

August 2005

TAX POLICY

Summary of Estimates of the Costs of the Federal Tax System



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TAX POLICY

Summary of Estimates of the Costs of the Federal Tax System

Highlights of [GAO-05-878](#), a report to House Majority Leader Thomas DeLay, and the Honorable John Linder, House of Representatives

Why GAO Did This Study

In 2005, Americans will pay about \$2.1 trillion in combined federal taxes, including income, payroll, and excise taxes, or about 16.8 percent of Gross Domestic Product (GDP). However, the amount of taxes paid does not reflect the total cost to taxpayers of the federal tax system. In addition to taxes paid, taxpayers also bear compliance costs and efficiency costs.

Understanding the magnitude of these additional costs is important because every dollar spent on compliance and lost due to inefficiency represents a dollar that society could have spent for other purposes.

In response to a congressional request for information on the magnitude of the compliance and efficiency costs of the current federal tax system, this study describes the nature of these costs, presents the difficulties associated with estimating them, and summarizes existing estimates of their magnitude. GAO did not make independent estimates of compliance or efficiency costs nor did we replicate any of the studies.

GAO is not making any recommendations in this report.

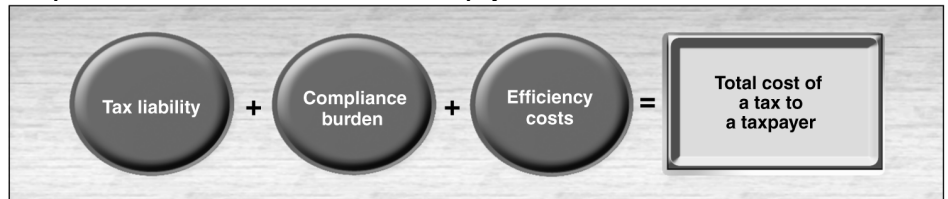
What GAO Found

Complying with the federal tax system costs taxpayers time and money. Estimating total compliance costs is difficult because neither the government nor taxpayers maintain regular accounts of these costs and federal tax requirements often overlap with recordkeeping and reporting that taxpayers do for other purposes. Although available estimates are uncertain, taken together, they suggest that total compliance costs are large. For example, combining the lowest available estimates for the personal and corporate income tax yields a total of \$107 billion (roughly 1 percent of GDP) per year. As noted, whether this is a definitive lower bound for compliance costs is uncertain.

The tax system also results in economic efficiency costs because tax rules cause individuals to change their behavior in ways that ultimately leave them with lower-valued combinations of consumption and leisure than they would have obtained if the tax system did not affect their behavior. Estimating efficiency costs is very challenging because the tax system has such extensive and diverse effects on behavior. In fact, we found no comprehensive estimates of the efficiency costs of the current federal tax system. The two most comprehensive studies we found suggest that these costs are large—on the order of magnitude of 2 to 5 percent of GDP each year (as of the mid-1990s). However, the actual efficiency costs of the current tax system may not fall within this range because of uncertainty surrounding taxpayers' behavioral responses, changes in the tax code and the economy since the mid-1990s, and the fact that the two studies did not cover the full scope of efficiency costs.

The goal of tax policy is not to eliminate compliance and efficiency costs. The goal of tax policy is to design a tax system that produces the desired amount of revenue and balances the minimization of these costs with other objectives, such as equity, transparency, and administrability. In addition, whether compliance and efficiency costs could be reduced by redesigning the tax system and, if so, by how much would depend critically upon the detailed characteristics of the new tax system.

Components of the Total Cost of a Tax to Taxpayers



Source: GAO.

www.gao.gov/cgi-bin/getrpt?GAO-05-878.

To view the full product, including the scope and methodology, click on the link above. For more information, contact James White at (202) 512-5594 or whitej@gao.gov.

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United States Government Accountability Office
Washington, D.C. 20548

August 26, 2005

The Honorable Thomas DeLay
Majority Leader
House of Representatives

The Honorable John Linder
House of Representatives

In 2005, Americans will pay about \$2.1 trillion in combined federal taxes, including income, payroll, and excise taxes, or about 16.8 percent of Gross Domestic Product (GDP). These taxes fund the services provided by government. As taxpayers, we balance the costs of taxes with the benefits of government.

However, the amount of tax revenue collected does not reflect the total cost to taxpayers of the federal tax system. In addition to taxes paid, taxpayers also bear compliance costs and efficiency costs. Compliance costs include the value of the taxpayer's time and resources, along with any out-of-pocket costs to paid tax preparers and other tax advisors, spent to ensure compliance with the tax laws. Efficiency costs result when taxes alter the economic decisions that people make—decisions such as how much to work, how much to save, what to consume, and where to invest—in ways that reduce overall well-being. Understanding the magnitude of these additional costs is important, because every dollar spent on compliance and lost due to inefficiency represents a dollar that society could have spent for other purposes. Moreover, these costs could change if policymakers decide that the projected imbalances between federal revenues and expenditures can only be addressed by changes to both sides of the fiscal system.

Despite the existence of these costs and their size, the goal of tax policy is not to eliminate compliance and efficiency costs. The goal of tax policy is to design a tax system that produces the desired amount of revenue and balances the minimization of compliance and efficiency costs with other objectives, such as equity, transparency, and administrability.

In response to your May 17, 2004, letter to the Comptroller General and follow-up meetings with your staffs, this report summarizes what is known from the academic literature about the current tax system's compliance and efficiency costs. For both costs this report describes their nature,

presents the difficulties associated with estimating them, and summarizes existing estimates of their magnitude.

To describe the nature of compliance costs and the difficulty in estimating their magnitude, we reviewed the relevant economic literature. To summarize the relevant cost estimates available from the literature we reviewed studies that present original, empirically based compliance cost estimates. We report on all studies that we found that estimate the compliance costs to individuals or businesses attributable to the current (post-1986) tax system. We did not make independent estimates of compliance costs nor did we replicate any of the studies.

To describe the nature of efficiency costs and the difficulty in estimating their magnitude, we reviewed the relevant economic literature. To summarize the relevant cost estimates available from the literature, we reviewed 1,567 abstracts from peer-reviewed journal articles and books (dating back to January 1986) and nonacademic research organization publications and economic working papers (dating back to January 1, 2000) that contained some reference to taxes, costs, and efficiency. On the basis of reading the abstract or paper, we excluded studies that did not produce original empirical estimates or that made estimates for the federal tax system existing prior to the major 1986 tax reform. We found no study that comprehensively estimated the cost of all behavioral distortions caused by the tax system. We also consulted with experts outside of GAO, asking them if they were aware of studies we overlooked. We report on all studies that we found that estimate the efficiency costs attributable to selected aspects of the current system. The coauthor of one of these studies is a key contributor to this report. To ensure the objectivity and independence of this product, a second economist, within GAO, verified that the work in this section was presented in an accurate and unbiased manner. We also report on a set of studies that estimate efficiency gains that would result from replacing the current federal tax system with an alternative system that raised the same amount of revenue. As was the case with compliance costs, we did not make independent estimates of efficiency costs nor did we replicate any of the studies.

