

# Reducing the Tax Gap: The Illusion of Pain-Free Deficit Reduction

Eric Toder

Urban Institute and Urban-Brookings Tax Policy Center\*

## INTRODUCTION AND SUMMARY

The gross tax gap is the difference between tax liability in any year and the amount of tax that is paid voluntarily and on time. The IRS recently estimated a gross tax gap for tax year 2001 of \$345 billion, just over 16 percent of tax liability for that year.

The tax gap is once again a high profile political issue, as politicians and some economists see measures to close the tax gap as a key component of a deficit reduction strategy. This attention paid to the tax gap is the latest iteration of a cyclical pattern in which politicians alternatively call for increased IRS enforcement and then complain about the burdens the IRS imposes on the citizenry.

For example, in the 1988 presidential campaign, Democratic candidate Michael Dukakis called for more tax enforcement as a means of reducing the budget deficit and cited his success in improving tax compliance in Massachusetts as a model of what might be accomplished at the Federal level. In the mid-1990s, however, politicians competed with each other to denounce alleged heavy-handed IRS enforcement tactics. Congress enacted a new Taxpayer Bill of Rights, placed new restrictions on IRS activities, and mandated a re-organization of the IRS in the Internal Revenue Restructuring Act of 1998. Throughout the second half of the 1990s, IRS spending on enforcement activities declined dramatically, as budgetary resources shifted from enforcement to taxpayer service. Since 2001, however, IRS enforcement activities have gradually increased and, today, narrowing the tax gap is again a priority.

### The Tax Gap, the Budget Deficit, and Budget Politics

Assuming that the tax gap grows in proportion to the growth in tax liability, the \$345 billion tax gap for calendar year 2001 could be as high as \$400 billion in 2006. That amount is more than twice the \$172 billion federal deficit that the Congressional Budget Office (CBO) projects for fiscal year 2007, leading politicians and economists to conclude that actions to close the tax gap could make a large dent in the federal deficit and be a major component of a strategy to restore fairness to the tax law.<sup>1</sup> For example,

---

<sup>1</sup> The 2007 deficit would be \$50 billion higher if Congress extends the temporary increase in AMT exemptions for another year; without this "AMT patch" 23 million taxpayers would pay AMT in tax year 2007. The Congressional Budget Office (2007) is projecting a budget surplus by fiscal year 2012, but the CBO projection assumes current law, under which the president's 2001 tax cuts will expire and 21 million taxpayers will be subject to the AMT in 2012 (Burman et al. 2007). If the president's tax cuts are extended and the AMT brackets indexed for inflation, CBO projects a deficit of \$207 billion in fiscal year 2012. Thus, an alternative view of the current discussion is that politicians are seeking to close the tax gap as a way of avoiding the pain of allowing the tax cuts to expire and raising other taxes to pay for reform of the AMT.

Senate Majority Leader Harry Reid was quoted shortly after last year's Congressional elections as saying as much as \$200 billion per year could be raised by closing the tax gap (Schor 2006). Former Treasury Secretary Larry Summers, in a statement at a hearing of the Joint Economic Committee in early 2007, lists assuring the fair collection of taxes as the first of three policy recommendations to help the middle class and asserts that making a serious assault on the tax gap could raise about \$50 billion per year (Summers 2007).

In contrast, I will argue that realistic measures that Congress may approve can close only a small fraction of the federal deficit. Although a strong case can be made for investing more in enforcement and enhancing some of the tools available to the IRS, real spending cuts or tax increases will ultimately be necessary to address the pending fiscal problem resulting from the combination of recent tax cuts and higher spending on defense and homeland security in the short run and from the growth in entitlement spending for programs for older Americans in the long run.

### Key Points about the Tax Gap

I start by summarizing some key points about the tax gap. These points and their implications are discussed more fully in the remainder of the paper.<sup>2</sup>

*The size of the estimated tax gap in relation to taxes owed has been remarkably stable over time.* The IRS has conducted studies of noncompliance since the 1970s. In all of these prior studies, the estimated tax gap ranged between 16 and 20 percent of tax liability. The most recent estimates are well within the range of historical estimates.

