The last two years have witnessed historic shifts in fiscal policy in the United States and many other nations. The U.S. Congressional Budget Office (CBO; 2009) projects that the U.S. federal deficit will reach 11.2 percent of GDP in fiscal year 2009. The analogous value for 2007 was 1.2 percent. The 2009 deficit is the largest as a share of GDP since the end of World War II. CBO also predicts that the federal deficit in fiscal year 2010 will be 9.6 percent of GDP.

The path of federal deficits in the next few years will depend critically on a number of policy choices. Legislation currently in place calls for the 2001 and 2003 tax cuts to expire at the end of calendar year 2010, for the Alternative Minimum Tax (AMT) to apply to more than 30 million taxpayers beginning in 2011, for reductions in Medicare payments to doctors and other health care providers, and for declining discretionary outlays as a share of GDP in coming years. If these policy changes take effect, they will collectively result in rising taxes and declining spending as a share of GDP: CBO (2009) forecasts a federal deficit of 3.2 percent of GDP for fiscal year 2013 under this scenario. The ratio of publicly held debt to GDP rises in this case from 40.8 percent at the end of fiscal 2008, to 61.4 percent at the close of fiscal year 2010, and to 67.8 percent in 2020. If new legislation changes these policies to slow the growth of taxes or to increase the growth of spending, the resulting debt-to-GDP trajectory could be substantially higher.

The increase in federal debt associated with policies that have responded to the global financial crisis has worsened the long-term fiscal outlook for the United States; but even without recent deficits, U.S. fiscal policy was on an unsustainable course. The key long-term drivers of federal fiscal balance are the aging population and the associated growth of both Social Security and federally financed health insurance for older households, Medicare and Medicaid. Outlays on health insurance are projected to grow faster than Social Security payments because they rise both as the population ages, and as the real cost of health care rises. CBO (2009) reports that spending on Social Security, Medicare, and Medicaid totaled 9 percent of GDP in fiscal year 2008. Outlays on these three programs are projected to rise to 17 percent of GDP by 2035. The primary effect of recent crisis-related deficits has been to accelerate the date at which the debt-to-GDP ratio is projected to surpass various threshold values.

Elmendorf (2009) summarizes the long-term gap between expenditures and revenues by computing the share of GDP that would need to be collected in additional taxes in every year between 2009 and 2033 to make the debt-to-GDP ratio at the end of 2033 equal its value at the start of 2009. Under the “current law” CBO baseline, an immediate tax increase of 2.1 percent of GDP, maintained for the full 25-year horizon, would be necessary. Over a 50-year horizon, largely because of the continued growth of real health insurance costs between 25 and 50 years into the future, the analogous required tax increase is 2.6 percent of GDP. The necessary fiscal adjustment is much greater, however, if the CBO baseline is replaced with a more realistic scenario with regard to the evolution of tax and spending policy. If the AMT is indexed for inflation, discretionary spending remains stable as a share of GDP, and the 2001 and 2003 tax cuts are made permanent, stabilizing the debt-to-GDP ratio requires a tax increase of 5.4 percent of GDP over the 25-year horizon and 6.9 percent of GDP over the 50-year horizon.

These statistics underscore the critical role that fiscal policy reforms will play in the United States in coming decades. While it is impossible to predict the mix of tax increases and spending reductions that will be enacted to close the budget gap, there...
can be little doubt that some changes will take place. This is the most important time in a generation for economists, lawyers, and accountants with expertise on the U.S. tax system, and on the structure of government programs, to guide policymakers, since the fiscal challenge today is greater than at any time in the recent past.

To highlight the critical role that tax policy analysis must play in the coming budget debates, I will discuss two ways in which the taxation of households might be modified — raising marginal tax rates, or broadening the tax base — to raise additional revenue. In each case, I will sketch key analytical findings that may bear on the policy debate, and identify unresolved research issues that demand further attention. Tax analysis can play a key role in providing a factual background against which reform can be analyzed, and in identifying the most important consequences of each potential reform. While I focus on issues involving the individual income tax, a similar case for the importance of tax analysis could be presented for the corporate income tax.