We conducted our work in Washington, D.C., from November 2004 through July 2005 in accordance with generally accepted government auditing standards. We provided a draft of this report in August 2005 to the Commissioner of Internal Revenue. We received technical comments via e-mail from the IRS Office of Research. Where appropriate, we made changes in our report in response to these comments.

GAO is making no recommendations in this report.

Results in Brief

The federal tax system imposes a wide range of recordkeeping, computational, and filing requirements upon businesses and individuals. Complying with these requirements costs taxpayers' time and money. Neither the government nor taxpayers maintain regular accounts of these costs and many important elements of the costs are difficult to measure because, among other things, federal tax requirements often overlap with recordkeeping and reporting that taxpayers do for other purposes. Available estimates of aggregate compliance costs vary in terms of the scope of costs that they include, the tax years that are represented, assumptions regarding the monetary value of an hour of time spent on tax compliance, and other methodological factors. Although the Information Collection Budget for the Department of the Treasury contains the most comprehensive estimate, analysts both within Treasury and outside consider this estimate to be very uncertain because it is based on survey data from the early 1980s that have been updated each year with an overly simplified methodology. The Internal Revenue Service (IRS) is in the middle of a long-term research effort to improve its methodology for estimating compliance burden. Preliminary, partial results from that new effort and evidence from other researchers indicate that compliance costs are large, even though the total remains uncertain. For example, combining the lowest available (and incomplete) estimates of individual and corporate compliance cost yields a total of \$107 billion (roughly 1 percent of GDP) per year; however, other studies estimate costs 1.5 times as large. Whether compliance costs could be reduced by redesigning the tax system and, if so, by how much would depend upon the details of the new tax system, since all tax systems have compliance costs.

The tax system also results in economic efficiency costs. These costs occur when tax rules cause individuals to change their work, savings, consumption, and investment behavior in ways that ultimately leave them with a combination of consumption and leisure (now and in the future) that they value less than the combination they would have obtained under a tax system that did not alter their behavior. Some of the incentives to change behavior are intentionally designed into the tax system, others are unintended consequences of rules designed to achieve other objectives, such as equity or increased revenue yields. Estimating efficiency costs is very challenging because federal taxes have such extensive and diverse effects on behavior. In fact, we found no comprehensive estimates of the efficiency costs of the current federal tax system. Nonetheless, we did find

some studies that estimate the efficiency costs attributable to selected aspects of that system. Although none of these studies, either individually or in the aggregate, provide a basis for estimating the total efficiency cost of the tax system, they do indicate that those total costs are likely to be large. The two most comprehensive studies we found show costs on the order of magnitude of 2 to 5 percent of GDP each year (as of the mid-1990s). However, the actual efficiency costs of the current tax system may not fall within this range because of uncertainty surrounding taxpayers' behavioral responses; changes in the tax code and the economy since the mid-1990s; and the fact that the two studies did not cover the full scope of efficiency costs. The current tax system, as well as all major alternatives, imposes efficiency costs. As with the case of compliance costs, the extent to which efficiency costs could be reduced by tax system redesign would depend upon the details of the new system.

Background

The current tax system in the United States consists primarily of five types of taxes: (1) personal income taxes; (2) corporate income taxes; (3) social insurance taxes (employee and employer contributions for Social Security, Medicare, and unemployment compensation); (4) estate and gift taxes, and (5) a variety of other taxes such as excise taxes on goods and services. Table 1 summarizes several selected features of the current federal tax system.

Table 1: Features of the Tax System as of July 2005

Type of tax	Tax base	Tax rates
Personal Income Taxes (PIT)	Regular PIT Personal income, including income from wages, interest and dividends, capital gains, and small business income. Numerous tax expenditures exist that reduce the size of the tax base.	Regular PIT Graduated rate structure: Statutory marginal rates of 10, 15, 25, 28, 33 percent, and 35 percent. Deductions and other tax expenditures, such as refundable tax credits, such as the Earned-Income Tax Credit, create a group of taxpayers who have no tax liability or receive an outlay from the tax system.
	Personal Alternative Minimum Tax (AMT) Taxable income exceeding certain threshold amounts based on filing status.	Personal AMT 26 or 28 percent depending on taxable income subject to the AMT. Eligible for a credit for a portion of the AMT paid in a prior year.

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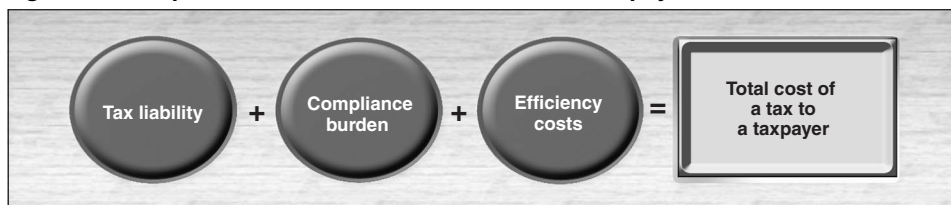
Type of tax	Tax base	Tax rates
Corporate Income Taxes (CIT)	Regular CIT Corporate profits (total revenues less total expenses). Numerous tax expenditures exist that reduce the size of the tax base.	Regular CIT Statutory marginal rates fluctuate between 15 and 35 percent. Due to special provisions, some corporations may pay a marginal tax rate of 39 percent.
	Corporate AMT Broader definition of the tax base (corporate income) than regular CIT, less generous accounting rules.	Corporate AMT 20 percent for all corporate income subject to the tax less the AMT credit for that tax year.
Social Insurance Taxes	Social Security First \$90,000 of employee wages.	Social Security 6.2 percent employee contribution. 6.2 percent employer contribution. 12.4 percent for self-employed.
	Medicare All wages.	Medicare 1.45 percent employee contribution. 1.45 percent employer contribution. 2.90 percent for self-employed.
Unified Transfer Tax—Estate, Gift, and Generation Skipping Tax^a	Estate Tax Fair market value of the decedent's cash and securities, real estate, trusts, annuities, business interests, and other assets less allowable deductions in excess of \$1.5 million in 2005. There is an unlimited deduction for transfers to a surviving spouse.	Estate Tax Maximum tax rate of 47 percent in 2005. As a result of recent tax legislation, estate tax rates will fluctuate before the estate tax is eliminated in 2010. However, the estate tax will be reinstated in 2011.
	Gift Tax Tax is imposed on lifetime taxable transfers of gifts of property. Applicable exclusion amount of \$1 million for 2005. In addition, there is an annual exclusion of \$11,000 per donee and an unlimited exclusion for tuition and medical payments.	Gift Tax Maximum tax rate of 47 percent in 2005. Rates fluctuate in the same manner as for the estate tax in coming years. Gift tax will be retained following repeal of estate and generation skipping tax.
	Generation Skipping Tax (GST) Total generation skipping transfers (such as from a grandparent to a grandchild) in excess of \$1.5 million in 2005.	Generation Skipping Tax 47 percent (or highest statutory marginal tax rate for the estate tax) in 2005. GST rates decrease until the tax is repealed in 2010. GST is reinstated in 2011.
Excise and Other Taxes	Selected goods, services, and other items (e.g., gasoline, alcoholic beverages, tobacco, airline tickets, etc.).	Various rates apply to different goods, services, and other items.

