How Do Complexity, Uncertainty and Other Factors Impact Responses to Tax Incentives?

Testimony before the

Senate Finance Committee

United States Senate

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March 30, 2011

Chairman Baucus, Ranking Member Hatch, and distinguished members on the Committee, thank you for the opportunity to testify today regarding the evaluation of special tax incentives and tax expenditures.

Tax expenditures represent a broad array of provisions and priorities of the Congress in the development and evolution of the Internal Revenue Code (the "Code") since the inception of the income tax a century ago. These provisions affect large segments of the U.S. economy, touch upon many aspects of household and business decisions, and significantly narrow the tax base, thereby requiring higher tax rates to raise a given amount of revenue. Many of these provisions are long-standing provisions that have been part of the Code for many years, but others reflect more recent priorities. These provisions were carefully considered and debated at the time of their enactment and added to the Code to meet specific objectives.

There are also a large number of provisions – expiring provisions – often extended a year at a time. In principle, the periodic extension of expiring provisions provides Congress an opportunity to reconsider and reevaluate their effectiveness, but the lack of their permanence may undermine the ability of taxpayers to rely upon and base decisions on the benefits they provide. Moreover, expiring provisions are no longer limited to several dozen business tax provisions, but now also include the alternative minimum tax (AMT) patch and the 2001 and 2003 tax cuts. The result is a tax system where large portions of the Code are in effect temporary.

Tax expenditures are in part receiving closer scrutiny due to the growing imbalance between what the federal government spends and collects in revenue over the next several decades. With growing federal deficits, the federal government debt held by the public is projected by the Congressional Budget Office to rise to 87 percent by 2021 and continue to grow to unsustainable levels. With these increasing fiscal pressures, there is a growing recognition that reevaluation of spending priorities ought to also take into account related spending that occurs

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through the tax code. Tax expenditures are also seen by some as a potential source of additional revenue that can help stem the fiscal gap and/or be used to lower tax rates.

An evaluation of the effectiveness of tax expenditures can be particularly helpful to the Congress as various policy priorities are reconsidered in light of the nation's long-term fiscal imbalance and need for tax reform.

I have had the opportunity to consider tax expenditures and other special tax provisions included in the Code from a number of perspectives, inside and outside of government, in the context of broad reform of the Code, how the provisions affect household and business decisions, and who receives their benefits.

Today I will discuss issues relevant to the evaluation of tax expenditures and other special tax provisions. First, I will focus on tax expenditures and their limitations. Next, I will focus on the rationale for special tax provisions. Then I will discuss how complexity and uncertainty affect their effectiveness and provide some considerations important to their evaluation.