THE CURRENT INCOME TAX

To set the stage for prospective tax reform debates, it is helpful to consider several summary statistics relating to the current federal income tax. For tax year 2005, the federal individual income tax collected $934.8 billion. Taxable income totaled $5.02 trillion, the sum of all itemized deductions was $1.12 trillion, and adjusted gross income (AGI) for all tax filers was $7.42 trillion. The taxable income threshold for the top marginal tax bracket, 35 percent, was $326,450, while the threshold for the second-highest bracket (33 percent) was $150,150 for single filers and $182,800 for married joint filers.

Table 1 shows the distribution of taxpayers, AGI, and taxable income across AGI categories for 2005. The table suggests several observations. First, the distribution of income is strongly skewed, and the distribution of tax payments is even more skewed. Taxpayers with AGI of more than $1 million, who represented 0.2 percent of the taxpayer population, reported 13.8 percent of AGI and paid just over one-quarter of federal income taxes. Second, itemized deductions are less concentrated than tax payments or AGI. Taxpayers with more than $1 million in AGI claimed 9.5 percent of these deductions. Those with AGI of less than $75,000 reported 39.3 percent of AGI and nearly 38 percent of itemized deductions. Third, the group of households with AGI of less than $75,000, which accounts for 81.5 percent of all tax returns filed, account for less than 20 percent of income tax payments. The share of income taxes paid by this group has declined in the last two decades as a result of expansion of the Earned Income Tax Credit, rising personal exemptions, and a shift in the pretax distribution of income.

The concentration of tax payments among high-income taxpayers has attracted widespread attention. The share of taxes paid by those at the top of the income distribution depends on the structure of the tax code, but it also depends critically on the distribution of pretax incomes. Piketty and Saez (2003) point to the widening of the pretax income distribution in recent years as a key contributor to the growing concentration of income tax liabilities.

Marginal tax rates are key determinants of the incentive effects of the tax system and of the efficiency costs of the system. It is therefore useful to classify taxpayers by their marginal income tax rates. Table 2 presents the distribution of AGI, itemized deductions, taxable income, and tax liability across households, with households ranked

### Table 1

<table>
<thead>
<tr>
<th>AGI Category</th>
<th>Share of Returns</th>
<th>Share of AGI</th>
<th>Share of Itemized Deductions</th>
<th>Share of Taxable Income</th>
<th>Share of Tax Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 75K</td>
<td>81.5%</td>
<td>39.4%</td>
<td>37.8%</td>
<td>30.6%</td>
<td>19.2%</td>
</tr>
<tr>
<td>75-100K</td>
<td>7.8</td>
<td>12.1</td>
<td>14.6</td>
<td>12.1</td>
<td>9.2</td>
</tr>
<tr>
<td>100-200K</td>
<td>8.0</td>
<td>19.3</td>
<td>23.9</td>
<td>20.5</td>
<td>20.3</td>
</tr>
<tr>
<td>200-500K</td>
<td>2.0</td>
<td>10.6</td>
<td>10.5</td>
<td>12.8</td>
<td>17.1</td>
</tr>
<tr>
<td>500K-1M</td>
<td>0.4</td>
<td>4.8</td>
<td>3.7</td>
<td>6.1</td>
<td>9.1</td>
</tr>
<tr>
<td>&gt; 1M</td>
<td>0.2</td>
<td>13.8</td>
<td>9.4</td>
<td>17.9</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: U.S. Department of the Treasury (2007), Table 1.2 and author's calculations.
by their last-dollar marginal tax rates. The table shows that taxpayers in the 35 percent tax bracket – U.S. Department of the Treasury (2007) reports that there were 953,005 such taxpayers – reported $1.208 trillion in AGI, and $1.094 trillion in taxable income. The estimated income tax liability for these taxpayers was $315.4 billion, close to one-third of individual income tax revenue.

Each taxpayer who faces the 35 percent marginal tax bracket also has $326,450 of income that is taxed at rates below 35 percent. In addition, some of the taxable income of the taxpayers in the 35 percent marginal tax bracket may be the result of realized capital gains, which are subject to a lower tax rate. These factors mean that the incremental revenue collected by raising the 35 percent bracket rate by 1 percentage point is less than 0.01 times the taxable income reported by those in the 35 percent bracket. This is true even in the absence of behavioral responses to changes in marginal tax rates.

