

Statement of

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Responses to Tax Incentives in a Complex and Uncertain Tax Law

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Chairman Baucus, Ranking Member Hatch, and members of the Committee

Thank you for inviting me to testify today on taxpayer responses to incentives in the individual and corporate income taxes. I will limit my comments to a discussion of how tax incentives might affect behavior, what the available evidence does and does not tell us, and how the increased complexity of the tax code affects responses to these incentives. I will not address the important questions of whether the behaviors that tax incentives encourage add to or subtract from economic efficiency or how tax incentives alter the distribution of income.

The tax code can be viewed conceptually as consisting of two types of provisions – 1) general rules and 2) exceptions to those rules. The general rules define what is to be taxed (the tax “base” or bases), the rates at which taxes should be applied (flat or graduated), the taxpaying unit (single individuals, couples, corporations), and rules for adjusting the tax base to account for family size. The exceptions consist of provisions that allow special exemptions, deductions, tax credits, preferential tax rates, or deferrals of recognition of income for selected activities or categories of taxpayer.

There is considerable dispute about which provisions should be viewed as part of the normative or baseline tax system and which provisions are exceptions, or “tax expenditures”. For example, the baseline tax system is a broad-based income tax, while some economists would prefer a consumption-based system that allows deferral of liability until income is consumed. Under such an alternative baseline, deferral of tax on income accrued within qualified retirement plans would no longer be a tax expenditure. Nonetheless, the Congressional Budget Act of 1974 required both the Office of Management Budget (OMB) and the Congressional Budget Office to prepare annual lists of these tax expenditures and estimates of their revenue losses. The Joint Committee on Taxation (JCT) has assumed responsibility for preparing these estimates on the Congressional side. Every year, both OMB and JCT release updated estimates of tax expenditure provisions.¹

Tax expenditures often intend to reward selected groups of taxpayers, encourage certain forms of behavior, or do both. For example, child credits, special deductions for the elderly and blind, and exemption of Social Security benefits for low-income taxpayers intend to help certain groups Congress views as meriting assistance and are substitutes for cash transfer programs. Other provisions, such as tax credits for renewable energy, or deferral of tax liability for income accrued within qualified retirement plans, intend to promote policy goals, such as reduced use of

¹ The OMB estimates are included in the Analytical Perspectives section of the federal budget. The Treasury Department’s Office of Tax Analysis prepares the estimates for OMB.

fossil fuels or adequacy of retirement saving. Still other provisions, such as the earned income credit, intend both to help low-earners with families and to encourage workforce participation.

The use of the term tax expenditures reflects the insight that many of these benefits in the tax law could alternatively be structured as spending programs. Renewable energy tax credits could be structured, for example, as grants for qualifying energy investments provided by the Department of Energy. The child credit could be paid out as an annual check to qualifying families from the Department of Health and Human Services. In some cases, the tax code may be a convenient way to provide benefits because it does not require recipients already reporting to the IRS to interact with a different government agency or the government to create a new agency and because some characteristics for qualifying, such as annual income, may already be reported on tax forms. Nonetheless, often the tax system is used to provide incentives simply because tax incentives with exactly the same structure as benefit programs can be marketed as tax cuts instead of new spending.

Tax expenditures cost the government substantial revenues. My colleague Donald Marron has recently calculated that losses in individual and corporate revenues from tax expenditures reported in the fiscal 2012 budget, including the refundable portion of credits, add up to almost \$1.2 trillion in fiscal year 2011, about the same as projected total individual and corporate income tax receipts.² Total tax expenditures do not lose the same amount of revenue as the sum of the individual provisions because each provision is estimated as if all other provisions in the tax law remain in effect.³ But the \$1.2 trillion figure is probably a very good approximation and may be an understatement. In a recent paper, Len Burman, Chris Geissler, and I estimated the simultaneous effect of eliminating virtually all individual income tax expenditures, other than those affecting the reporting of business income, in 2007.⁴ We found that taking account of interactions among provisions raised the estimate of total revenue losses by between 5 and 8 percent, compared with simply adding up each item separately.