The tax expenditure concept and its limitations

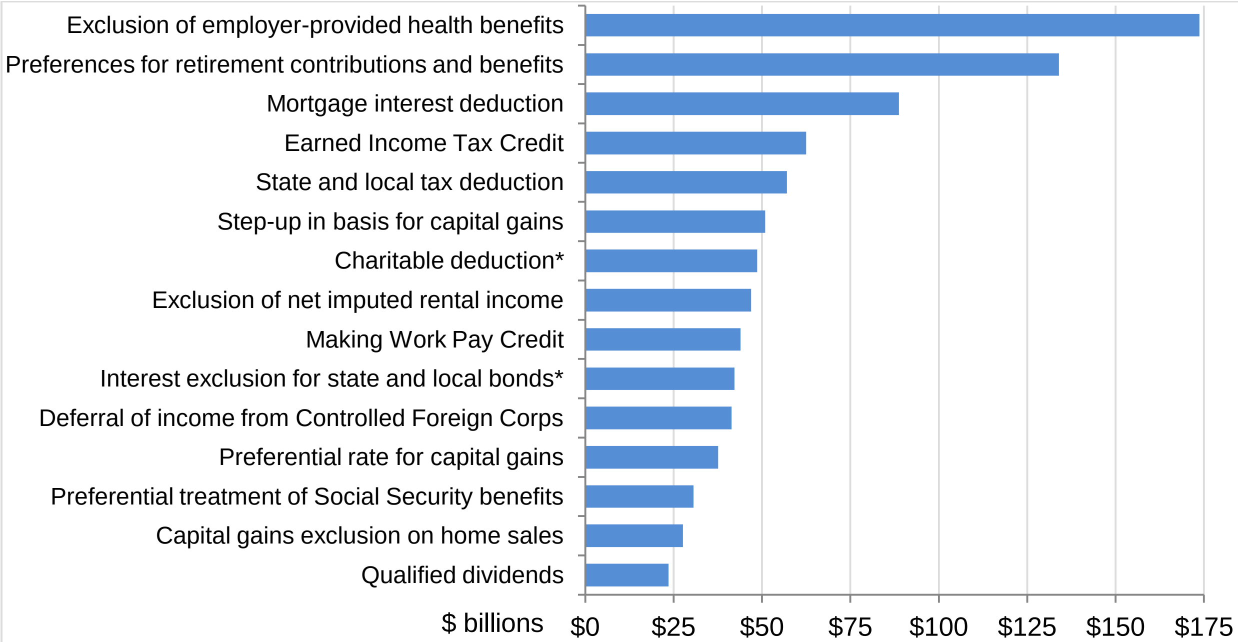
More often than not, the tax system has been used to encourage certain activities or provide benefits to particular groups of taxpayers through various special tax provisions often referred to as "tax expenditures." These provisions often take the form of exclusions, deductions, credits, or special tax rates that confer special benefits to activities and groups. The term "tax expenditures" reflects the notion that many of these provisions can be viewed similar to government spending programs, but that are included as part of the tax system.[2]

Tax expenditures have recently gained attention in part due to the large federal deficits over the past several years and the growing imbalance between what the federal government is projected to spend and receive in revenue over the next several decades. The 173 tax expenditures listed in the Budget of the United States total roughly $1.1 trillion annually.[3] These provisions result in a more narrow tax base that requires higher tax rates to raise a given amount of revenue. The higher tax rates themselves have adverse effects on work effort, saving and investment. The idea that tax expenditures reflect spending through the Code also suggests that their effectiveness and distributional effect ought to be considered together with reevaluation of direct spending priorities.

One important consideration is that many tax expenditures have been part of the Code for a long time. As shown in Chart 1 below, these provisions represent a broad range of priorities and are among the most politically popular provisions in the Code. Many provisions have been reconsidered and studied extensively since their enactment.

[2] See Stanley S. Surrey, 1970, "Federal Income Tax Reform," *Harvard Law Review* 84, pp. 352-408; and Stanley S. Surrey and Paul R. McDaniel, 1985, *Tax Expenditures* Harvard University Press, Cambridge, MA.
[3] Office of Management and Budget, Budget of the United States, Fiscal Year 2012, February 14, 2011.

Chart 1. Largest 15 tax expenditures, annual average, 2012 - 2016



* Denotes that tax expenditure includes both corporate and individual tax expenditure components.
Note: Estimates were based on current law prior to enactment of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.
Source: Budget of the United States for FY 2012, Analytical Perspectives, Tax Expenditures (Chapter 17), February 14, 2011.

Nevertheless, it is useful to consider the conceptual framework underlying tax expenditures and some of its limitations. Tax expenditures are, in some respects and in some cases, subjective departures from a more general and theoretical notion of an "ideal" income tax system. Their measurement takes certain key aspects of the income tax system as given and adheres to a set of rules that simplifies their estimation, but limits their usefulness. Also, in practice, the Congress has looked well beyond tax expenditures in past efforts for reform. Thus, tax expenditures only provide a limited guide for what would likely be considered in an actual reform.

