⁵² Just as the effects on substantive tax system goals of undertaking certain tax expenditures may conflict (e.g., what is equitable may not be efficient)¹⁵³ or complement each other (e.g., equity can sometimes enhance

Also, some longer term expirations or sunsets are related to parliamentary rules concerning revenue effects outside of the traditional five- or ten-year budget period.

¹⁵¹ The research and experimentation credit is a notable exception.

¹⁵² The Congressional Research Service (“CRS”) comprehensively examines tax expenditures using the normative law approach. Congressional Research Service, *Tax Expenditures: Compendium of Background Material on Individual Provisions*, prepared for the Committee on the Budget, 109th Congress, 2nd Session, S. Per. 109-072 (December 2006). The substantive and design criteria presented here are noted in some of the CRS descriptions of individual tax expenditures, but not in a formalized manner. The criteria discussed here are the foundation for our revised approach to tax expenditures described in Section IV above, and may be useful as a companion, along with the CRS publication, to applied research on tax expenditures.

¹⁵³ An important treatise on the interaction of these two aspirations for an income tax system is Arthur M. Okun, *Equality and Efficiency: The Big Tradeoff* (Washington, D.C., The Brookings Institution, 1975).

efficiency), some of these desirable design characteristics of tax expenditures may also conflict or complement each other, and the substantive and design goals may also interact. As an example, the attributes that make a tax expenditure understandable and straightforward may inhibit attainment of other goals embodied in the Code, as when narrow targeting leads to a lack of transparency.

D. Application of Economic Analysis to Selected Tax Subsidies

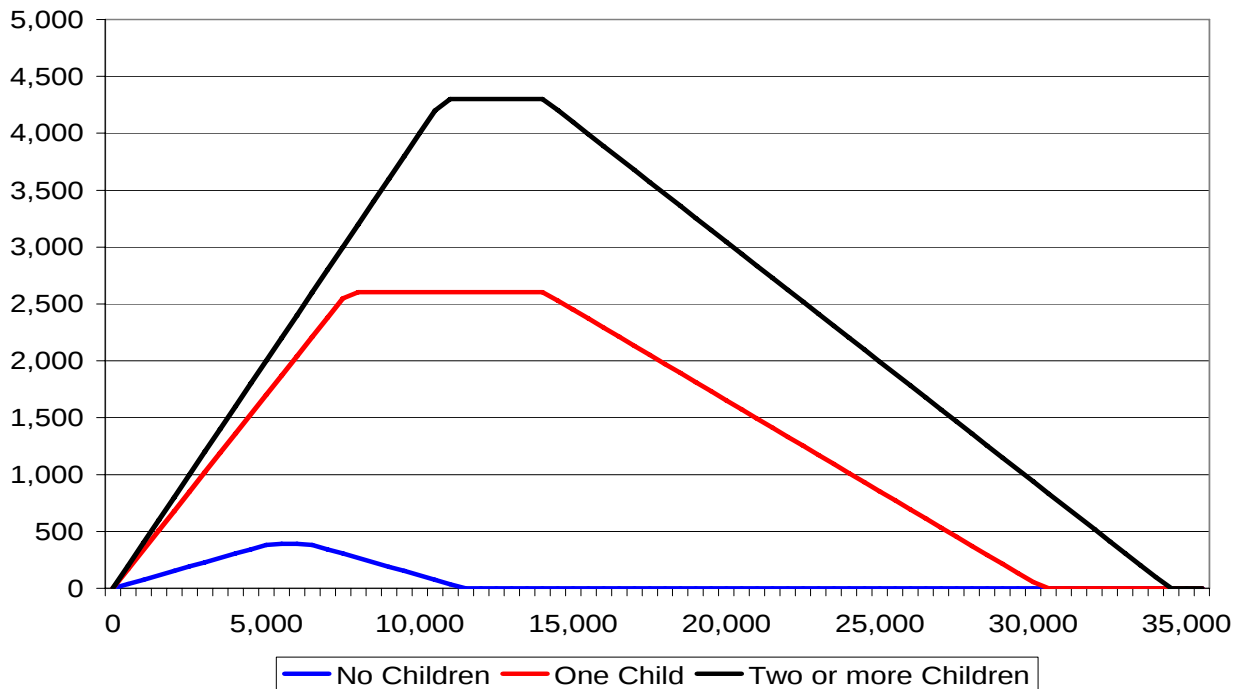
This Subsection presents some selected examples of how the economic reasoning developed earlier in Section V can be applied to some examples of Tax Subsidies.