*Most of the tax gap comes from underreporting of tax on individual income tax returns.* Although corporate tax shelter abuses are important and widely publicized, most of the tax gap represents underreported tax liability on individual tax returns. IRS estimates underreporting of individual income tax and self-employment (SECA) tax in 2001 at \$236 billion, or 68 percent of the gross tax gap.

*The largest source of underreporting of tax is underreporting of business and self-employment income.* Underreporting of business and self-employment income accounts for 63 percent of total underreporting of tax due on individual tax returns (individual income tax and SECA tax) and 43 percent of the tax gap.

*Almost one-fifth of the tax gap is currently recovered through IRS enforcement activities and voluntary late payments.* The gross tax gap represents tax owed and not paid on time. The IRS estimates that \$55 billion of the \$345 billion tax gap for tax year 2001 will eventually be recovered through either voluntary late payments or from IRS enforcement activities on tax year 2001 returns, leaving a net tax gap of \$290 billion.

---

<sup>2</sup> The IRS has released a "Tax Gap Map" and accompanying tables that have appeared in a number of presentations by IRS officials and others. See, for example, Mazur (2006). Figures from these documents are cited in this report. Updated estimates of the tax gap are presented in Internal Revenue Service (2007)

*The IRS conducts a wide variety of enforcement programs, which raise about \$45 billion per year.* In addition to traditional audits of a taxpayer's records at an IRS office or at the taxpayer's home or business, IRS enforcement activities also include corrections of errors in return processing (math errors), document matching, a program to identify and assess nonfilers, correspondence audits addressing one or a few selected and relatively simple issues instead of an entire tax return, and collection activities.<sup>3</sup>

*The largest source of enforcement revenues is collection of unpaid taxes due.* Collections of taxes that have been reported (or assessed and agreed to) but not paid consistently represent about 60 percent of enforcement revenues. Most of the remaining enforcement revenue comes from audits of large corporations.

*Congress and the administration can and should take additional steps to reduce the tax gap, but their aggregate revenue potential is a small share of the tax gap and the budget deficit.* The tax gap can be reduced by allocating more resources to IRS enforcement, by giving the IRS more tools to enforce the law (such as, for example, requiring additional types of information reporting) and, more broadly, by reforming and simplifying the income tax law. Although estimates of how much additional resources and better enforcement tools would raise are incomplete and highly uncertain, it is extremely unlikely that they could raise more than \$20–\$30 billion per year. In addition, Congressional Budget scoring rules do not count potential revenue gains from increased IRS budgetary resources or improved productivity; Congress has little ability to improve IRS productivity anyway. Reforming the tax law may or may not reduce the tax gap, depending on the type of reform, and raises much broader policy issues.

*Policies to reduce the tax gap are not cost-free.* In addition to the higher IRS budgetary costs, policies to reduce the tax gap can also impose higher costs on taxpayers and on third parties who must comply with increased reporting requirements. Raising revenue from better enforcement makes the distribution of the tax burden fairer by helping ensure that more taxpayers remit the amounts they owe. It also avoids efficiency losses associated with tax increases that would be needed to raise the same revenue. Assessment of proposals to reduce the tax gap involves weighing a trade-off between the gains in fairness and economic efficiency from raising a larger share of revenue from (currently) noncompliant taxpayers and the increased costs of administration and compliance that are associated with increased enforcement.

The following sections of this paper discuss how the tax gap is defined and measured, major sources of the tax gap, current IRS enforcement activities, additional steps that can be taken to reduce the tax gap, and benefits and costs of reducing the tax gap.

---

<sup>3</sup> Enforcement revenues in any year do not correspond exactly to the difference between the gross and net tax gaps because (1) enforcement receipts in any fiscal year represent amounts recovered based on tax due from a number of previous calendar years, (2) late payments that are paid without IRS intervention are not included in enforcement revenues, and (3) the portion of enforcement revenues that represents penalties and interest as opposed to tax liability due is not included in either the gross or net tax gaps.