Tax expenditures and the baseline tax system

The process of identifying and quantifying tax expenditures became formalized in 1974 with the enactment of the Congressional Budget and Impoundment Control Act of 1974, which mandated the annual publication of tax expenditure estimates in the Budget of the United States Government. This Act defined tax expenditures as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."[4]

Despite this requirement, identifying and quantifying tax expenditures is not straightforward and involves judgment. Identifying tax expenditures requires defining a baseline tax system against

[4] Congressional Budget and Impoundment Control Act of 1974 (PL 93-344), sec. 3(3).

which special provisions can be measured.[5] Tax expenditures can only be understood as deviations from a hypothetical baseline tax system that serves as a point of comparison.[6] This is because tax expenditures are a *negative* concept defined by reference to what is *not* done, i.e., taxes that are not collected on a particular activity or group of taxpayers.

The baseline tax system underlying the identification and measurement of tax expenditures used by both the U.S. Department of the Treasury and the Joint Committee on Taxation (JCT) is a comprehensive income tax. Under such a system, all household income would be taxed. In practice, however, a number of important departures from a comprehensive income tax are embedded into the baseline used by the Treasury Department and the JCT. First, the individual and corporate income taxes are viewed in isolation of each other. The fact that some income has been previously taxed under the corporate income tax, for example, is not considered when evaluating tax expenditures under the individual income tax. Thus, the lower tax rate on dividends and capital gains resulting from corporate equity investments is viewed as a tax expenditure even though this income has already been subject to the corporate income tax.[7] This, in effect, embedded the double tax on corporate profits into the baseline tax system for tax expenditures. Rather than the investor level taxes on this income being viewed as surtaxes, the lower rate on this income is instead viewed as a tax expenditure.

The baseline used for official tax expenditures also assumes that income is only taxed when realized even though a comprehensive income tax would tax income as it accrues. Thus, the deferral of tax on unrealized capital gains is not considered a tax expenditure.[8] Tax rates are allowed to vary by income, thus building the graduated tax rate existing in any particular year into the baseline tax system. In addition, tax rates, the standard deduction, personal exemptions and various other provisions are allowed to vary with marital status and the value of assets and debt are not adjusted for inflation.

The very choice of a comprehensive income tax as the underlying baseline system also has a considerable effect on the provisions included as tax expenditures. Under the alternative of a consumption tax baseline, the return to saving and investment would be free of tax. Roughly one-third of household financial assets and two-fifths of the return to investment receive consumption tax treatment under the current income tax system; that is, the current so-called income tax is very much a hybrid income-consumption tax.[9] Those provisions currently listed as tax expenditures because they relieve some of the return to saving and investment from tax

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[5] For a more detailed discussion of these issues, see Robert Carroll, David Joulfaian, and James Mackie, "Income Versus Consumption Tax Baselines for Tax Expenditures," *National Tax Journal* 64(2), 2011, forthcoming.

[6] Bradford, David F., 1989, "Tax Expenditures and the Problem of Accounting for Government," In Bruce, Neil (ed.), *Tax Expenditures and Government Policy* John Deutsch Institute for the Study of Economic Policy, Kingston, Ontario, pp. 427-434.

[7] The U.S. Budget released in February 2004 through February 2009 had accounted for the fact that the return from equity-financed investment in the corporate sector had been previously taxed under the corporate income tax when evaluating the tax expenditures related to dividends and capital gains. The U.S. Budget released in February 2010 no longer takes this interaction between the individual income and corporate income taxes into account.

[8] While tax upon realization is integrated into the "reference law" baseline tax system used by the Treasury Department and the "normal tax" baseline used by the Joint Committee, the lower tax rate applied to capital gains realizations is included as a tax expenditure.