**HOW MUCH EXTRA REVENUE IN TOP BRACKETS? THE IMPORTANCE OF BEHAVIORAL RESPONSES**

The U.S. Department of the Treasury (2007) reports the amount of taxable income in each marginal tax bracket, as well as the taxes generated at each rate. Table 3 presents this information. The table shows that in 2005, $565.4 billion of taxable income was taxed at the 35 percent rate, and another $217.4 billion was taxed at the 33 percent rate. The taxable income that fell into the 35 percent bracket yielded revenue of $197.9 billion; income in these two brackets generated $269.6 billion in revenue. Absent behavioral response, raising the 35 percent marginal tax bracket to 40 percent would raise $28.3 billion (= 0.05*$565.4 billion) per year.

The foregoing calculation takes the distribution of taxpayers and taxable income as given, and applies a modified set of marginal tax rates. One of the key lessons of tax analysis, however, is that taxpayers respond to incentives. The evidence is clearest when taxpayers can foresee changes in marginal tax rates on various types of income over a relatively short time period; this results in retiming of the realization of income. More generally, however, when there are differences in the tax burdens on different types of income, at least some taxpayers will seek to characterize their activities in a way that will minimize their tax liability. This behavioral response makes the tax base elastic, and subject to change with changes in marginal tax rates. The size of this behavioral response is likely to vary with the tax provision in question, and may be history-dependent.

Behavioral response on the part of taxpayers complicates the challenge of revenue estimating when marginal tax rates are raised or when the tax base is broadened. The difficulty of estimating the revenue yield of higher rates can be illustrated by considering the potential revenue effects of raising marginal income tax rates only on taxpayers in the top marginal tax bracket. Consider once again the 5 percentage point increase in the 35 percent marginal tax rate examined above. Gruber and Saez (2002) suggest that the elasticity of taxable income with respect to the last-dollar marginal income tax rate, particularly for high-income households, is on the order of -0.40. This elasticity applies to

<table>
<thead>
<tr>
<th>Last Dollar Marginal Tax Rate</th>
<th>AGI (in $ billion)</th>
<th>Taxable Income (in $ billion)</th>
<th>Tax Liability (in $ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>27.3</td>
<td>8.4</td>
<td>0.4</td>
</tr>
<tr>
<td>10</td>
<td>501.6</td>
<td>130.9</td>
<td>12.6</td>
</tr>
<tr>
<td>15</td>
<td>1734.5</td>
<td>1028.3</td>
<td>132.3</td>
</tr>
<tr>
<td>25</td>
<td>1891.3</td>
<td>1411.1</td>
<td>237.5</td>
</tr>
<tr>
<td>28</td>
<td>624.1</td>
<td>503.8</td>
<td>104.5</td>
</tr>
<tr>
<td>33</td>
<td>453.3</td>
<td>387.5</td>
<td>92.4</td>
</tr>
<tr>
<td>35</td>
<td>1207.9</td>
<td>1094.2</td>
<td>315.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7243.0</td>
<td>5136.9</td>
<td>972.7</td>
</tr>
</tbody>
</table>

Source: U.S. Department of the Treasury (2007), Table 3.4. Entries for “total” do not equal the sum of column entries since some types of income are excluded, such as $712.4 billion of capital gains income taxed at the 15 percent rate.
total taxable income for the household, not just the component of taxable income taxed in the 35 percent tax bracket.