## DEFINITION AND MEASUREMENT OF THE TAX GAP

### Definition of the Tax Gap

The gross tax gap for any tax year is the difference between tax owed and the amount paid voluntarily and on time. The noncompliance rate (NCR) is equal to  $G / (G + T)$ , where  $G$  = the gross tax gap and  $T$  is the amount of tax paid voluntarily and on time. The amount  $(G + T)$  is total tax liability. The net tax gap is the gross tax gap less voluntary late payments and revenues collected from enforcement activities. These late payments and enforcement revenues come in over a number of years, so that enforcement *receipts* in any fiscal year do not correspond with the tax liability in that or the preceding calendar year.

### Components of the Tax Gap and How They Are Measured

The tax gap has three components—the nonfiling gap, the underreporting gap, and the underpayment gap.

*The nonfiling gap* is the loss in timely tax revenue from taxpayers who have a legal requirement to file a tax return, but do not file on time or at all. The Census Bureau has estimated the tax liability of nonfilers, whom they identify using an exact match of the Current Population Survey (CPS) with the limited IRS data that Census receives by law to help in their estimation of incomes. Census tabulated aggregate estimates of income and tax liability for tax year 2003 for those who were estimated to have a filing requirement and did not file. The IRS then projected these estimates backwards to tax year 2001 and subtracted an estimate of the tax that was paid on time.<sup>4</sup> The resulting estimate of the gross nonfiling gap for tax year 2001 was \$27 billion.

*The underreporting gap* is the loss in timely tax revenues from taxpayers who file a timely return, but misreport the amount of tax they owe. Between the 1960s and 1988, the IRS estimated the underreporting gap for various tax sources (individual income tax, corporate income tax, and employment tax) by conducting random audits for selected tax years under the Taxpayer Compliance Measurement Program (TCMP). The last TCMP was for tax year 1988 individual income tax returns. TCMP was used both to measure compliance and to update audit selection formulas. TCMP was suspended in the 1990s, partly as a result of complaints about the burdens imposed by TCMP audits (“audits from

---

<sup>4</sup> The IRS estimate comes from tabulation of withholding taxes paid by individuals who did not subsequently file a timely tax return. There are many technical issues with the Census estimates, particularly involving imputations of a filing requirement or nonrequirement to CPS records of households who either did not supply a Social Security Number (SSN) to Census or supplied an SSN or SSNs that failed to match with IRS records. Nonetheless, tabulations for those records that Census assumes had a requirement to file and did file match closely with similar tabulations from IRS data of filers who are required to file, which suggests that the totals for those assumed to have a requirement to file who failed to file may also be reasonably accurate.

hell”) and also reflecting pressure within the IRS to allocate scarce resources to audits of taxpayers selected based on probable noncompliance instead of randomly.

The IRS random audit program was reborn under former Commissioner Charles Rossotti as the National Research Program (NRP), a less intrusive substitute for TCMP that relies more heavily on third-party data and exempts some simple returns from intense scrutiny.<sup>5</sup> NRP recently completed estimates of results from a random audit study of 46,000 individual tax returns for tax year 2001 and is currently conducting a random audit study of flow-through entities.<sup>6</sup>

Under NRP (as with TCMP), the first step in estimating the underreporting gap is to measure the difference between the amount of income and tax liability taxpayers report on their returns and the amount of income and tax liability the IRS examiner identifies.<sup>7</sup> For purposes of computing the tax gap measure, the IRS then inflates the examiners’ findings of underreporting of income for income sources with no third-party matching data, based on a statistical technique used to estimate nondetection by auditors of varying abilities.<sup>8</sup> The IRS has not released the adjustment factors used for different sources of income, but they could on average be over three times as large as the amount of underreporting detected by examiners.<sup>9</sup> Thus, the amount of underreporting of nonmatched income (mainly profit or loss from business reported by individual taxpayers on schedule C of form 1040) that the IRS estimates is far in excess of any amount they could recover *even if the IRS audited every individual income tax return with business income*.