[9] Report of the President's Advisory Panel on Federal Tax Reform, *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System,* November 2005, p. 23 and 71.

would not be counted as tax expenditures under a consumption tax baseline. Provisions such as individual retirement accounts, section 401(k) accounts, education savings accounts, health saving accounts, accelerated depreciation, and expensing would all be excluded as tax expenditures under a consumption tax baseline. To the extent some tax is imposed on the return to saving and investment, these items would instead be surtaxes under a consumption tax baseline. Of course, those special tax provisions unrelated to the return to saving and investment would remain tax expenditures under either an income or consumption tax baseline.

Other limitations of tax expenditures

Other well-known limitations apply when considering tax expenditure estimates.[10] The estimates do not, for example, include incentive or behavioral effects. For example, taxing dividends at ordinary rates would affect corporate dividend policy, but these effects are not incorporated into tax expenditure estimates. They also do not include interactions with other provisions. A higher tax rate on dividends could affect capital gains because companies would be more likely to retain corporate earnings rather than pay such profits out as dividends. Retaining corporate earnings would increase firm value and future capital gains realizations.

Interactions unrelated to behavioral effects are also not reflected in tax expenditure estimates. Repeal of an itemized deduction, for example, is estimated in isolation of other itemized deductions. If two or more provisions were repealed simultaneously, they would have interactive effects that are not reflected in tax expenditure estimates.

Another major limitation of official estimates of tax expenditures is that they focus solely on the income tax. Tax expenditures arise under other revenue sources, such as the payroll tax, excise taxes, and the estate tax.[11] Any departure from the theoretical baseline underlying these alternative revenue sources could be viewed as tax expenditures. For example, the largest income tax expenditure, the exclusion for employer-sponsored health insurance (Chart 1), would also be viewed as a tax expenditure under the payroll tax.

The rationale for special tax provisions

Economists have long focused on the role taxes play in the decisions of households and businesses. Resources transferred from the private economy to the government through taxes reduce disposable income, and the manner in which revenues are raised can have important consequences for the economy.

Virtually every tax creates what economists call an excess burden or deadweight loss, which represents the loss in welfare over and above what people transfer to the government as taxes. Taxes can distort choices and steer resources away from their best and highest use based

[10] For a more detailed discussion of these limitations, see Office of Management and Budget, *Budget of the United States, Fiscal Year 2012, Analytical Perspectives*, Chapter 17 (Tax Expenditures), February 14, 2011, pp. 240-255.
[11] For a discussion of tax expenditures under the excise tax, see Bruce F. Davie, "Tax Expenditures in the Federal Excise Tax System," *National Tax Journal* 47(1), March 1994, pp. 39-62.

purely on economic merit. Generally, when decisions are made in part for tax reasons, economic resources are wasted.[12]

Special tax provisions, however, can address deficiencies in the private market – the failure to take into account information or spillover effects of one activity to others. These provisions may attempt to achieve their objectives by encouraging (or discouraging) a particular economic activity. Invariably, this type of special tax provision also transfers economic resources. In other cases, special tax provisions are instead intended to solely achieve distributional objectives by transferring economic resources to a particular group.

Influencing taxpayer behavior through the tax code

One common rationale for special tax provisions intended to encourage a particular economic activity is the notion that some external effect is not reflected in market decisions or prices. In this case, private market participants acting on their own would base decisions without fully taking into account the societal benefits of an activity. In this case, it might be appropriate for the government to intercede in the market place, in effect, to nudge the private market towards a more economically efficient outcome; that is, an outcome that takes into account the societal benefits of the activity.

For example, research and development can provide benefits that are external to the benefits a private market participant may consider when making its decision on how much to spend on research and development or in what manner to spend on research. Such spillover effects of the research may benefit other market participants or broadly benefit the economy as a whole as new and innovative ideas are developed and incorporated into production processes. The same reasoning could apply to a broad range of provisions, including those that encourage additional education or health care spending, or the use and development of renewable and alternative energy sources, or charitable giving.