Table 2 showed that the taxable income of taxpayers facing the 35 percent marginal tax bracket was $1094.2 billion. An increase in the marginal tax rate from 35 to 40 percent lowers the “keep ratio,” that amount that remains per dollar of pre-tax income, from 0.65 to 0.60, a 7.7 percent decline. This calculation ignores state-level income tax and any other taxes that may apply; by reducing the “keep ratio” when the federal marginal income tax rate is 35 percent, these taxes would increase the percentage decline in the keep ratio associated with a 5 percentage point increase in the federal marginal tax rate. With a taxable income elasticity of -0.40, a 7.7 percent decline in the keep ratio translates to a 3.1 percent decline in taxable income. This would result in total taxable income of $1060.5 billion. Assuming that all of the decline in taxable income falls in the top tax bracket, which is now 40 percent, these taxes would increase the percentage decline in the keep ratio associated with a 5 percentage point increase in the federal marginal tax rate. With a taxable income elasticity of -0.40, a 7.7 percent decline in the keep ratio translates to a 3.1 percent decline in taxable income. This would result in total taxable income of $1060.5 billion. Assuming that all of the decline in taxable income falls in the top tax bracket, which is now 40 percent, the total taxable income that will face the 40 percent rate will be $531.7 billion. The revenue collected from raising the 35 percent tax bracket to 40 percent would therefore be $14.8 billion ($212.7 - $197.9), roughly half of the $28.3 billion revenue gain that emerges when the calculation ignores potential behavioral response. A key component of this calculation is the ratio of total taxable income to taxable income in the 35 percent tax bracket for taxpayers whose last-dollar marginal rate is 35 percent. The larger this ratio, the smaller the projected tax revenues with behavioral response relative to projected revenues without such a response.

Different components of taxable income may exhibit different elasticities with respect to marginal tax rates. Gruber and Saez (2002), for example, find that deductions appear to be more responsive to tax rates than most sources of income. Capital gain realizations also appear to be highly elastic. In 1986, the Tax Reform Act of 1986 raised the tax rate on realized long-term gains from 20 to 28 percent, and the tax change was announced in advance. Auten (2005) presents the time series of realized capital gains before and after this pre-announced tax change. By midsummer in 1986, taxpayers knew that beginning in January 1987 they were going to face a 28 percent tax rate on long-term gains. The taxes collected on realized capital gains rose from $26.5 billion in 1985 to $52.9 billion in 1986, and fell back to $33.7 billion in 2007 after the tax increase took effect.

Table 3
Taxable Income and Taxes Generated, by Marginal Tax Bracket, 2005 ($ billion)

<table>
<thead>
<tr>
<th>Last Dollar MTR</th>
<th>Taxable Income</th>
<th>Taxes Generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>$979</td>
<td>$97.9</td>
</tr>
<tr>
<td>15</td>
<td>1720.0</td>
<td>258.0</td>
</tr>
<tr>
<td>25</td>
<td>720.6</td>
<td>180.2</td>
</tr>
<tr>
<td>28</td>
<td>243.3</td>
<td>68.1</td>
</tr>
<tr>
<td>33</td>
<td>217.4</td>
<td>71.7</td>
</tr>
<tr>
<td>35</td>
<td>565.4</td>
<td>197.9</td>
</tr>
</tbody>
</table>

Source: U.S. Department of the Treasury (2007), Table 3.6.

EFFICIENCY AND DISTRIBUTIONAL CONCERNS

While the revenue potential of various taxes is a key input to the tax policy debate, two other factors that are central to tax policy analysis are the efficiency costs and the distributional consequences of different taxes. Virtually all feasible taxes, with the exception of lump-sum taxes, impose efficiency costs above and beyond the revenue that they remove from the economy. When policy makers are concerned about the overall level of economic activity, the “size of the pie,” all else equal they will seek to raise revenue in the most efficient manner. While most public finance economists regard the efficiency costs of taxation as self-evident, it can be challenging to explain these costs to non-economists. Efficiency costs arise because taxes place “wedges” between the before-tax and the after-tax value of various items and activities. Tax rates on labor income provide individuals who might supply labor with a lower net-of-tax wage than the amount that employers are prepared to pay for their services; retail sales taxes raise the prices of various goods above their production costs, discouraging potential consumers from buying goods that they value are more than their production cost but less than their tax-inclusive price.
The efficiency costs of taxes rise with the marginal rate of taxation, and as a rough approximation, the distortions rise with the square of the tax rate. Raising a household’s tax rate from 20 to 25 percent generates a smaller incremental deadweight loss than raising its marginal tax rate from 40 to 45 percent. Using the tax-rate-squared approximation, the marginal deadweight burden associated with an increase in tax rates from 40 to 45 percent is roughly twice as large as the incremental deadweight burden associated with a tax rate increase from 20 to 25 percent. Because efficiency costs rise faster than marginal tax rates, absent any complicating factors such as pre-existing economic distortions, the tax system that minimizes efficiency costs will be one that applies low marginal tax rates to a broad swath of economic activity, rather than high marginal rates to a narrow segment of that activity. “Base broadening” is the term that is usually applied to expanding the breadth of the tax base. It makes it possible to raise the same revenue as before with lower rates, or to raise more revenue with the same rate structure.