1. Refundable earned income credit

The Earned Income Credit (“EIC”) is intended to subsidize the work effort of low-income families. We classify the refundable portion of the EIC as a Tax Transfer. Because the EIC is designed as an income support program (in addition to rewarding work effort), the two principal substantive evaluation issues of equity and ease of administration play major roles in assessing its effects.

As can be seen in the figure below, the EIC provides a credit for each additional earned dollar up to a maximum dollar amount, with the credit phased out for each dollar of earned income or adjusted gross income above a phase-out threshold. The credit rate, maximum income, beginning of the phase-out, and the phase-out rate depend on whether the taxpayer has no qualifying children, one qualifying child, or two or more qualifying children.

Figure 3.—2004 Value of the EIC by Income and Number of Qualifying Children



While not all of the EIC is received by taxpayers as a refund, a substantial majority of the revenue cost is categorized as refundable (88 percent of the EIC claimed on 2004 returns was refunded after the nonrefundable portion was exhausted by offsetting income and self-

employment taxes.)¹⁵⁴ The table below shows that the income distribution of the EIC is concentrated among low-income taxpayers, and could be considered a substitute for direct spending welfare programs.

**Table 1.—Distribution by Income Class of the Earned Income Credit
at 2006 Rates and 2006 Income Levels¹
[money amounts in millions of dollars, returns in thousands]**

Income Class²	Earned Income Returns	Credit Amount³
Below \$10,000	5,747	\$6,650
\$10,000 to \$20,000	6,407	16,349
\$20,000 to \$30,000	4,808	11,353
\$30,000 to \$40,000	4,067	6,446
\$40,000 to \$50,000	1,815	1,987
\$50,000 to \$75,000	534	475
\$75,000 to \$100,000	9	5
\$100,000 to \$200,000	3	5
\$200,000 and over	0	0
TOTAL	23,391	43,270

¹ Excludes individuals who are dependents of other taxpayers and taxpayers with negative income.

² The income concept used to place tax returns into classes is adjusted gross income (AGI) plus: (a) tax-exempt interest, (b) employer contributions for health plans and life insurance, (c) employer share of FICA tax, (d) workers' compensation, (e) nontaxable Social Security benefits, (f) insurance value of Medicare benefits, (g) alternative minimum tax preference items, and (h) excluded income of U.S. citizens living abroad.

³ Excludes individuals who are dependents of other taxpayers and taxpayers with negative income.

As indicated earlier, because the EIC is a Tax Transfer, its efficacy can be determined principally by reference to the two substantive criteria of equity and ease of administration. In terms of the design criteria, the EIC appears to be relatively targeted, transparent, and certain in its application when compared to other Tax Subsidies.

With regard to equity, the EIC benefits the lower portion of the income distribution as shown above. As with any program that provides income support, and particularly in the case of a program such as the EIC which attempts to reward work effort, it is important to measure over

¹⁵⁴ Internal Revenue Service, *Statistics of Income Bulletin*, Winter 2006-2007 (Washington, D.C. 2006). The portion that is refundable has varied over time as the liability otherwise owed by taxpayers has adjusted to changes in the rest of the income and self employment tax systems.

time the income mobility of current and prior participants. That is, is the EIC a catalyst or a deterrent to income mobility? One mobility measure would be the number of recipients moving out of eligibility due to an increase in earnings. A good result would be fewer people qualifying for the EIC over time because of an improvement in their employment and income situations. One study found that as many as 50 percent of EIC claimants receive the EIC for only short periods of time lasting one to three years.¹⁵⁵ While these results are not causal, the short tenure of those claiming the EIC, combined with the high participation rates, suggests that the program is reaching a fairly mobile population in terms of income.

The combination of the high dollar value of the credit (the maximum credit in 2007 was \$4,716), the high phase-out rates (about 20 percent for taxpayers with two or more qualifying children), and the earned income requirement also means that the EIC is likely to have a number of effects on the supply of labor that might have long-term equity and efficiency ramifications. In this regard, researchers have found that the EIC has a variety of effects on labor supply.¹⁵⁶

The narrowly targeted design of the EIC contributes to these equity effects. Initially the EIC was targeted only toward low-income workers with children, but it was expanded beginning in 1994 to include all low-income workers. A measure of the effectiveness of the EIC in reaching its targeted beneficiaries is the participation rate in the program. The credit appears to be fairly effective in reaching targeted beneficiaries, with some studies finding the participation rates for families with children ranging between 80 percent¹⁵⁷ and 92 percent.¹⁵⁸ These participation rates compare favorably with participation rates for other direct spending subsidies.