The underreporting gap includes underreporting of corporate income taxes and payroll taxes by business firms. The IRS estimates of the corporate income tax gap are based on very old data from the 1980s, extrapolated to tax year 2001.<sup>10</sup> The gap for small corporations was estimated from random audit TCMP studies of small corporations in the early 1980s. The gap for large corporations was estimated from operational (i.e., nonrandom) examination data from the 1980s. (For the largest corporations, audit

---

<sup>5</sup> More thorough audits on a small sub-sample of NRP returns found no significant difference in the amount of noncompliance detected from NRP and more TCMP-like audits.

<sup>6</sup> NRP used a stratified random sample of tax returns, with higher selection rates for high-income individuals and individuals reporting business income.

<sup>7</sup> Some taxpayers overreport their tax liability and overreported tax is also detected on audit, although examiners probably look more closely for underreporting than for overreporting. Overreported tax that is detected is subtracted from underreported tax to drive the gross underreporting gap. (To compute the net tax gap, the IRS subtracts the amounts recovered from taxpayers who underpay, but adds back the amounts refunded to taxpayers who overpay.)

<sup>8</sup> This technique relies on data that show that audit adjustments for taxpayers with the same characteristics vary among examiners. For a discussion of the methodology used, see Feinstein (2004) and Erard and Feinstein (2007).

<sup>9</sup> The detection control method replaces a method used earlier that was based on results from an old TCMP study that compared nonreporting of interest and dividend income that examiners found without the use of third-party matching documents with subsequent amounts detected through document matching. Based on these results, IRS in a previous study (Internal Revenue Service 1996) inflated estimates of underreporting of nonmatched income sources by a multiple of 3.28.

<sup>10</sup> The extrapolation of past studies to 2001 assumes a constant ratio of the tax gap to reported tax liability.

coverage used to be so high that operational data was virtually comprehensive. The coverage rate for large corporations is now much lower and there would be issues about how best to project results from the audited sample to the entire population to the extent firms subject to continuous audit are not selected randomly.) The total estimated underreporting gap for corporations in 2001 is \$30 billion, of which \$25 billion comes from large corporations (corporations with assets above \$10 million).<sup>11</sup> Because of the nature and age of the data on which these figures are based, the estimate of the corporate tax gap is less reliable than the individual reporting gap estimate.

In all, the IRS estimates the underreporting gap for tax year 2001 at \$285 billion. This amount represents 83 percent of the total tax gap.

*The Underpayment Gap.* The underpayment gap is the loss in timely revenue from taxpayers who have filed timely returns, but have not fully paid their reported tax on time. The IRS tabulates the underpayment gap annually from tax return and payment data on the IRS Master File. These tabulations are a highly accurate measure of the underpayment gap because IRS generally knows both the amounts reported on timely returns and the amounts paid on time. The IRS estimates the 2001 underpayment gap at \$33 billion. (Interest and penalties associated with delayed payments are not counted as part of the tax gap because they are not part of tax liability.)

#### Historical Trends in the Tax Gap.

Comparisons over time in the degree of compliance are imprecise. The tax gap can change both from changes in compliance rates for different taxes and sources of income and changes in the shares of tax and income sources. The measured tax gap is also affected by changes over time in the ability of taxpayers to conceal income and the ability of the IRS to detect nonfiling and underreporting. We do not know the size and direction of the effect on the measured tax gap from these latter changes.

With the caveat that estimates are very imprecise and the degrees of imprecision can change, we note that the measured tax gap has been quite stable over time in relation to “true” tax liability. The most recent IRS Report on the Individual Income Tax Gap (Internal Revenue Service, 1996) estimated the individual income tax NCR at 18.8 percent in 1985, 17.5 percent in 1988, and 17.3 percent in 1992, with the difference between 1988 and 1992 wholly due to differences in income and tax shares. An earlier IRS report (Internal Revenue Service 1990) reports individual income tax NCR estimates ranging from 16 to 21 percent between 1973 and 1992. The \$345 billion tax gap estimate reported by the IRS for 2001 represents an NCR of 16.3 percent for all types of tax combined, but an NCR for the individual income tax of 20.9 percent. While seemingly