Many of these tax incentives intend to encourage certain forms of behavior. But it is not always clear what Congress intended when it created particular tax incentives. For example, when the

² Donald B. Marron, "How Large are Tax Expenditures," *Tax Notes*, March 28, 2011.

³ Eliminating any separate tax expenditure or group of tax expenditures would also not necessarily raise the same amount of revenue as the tax expenditure estimate shows because the tax expenditure estimates ignore behavioral responses. For example, eliminating the preference for capital gains would induce lower capital gains realizations, so would not raise as much revenue as the static loss from the preference at existing levels of realizations.

⁴ Leonard Burman, Eric Toder, and Christopher Geissler, "How Big are Total individual Income Tax Expenditures and Who Benefits from Them?" Tax Policy Center. Discussion Paper No. 31. December 2008. At http://www.taxpolicycenter.org/UploadedPDF/1001234_tax_expenditures.pdf

modern federal income tax was introduced in 1913, all interest was deductible as a cost of producing income. But the resulting deductibility of home mortgage interest originally had very little effect on economic behavior; many fewer people owned homes than today, only the very highest income Americans were subject to any income tax, and the fixed rate 30 year mortgage had not become widely prevalent. Subsequent changes, including the conversion of the income tax from a “class” tax to a “mass tax” during World War II, the post-war expansion of homeownership, and the increased availability of mortgage financing, turned the deduction into an important incentive, encouraging investment in larger homes. The deduction then became even more of an anomaly in the tax code after 1986 when deductibility of other forms of interest not associated with the production of income were curtailed and over time as opportunities to accrue interest tax-free in qualified retirement plans increased.⁵ Today, we can retrospectively construct reasons why Congress might have wanted to subsidize home mortgage borrowing, but this provides a possible rationale for the policy and not an explanation of how it came about.

Regardless of the actual goals of provisions, we can identify provisions that subsidize certain investments by businesses and consumption choices by households. And we may want to know whether these incentives actually increase the subsidized behaviors.

In my comments today, I will address the following questions:

- What does traditional economic theory tell us about the effects of tax incentives?
- What have we learned from statistical studies of the major tax incentives?
- What is “behavioral economics” and how has this relatively new approach to economic research affected our views of how tax policies affect behavior?
- Based on the insights of this research, in what ways does the complexity of the current income tax alter the effectiveness of tax incentives?

Traditional Economic Analysis of Tax Incentives

Traditional economic theory starts with the premise that businesses and households behave rationally. Businesses seek to maximize profits, subject to restraints imposed on them by markets for goods, labor, and capital and laws, regulations and social customs. Households try

⁵ See discussion of the mortgage interest deduction in Eric Toder, Margery Austin Turner, Katherine Lim, and Liza Getsinger, “Reforming the Mortgage Interest Deduction,” Urban Institute and Tax Policy Center, April 2010, at <http://www.urban.org/UploadedPDF/412099-mortgage-deduction-reform.pdf>

to maximize their economic well-being, broadly defined to include availability of leisure time and amenities in the work place as well as consumption of goods and services purchased with money income.

In maximizing their economic well-being, households must make the following basic choices:

- Households choose how to allocate their time between working for pay and engaging in non-market activities. These two categories are often called “work” and “leisure” in the economic literature, but leisure broadly defined includes many forms of uncompensated work performed in the home, such as child care, cooking meals, and self-performed household repairs.
- Households choose to allocate their income between consumption today and saving, so that they can consume more in the future or, for some, leave a larger bequest.
- In any year, households choose how to allocate their current consumption among different goods and services such as food, clothing, housing, and recreation.
- Households choose how to invest their saving among choices of real and financial assets with different expected returns and risks. They may also invest in their future earning power through schooling and on-the-job training.