While there is broad agreement that efficiency considerations are an important input to tax policy design, there is less agreement on the efficiency costs of particular taxes. The lack of consensus can be traced to differences in estimates of the key behavioral elasticities that determine efficiency costs, not to differences about the conceptual framework in which to analyze efficiency costs. Consider the case of a tax on labor income. Economic theory does not allow us to determine on a priori grounds whether such a tax raises or lowers labor supply, since even in simple one-period models there are offsetting income and substitution effects. While the voluminous empirical literature on the elasticity of labor supply with respect to the after-tax wage contains a range of different estimates, with some close to zero and others quite substantial, there are some population groups – notably older workers who are nearing retirement and younger workers who may be labor market entrants – for whom there appear to be substantial positive effects of higher after-tax wages on labor supply.

While the effect of labor income taxes on labor supply is important for assessing the revenue impact of such taxes, estimates of the efficiency costs of such taxes depend on the compensated rather than the uncompensated elasticity of labor supply. This makes it possible for a tax-induced reduction in the after-tax wage to have very little effect on observed labor supply, as it would if the Marshallian elasticity of labor supply is low, while having a substantial efficiency cost, as it would if the income effect of a change in the after-tax wage was large and the compensated labor supply elasticity was substantially different from zero. This point about efficiency costs can be particularly challenging to communicate to policy makers.

Despite decades of research on labor supply, saving, charitable giving, and housing demand, there remains substantial uncertainty regarding key supply and demand parameters that determine efficiency costs. This implies a range of potential efficiency cost estimates for the existing tax system and for potential alternatives. Analyzing efficiency costs is also complicated by the need to consider both existing taxes and the taxes that would replace them in a reform, and by the interaction of multiple taxes. Consider, for example, a reform that reduces income tax rates while raising the sales tax rate. While this reform would reduce the tax wedge between the pretax and the after-tax nominal wage, labor supply decisions depend on the real after-tax product wage: \((1 – t)w/(1 + sp)\). In this expression, \(w\) is the wage rate, \(t\) is the marginal labor income tax rate, \(p\) is the nominal price level, and \(s\) is the consumption tax rate. Substituting an equal-revenue broad-based sales tax for a broad-based wage tax might have very little impact on the after-tax real product wage, and as such might have very little effect on labor supply incentives or the efficiency cost of the overall tax system.

Tax analysts must strive to explain the factors that determine efficiency costs, and to present the best available evidence on the magnitude of these costs, to those who must design tax policy. At the same time, they must search for creative new research strategies that will generate convincing estimates of the behavioral parameters that underpin estimates of elasticity costs.

Along with revenue effects and efficiency costs, the distributional effects of tax reform are another key input to tax design. The process of analyzing how the existing tax system, or a proposed alternative, affects the distribution of after-tax income is a complex undertaking. Distributional effects depend not just on the pattern of marginal tax rates across households and goods, but also on “infra-marginal” provisions such as exemptions and filing thresholds. These provisions determine which households are taxpayers, and they influence each
household’s total tax liability. There are important data challenges in modeling distributional effects, since information on tax returns does not contain information on households that do not file taxes, and household surveys often contain insufficient information to precisely assess a household’s tax liability.