¹⁵⁵ Tim A. Dowd, *Distinguishing Between Short-Term and Long-Term Recipients of the Earned Income Tax Credit*, 58 National Tax Journal 807-828 (December 2005). Dowd also finds that there is broad usage of the EIC. For taxpayers who have a child at some point over a 15-year period, or are under the age of 65, the probability of claiming the EIC at least once is 28 percent.

¹⁵⁶ Researchers have looked at the labor supply effects of the credit. Nada Eissa and Jeffrey Liebman, *Labor Supply Response to the Earned Income Tax Credit*, 111 Quarterly Journal of Economics 605-637 (1996) and V. Joseph Hotz, Charles H. Mullin, and John Karl Scholz, *The Earned Income Tax Credit and Labor Market Participation of Families on Welfare*, Unpublished Working Paper, March, 2005, found that the EIC expansions of 1987 and 1994 increased labor force participation. Other studies have found that the EIC does not affect hours of work very much. Maria Cancian and Arik Levinson, *Labor Supply and Participation Effects of the Earned income Tax Credit: Evidence from the National Survey of America's Families and Wisconsin's Supplemental Benefit for Families with Three Children*, Unpublished Working Paper, September 2003; Eissa and Liebman, *supra*. Still, other researchers have found that the EIC reduces labor force participation for married taxpayers. Nada Eissa and Hilary Hoynes, *Taxes and the Labor Market Participation of Married Couples: The Earned Income Tax Credit*, 88 Journal of Public Economics 1931-1958 (August 2004).

¹⁵⁷ John Karl Scholz, *The Earned Income Tax Credit: Participation, Compliance and Antipoverty Effectiveness*, 47 National Tax Journal 63-87 (March 1994).

¹⁵⁸ Marsha Blumenthal, Brian Erard, and Chih Chin Ho, *Participation and Compliance with the Earned Income Tax Credit*, 58 National Tax Journal 189-214 (June 2005).

One study, for example, found that food stamps, arguably targeted at a similar population, had a participation rate of 54 percent.¹⁵⁹

There is a significant degree of noncompliance, however, with the EIC requirements, resulting in claims by non-targeted individuals. In a recent study, the General Accountability Office found that up to 80 percent of the recipients of the advance EIC were non-compliant.¹⁶⁰ Moreover, for the program as a whole, the IRS found that for tax year 1999 as many as 32 percent of EIC claims were erroneous.¹⁶¹ The high non-compliance rates reduce the degree to which the EIC is effective at delivering benefits only to the targeted population of working poor families.

In response to the high non-compliance rate, Congress has attempted to target the credit more effectively by increasing the administrative requirements and changing the eligibility requirements.¹⁶² These efforts, however, affect the extent to which the EIC meets the second substantive goal of ease of administration. While some of the non-compliance may be due to fraud, the complex nature of the eligibility rules contributes to taxpayer confusion and non-compliance.¹⁶³ Studies have shown that the high non-compliance rates are indicative of the complex eligibility requirements for the EIC,¹⁶⁴ and this complexity reduces the extent to which the EIC is a transparent program from an administrative perspective.

On the other hand, the revenue cost of the earned income credit (“EIC”) is relatively transparent compared with other tax subsidies. The credit is entered directly on individual tax forms and has limited substitutability with other tax expenditures, and the provision’s relative complexity is somewhat tempered by its long tenure in the Internal Revenue Code and the Internal Revenue Service’s outreach program for employees and employers. For knowledgeable, qualifying taxpayers, the EIC is essentially certain. Taxpayers and firms expect that the EIC will be available every year because it has been a part of the income tax system since 1975. However, low-income and first-time filers may not be aware of, or in some cases may

¹⁵⁹ Department of Agriculture, Food and Nutrition Service, *Explaining Changes in Food Stamp Program Participation Rates* (Washington, D.C., September 2004).

¹⁶⁰ Government Accountability Office, *Advance Earned Income Tax Credit, Low Use and Small Dollars Paid Impede IRS’s Efforts to Reduce High Noncompliance* (Washington, D.C., August 2007).