Source: GAO analysis of IRS information.

^aThe unified transfer tax is based on the value of property to be included in a decedent's estate at death and the value of taxable lifetime gifts made by the decedent. Beginning in 2004, the estate and gift tax applicable exclusion amounts differ.

The definition of the tax bases, the tax rates, the various tax credits, and the specific characteristics of each taxpayer determine how much that taxpayer must pay to the U.S. Treasury. The total cost of taxes from a taxpayer's point of view is the sum of the tax liability, the costs of complying with the tax system, and the efficiency costs that the system imposes, as shown in figure 1. In subsequent sections we discuss the various factors that cause the latter two types of costs.

Figure 1: Components of the Total Cost of a Tax to Taxpayers



Source: GAO.

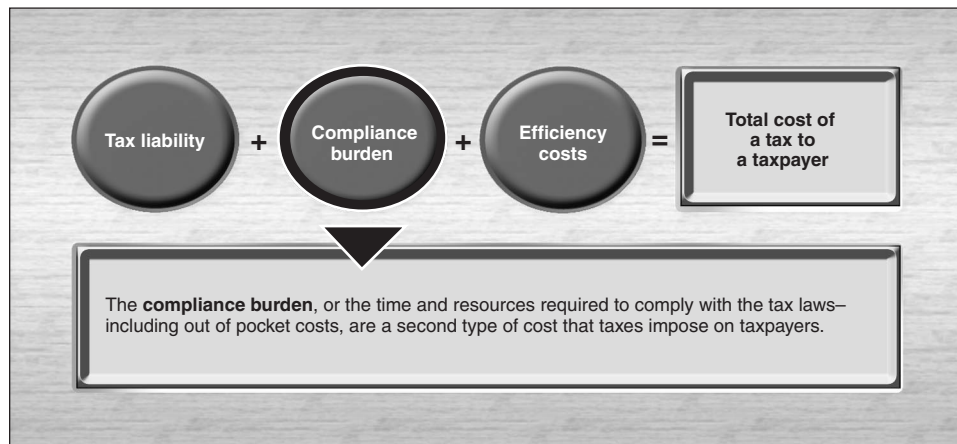
Estimates of Tax Compliance Costs Are Uncertain Because Taxpayers Generally Do Not Record Them; However, Total Costs Are Likely to Be Large

The costs of complying with the tax system are uncertain, but likely to be large—estimates are roughly on the order of about 1 percent of GDP. The costs include the computational, reporting, planning, and recordkeeping requirements of the tax system. Estimates of compliance costs are uncertain because taxpayers generally do not keep relevant records documenting their time and money spent complying with the tax system and many important elements of the costs are difficult to measure because, among other things, federal tax requirements often overlap with recordkeeping and reporting that taxpayers do for other purposes.

Taxpayers Incur Costs When Complying with the Computational, Reporting, and Recordkeeping Requirements of the Tax System

The federal tax system imposes a wide range of recordkeeping, planning, computational, and filing requirements upon businesses and individuals. Complying with these requirements costs taxpayers time and money. Many of these requirements are complex, reflecting both the complexity of our modern economy and intent of policymakers to build progressivity and various incentives into the tax system. As shown in figure 2, these costs to taxpayers are above and beyond what they pay to the government in taxes.

Figure 2: Compliance Burden Is One Cost Taxpayers Face in Complying with the Tax System



Source: GAO.

The tax compliance requirements for individuals include the documentation of their incomes and their qualifications for various exemptions, deductions, and credits available under the federal income tax. Although the documentation of income is straightforward for a large proportion of the individual taxpayer population who earn only labor and interest income and capital income within a retirement account, substantial numbers of taxpayers receive income from capital gains, rents, self-employment, and other sources that involve additional calculations and recordkeeping. In addition, many individuals must familiarize themselves with (or pay someone to advise them on) the sometimes complex rules for determining whether they qualify (and, if so, to what extent) for any of the numerous tax benefits in the federal tax code. Moreover, in cases where multiple tax expenditures have similar purposes, taxpayers may have to devote considerable time to learning and planning in order to make optimal use of these tax benefits.

For example, the IRS publication *Tax Benefits for Education*¹ outlines 12 tax expenditures, including 4 different tax expenditures for educational saving. Three of these savings tax expenditures—Coverdell Education Savings Accounts, Qualified Tuition Programs, and U.S. education savings bonds—differ across more than a dozen dimensions, including the tax

¹Department of the Treasury, IRS, Publication 970, *Tax Benefits for Education*, 2004.

penalty that occurs when account balances are not used for qualified higher education expenses, who may be an eligible beneficiary, annual contribution limits, and other features. Similarly, 3 other tax expenditures, all of which help students meet current costs—the Hope credit, Lifetime Learning credit, and the tuition deduction—differ in terms of eligibility criteria, benefit levels, and income-related phase-outs. The use of one of these tax expenditures can affect whether (or how) a taxpayer is allowed to use the other tax expenditures. Moreover, the use of one of these tax expenditures may affect a student's eligibility for other forms of federal assistance for higher education, such as Pell grants and subsidized loans.²

Tax compliance requirements for businesses are even more extensive and complex than those for individuals. Rules governing the computation of taxable income, expense deductions, and tax credits of U.S. corporations that do business in multiple foreign countries are particularly complex. But even small businesses face multiple levels of tax requirements of varying difficulty. In addition to computing and documenting their income, expenses, and qualifications for various tax credits, businesses with employees are responsible for collecting and remitting (at varying intervals) several federal taxes on the incomes of those employees. Moreover, if the businesses choose to offer their employees retirement plans and other fringe benefits, they can substantially increase the number of filings they must make. Businesses also have information-reporting responsibilities—employers send wage statements to their employees and to IRS; banks and other financial intermediaries send investment income statements to clients and to IRS.³ Finally, a relatively small percentage of all businesses (which nevertheless number in the hundreds of thousands) are required to participate in the collection of various federal excise taxes levied on fuels, heavy trucks and trailers, communications, guns, tobacco, and alcohol, among other products.

² For a fuller discussion of the difficulties that taxpayers face when trying to make use of the various tax expenditures for education, see GAO, *Student Aid and Postsecondary Tax Preferences: Limited Research Exists on Effectiveness of Tools to Assist Students and Families through Title IV Student Aid and Tax Preferences*, GAO-05-684 (Washington, D.C.: July 29, 2005).

³ Although this information reporting increases the compliance burden on businesses, it does enable IRS to enforce tax compliance by wage earners and investors at lower cost. This reduction in administrative costs, which are paid out of the federal budget, means that taxes are slightly lower than they otherwise would have to be.

The tax filings and records of both individuals and businesses are subject to review by IRS. Attempts at tax evasion, unintentional filing errors, or differing interpretations of the tax law can all lead IRS to request more information from taxpayers and, possibly, to litigation, all of which would add to the taxpayers' costs.