Distributional analysis must also recognize the general equilibrium incidence of tax reforms. Tax changes can affect the pre-tax incomes received by different households through their impact on aggregate labor supply and saving, and the resulting changes in wage rates, interest rates, and other dimensions of the return on capital. While it is possible to describe the matrix of distributional effects of various tax changes, it is difficult to distill such matrices into a single simple summary measure, such as the aggregate efficiency cost of a reform. There are substantial differences among policymakers and the public at large in their views about what constitutes a fair distribution of tax burdens. This generates substantial demand for detailed analysis of how tax changes would affect households in different income, age, and geographic categories, but little agreement on what represents a fair or appropriate allocation of burdens.

Economic analysis plays a critical role in assessing the distributional impact of tax changes, but it is important to recognize the uncertainty associated with many distributional estimates. The detailed models maintained by the Congressional Budget Office, the Joint Committee on Taxation, the NBER, the Tax Policy Center, and the U.S. Department of the Treasury bring together, to various degrees, information on income, wealth, and consumption to permit comparative analysis of various proposals. These models are strongest in describing how changes in the parameters of the tax code will affect tax liability for a given distribution of pretax incomes, but for large changes that require a more subtle analysis of tax incidence, complete with changing pretax incomes, the model results are less precise. There are important opportunities to expand these models to consider the life-cycle trajectory of households, particularly as they may experience changes in the extent to which they qualify for various tax benefits.

**BASE BROADENING AND TAX EXPENDITURES**

Raising marginal tax rates is one way to increase income tax revenues: that approach would increase efficiency costs. The distributional impact would depend on which tax brackets were increased. An alternative strategy for revenue raising is to broaden the tax base. This involves restricting or eliminating current deductions, or including components of income that are not currently part of the tax base in taxable income. Base broadening is often justified on efficiency grounds: by reducing or eliminating the differential tax treatment of different economic activities, it improves resource allocation. Some also advance distributional arguments in support of base broadening. A deduction of a given amount, say for $5000 of mortgage interest, generates a larger tax saving for a taxpayer in a high marginal tax bracket than for one in a low tax bracket.

The President’s Advisory Panel on Federal Income Tax Reform (2005), following many previous tax reform panels and tax analysts, called for broadening the base of the current income tax. There are many ways to reduce the revenue cost of existing deductions, short of complete elimination. Deductions could be capped as a share of taxable income, or the tax rate at which deductions could be claimed could be capped, thereby reducing the disparity in the value of deductions between high- and low-tax bracket taxpayers. Base broadening reforms can thereby be adjusted to achieve distributional or revenue objectives.

Base-broadening is politically difficult to implement and it commands less support among elected officials than among tax researchers. Many constituencies benefit from the various provisions that narrow the income tax base, and each is prepared to fight hard to preserve its special tax status. Some critics of tax expenditures, the deductions and credits that narrow the tax base, argue that traditional government spending programs are at least in principle subject to cost-benefit analysis, while many tax expenditures are never held to the same standard.

Table 4 shows the five largest federal income tax expenditure programs in fiscal year 2009, based on calculations by the Joint Committee on Taxation (2010). These are the exclusion of employer-provided health insurance from the income tax base, the taxation of dividends and capital gains at rates below ordinary income tax rates, the mortgage interest deduction, the tax exclusion for contributions to employer-provided pension plans and the associated “inside build up” of pension assets, and the deduction for state and local income and sales taxes.
Carroll, Joulfaian, and Mackie (forthcoming) note that two of these tax expenditures, those corresponding to tax relief on dividends and capital gains, and to pension contributions and income, represent tax expenditures relative to an income tax baseline, but not relative to a consumption tax baseline. Whether a consumption tax, which exempts capital income from taxation, or an income tax is the most efficient tax structure is one of the most debated issues in public finance. Atkinson and Stiglitz (1976), Chamley (1986), and Judd (1985), among others, have advanced arguments supporting the efficiency advantages of a consumption tax. Recent work, however, notably that by Banks and Diamond (2010), raises questions about the robustness of this efficiency case. There are a wide array of hybrid tax structures, of which the current U.S. income tax is one example, that fall somewhere between a comprehensive income tax in which capital income is taxed in the same way as all other income, and a consumption tax in which capital income is excluded from the tax base. Further research is needed to clarify the factors that determine the relative efficiency costs of the two alternative tax bases. Since the choice between an income and a consumption tax is at the center of tax design, this is a topic on which tax analysts can provide particularly valuable insight.