¹⁶¹ Internal Revenue Service, *Compliance Estimates for Earned Income Tax Credit Claimed on 1999 Returns* (Washington, D.C., February 2002).

¹⁶² For example, in the Personal Responsibility and Welfare Relief Act of 1996, Congress required taxpayers to use Social Security Numbers for each claimed child; in the Economic Growth and Tax Relief Reconciliation Act of 2001, Congress streamlined some of the rules regarding qualifying income and children.

¹⁶³ Lindsay H. Rubel, *Complexity, Regressivity, and Income Disparity: Self-defeating Aspects of the Earned Income Tax Credit* (Washington and Lee University, School of Law, 2006).

¹⁶⁴ Janet Holtzblatt, and Janet McCubbin, *Issues Affecting Low-Income Filers*, in Henry J. Aaron and Joel Slemrod, eds, *The Crisis in Tax Administration* (Brookings Institution Press, 2004).

overestimate, the high effective marginal tax rates associated with the EIC's phase-out. This confusion about the credit reduces its certainty for taxpayers.

Finally, the EIC program's structure also is of interest to the extent that it can provide information about the merit of using the tax system (and employers) to partially or fully deliver government benefits to employees. Some researchers have argued that because of the lower EIC administrative costs and the higher participation rates for the EIC that, relative to other direct spending transfer programs, the EIC should be expanded beyond its current target population.¹⁶⁵

2. Individual retirement accounts

The principal purpose of the IRA provisions is to help ensure adequate income for retirees, and thus we classify IRAs as Social Spending (while acknowledging that their role in capital accumulation means that they share some attributes of other items that we classify as Business Synthetic Spending). The IRA provisions attempt to meet this goal of retiree income assurance in two ways: (i) IRAs provide a vehicle to which employees can roll over employer-sponsored pension assets upon separation from service; and (ii) IRAs provide those without an employer plan, or those who participate in an employer plan that provides limited benefits, with a retirement savings opportunity. The choice was made in providing IRAs that, because of the difficulty in ascertaining the retirement assets of a heterogeneous mix of taxpayers, the provision would be targeted with relatively modest caps on contributions and with income-related limitations. Over the years, however, other IRA programs (such as the Roth IRA) have been added to the Internal Revenue Code as a need for flexibility was perceived. The current IRA provisions contain many complex rules pertaining to contributions and withdrawals. Depending upon the type of IRA and the taxpayer's current circumstances, a taxpayer may at any one time be affected by an IRA's potential deductibility, deferral of taxation on inside-build-up, exemption, and a number of other Internal Revenue Code features.

As noted in Section IV, for an item in the Social Spending subcategory, efficacy in achieving a specified societal goal may be more important than its effects on equity or efficiency. In fact, both the IRA deduction and the Roth IRA exemption appear to be relatively inequitable, because their tax benefits are linked to a taxpayer's marginal tax rate. This inequity could be mitigated by converting the deduction into a credit.¹⁶⁶ However, another potential source of inequity may be the difficulty in identifying a worker's accumulated pension assets, with the result that eligibility for the IRA provisions cannot be related directly to the level of those assets. The actual extent of any inequity is difficult to determine, due to the connection between the tax treatment of the contribution to an IRA and the eventual distribution: for example, a taxpayer may obtain a deduction while facing a marginal tax rate of X% at time of contribution and then pay tax at a rate of Y% upon distribution (with the distribution including any investment gain). The tax treatments are reversed for contributions to and distributions from a Roth IRA. This connection between tax treatment of contribution and distribution requires that the equity of the

¹⁶⁵ Dennis J. Ventry, *Welfare By Any Other Name: Tax Transfers and the EITC*, 56 American University Law Review (2007).

¹⁶⁶ Batchelder, Goldberg and Orszag, *supra*.

provision be evaluated taking account of a longer period of time, perhaps with a present-value measure of equity.

The design goals of transparency and certainty are perhaps more relevant, however, in determining the extent to which IRAs achieve their societal goal of enhancing retirement income. In assessing transparency, participation (as measured by deductible contributions to IRAs) is easily gauged because of the tax form entry on Forms 1040 and 1040A, but nondeductible and Roth IRA participation is less transparent because taxpayers are not required to make a direct entry identifying Roth IRA participation on basic tax forms (although participants in nondeductible IRAs are required to complete supplementary Form 8606).¹⁶⁷ There may also be interactions between IRAs and other tax expenditures that are close substitutes, including defined contribution plans such as section 401(k) programs sponsored by employers. Calculations of IRA revenue costs, particularly on a present-value basis, are complicated by the necessity of tracking or predicting both IRA contributions and distributions, with time and taxpayer characteristics (including marginal tax rates) varying over the life of an IRA. The analysis further is complicated by the availability of Roth IRAs, and the opportunity (limited by taxpayer income level) of taxpayers to convert from traditional IRAs to Roth IRAs.