Estimates of Compliance Costs Are Uncertain Because Relevant Records Are Not Kept

It is difficult for researchers to estimate the total compliance costs of the federal tax system because taxpayers generally do not keep records of the time and money spent complying with that tax system. Moreover, many important elements of the costs are difficult to measure because

- recordkeeping and reporting to comply with federal tax requirements often overlap with recordkeeping and reporting that taxpayers do for other purposes;
- some costs that taxpayers incur in dealing with IRS may result from tax evasion, rather than tax compliance; and
- there is no consensus on the appropriate method for determining the dollar-value of each hour that an individual spends on tax compliance.

Businesses and individual taxpayers have little, if any, motivation to keep records of the time and money that they spend specifically on complying with federal tax requirements. Consequently, when researchers attempt to collect data on compliance costs, they typically have had to contact samples of taxpayers, through surveys or interviews, and ask them for their best recollection of the total time and money they spent on particular compliance activities. Evidence from one past compliance cost study suggests that respondent recall error may be substantial.⁴ Moreover, conveying the appropriate definition of federal tax compliance costs to mail or telephone survey respondents and getting those respondents to apply that definition uniformly is difficult, as will be clear from the discussion below. In fact, most of the studies that we found had considerable difficulty getting taxpayers, particularly businesses, to

⁴ As part of the study that forms the basis for IRS's current estimates of compliance costs, the study's authors used two data collection methods—a mail survey and a diary study. The cost estimates yielded by the two methods varied significantly. The average burden of 14.8 hours for the mail survey respondents was 78 percent higher than the average burden of 8.3 hours reported by diary respondents.

respond at all. A high response rate is important for the accuracy of estimates, particularly for the population of business taxpayers that is highly diverse in terms of size, industry, and business organization and, therefore, is likely to be diverse in terms of its compliance costs.

A major difficulty in measuring compliance costs is disentangling accounting and recordkeeping costs due to taxes from the costs that would have been incurred in the absence of the federal tax system. For example, where the rules regarding the calculation of income for tax purposes coincide with the rules for determining income for financial statement purposes, the additional costs of taxation can be minimal. Public corporations must file financial statements with the Securities and Exchange Commission; other businesses are required to provide financial statements to banks and other lenders when they are seeking credit. Similarly, many individuals need to document their income when applying for mortgages or financial aid for college. Moreover, most businesses and individuals must comply with state, and sometimes local, income tax filing requirements that are often very similar to those imposed by the federal tax system. Consequently, if one wishes to define the compliance costs attributable to the federal tax system as only those costs that would not exist in the absence of that system, then one needs to assume what the requirements of state and local tax systems, as well as those of financial accounting systems, would look like in the absence of the current federal tax system and make sure that none of the costs of complying with those requirements are included in the estimate of federal compliance cost. The studies that we reviewed typically exclude normal business accounting costs from their definition of federal tax compliance costs; however, they do not exclude the costs of complying with tax requirements that are imposed by both federal and state governments.

Two additional definitional issues that have been discussed in the compliance cost literature are how to treat costs associated with either tax planning or tax evasion. Although tax planning expenses are excluded from the definitions of compliance costs established by the Paperwork Reduction Acts of 1980 and 1995, some studies that we reviewed do include such expenses in their definition of compliance costs.⁵ None of the studies we reviewed recommended the inclusion of costs associated with illegal tax evasion; however, it is difficult for researchers to completely exclude tax evasion costs from their estimates because, in many cases, the

⁵ Pub. L. No. 96-511 (1980) and Pub. L. No. 104-13 (1995).

determination of whether a particular activity constitutes tax evasion or not is not made until a year or more after the activity is completed (and recorded in a survey).

There is no consensus among researchers regarding the appropriate monetary value to be assigned to each hour of time spent on tax compliance activities. Some of the many issues involved in the choice of the appropriate value are: whether to use different values for time that is taken away from the taxpayer's leisure and time taken away from additional hours at work; whether to use different values for time spent on activities that the taxpayer could have paid someone to do and time spent on activities that only the taxpayer could do; whether to relate the value to each taxpayer's own hourly wage rate or to some uniform wage rate; and whether to use a before-tax or after-tax wage rate. The choice of the monetary value of an hour spent on tax compliance obviously will have a substantial effect on the estimated magnitude of aggregate compliance costs.

Existing Estimates of the Compliance Costs of the Federal Tax System, Though Incomplete and Imprecise, Suggest Those Costs Are Large

The government's Information Collection Budget (ICB), for the Department of the Treasury, annually estimates the time that taxpayers spend on prefilling and filing activities for every form issued by the Treasury. The vast majority of these forms are tax related. Treasury has estimated that during fiscal year 2004 individuals, businesses, and exempt organizations spent a total of 6.4 billion hours on Treasury's forms. Treasury does not convert this time estimate into a monetary value. If this time burden were monetized at rates between \$15 per hour and \$30 per hour (the range used for individual taxpayers in the studies that we found), the total cost would amount to between about \$100 billion and \$200 billion.

Many analysts within Treasury and outside believe that the ICB estimates are not very accurate. The estimates are based primarily on an IRS model that was developed with survey data for tax year 1983. The simplicity of the model's approach for updating the data each year leaves it with a very limited ability to adjust for changes in compliance burden resulting from

changes in tax policy or tax system administration.⁶ Indeed, in an effort to more accurately measure paperwork burden, IRS is currently developing a revised methodology for estimating the compliance burden individuals incur when complying with the U.S. tax system. The new model will reflect a change in the approach for measuring burden: it focuses on the taxpayer and the taxpayer's characteristics rather than the forms the taxpayer uses. Key drivers of taxpayer burden in the model are the taxpayers' activities and the method of return preparation (by a paid preparer, by the taxpayer with tax preparation computer software, or by the taxpayer without computer assistance). In addition, IRS is also working on new methodologies for estimating the compliance burdens of various types of businesses and tax-exempt entities, and the burdens associated with postfiling activities.

Most of the other estimates of the compliance burden that we found for large segments of the taxpayer population were produced by contractors to IRS or by analysts who used IRS's data. The disparities among the estimates, their likely margins of error, and their incompleteness (few include postfiling costs, such as audits, and all are limited to the income tax) prevent a more definitive conclusion about the total compliance burden of the U.S. tax system.

Studies we found that focus on the compliance costs of individual taxpayers estimate it to be between \$67 billion and a little over \$100 billion per year. The variation in these estimates is primarily attributable to the wide range in monetary values that the different studies apply to an hour spent on tax compliance activities. These studies are summarized and compared in table 2.

⁶ The only factors used in the model are measures of return size (numbers of forms and attachments), form size (number of words or number of line items), the number of references to the tax code in forms, and instructions, and the number of line items requiring records. The model does not take into account new developments in tax preparation technology, such as personal computer software and electronic filing, nor does it differentiate between simple and complex types of line items on tax forms.