All these choices are influenced by relative prices for different activities – the relative price between an extra hour of “work” and “leisure” (the wage rate), the relative price of current and future consumption (the interest rate or return to saving), the relative prices of different consumer goods, and the relative returns (and risks) among different investment opportunities. Taxes, in turn, affect the relative prices consumers pay for goods and services, the relative incomes they receive from different activities, and the costs that businesses face in supplying the goods and services households demand. They do this by reducing the price sellers receive (net of tax) below the price paid by buyers (including tax). Income taxes reduce the after-tax wage, relative to the firm’s cost of employing workers, and the net return to saving, relative to the price businesses pay for capital services. Selective sales and excise taxes raise the prices of taxed goods and services relative to those not taxed or taxed at lower rates. Broad-based consumption taxes reduce the value of earnings workers receive, relative to the prices they pay for goods and services, but do not affect the return to saving. The corporate income tax increases the cost of capital services to corporate firms, but also contains numerous complex incentives affecting choices between debt and equity, dividend payout rates, the international location of investment, amounts of income reported to different tax jurisdictions, and decisions on whether to be structured as a taxpaying corporate entity or a flow-through business with income taxed directly to owners.

Tax incentives affect behavior by changing relative prices faced by households and firms, compared with those they would face in the baseline tax system. For example:

- The home mortgage interest deduction reduces the cost of capital in owner-occupied housing by lowering interest net of taxes paid by borrowers. It favors owning over renting and encourages homeowners to invest more in their homes, thereby diverting capital from financial assets and businesses to the household sector. The subsidy is larger for those in higher tax brackets than for those in lower income tax brackets and there is no subsidy at all for taxpayers who claim the standard deduction instead of itemizing.
- The charitable deduction reduces the “price” of giving so that, for example, a taxpayer in the 35 percent bracket spends only 65 cents per dollar she donates to a qualified charity. As with the home mortgage deduction, the subsidy to giving is larger for those in higher than in lower tax brackets and there is no subsidy for non-itemizers.
- Tax credits for renewable energy reduce the cost of generating electricity from renewable energy sources such as hydropower or geothermal energy, relative to the cost of burning fossil fuels.

Economic theory generally implies that tax incentives that affect decisions at the margin by reducing the cost of additional activities a taxpayer may undertake are more effective than those that provide fixed dollar benefits that do not increase as output rises. For example, IRAs with a fixed dollar contribution limit may provide little incentive to save for those who typically save more than the limit. An incentive to save more would only occur if the dollar limit was higher than what the households would have otherwise saved and if the household was unable to contribute up to the limit either by transferring other assets or by borrowing. Tax benefits for new investment, such as expensing or investment credits, may increase investment more per dollar of revenue cost than tax rate cuts that benefit existing as well as new investment.⁶

Because tax incentives work by changing prices that households and businesses face for subsidized activities, standard economic theory implies that it does not matter whether the subsidy is claimed by the seller or the buyer. What matters instead is how responsive sellers and buyers are to price changes. According to this view, for example, a 20 percent interest credit

⁶ Some subsidies may have opposite effects on the incentive to undertake an activity at all and the incentive to undertake more of the activity for those participating. For example, the earned income credit (EIC) raises the reward for working in the market, but may discourage working more than a certain number of hours if the taxpayer's income is in the range at which the earned income credit phases out with additional earnings. Research shows that the EIC raises hours worked overall because the increase in hours from higher labor force participation outweighs any decrease in hours among those otherwise working.

paid to mortgage borrowers should have the same effect on borrowing as a 25 percent interest subsidy paid to lenders.⁷