IRAs also entail a significant element of uncertainty, i.e., a taxpayer's uncertainty, noted above, about his marginal tax rate at the time of potential distribution. The difference between a taxpayer's tax rate at time of contribution and distribution or early withdrawal is a key factor in choosing among the IRA options for taxpayers who are eligible for more than one type of IRA.

IRAs appear, however, to fare well in terms of ease of administration, a substantive goal that is important to all subcategories of Tax Subsidies. IRAs appear to have minimal fraud and compliance issues, although the complexity of the mandatory distribution and early withdrawal rules noted above may offer opportunities for tax evasion.

Broader evaluation issues include the interaction of IRAs with other retirement tax expenditures. For example, the equity implications of IRAs discussed above may look different when one takes account of the effects of the Saver's Credit.¹⁶⁸ Other questions related to the substantive Social Spending goals of IRAs include whether, given society's continued desire to

¹⁶⁷ A similar distinction occurs with respect to distributions – a normal distribution from a Roth IRA will not show up on any tax return form. However, there is information reporting on all IRA contributions and distributions, and Form 8606 is required for non-deductible IRA contributions. For compliance purposes the IRS thus can use Form 8606 and information returns as well as Form 1040 or 1040A, and for research purposes the information returns easily can be linked to tax returns. This characterization of the connection between lines on Forms 1040 and 1040A, other tax forms and information returns, and the role of such information in compliance and research also generally applies to other exemptions such as the foreign earned income exclusion or the exclusion of fellowship and scholarship income, while the exemption for tax-exempt interest is required to be listed on the Forms 1040s and 1040A.

¹⁶⁸ For example one study of the Saver's Credit found that nonrefundability inhibited its effect. See Gary Koenig and Robert Harvey, *Utilization of the Saver's Credit: An Analysis of the First Year*, 58 National Tax Journal 787-806 (2005).

ensure adequate retiree income, the IRA method of encouraging retirement saving are as imperative in 2008, with the current proliferation of employee participation in such plans and the decline of defined benefit plan participation, as IRAs were when they were introduced en masse in the 1980s, a time when defined benefit plan usage was relatively more prevalent. Thus, one could test whether IRAs, in their current form or perhaps legislatively enhanced for the future by use of tax credits and other tools, are necessary to ensure retirement income security if the ongoing decline in defined benefit participation is viewed with alarm.

3. Research and experimentation tax credit

The research and experimentation (“R&E”) tax credit, which expired at the end of 2007, is a multifaceted Tax Subsidy that is intended to increase general social welfare by encouraging businesses to perform research. Its rationale thus is economic efficiency. We classify the R&E credit as a Business Synthetic Spending item because it is elected by businesses and aimed at a type of spending, research and experimentation expenses, that when targeted correctly improves general social welfare.

One fundamental question about the R&E credit relates to the externality rationale for its existence, that is, whether in a Pigouvian fashion the credit increases social welfare by inducing important research that otherwise would not occur. In this regard, consideration of other tax and outlay effects is necessary for evaluation of the R&E credit’s effect on efficiency.¹⁶⁹

As indicated by Tables 2 and 3, the R&E credit is used by businesses of varying size and industrial focus. These tables show that a heterogeneous mix of firms claim the credit, although the dollar amount of the credit is more narrowly distributed.

¹⁶⁹ See Zvi Griliches, *The Search for R&D Spillovers*, 94 *Scandinavian Journal of Economics* (1992); M. Ishaq Nadiri, *Innovations and Technological Spillovers*, National Bureau of Economic Research, Working Paper No. 4423 (1993); Bronwyn Hall, *The Private and Social Returns to Research and Development*, in Bruce Smith and Claude Barfield, eds., *Technology, R&D and the Economy* (Washington, D.C., Brookings Institution Press 1996) at 1-14. These papers suggest that the rate of return to privately funded research expenditures is high compared to that in physical capital and the social rate of return exceeds the private rate of return. Griliches concludes, “in spite of [many] difficulties, there has been a significant number of reasonably well-done studies all pointing in the same direction: R&D spillovers are present, their magnitude may be quite large, and social rates of return remain significantly above private rates.” Griliches, *supra*, at S43. Charles I. Jones and John C. Williams, *Measuring the Social Return to R&D*, 113 *Quarterly Journal of Economics* at 1120 (1998), also conclude that “advanced economies like the United States substantially under invest in R&D.”