Table 2: Available Estimates of Tax Compliance Costs for Individual Taxpayers (Including Self-employed)

Study (publication date/estimate year) ^a	Compliance costs (dollars in billions)	Important differences in scope and assumptions ^b	Notable methodological issues
IBM/IRS (2003 /TY 2000)	67-99	<ul style="list-style-type: none"> • Covers taxpayers' time, preparer fees, and any other out-of-pocket expenses. • Taxpayers' time is monetized at \$15 per hour for the low estimate and at \$25 per hour for the high estimate. 	<ul style="list-style-type: none"> • Based on surveys of two samples of taxpayers: one (in 2000) for individuals who earn only wage and investment income; a second (in 2001) for self-employed individuals.
Moody—Tax Foundation (2002 /CY 2002) ^c	104	<ul style="list-style-type: none"> • Covers taxpayers' and preparers' time but no out-of-pocket expenses. • Taxpayers' and preparers' time is monetized at \$30 per hour. 	<ul style="list-style-type: none"> • Based on data from an IRS survey of taxpayers for TY 1983; the methodology for updating that data is simplistic and does not account for changes in tax preparation and recordkeeping technology.
Slemrod (2004 /TY 2004) ^d	85	<ul style="list-style-type: none"> • Covers taxpayers' time, preparer fees, and any other out-of-pocket expenses. • Taxpayers' time is monetized at \$20 per hour. 	<ul style="list-style-type: none"> • Based on the author's informed judgment of accumulated research on this topic, including his own study of a sample of Minnesota taxpayers in 1989 (Slemrod and Blumenthal) and the IBM/IRS study.

Source: GAO analysis of papers cited.

^aThe abbreviations CY and TY stand for calendar year and tax year respectively.

^bThe scopes of all of these studies are limited to the prefilling and filing burden associated with taxpayers' own income tax returns; they do not cover costs of complying with payroll or income tax responsibilities with respect to any employees they may hire. None of these studies includes postfiling costs, such as responding to notices or providing information for audits.

^cMoody included the self-employed in his estimate for business burden. He also provided detailed estimates by specific tax forms. We used this form-level detail to approximate his estimate for the self-employed and shift that amount (\$20 billion) from table 3 to this table to improve comparability to the other studies.

^dThis estimate updates a similar exercise the author undertook in 1996.

Studies we found that focus on the compliance costs of businesses estimate them to be between about \$40 billion and \$85 billion per year. None of these estimates include the costs to businesses of collecting and remitting income and payroll taxes for their employees. The accuracy of these business compliance cost estimates is uncertain due to the low rates of response to their data collection surveys. In addition, the range in estimates across the studies is due, among other things, to differences in monetary values used (ranging between \$25 per hour and \$37.26 per hour), differences in the business populations covered, and differences in the tax years covered. These studies are summarized and compared in table 3.

Table 3: Available Estimates of Tax Compliance Costs for Corporations and Partnerships

Study (publication date / estimate year) ^a	Compliance costs (dollars in billions)	Important differences in scope and assumptions ^b	Notable methodological issues
Moody—Tax Foundation (2002 /CY 2002) ^c	85	<ul style="list-style-type: none"> • Covers all corporations and partnerships. • Covers taxpayers' and preparers' time but no out-of-pocket expenses; does not cover any postfiling costs. • Taxpayers' and preparers' time is monetized at \$37.26 per hour. 	<ul style="list-style-type: none"> • Based on data from an IRS survey of taxpayers for TY 1983 (with a response rate of less than 38 percent); the methodology for updating that data is simplistic and does not account for changes in tax preparation and recordkeeping technology.
Slemrod and Venkatesh (2002 /TY 2001)	22	<ul style="list-style-type: none"> • Excludes the largest 1,350 corporations, all businesses with less than \$5 million in assets, and all partnerships with less than a certain number of partners. • Covers taxpayers' time, preparer fees, and any other out-of-pocket expenses, including all postfiling costs. • Costs are stated in terms of businesses' actual expenses for in-house or external tax compliance services. 	<ul style="list-style-type: none"> • The effective response rate for the survey was only 10.25 percent. • Large discrepancies existed between the estimates of outside expenses given by the taxpayers versus those given by tax professionals. • Large discrepancies existed between the asset sizes reported by IRS versus the sizes reported by the taxpayers themselves. (Some respondents may have reported as part of a consolidated group when they were sampled to represent only a single corporation.)
Slemrod (2004 /TY 2004)	40	<ul style="list-style-type: none"> • Covers all corporations and partnerships. • Covers taxpayers' time, preparer fees, and any other out-of-pocket expenses, but does not appear to cover postfiling costs. • Taxpayers' time is monetized at \$25 per hour. 	<ul style="list-style-type: none"> • Represents author's best judgment, based on his other studies cited in this table and an educated guess about the cost to small businesses other than sole proprietors.
Slemrod and Blumenthal (1993 /TY 1992) Follow-up study by Slemrod (1997/TY 1996)	2	<ul style="list-style-type: none"> • Covers only the 1,329 largest corporations. • Covers taxpayers' time, preparer fees, and any other out-of-pocket expenses, including all postfiling costs. • Costs are stated in terms of businesses' actual personnel costs for in-house tax compliance activities and all costs for external tax compliance services. 	<ul style="list-style-type: none"> • Response rate for the 1992 survey was 27.5 percent. • Slemrod (1997) did a follow-up survey in 1996 that had a lower number of respondents. The overall cost estimate was roughly the same in each study.

Source: GAO analysis of the papers cited.

^aThe abbreviations CY and TY stand for calendar year and tax year respectively.

^bThe scopes of all of these studies are limited to the taxpayers' own income tax returns; they do not cover costs of complying with payroll or income tax responsibilities with respect to their employees.

^cThis study estimated that nonprofits spent over \$5 billion on compliance costs (above and beyond the \$85 billion). None of the other studies included the costs of nonprofits.

Frequent changes to the tax code over time reduce the relevance of past estimates of compliance costs to policymakers who are interested in the costs of the current system. Since the comprehensive tax reform of 1986 there have been changes to the tax code every year; many of these changes can be characterized as major.⁷ Two examples of the numerous changes that have likely affected compliance burden are

- the revenue provisions of the Small Business Job Protection Act of 1996⁸ that tightened the pension nondiscrimination rules that businesses must follow; and
- the creation of Hope and Lifetime credits for post-secondary education (in the Taxpayer Relief Act of 1997⁹); the fact that taxpayers must choose between the two credits adds to their need for tax planning.

The Extent to Which Compliance Costs Could be Reduced Depends Upon the Details of a Redesigned Tax System

The estimates presented above do not represent the potential cost savings to be gained by replacing the current federal tax system. Any replacement tax system will impose significant compliance costs of its own. Moreover, given that many state and local government income taxes depend upon the same compliance activities as the federal income tax does, taxpayers would still bear the costs of those activities unless those other governments replaced their own taxes to conform to the new federal system. In addition, if some of the subsidies, such as the earned income tax credit and the research tax credit, that are provided by the current federal tax system are replaced by spending programs under a reformed system, tax compliance costs may be reduced, but only as a result of their being shifted to those new programs. Similarly, if a replacement tax system no longer requires businesses and individuals to compute and document their incomes, those businesses and individuals will still need to document their incomes for borrowing and other purposes, and government statistical agencies will incur expenses to replace the data that they currently obtain from income tax returns.