Joel Slemrod has provided a useful classification of the hierarchy of responses to targeted incentives.⁸ Incentives that affect the *timing* of behavior by providing a tax benefit, for example, in December 2011 than is not available in January 2012, can induce a very large shift in economic activity to qualify for the benefit, even while total activity over several years is unchanged. For example, the tax holiday for repatriation of foreign profits enacted in December 2004 induced a huge volume of dividends paid to U.S. parent companies from foreign subsidiaries while the benefit was in effect. Incentives that affect *financial arrangements*, such as whether a particular investment is financed with equity or debt or where income is reported, can also generate fairly large, but not as large responses as timing differences. For example, the growing gap between the U.S. corporate income tax rate and tax rates in other countries has induced companies to find ways to report more income in lower-taxed offshore jurisdictions. Incentives that affect *real* activities, such as the level of investment or labor supply, generate the smaller responses. The same growing corporate rate gap that induces income shifting encourages some additional investment overseas compared with investing in the United States, but the likely shift in real investment is much more modest than the shift in reported profits.⁹

Among subsidies for real activities, more narrowly targeted subsidies that favor assets or consumer goods that are close substitutes for others generate larger behavioral responses. Thus, a favorable tax concession for capital employed in one industry or type of firm is likely to generate a much larger response for the subsidized asset than would a tax benefit that affects all assets equally and relies on inducing households in general to save more. This is not to say that narrowly targeted incentives necessarily represent good policy. If one believes that private market signals provide a better guide to investment choices than government decisions, then the targeted incentives could generate a large efficiency loss by misallocating scarce capital resources to investments with lower pretax returns.

⁷ To see that these two subsidies are equivalent, suppose the borrower is charged a 10 percent interest rate and claims a 20 percent credit. The net cost of borrowing is 8 percent and the bank receives 10 percent. Suppose, instead that a 25 percent credit is paid to the bank. The bank charges the borrowers 8 percent interest and then receives a payment from the government equal to 25 percent of the interest charged, leaving the bank with a total return from the borrower plus government of 10 percent.

⁸ Joel Slemrod, "Do Taxes Matter? Lesson From the 1980s," National Bureau of Economic Research, Working Paper 4008, March 1992.

⁹ For example, Martin Sullivan cites IRS data showing that the ratio of reported profits to assets for U.S. multinational companies is much higher in low-tax than in high-tax countries. See Martin A. Sullivan, "Economic Analysis: Extraordinary Profitability in Low-Tax Countries." *Tax Notes*, August 25, 2008.

Research on Tax Incentives and Behavior

There have been numerous studies of how price changes induced by tax incentives affect economic behavior. These results of these studies are difficult to interpret because economists typically cannot perform the type of controlled experiments that are possible in other scientific fields. Instead, economists search for “natural experiments” in which it may be possible to isolate the effects of price variations on economic behavior. Cross-section studies compare the behavior of taxpayers in the same year, who are faced with different tax incentives, either because they live in different jurisdictions or because the incentive depends on other aspects of their economic or tax position. Time-series studies compare changes in taxpayer behavior over time when there have been changes in tax incentives. If they are available, panel studies that follow the same taxpayers over time provide a useful way of capturing changes in behavior of the same taxpayers when the incentives they face change relative to others.

All of these studies confront serious problems of statistical interpretation. Correlation between two variables does not imply that one change causes the other and there are usually many aspects of a taxpayers’ situation that are changing at the same time, confounding attempts to identify the separate effect of the incentive being studied. Statistical studies provide broad confirmation that tax incentives affect behavior, but the size of estimated behavioral responses often varies greatly among studies.

It is not my purpose to summarize the vast amount of research on tax incentives and economic behavior, but I cite a few examples:

- Numerous studies find that charitable contributions are affected by the “tax price” of giving; the lower the price net of tax, the larger amounts given, holding other variables constant. But the size of estimated responses varies greatly; some studies find that taxpayers give more *net* of the tax benefit in response to a larger benefit¹⁰, suggesting that it is more “cost-efficient” for government to support charities through a tax incentive than

¹⁰ Technically, this happens when the response of charitable giving has a price elasticity that is great than 1, meaning that, for example, a 10 percent reduction in the tax price increases giving by more than 10 percent. If for example, a 10 percent tax credit causes giving to rise by 20 percent, someone previously giving \$100 would now give \$120. Charities would receive an additional \$20 in contributions at a cost to the government of only \$12 (10 percent of \$120). In contrast, if the price elasticity of giving is less than one, the revenue loss to the government will exceed the increased gifts received by charities.