Table 2.—Percentage Distribution of Corporations Claiming Research Tax Credit and Percentage of Credit Claimed by Sector, 2005

Industry	Percent of Corporations Claiming Credit	Percent of Total R & E Credit
Manufacturing	50.7	71.2
Professional, Scientific, and Technical Services	25.3	10.2
Information	6.7	9.8
Wholesale Trade	6.2	3.1
Finance and Insurance	1.5	1.9
Holding Companies	2.4	1.5
Retail Trade	0.9	0.7
Health Care and Social Services	1.0	0.4
Utilities	0.2	0.3
Transportation and Warehousing	0.9	0.2
Administrative and Support and Waste Management and Remediation Services	2.4	0.2
Agriculture, Forestry, Fishing, and Hunting	1.0	0.2
Mining	0.1	(1)
Real Estate and Rental and Leasing	0.1	(1)
Construction	0.2	(1)
Other Services	0.2	(1)
Arts, Entertainment, and Recreation	(2)	(2)
Educational Services	(2)	(2)
Accommodation and Food Services	(2)	(2)
Not Allocable	(2)	(2)
Wholesale and Retail Trade not Allocable	(2)	(2)

¹ Less than 0.1 percent.

² Data undisclosed to protect taxpayer confidentiality.

Source: Joint Committee on Taxation staff calculations from Internal Revenue Service, Statistics of Income data.

Table 3.—Percentage Distribution of Corporations Claiming Research Tax Credit and of Credit Claimed by Corporation Size, 2005

Asset Size (\$)	Percent of Firms Claiming Credit	Percent of Credit Claimed
0	1.4	0.7
1 to 99,999	10.1	0.1
100,000 to 249,999	5.2	0.1
250,000 to 499,999	3.8	0.2
500,000 to 999,999	8.1	0.4
1,000,000 to 9,999,999	37.5	5.4
10,000,000 to 49,999,999	18.7	6.4
50,000,000 +	15.3	86.6

Note: Totals may not add to 100 percent due to rounding.

Source: Joint Committee on Taxation staff calculations from Internal Revenue Service, Statistics of Income data.

The R&E credit has several variants. The three primary versions broadly target cross-industrial research activity and are provided on an incremental basis. Another narrower credit focuses on research undertaken by energy research consortia and is calculated as a percentage of base expenditures. Finally, a credit is available for amounts paid to certain universities and nonprofit scientific research organizations for basic research that advances scientific knowledge but does not have a specific commercial objective.¹⁷⁰

The R&E credit is a good example of a provision in which targeting creates complexity. The complexity arises from requirements to identify qualified expenditures and to track these expenditures over time. Taxpayers must also make the calculation for each variant of the credit to determine which provides the greatest tax benefit. The provision's complexity, however, may be relatively less burdensome by virtue of the sophistication of typical research credit claimants compared with EIC or IRA users. The credit's incremental targeting is designed to encourage taxpayer response similar to that provided by a conventional credit but at a substantially reduced revenue cost and, in that respect, enhance efficiency. On the other hand, the nonrefundability of

¹⁷⁰ A full discussion of this and other issues, including the connection of the R&E credit to externalities, can be found in Joint Committee on Taxation, *Description of Revenue Provisions Contained in the President's Fiscal Year 2009 Budget Proposal*, March 2008 (JCS-1-08).

the credit disadvantages some potentially important start-up businesses that lack sufficient tax liability to fully use the credit.¹⁷¹

Although the R&E credit currently is not applicable because of its expiration, it has been extended many times since its introduction.¹⁷² One of the continuing issues related to the R&E credit concerns uncertainty, as the credit has been extended for short periods of varying duration numerous times over the past two decades. The credit has also been difficult to administer, resulting in audit issues and complicated recordkeeping requirements.

¹⁷¹ However, any unused credits may be carried forward up to twenty years, and in limited circumstances start-up firms with unused credits may be combined with other firms or with new business opportunities that generate tax liabilities.

¹⁷² The credit was allowed to lapse from July 1, 1995, through June 30, 1996.