⁷ According to The President's Advisory Panel on Federal Tax Reform, Staff Presentation on Complexity and Instability presented on July 20, 2005, there have been 14,400 changes to the tax code since 1986.

⁸ Pub. L. No. 104-188 (1996).

⁹ Pub. L. No. 105-34 (1997).

Efficiency Costs Arising from Tax-Induced Changes in Behavior Are Likely to Be Large but Can Only Be Modeled with Considerable Uncertainty

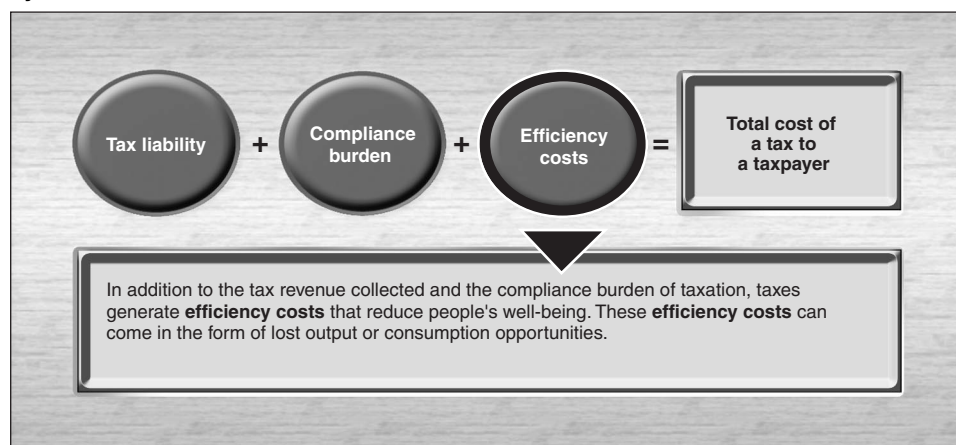
Economic efficiency costs occur when tax rules cause individuals to change their work, savings, consumption, and investment behavior in ways that ultimately leave them with a combination of consumption and leisure (now and in the future) that they value less than the combination they would have obtained under a tax system that did not distort their behavior. Estimating efficiency costs is very challenging because the tax system has such extensive and diverse effects on behavior. We found no comprehensive estimates of the efficiency costs of the current federal tax system. However, we did find some studies that estimate the efficiency costs attributable to selected aspects of the current system. Although none of these studies, either individually or in the aggregate, provide a basis for estimating the total efficiency cost of the tax system, they do indicate that those total costs are likely to be large. The more comprehensive estimates show costs on the order of 2 to 5 percent of GDP each year. However, the efficiency cost of the current tax system may not fall within that range because of uncertainty surrounding taxpayer's behavioral responses to tax rules, changes in the tax code and the economy since the mid-1990s, and the studies do not cover all of the sources of efficiency costs.

Efficiency Costs Arise When Taxpayers Alter Their Behavior in Response to Tax Rules

Many aspects of the federal tax system provide incentives or disincentives for taxpayers to undertake particular activities. Some of these incentives and disincentives were intentionally designed into the system; others are unintended consequences of rules designed to achieve other objectives, such as equity or increased revenue yield. By changing the relative attractiveness of highly taxed and lightly taxed activities, taxes alter decisions such as what to consume and how to invest. Households and firms generally respond to taxes by choosing more of lower taxed items and less of higher taxed items than they would have otherwise. When taxpayers alter their behavior in response to tax rules, they often end up with a combination of consumption (broadly defined) and leisure that they value less than the combination they could have achieved if they made decisions free of any tax influences. Economists refer to this reduction in value as a "welfare loss" or an efficiency cost; they also generally refer to

behavioral changes in response to taxes as “distortions,” even though not all changes have negative consequences.¹⁰

Figure 3: Efficiency Costs Are One Cost Taxpayers Face in Complying with the Tax System



Source: GAO.

As an example of the efficiency costs of taxes, suppose an investor is choosing between two potential investments, one that has an expected return of \$1.10 on every dollar invested and a second that has an expected return of \$1.20. If neither investment is taxed, or if the investments are taxed equally, the investor will choose the second investment with its higher economic rate of return. However, if the first investment continues to be untaxed, while the second is subject to a 10 percent tax, the decision will be based on the investments' after-tax rates of return. In this case the after-tax return on the first investment continues to be \$1.10 for every dollar invested, while the after-tax return on the second investment is now \$1.08. An investor would choose the first investment because it has a higher after-tax return. This tax distortion causes investors to earn \$.10 less on every dollar invested, relative to the no-tax case, even though no tax is paid to the government. This decline in income ultimately leads to lower total consumption.

¹⁰ A tax on pollution is an example of an efficiency-enhancing tax that causes a beneficial change in behavior. Pollution may be viewed as a negative product that consumers are involuntarily forced to consume. A tax on pollution can provide polluters with an incentive to reduce their emissions, thereby increasing the well-being of consumers.

Efficiency gains or costs are not the same as increases or decreases in economic output (normally measured in terms of GDP). For example, a reduction in taxes on wages could encourage some individuals to increase the number of hours they work, which in turn would increase economic output and the amount of consumption those workers could achieve. However, the welfare gain to these individuals may be considerably less than the increase in their consumption because they would have to forego some leisure time that they value in order to achieve the gain in welfare. In fact, some researchers who have examined both the output and efficiency effects of replacing the current tax system with various alternatives have reached similar conclusions concerning output effects while reaching different conclusions concerning the efficiency effects of similar alternatives.¹¹

The efficiency gain or loss due to a change in a tax system is defined as the difference between total welfare that is achieved under the existing tax system and that which would be achieved under the replacement system that raised the same amount of revenue. The total efficiency cost of the current federal tax system would have to be estimated by comparing it to a tax system that raised the same amount of revenue while generating no efficiency costs at all—in other words, a tax system that had no effect on taxpayers' behavior at all. Although such distortion-free tax systems can be designed in theory, none exist as primary sources of revenue in practice because they are generally viewed as inequitable.¹²

¹¹ For example, both Jorgenson and Yun, *Investment Volume 3: Lifting the Burden: Tax Reform, the Cost of Capital, and U.S. Economic Growth*, (Cambridge, Massachusetts, MIT Press, 2001) and Alan Auerbach, "Tax Reform, Capital Allocation, Efficiency and Growth," in *Economic Effects of Fundamental Tax Reform* (Washington, D.C., Brookings Institution Press, 1996) examine the output and efficiency effects of changing to a consumption-based tax. While they both find significant output effects, only Jorgenson and Yun consistently find large efficiency gains from switching to a consumption tax.

¹² A head tax, which is a tax that collects the same amount of money from all taxpayers regardless of how much they earn or consume, is an example of a tax that does not distort behavior. This type of tax does not meet either of the two commonly recognized criteria for equitable taxes—first, that tax liabilities should be related to taxpayers' ability to pay and, second, that tax liabilities should reflect the benefits that taxpayers receive from the government.