The role of tax analysis in informing policy debates about tax expenditures can be illustrated by considering two of the largest tax expenditures: the exclusion of employer-provided health insurance from the income tax base, and the mortgage interest deduction. In each case tax researchers can provide essential input to the policy process by evaluating the revenue, efficiency, and distributional consequences of these current tax provisions, and by analyzing the potential ways in which household and firm behavior might respond to these changes.

### INCLUDING EMPLOYER-PROVIDED HEALTH INSURANCE IN THE INCOME TAX BASE

The exclusion of employer-provided health insurance from the income tax base increases the fraction of households with employer-provided health insurance. It places a wedge between the cost of an insurance policy purchased in the individual marketplace and one purchased through the employer. Eliminating the tax subsidy for employer-provided health insurance would increase the price of that insurance. For most taxpayers, the effective subsidy rate includes both the marginal federal income tax rate and the payroll tax rate, since the value of this insurance is not included in the payroll tax base. Gruber (forthcoming) provides a summary of the incentive effects of current tax provisions, and of the potential behavioral responses to changes in tax rules.

There are both efficiency arguments, stemming from the distortion in the amount of insurance purchased and the way it is purchased, and equity arguments, stemming from the greater value of the insurance exclusion to those with high marginal tax rates, for limiting or eliminating the current exclusion. Yet it has proven difficult to build a political consensus for taxing employer-provided health insurance. In large part this reflects the reluctance of those who benefit from this tax provision, notably workers who receive generous employer-provided insurance, to risk higher taxes or changes in the nature of their health insurance coverage if the current tax rules were changed.

If the value of employer-provided health insurance was included in taxable income, firms would need to estimate the value of insurance for each covered employee, and report that information on a W-2 or similar information document. The revenue collected from such a reform would depend in part on how insurance values were imputed to taxpayers. Imputing the same insurance value to all employees, for example, would assign more health

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**Table 4**

<table>
<thead>
<tr>
<th>Tax Expenditure</th>
<th>Estimated Revenue Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion of Employer Provided Health Insurance</td>
<td>$94.4</td>
</tr>
<tr>
<td>Reduced Tax Rates on Dividends and Capital Gains</td>
<td>89.5</td>
</tr>
<tr>
<td>Mortgage Interest Deduction</td>
<td>86.4</td>
</tr>
<tr>
<td>Exclusion of Pension Contributions and Income on Pension Assets</td>
<td>79.8</td>
</tr>
<tr>
<td>State and Local Income and Sales Tax Deductions</td>
<td>46.7</td>
</tr>
</tbody>
</table>

Source: U.S. Congress, Joint Committee on Taxation (2010).
insurance income to younger and typically lower-income taxpayers than an imputation algorithm that recognized the rising age profile of insurance premiums, and therefore assigned greater insurance income to older than to younger workers. These different imputation rules would be applied within a given workplace, where the insurance policy available to all workers was the same, but the expected cost of that policy would be age-related. The price elasticity of demand for health insurance would also play a central role in determining the revenue effects. While tax expenditure estimates are based on the current level of employer spending on health insurance, once the value of insurance was included in taxable income, taxpayers would be very likely to reduce their desired insurance consumption, reducing the associated revenue gain.

One important role of tax analysts is exploring the many consequences of tax reforms, even those that are difficult to estimate ex ante. Eliminating the employer-provided health insurance exemption, for example, would be likely to shift households into the individual health insurance marketplace. This could trigger effects on the relative prices of employer and nonemployer provided insurance, as the degree of self-selection in the two markets changes, and it could lead to more stratified insurance markets.

RESTRICTING THE MORTGAGE INTEREST DEDUCTION

The mortgage interest deduction also illustrates the key role of tax analysis. It is widely recognized that the primary source of tax subsidies to owner-occupied housing is the failure to include imputed rental income in taxable income. While it is admittedly difficult to measure the value of such rent, by excluding it from the tax base while also allowing a deduction for mortgage interest, the income tax code reduces the user cost of owner-occupied housing and encourages the allocation of resources towards owner-occupied housing. Eliminating or reducing the tax deduction for mortgage interest would raise the user cost of owner-occupied housing, thereby reducing the distortion in housing consumption created by the omission of imputed rent. It would also create other distortions, however. It would treat interest on mortgages differently from interest on loans that were incurred to buy financial assets, and it would shift households toward equity finance of their homes.