through direct grants. Other studies find a much smaller response of giving to the tax price.¹¹

- Many studies show that capital gains realizations increase when the tax rate on realized capital gains falls, although this does not necessarily imply that investment also increases. Some studies suggest that, within certain ranges, a lower capital gains rate could raise revenue from capital gains taxes. The short run response and timing effects, however, have been shown to be much larger than the long-run effects.¹²
- There have been diverse results from studies of the effects of saving incentives for IRAs and 401k plans on saving.¹³ Some studies find large effects on household saving, but others find that most contributions come from other saving accounts or from borrowing. Some research finds much larger positive saving effects, per dollar of participation in plans, for low-income households who do not have the ability to shift assets from other accounts.¹⁴ But these households represent a minority of plan participants and hold a very small share of total assets in qualified plans.

New Lessons from Behavioral Economics

“Behavioral economics” departs from traditional economic theory by assuming “non-rational” behavior among households. Thus, it seeks to explain better how people do behave instead of how they would behave if they were making rational and consistent choices to maximize their well-being.

Assuming households are non-rational does not mean that their tastes and preferences differ from ours. It is perfectly consistent with a rational economic model for an individual to consume all her income every year and not worry about being impoverished in retirement, although we might

¹¹ Many of these studies are summarized in John Peloza and Piers Steel, “The Price Elasticities of Charitable Contributions: A Meta-Analysis,” *Journal of Public Policy and Marketing* 24(2), 2005.

¹² For a discussion of much of this research, see Leonard E. Burman, *The Labyrinth of Capital Gains Tax Policy – A Guide for the Perplexed*, Brookings Institution Press, Washington, DC, 1999.

¹³ See, for example, Eric M. Engen, William G. Gale, and John Karl Scholz, “The Illusory Effects of Saving Incentives on Saving,” *Journal of Economic Perspectives* 10(4), 1996, R. Glenn Hubbard and Jonathan S. Skinner, “Assessing the Effectiveness of Saving Incentives,” *Journal of Economic Perspectives* 10 (4), 1996, and James M. Poterba, Steven F. Venti, and David A Wise, “How Retirement Saving Programs Increase Saving,” *Journal of Economic Perspectives* 10(4), 1996.

¹⁴ Eric M. Engen and William G. Gale, “The Effects of 401(k) Plans on Household Wealth Differences Across Earnings Groups,” National Bureau of Economic Research, Working Paper 8032, 2000.

think such behavior is unwise. Instead, non-rational behavior means that households do not act according to a consistent set of preferences. Behavior is affected by how incentives are framed, by default rules, and by other attributes that do not alter real economic choices.

If household behavior were viewed as purely random, then behavioral economics would be no help in understanding the economy. But behavioral economics can make an important contribution to our understanding of how incentives affect economic choices to the extent it can reveal systematic patterns of inconsistent behavior.

Some of the findings of research by behavioral economics contradict the assumption of rationality and improve our understanding of household behavior. A few examples:

1. Participation in retirement saving plans and choices among investments within plans are heavily influenced by default rules. Participation rises dramatically when workers are automatically put into retirement plans and given the chance to “opt out” than when they have to take an active decision to participate. When enrollment is automatic, most participants retain the investment portfolio that the plan defaults them into. And, although standard economic theory suggests that more choices make people better off, households are more likely to sign up for participation in plans that offer fewer investment options, perhaps because the inability to decide which fund to select deters them from doing anything.¹⁵ Sometimes people fail to sign up for plans offering an employer match even when the match can be converted directly into cash and therefore could leave them with increased wealth at no sacrifice in current consumption.¹⁶
2. The visibility of incentives (referred to as “salience”) affects behavior substantially. People reduce demand for taxed goods more when sales and excise taxes are stated separately than when they are simply incorporated in the price of goods.¹⁷ Use of an EZ-