Estimates of Efficiency Costs Are Highly Uncertain Because the Tax System Has Such Extensive and Diverse Effects on Behavior

Estimating the efficiency costs of the federal tax system is an enormous, complicated, and uncertain task, given the complexity of existing tax rules, the breadth and diversity of the U.S. economy and population, and the limited empirical evidence available regarding how individuals and businesses change their behavior in response to tax rules. In order to obtain a precise estimate of the efficiency costs researchers would need to identify all of the significant incentives and disincentives imbedded in the federal tax system; they would also need to know the extent to which large, heterogeneous populations of individuals and businesses have changed their behaviors in response to these incentives.¹³

In practice, researchers have not been able to obtain and analyze all of the detailed data they need to produce efficiency cost estimates that are free from a large degree of uncertainty. The mathematical models that are used to analyze the important interrelating and cascading effects of the entire tax system, or even significant components of the system, are quite complex, even when researchers limit their examination to highly simplified representations of the actual taxes. It is impractical to incorporate all of the significant details of tax rules that result in efficiency costs. Similarly, data constraints and computational practicality lead researchers to limit the extent to which their models reflect the variations in behavioral responses to various tax rules across large and heterogeneous populations of businesses and individuals. Finally, researchers attempting to estimate efficiency costs often have little, or conflicting, empirical evidence upon which to base their assumptions about various behavioral responses to tax distortions because the underlying research into those behavioral responses is, itself, subject to considerable uncertainty. For example, one piece of information that is critical to the estimation of efficiency costs is the extent to which individuals' taxable incomes change in response to tax changes. Researchers have had difficulty estimating this responsiveness because of the difficulty of controlling for all of the other factors that affect income growth, such as changes in the economic environment, returns to investments in education, and the changing age distribution of the

¹³ Moreover, it is not sufficient simply to know how various tax incentives directly distort an individual's or business' decisions. The researchers would also need to know how those distorted decisions, in turn, caused other decisions to be distorted in a cascading effect. For example, the distortion of savings decisions can affect the amount of investment in the economy, which in turn can affect the productivity of labor and, therefore, the wage rate paid to labor (which generally is directly related to the productivity of labor). The change in the wage rate then affects individuals' choices between work and leisure.

population. Moreover, this responsiveness is likely to be different for different subpopulations of taxpayers.¹⁴

While No Comprehensive Estimates of the Tax System’s Efficiency Costs Exist, Available Partial Estimates Suggest Those Costs Are Large

None of the studies we reviewed provides a comprehensive estimate of the efficiency cost of the U.S. federal tax system since the tax reform of 1986. However, a variety of studies do provide some evidence that the efficiency costs are large. All of these studies are summarized in table 4. The more comprehensive studies we found show costs on the order of 2 to 5 percent of GDP each year (as of the mid-1990s). The other studies that we reviewed examined more limited aspects of the tax system’s distortions. The efficiency cost estimates for those selected distortions cannot be summed directly to an overall estimate; however, they are each significant enough to support the conclusion that the combined cost of all distortions is large.

Table 4: Estimates of the Efficiency Gains from the Removal of Selected Distortions in the Current Tax System

	Tax(es) included in the study	Behavior altered
Feldstein (1999)		
Employs his own estimates of the responsiveness of taxable income to tax changes and those of other researchers to estimate the efficiency gains from replacing personal income and payroll taxes with revenue-neutral nondistorting taxes. Estimated efficiency costs of \$137 billion to \$363 billion in 1994. The author recognizes that the responsiveness of taxable income to changes in taxes is a key parameter, subject to ongoing research and that a range of estimates exist. This cost recurs each year.	Personal Income Tax Payroll Tax	Work versus leisure Tax-preferred consumption (e.g., fringe benefits) versus other consumption
Gravelle (2004, 1989) Gravelle and Kotlikoff (1993)		
Simulates how taxes affect the allocation of capital investment across the corporate and noncorporate sectors. Estimated efficiency costs of nearly \$13 billion in 1988, based upon one set of assumptions. This cost recurs each year. In 2004, the author notes that the subsequent reduction in taxes on dividends has contributed to a decrease in the efficiency cost from the corporate/noncorporate distortion.	Personal Income Tax Corporate Income Tax	Corporate versus noncorporate investment

¹⁴ Seth Giertz, *Recent Literature on Taxable Income Elasticities*, Congressional Budget Office Technical Paper Series, number 2004-16, December 2004.

(Continued From Previous Page)

	Tax(es) included in the study	Behavior altered
Cai and Gokhale (1997)		
Estimates how taxes on capital income distort decisions about when and what to consume. Estimated efficiency costs of \$45 billion in 1995, in the authors' base-case. The authors note that the distortion can be substantial for the consumption of durable goods, such as housing, which have relatively low rates of depreciation. This cost recurs each year.	Selected Aspects of the Personal Income Tax	Current consumption versus savings
	Selected Aspects of the Corporate Income Tax	Durable consumption versus nondurable consumption
Lui and Rettenmaier (2002, 2004)		
Estimates the excess burden of the Social Security payroll taxes using two estimates of labor supply responsiveness. Estimated efficiency costs range from \$49 billion to \$82 billion in 2001, depending on the degree of labor supply responsiveness assumed. The authors note that their estimates do not include impacts of payroll taxes on savings decisions or tax-preferred consumption. This cost recurs each year. In the second paper the authors suggest an alternative derivation of the excess burden, which produces estimates that are 10 to 50 percent of the original.	Social Security Payroll Tax	Work versus leisure
Holtz-Eakin and Marples (2001a, 2001b)		
Estimates the efficiency cost associated with the distortion of wealth accumulation decisions by the estate tax relative to a uniform tax on capital income. Estimated efficiency cost of \$38.4 billion in 1999, using the authors' preferred set of assumptions. The authors note that their data exclude the "super-rich" who are most affected by the tax and that the literature on the percentage of bequests that are intentional presents a large range of estimates. This cost recurs each year.	Estate Tax	Wealth accumulation and allocation to bequests versus lifetime consumption and other lifetime uses of wealth
Jorgenson and Yun (2001)		
Estimates the efficiency cost of replacing the personal and corporate income tax with a nondistortionary revenue neutral tax. Estimated efficiency costs at the local, state, and federal level of 19.5 percent of combined collections. If applied to only federal collections, this would equal about \$200 billion in 1997.	Personal and Corporate Income Taxes at the Federal, State, and Local level	Behaviors altered by the personal income tax, such as savings, work effort, and housing choices; and behaviors altered by the corporate income tax, such as debt versus equity finance, organizational form, and dividend decisions.

Source: GAO analysis of papers cited.