There are numerous suggestions for reforming the tax treatment of mortgage interest, for example by allowing the deduction at a fixed rate for all taxpayers, so that those in the highest tax brackets would not receive a larger proportional subsidy toward the cost of housing, or by lowering the current $1 million cap on the value of a mortgage that qualifies for tax-deductible interest. Both of these proposals would reduce the value of the current tax deduction for some taxpayers, thereby raising revenue while also reducing the efficiency cost of the current tax system. Poterba and Sinai (forthcoming) explore the revenue effects of such proposals.

Proposals to scale back the deductibility of mortgage interest payments are often opposed on the grounds that they would lead to a decline in house prices. This is an example of the general-equilibrium effects of tax reform. Existing home prices capitalize the value of future tax deductions. Poterba (1984) presents a simple model with forward-looking homebuyers that offers a quantitative estimate of such house price effects. Assessing the distributional effects of changing the mortgage interest deduction requires recognition of the capitalization effects that will affect household balance sheets, as well as the increase in future tax payments corresponding to the removal of this deduction. Just as the incidence calculations that underlie distribution tables are subject to some uncertainty, calculations of house price changes, or other asset price changes, are crucially dependent on the values of several key elasticities. Research is needed to better measure these parameters, and to reduce the degree of uncertainty associated with these incidence calculations.

One question about the tax treatment of housing that deserves more attention is whether it would be feasible to tax imputed rent on homes. Doing so would require estimating the rental value of owner-occupied homes. A number of European nations made such imputations in the past, but they no longer do so. A property tax levied at a fixed rate per unit of housing value is likely to provide a close approximation to an income tax on imputed rent. Further research could explore the differences between these two taxes in practice.

Tax policy analysis is central to the assessment of tax expenditures, since the efficiency cost and distributional effects of the current system are key concerns. Some tax expenditures may have relatively modest efficiency costs because the behaviors that they address are relatively inelastic, while other tax expenditures may have large efficiency costs. Tax economists must continue to improve their estimates of the efficiency costs of
various tax expenditures. The empirical research that underlies efficiency and distributional estimates is often unheralded -- a researcher who develops a more precise estimate of a well-known parameter, such as the price elasticity of demand for medical insurance or the supply elasticity of housing, may not receive as much acclaim as one who identifies a new channel by which the tax system affects household or firm behavior. But refining our parameter estimates is a critical step in narrowing the uncertainty that surrounds a number of key measures of how the tax system affects behavior.

CONCLUSION

Addressing the fiscal challenge facing the United States is certain to be a subject of intense political debate. Economic analysis of the tax system, and of spending programs, may not be the sole or even the dominant force in determining the policy outcome. But there is little doubt that there will be great demand for systematic analysis of the incentive and distributional effects of the tax system in the coming decade. The political environment in the next few years may be more receptive to base-broadening and the trimming of deductions that have long been considered “sacred cows” of the tax code than it has been in many years.

One important role that tax policy analysts can perform is to help distinguish efficiency effects and distributional effects in the analysis of tax policy. Too often, policies are considered in isolation, and the distributional effects of a proposal with substantial efficiency gains lead to its dismissal. As Kaplow (2008) argues, a flexible income tax provides a powerful device for redistributing resources across different income classes. Even if a specific proposal for base-broadening might place a heavier tax burden on the average middle-income household than the average low-income household, it is often possible to neutralize this redistribution, at least on average by suitable modification of the rate and exemption structure.

Successful tax reform often involves bundling sets of provisions that taken together generate an attractive package of efficiency and distributional effects, even though individual provisions may place substantial burdens on particular subgroups of the population. Shifting the tax policy debate to a discussion of broad reform packages, rather than specific provisions, may therefore enhance the prospects for fundamental tax reform.

References