¹⁵ Over the past decade, a large volume of articles by James Choi, David Laibson, Brigitte Madrian, and others have explored the effects of default rules on retirement saving choices. For a summary, see John Beshears, James Choi, David Laibson, and Brigitte C. Madrian, “The Importance of Default Options for Retirement Savings Outcomes: Evidence from the United States.” In Jeffrey R. Brown, Jeffrey Liebman, and David A. Wise, editors, *Social Security in a Changing Environment*, Chicago, University of Chicago Press, 2009.

¹⁶ James Choi, David Laibson, and Brigitte C. Madrian, “\$100 Bills on the Sidewalk: Suboptimal Investment in 401(k) Plans,” *Review of Economics and Statistics*, forthcoming.

¹⁷ Raj Chetty, Adam Looney, and Kory Kraft, “Salience and Taxation: Theory and Evidence,” National Bureau of Economic Research, Working Paper 13330, 2009.

pass to pay tolls increases the volume of traffic on toll highways by more than can be explained by time saved by not waiting at a toll booth.¹⁸

3. How subsidies are framed affects behavior. Matching grants to charities appear to induce more giving than subsidies in the form of rebates.¹⁹ While matching grants do induce additional charitable giving, the size of the match ratio appears to have no additional effect.²⁰ Evidence from a controlled experiment suggests that matching grants increase contributions by low-income households to retirement plans more than refundable tax credits.²¹

These research results challenge conclusions of traditional economics about how best to design incentives to influence behavior. It turns out it does matter whether an incentive is provided to the buyer or seller, even if the real incentive effect is the same. Lump sum subsidies or fixed grants can affect behavior, even if they are easily substitutable for cash so don't really provide an economic incentive for the desired activity (the so-called "flypaper" effect). People will respond differently if offered a fixed-dollar subsidy for an activity instead of cash even if the subsidy is immediately and easily convertible to cash and therefore, in theory, equivalent. People are heavily influenced by default positions and have a strong bias to loss relative to their starting point. So they will be influenced much more by potential losses from changing behavior than by potential losses from not changing it.

The emphasis of behavioral economics on salience and framing of policies has particular relevance to how tax complexity affects responses to incentives. Even with fairly simple incentives, people may fail to perceive the benefits to them from particular choices. The problems become multiplied in our increasingly complex income tax. I turn now to some general observations about complexity and its effects.

Tax Complexity and Responses to Incentives

¹⁸ Amy N. Finkelstein, "E-Z Tax: Tax Salience and Tax Rates," National Bureau of Economic Research Working Paper 12924, 2007.

¹⁹ Catherine Eckel and Philip Grossman, "Subsidizing Charitable Contributions: A Natural Field Experiment Comparing Matching and Rebate Subsidies," Working Paper, 2007.

²⁰ Dean Karlan and John A. List, "Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment," *American Economic Review*, December 2007.

²¹ Esther Duflo, William Gale, Jeffrey Liebman, Peter Orszag, and Emmanuel Saez, "Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block," National Bureau of Economic Research, Working Paper 11680, 2005.

I identify three ways in which tax complexity can affect responses to tax incentives. First, and most directly, some tax incentives are so complex that even well-advised and sophisticated taxpayers find it hard to figure out how to respond optimally. Second, the overall complexity of the entire tax system makes even simple tax incentives less salient. Third, most of our tax law has become temporary, so people facing economic choices may have no good way to predict the tax consequences.