The size of the tax incentive embodied in the special tax provision, in principle, should be related in some way to the external benefits of the economic activity. In economic terms, the special tax provision should provide a subsidy that equals the difference between the total value to society and the value the private market places on the activity at the margin. That is, the incentive should be just large enough to nudge the private market to the economically efficient level of, for example, research and development, if the private markets fully understood and could reflect the social benefits of this activity.

While this serves as a useful theoretical framework for considering one role of some tax incentives, in practice, there are a number of difficulties that arise. First, it may be difficult to measure or know the social benefit of an activity. In some cases, there may be economic research that indicates or that could be conducted to indicate the social value of an activity to

[12] The consumer suffers a loss in economic welfare because the tax causes him to make a less desirable consumption choice as compared to a world without taxes. Virtually all taxes generate some type of excess burden because they create a wedge between the actual price and the underlying economic value of the product or services.

serve as a guidepost for the size of a subsidy. In other cases, judgment may need to be exercised as to the societal value of an activity.

Another difficulty might be how best to deliver a tax incentive. Providing a tax incentive to all of the underlying activity to align the societal and private benefits at the margin will generally be significantly more expensive as compared to a policy that was able to realign these benefits at the margin. Incremental credits, for example, have sometimes been used to attempt to focus more of the incentive on decisions at the margin. The drawback with focusing the incentive on marginal decisions, however, is that the incentive design is invariably substantially more complex and this complexity can undermine the effectiveness of the incentive and impose additional compliance and enforcement costs.

There may also be unintended consequences associated with a tax incentive due to unanticipated effects in other markets or industries or on other economically important decisions. For example, the home mortgage deduction is intended, in part, to promote homeownership. Homeownership has been linked to stronger and more cohesive neighborhoods, which has been associated with greater civic participation and lower rates of crime. It has also been observed that this deduction may affect household financing decisions and leverage. That is, the channel through which an incentive whose main purpose is to promote homeownership is delivered may have the unintended consequence of also promoting greater leverage.

Transfers of resources through special tax provisions

All tax subsidies also involve transfers of resources to the economic agents – the households and/or businesses – involved in the economic activity that is being encouraged. These distributional effects are an important aspect of the tax subsidy and play into notions of fairness.

It may seem relatively straightforward how tax subsidies that flow directly to households affect the distribution of the tax burden across income or demographic groupings. However, subsidies can be reflected in the price of the encouraged activity and the effects can flow beyond those directly claiming the tax benefits on their tax forms. For example, there is some evidence that the special tax provisions that provide subsidies for higher education have been passed forward into higher tuition costs.[13] Thus, taxpayers who claim the benefits of these provisions when filing their tax returns may also bear higher tuition costs, thereby reducing the benefits that flow to them from these provisions. Moreover, other consumers may pay higher tuition costs without the benefit of the tax subsidy.

Similar issues arise with special tax provisions for businesses. Workers may, for example, earn higher wages as their productivity is increased from faster integration of more innovative technologies or investors may earn higher returns due to such innovation. Similarly, consumers

[13] For example, see Bridget T. Long, "The Impact of Federal Tax Credits for Higher Education Expenses," In *College Choices: The Economics of Where to Go, When to Go, and How to Pay For It*, edited by Caroline M. Hoxby, University of Chicago Press, September 2004, pp. 101-165.

may broadly benefit as new technologies lower production costs and prices or new products are introduced that improve their general welfare.

In addition, the overall distributional effects of special tax provisions for businesses is confounded by the fact that businesses themselves cannot bear the burden of taxes. Only individuals, in their role as consumers, workers and investors can bear the burden of taxes through changes in prices, wages and returns to capital investments. Thus, while it is valuable, for example, to understand to which industries the benefits of the research and development credit flow,[14] this by itself does not tell us the entire story of how this provision affects the distribution of the tax burden.

Some special tax provisions are not necessarily designed to influence decision making, but instead to transfer resources to a particular group of taxpayers. For example, the child tax credit and the dependent exemption are intended to lighten the tax burden of families with children. In contrast, another family orientated tax provision, the child and dependent care tax credit, is designed to reduce the cost of child care for working parents. The benefits of many of these types of provisions are targeted to low-income and moderate-income taxpayers in various ways.