The two studies with the broadest scopes among those that we reviewed were by Jorgenson and Yun and by Feldstein.¹⁵ The first set of authors estimated that the efficiency cost of federal taxes on capital and labor income in 1997 was equal to about 19.5 percent of the revenues collected from those taxes.¹⁶ Applying this percentage to federal corporate and personal income tax collections in 1997 would yield efficiency costs of about \$200 billion or, roughly, 2.5 percent of GDP in that year. Feldstein examined the effects of several distortions caused by the federal personal income tax and payroll taxes, including those related to decisions about how much to work and what to consume. He estimated that these distortions resulted in efficiency costs of between \$137 billion and \$363 billion in 1994 (depending on his assumptions regarding the size of taxes effects on various decisions). Those estimates were roughly equivalent to between 2 and 5 percent of GDP in 1994.

The other studies that we found focused on more limited aspects of the tax distortions caused by the federal tax system. For example, Cai and Gokhale examined how selected aspects of the federal personal and corporate income taxes distorted the choices between savings and consumption and found that these distortions generated \$45 billion per year in efficiency costs as of 1995. As another example, Holtz-Eakin and Marples found that the distorting effect of the estate tax on choices among consumption, leisure, and wealth accumulation resulted in efficiency costs of over \$38 billion in 1999.

The estimates from the various studies shown in table 4 cannot be combined to obtain a comprehensive estimate of the current tax system's efficiency costs for several reasons. First, no combination of the estimates covers all of the tax system's distortions (e.g., none of the estimates cover the effects of payroll taxes on savings). Second, an estimate of the costs arising from all of the tax system's distortions can only be made by

¹⁵ Jorgenson and Yun 2001 and Martin Feldstein, "Tax Avoidance and the Deadweight Loss of the Income Tax," *The Review of Economics and Statistics*, 1999.

¹⁶ The authors actually estimate the cost of these taxes at the federal, state, and local level; however, one of the authors told us that the costs as a percentage of revenue should be approximately the same if the state and local taxes were excluded from the analysis.

examining the removal of all of the distortions simultaneously.¹⁷ Finally, the various estimates are made for different years and, therefore, reflect different tax systems, each of which is somewhat different than today's system. As noted earlier, there have been frequent and significant changes to the tax system since 1986. Even as recently as 2001 and 2003 there have been changes that are likely to have affected the efficiency costs of federal income taxes. For example, the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA)¹⁸ decreased the marginal tax rates on individual income and estates and increased the exemption from estate taxes. These changes could have decreased the efficiency cost for individuals. Also, Gravelle (2004) notes that the temporary reduction in taxes on dividends contained in the Jobs and Growth Tax Relief Reconciliation Act of 2003¹⁹ contributed to a reduction of the corporate/noncorporate distortion and its efficiency costs. Nevertheless, the estimated efficiency costs associated with the selected distortions are significant enough individually to suggest that the total efficiency cost of the tax system is large.

We also reviewed a number of other studies that estimated the difference in efficiency costs between existing federal income taxes and potential substitutes for those taxes.²⁰ These estimates do not represent the absolute costs of the existing taxes because the substitute taxes all generate efficiency costs of their own; however, they would (to the extent that they are accurate) represent lower bounds for those costs. The findings of these studies varied considerably, depending on the nature of the taxes that were presumed to replace the federal income taxes. For example, Lim Rodgers

¹⁷ For example, Douglas Holtz-Eakin and Donald Marples, "Distortion Costs of Taxing Wealth Accumulation: Income Versus Estate Tax," National Bureau of Economic Research Working Paper 8261, 2001, estimated the efficiency costs of the estate tax in the presence of all of the distortions associated with the federal income taxes. Their estimate could have been significantly different if they had assumed that a nondistortionary tax had been in effect at that time, instead of the income taxes. For this reason, it is inappropriate to assume that eliminating the distortions of the estate tax would have yielded the same \$38.4 billion in 1999 on top of the gains that Jorgenson and Yun 2001 estimate could have been realized by removing all income tax distortions.

¹⁸ Pub. L. No. 107-16 (2001).

¹⁹ Pub. L. No. 180-27 (2003).

²⁰ In addition, a number of studies have estimated the effects of fundamental tax reform on economic output. However, as we noted previously, output effects are not the same as efficiency effects, so those output estimates are not relevant to the questions addressed in this report.

and Jorgenson and Wilcoxon found that there would be little, if any, efficiency gain from replacing the existing income taxes with a consumption-based flat tax.²¹ In contrast, Jorgenson and Yun estimated that the efficiency gains of replacing income taxes with a pure flat-rate income and/or sales tax would yield gains of about \$210 billion per year (measured in 1997 dollars).²²

As noted earlier, considerable uncertainty surrounds all of the estimates we have cited. The estimation of efficiency costs involves complicated modeling based on numerous assumptions about the behavioral responses of individuals and businesses to changes in taxes and other factors. Results are often quite sensitive to the assumed magnitude of key responses and those assumptions are often based on empirical research that continues to evolve over time or, in other cases, has yet to be undertaken. For example, the consensus of recent research is that individuals are less responsive to changes in taxes than Feldstein assumed them to be when he made his estimates. As another example, Holtz-Eakin and Marples noted that there was significant disagreement in the empirical research over one of the factors that was key to their estimate—the extent to which actual bequests differed from intended bequests.

The Extent to Which Efficiency Costs Can be Reduced by Tax System Redesign Is Uncertain

As some of the results presented in the preceding section demonstrate, the extent to which efficiency gains could be realized by switching to an alternative tax system depends critically on the detailed characteristics of the alternative. All of the alternative tax system proposals that have received serious consideration in recent decades would have imposed significant efficiency costs. Moreover, in assessing the potential efficiency gains from any tax reform proposal it is also important to consider compensating changes that may be made on the spending side of the federal budget. For example, if any tax expenditures in the current federal income taxes are replaced by grants, spending programs, regulations, or

²¹ The characteristics of this replacement tax were specified by the Joint Committee on Taxation as part of an exercise for a symposium that the committee organized to test the feasibility of incorporating macroeconomic effects in revenue estimates. See JCS-21-97, “Joint Committee on Taxation Tax Modeling Project and 1997 Symposium Papers,” November 20, 1997, for a complete description.

²² These replacement taxes in Jorgenson and Yun 2001 are “pure” in the sense that they have no exemptions (except for investment goods in the case of the sales tax), deductions, credits, or special rates.

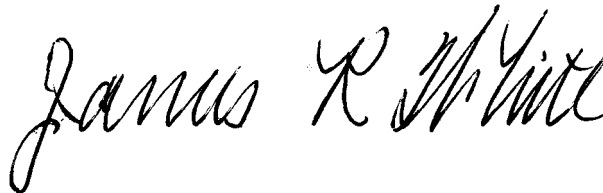
other forms of nontax subsidies, those subsidies can result in efficiency costs similar in magnitude to those associated with the tax expenditures they replaced.

Agency Comments and Our Evaluation

We provided a draft of this report in August 2005 to the Commissioner of Internal Revenue. We received technical comments via e-mail from the IRS Office of Research. Where appropriate, we made changes in our report in response to these comments.

As agreed, unless you announce the contents of this report earlier, we plan no further distribution until 30 days from the date of this report. At that time, we will make copies available to others on request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions on matters discussed in this report or would like additional information, please contact me at (202) 512-5594 or whitej@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report were James Wozny and Donald Marples.



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