Some Tax Incentives are Horrendously Complex

Some tax incentives may themselves be so complex that taxpayers have a hard time figuring out how best to respond in their own interest. Examples include:

- The multiple tax incentives for higher education and their interactions with spending programs, such as Pell grants.
- Multiple forms of saving incentives, including the choice between pre-paid (Roth) and deductible accounts, that make choice of the optimal response challenging even for highly educated tax professionals and their financial advisors. The relative benefits from saving in a Roth or deductible accounts depend on numerous factors, such as the taxpayer's expected future income, expectations of how Congress may change tax rates in the future, and expectations of the timing of future consumption needs.
- Various phase-outs and limitations on tax incentives that reduce their benefits and alter incentives to work and save in certain income ranges, including the limitation on itemized deductions, the personal exemption phaseout, and phase-outs of the child credit, education credits, IRA participation limits, and the earned income credit.
- Interaction of tax incentives with the alternative minimum tax
- Complicated eligibility provisions for certain tax benefits, such as the earned income credit.

The report of the President's Economic Recovery Board included a number of options to rationalize and simplify tax incentives.²² To date, however, this and similar proposals in

²² The President's Economic Recovery Advisory Board, "The Report on Tax Reform Options: Simplification, Compliance, and Corporate Taxation," August 2010.

previous years advanced by the IRS Taxpayer Advocate and others have had little impact on legislation.²³

The Overall Complexity of the Tax System Makes Even Simple Tax Provisions Less Salient

The tax system has become increasingly complex over time. Surprisingly, however, IRS researchers find that the cost for individual taxpayers to comply with the tax system has declined slightly in the past decade.²⁴ A plausible explanation for this is that the increased productivity of automated tax preparation methods has offset the rise in complexity of the tax code.

Currently, about 90 percent of taxpayers use either preparers or software to calculate their tax liability. The use of automated methods reduces time spent in preparing returns and helps taxpayers maximize their use of the benefits available to them in the tax code, given their economic behavior.

But this time saving comes with a cost. Taxpayers need to know less about the tax system in order to complete their returns and, unless they have a very proactive tax advisor, are less likely to respond to incentives in the tax code in a manner consistent with their personal economic interests. Because they know less about how their tax bottom line is calculated, they are less likely to be sensitive to the types of incentives that are placed in the tax law to change their behavior.

Further, various provisions have very complicated interactions with each other. In particular, although marginal tax rates are supposed to measure tax incentives and disincentives, it is very hard for taxpayers to know what their marginal tax rate will be when making decisions.

Here's a simple example. The Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) reduced the top marginal rate on capital gains to 15 percent in 2003. But for some taxpayers, the marginal rate on realized gains is much higher than that. Suppose, for example a taxpayer in the state of Maryland who is in the phase out range of the alternative minimum tax (AMT) exemption realizes an additional \$100 of capital gains. The \$100 of additional income reduces the AMT exemption by \$25. At the 26 percent rate (the first rate bracket of the AMT), the

²³ Annual reports of the National Taxpayer Advocate list the most serious problems faced by taxpayers in complying with the tax law. The latest report has a section on tax reform that discusses options for simplifying the tax code. See National Taxpayer Advocate. *2010 Annual Report to Congress*. At <http://www.irs.gov/advocate/article/0,,id=233846,00.html>

²⁴ George Contos, John Guyton, Patrick Langetieg, and Melissa Vigil, "Individual Taxpayer Compliance Burden: The Role of Assisted Methods in Taxpayer Response to Increased Complexity," Presentation at IRS Research Conference, June 2010. At <http://www.irs.gov/pub/irs-soi/10presconindtax.pdf>

individual liability increases by \$21.50 -- \$15 from the \$100 of capital gains and another \$6.50 (26 percent of \$250) from the reduction in the AMT exemption.²⁵ Adding on the 8 percent rate on capital gains in Maryland, which is not deductible for taxpayers on the AMT, makes the total rate on capital gains 29.6 percent – double the 15 percent rate. Without the AMT, the taxpayers would still pay state income tax on her capital gain, but the state tax would be deductible and the federal tax would be only 15 percent, so the total state-federal rate would be 21.8 percent $(.08 + (.15 * .92))$.