Evaluating special tax provisions

Two of the most important factors that may influence the effectiveness of special tax provisions may be their complexity and uncertainty. The design and delivery of a special tax provision can have profound effects on its effectiveness. Provisions that have complex eligibility requirements and other rules can impose substantial compliance costs that detract from their benefits. In some areas, duplicative provisions require taxpayers to understand and consider the tax benefits from several related provisions and choose the one that best meets their needs.

Examples of duplicative provisions include the numerous provisions in the Code to encourage savings or promote education spending. For the savings provisions, different income thresholds, different spousal participation rules, different effective contribution limits (e.g., pre-tax versus after-tax dollars), different withdrawal rules and different minimum distribution rules apply.[15] There are a dozen different provisions for education with different eligibility criteria, different benefits and different rules for what constitutes a qualified expense or expenditure.[16] The reliance on tax advisors to navigate the rules increases compliance costs and further detracts from the benefits of the provisions.

Uncertainty over tax provisions also undermines their effectiveness. A large number of tax provisions are now extended a year or two at a time. These provisions include many business and individual provisions such as the research and development credit and the state and local sales tax deduction. This results in significant uncertainty for taxpayers who rely on these provisions, including uncertainty in financial reporting for businesses. The uncertainty of these provisions makes it difficult for businesses to incorporate them into planning and investment

[14] For a recent analysis of the industry effects of business tax expenditures, see Gerald Prante, Robert Carroll and Tom Neubig, "Lowering Business Tax Rates by Repealing Tax Expenditures: An Industry Analysis," *Daily Tax Report* vol. 2011, no. 34, February 18, 2011.
[15] National Taxpayer Advocate's 2008 Annual Report to Congress, December 31, 2008.
[16] Congressional Research Service, *An Overview of Tax Benefits for Higher Education Expenses,* January 3, 2005.

decisions, thereby undermining their effectiveness. Some of these provisions have been allowed to lapse altogether or have been, on occasion, been extended retroactively. The 2001 and 2003 tax relief and the AMT patch are also temporary provisions leaving a significant portion of the Code in flux. The temporary nature of large portions of the Code adds complexity and uncertainty.

Evaluating special tax provisions requires examining the full range of their potential effects. Last year two bills introduced to extend expiring provisions (H.R. 4213 and S. 3793) included a provision that would have required the Joint Committee on Taxation (JCT) to prepare a study on the effectiveness of tax expenditures to help inform the Congress in its future consideration of these provisions.

Although ultimately not included in the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 enacted in December 2010, the provision suggests the type of additional analysis of tax expenditures that Congress might benefit from in the current environment of large deficits and a growing national debt. The ten points included in the provision (see Appendix) provide a useful approach for evaluating special tax provisions. The Committee should be commended for also focusing on the complexity and uncertainty of special tax provisions and these issues might also be explicitly included on the list.

One item included on the list and of primary interest is whether a special tax provision has achieved its original purpose; that is, did the provision encourage the activity for which it was initially enacted? This would appear to be the key question in evaluating any special tax provision initially enacted to encourage (or discourage) a particular economic activity. Does, for example, the research and development credit actually result in additional research? Have the credits for solar and wind turbines actually resulted in the development and integration of these technologies into the energy grid?

It may be relatively straightforward to track the economic activity targeted by a specific provision. One can then glean from the data whether the enactment of the provision had a discernable effect on the activity. Isolating and quantifying the effect of the tax provision on the level of activity, however, may be significantly more difficult. A variety of other factors may also influence the activity and obscure the effects of the special provision. Statistical approaches to account and control for other factors unrelated to the tax provision, but that also affect the target activity, can be used but often require detailed data and are complex.