Not knowing one's marginal tax rate means one can't gauge the incentive effect of tax benefits that are in the form of deductions, exclusions, exemptions, and deferrals of income. And it also means that preferential tax rates may be not as preferential as you might think for some taxpayers.

An Expiring Tax Code

Even if people understood the detailed working of all these incentives, they would still face great uncertainty assessing future tax burdens. The tax cuts enacted in 2001 and 2003 all expire at the end of 2012. It is possible they will be extended again, but one can't rule out a political stalemate that leads to their partial or complete expiration. The AMT patch also expires at the end of 2011; it has been extended several times in the past, although sometimes only just before the tax year has ended. The one-year payroll tax holiday also expires at the end of 2011. This provision was meant to be temporary, but allowing people's withholding to rise in January of an election year might give some legislators pause. Numerous business tax incentives expire annually or every two years. Some expiring incentives, such as the one-year expensing provisions enacted at the end of 2010, are meant to be temporary, but others have been extended numerous times in the past. For example, the R&E credit was initially enacted in 1981 and modified and extended many times since then. Although it has been effect now for 30 years, it has never been a permanent feature of the tax law.

Congress could greatly improve the transparency of the tax system by limiting temporary provisions to those that really are meant to be temporary, for example a few selected short-term anti-recession measures. Temporary tax cuts could be allowed to lapse or made permanent or some provisions could be made permanent while others are allowed to end. Whatever the shape of a future tax system, taxpayers would be much better served by tax laws that are reasonably stable and predictable.

²⁵ See Greg Leiserson, "The 15 Percent Rate on Capital Gains: A Casualty of the Alternative Minimum Tax," Tax Policy Center article, at http://www.urban.org/UploadedPDF/901052_Capital_Gains.pdf

Sunset dates in the tax code are, not, however, the only major source of uncertainty about future tax policy. As long as long-term fiscal policy continues to feature unsustainable deficits, taxpayers will wonder whether higher taxes might be part of the budget solution. And they will have no way to predict whether those higher taxes will take the form of increased tax rates, reduced tax incentives, new tax sources, or some combination of all of these.

The complexity of the tax law has several implications for the effectiveness of tax incentives. First, research findings on behavioral responses that come from studies performed when the tax law was more stable and transparent may not be relevant to today's environment. Second, there is a presumption that lack of transparency may make people even less responsive to tax incentives than they may otherwise have been. We cannot be sure of this, however, because lack of awareness of how various benefits are phased out may make people over-respond instead of under-responding to what they perceive as the benefit from certain tax incentives. What we can conclude is only that people are less likely to make the best choices for themselves when it becomes much harder to figure out the consequences of these choices.

Conclusions

Standard economic theory yields robust predictions of the direction of response to various tax incentives and insights on how to design effective incentives. A large body of statistical research finds that people do respond to incentives in the expected direction, undertaking more of an activity when its tax price falls. But while these studies are useful, there is a large uncertainty about the size of responses.

Insights from the new field of behavioral economics cast doubt on some of the prior beliefs of economists. Individuals do not necessarily behave in a rational and consistent way and are affected by how incentives are framed, default rules, and transparency of provisions. While this new body of research provides important insights about ways to design policies to affect behavior, they also suggest that we know a lot less about how well current incentives work than previously believed. And research applying behavioral insights is still in its infancy.

The increased complexity of the tax code and its temporary nature further reduces the extent to which we can rely on targeted incentives to influence behavior. Increased use of software and tax preparers and improved efficiency in the tax preparation industry may have kept compliance costs from rising in spite of a more complex tax code and helps taxpayers make use of available tax benefits, based on their economic behavior. But the increased reliance on preparers and software also reduces taxpayers' awareness of how the tax law works and makes them less likely to change their behavior to optimize their net benefit from tax incentives.

This may all sound depressing, but I would like to close on an upbeat note. The good news is that if we take this all to heart, we may be less tempted to use the tax code for complex social engineering schemes and more inclined to promote tax reforms that treat taxpayers with the same incomes in an equal and even-handed way.