One aspect of evaluating the effectiveness of a special tax provision is ascertaining whether the benefits of the provision lower the after-tax cost of an item or are reflected in prices or possibly asset values. If the special tax provision ultimately inflates prices, it is less likely that the provision would have the desired effects of encouraging the economic activity. The benefits of the special tax provision are, in effect, taken away by the rise in prices.

Capitalization can also affect who benefits from a tax provision. Current owners of assets might benefit from special tax provisions that are capitalized into asset values and prices even though future owners may claim the direct benefits when filing their tax returns. Changes in asset values and prices can also shift the benefits of a provisions to economic actors other than those who claim the benefits when filing their tax returns.

One area of concern is whether a special tax provision has had collateral consequences. Considering the impact of the provision on other economic decisions would generally be worthwhile so that the benefits of the provision can be weighed against potential costs due to collateral consequences. For example, in the case of the exclusion for employer-provided health insurance, it might be important to weigh the benefit of additional pooling of risk through employer provision of health insurance with the effect of the likely increased use of low-deductible plans and prepayment of routine health care through insurance that also accompanies employer-provision of health insurance. The pooling of risk may help lower overall costs, while low-deductible and prepayment may increase overall costs. Other provisions are also likely to have collateral consequences that should be carefully considered when evaluating their overall effectiveness.

Summary

Tax expenditures and other special tax provisions are receiving additional scrutiny by the Congress and others in the policy arena in the current environment of large deficits and a national debt projected to grow to unsustainable levels. The 173 tax expenditures identified by the Treasury Department total roughly $1.1 trillion annually and affect household and business decisions in fundamental ways. Many of these provisions are longstanding provisions of the Code, while others are relatively new additions.

This committee should be commended for focusing on these issues as part of their dialogue and deliberations on tax reform. A better understanding of the effect of these provisions and who they benefit would be valuable inputs into the policy debate as the Congress reevaluates various priorities on both the spending and tax sides of the budget to meet the nation’s fiscal challenges.

Thank you and I would be pleased to address any questions you may have.

Appendix: Extenders Bill Requirement for JCT
Cost-Benefit Analyses of Tax Expenditures

The extenders bills considered last year by both the House (H.R. 4213) and the Senate (S. 3793) included a provision that would have required the Joint Committee on Taxation (JCT) to prepare a study on the effectiveness of each tax expenditure to help inform the Congress in its future consideration of the provisions. Initially, the Joint Committee would have been instructed to first focus on the business and energy tax expenditures included in the extenders legislation.

Although ultimately not included in the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 enacted in December 2010, the provision is a clear indication of the additional scrutiny tax expenditures are receiving by the Congress in the current environment of large deficits and a growing national debt.

Each Joint Committee tax expenditure report would cover ten issues:

1. An explanation of the tax expenditure and any relevant economic, social or other context under which it was first enacted.
2. A description of the intended purpose of the tax expenditure.
3. An analysis of the overall success of the tax expenditure in achieving its intended purpose and supporting evidence.
4. An analysis of whether further extension of the tax expenditure, or making it permanent, would contribute to its intended purpose.
5. A description of the direct and indirect beneficiaries of the tax expenditure, including identifying any unintended beneficiaries.
6. An analysis of whether the tax expenditure is the most cost-effective method for achieving its intended purpose, a description of more cost-effective approaches, and modifications to make it more effective.
7. A description of any unintended consequences of the tax expenditure useful to understanding the tax expenditure's overall value.
8. An analysis of how the tax expenditure could be modified to better achieve its original purpose.
9. A brief description of any interactions (actual or potential) with other tax expenditures or direct spending programs in the same or related budget function worthy of further study.
10. A description of any unavailable information the Joint Committee on Taxation might need to complete a more thorough examination and analysis of the tax expenditure and what must be done to make such information available.

The Joint Committee reports were to be prioritized with reports completed in order of their costs (from the least cost to the greatest cost).