---

<sup>11</sup> The IRS estimate of the corporate tax gap does not make a distinction between underreporting resulting from abusive tax avoidance transactions (tax shelters) or from other sources (such as, for example, misstatement of depreciation allowances). In principle, corporate tax underreporting due to shelters is subsumed within the \$30 billion figure. The Government Accountability Office (GAO) reported in 2003 on an internal IRS study that estimated that the average annual corporate tax shelter gap between 1993 and 1999 was between \$11 billion and \$15 billion, but GAO agreed with an IRS assessment that the results were subject to huge potential errors in both directions (Brostek 2003).

shockingly large, this individual income tax NCR for 2001 is within the range of estimates over the past few decades.

## **MAJOR SOURCES OF THE TAX GAP**

### Biggest Sources of the Measured Gap

*Underreporting of tax liability* is a much bigger source of the tax gap (\$285 billion) than either underpayment (\$33 billion) or nonfiling (\$27 billion). Among tax sources, individual income taxes (\$245 billion) accounts for the largest share of the tax gap, followed by payroll taxes (\$59 billion) and the corporate income tax (\$32 billion). Adding in self-employment (SECA) taxes, individual income tax filers account for about \$285 billion of the \$345 billion tax gap. Among individual filers, underreported tax on business income and self-employment tax account for \$148 billion of the total underreporting gap for individual income tax plus SECA of \$236 billion.

### Compliance Rates and Third-Party Reporting.

IRS estimates from the latest NRP show that misreporting percentages are much lower for income sources subject to withholding and/or third party reporting than for less visible income sources (Internal Revenue Service 2006). The net misreporting percentage (NMP) is the aggregate net amount of income or offset (deduction or credit) misreported divided by the sum of the absolute values of the amounts that taxpayers should have reported. The NMP was only 1.2 percent for wages, which are subject to both substantial information reporting and withholding. The NMP was 4.5 percent for items subject to substantial information reporting (interest income, dividends, pensions and annuities, unemployment compensation, Social Security benefits and state tax refunds), 8.6 percent for items subject to some information reporting (partnership income, alimony income, capital gains, deductions, and exemptions) and 53.9 percent for items subject to little or no information reporting (mostly business income reported on Schedule C). The net misreporting percentage for tax credits was 26.3 percent.

### Possible Errors in the Tax Gap Measure

The IRS deserves praise for its detailed and thorough efforts over the years to measure compliance with the tax laws. Its estimates are far more comprehensive than most estimates of noncompliance in other countries.<sup>12</sup> Nonetheless, there are some serious “gaps” in the tax gap measure and these introduce substantial uncertainty into the measure.<sup>13</sup>

---

<sup>12</sup> McManus and Warren (2006) note that a number of jurisdictions around the world now undertake tax gap estimates and cite estimates of value added tax (VAT) studies in France and the United Kingdom, as well as a broader tax gap study in Sweden that covers “a broad range of taxes and Social Security levies, including VAT.”

<sup>13</sup> For a fuller discussion, see Toder (2007).

One possible source of error comes from the absence of recent studies of the corporate tax gap and in particular the absence of any good estimates of the revenue loss from sophisticated tax avoidance strategies. In part, the absence of good estimates reflects ambiguity about the legal status of specific transactions. While some indirect evidence suggests that some forms of avoidance are increasing,<sup>14</sup> reliable and authoritative estimates are lacking. The IRS has undertaken major efforts in recent years to combat tax shelters through increased disclosure requirements. In addition, new corporate reporting requirements (the M-3 form) should help to clarify sources of the difference between income reported on tax returns and book income reported to shareholders and thereby shed more light on potential abusive transactions. Still, much more work remains to get a good handle on corporate tax noncompliance.

Finally, while the initial NRP study surveyed individual taxpayers, it did not broadly survey the returns of flow-through entities that report their profits as income to individual partners, trustees, and shareholders. Returns of the flow-through entities were examined only in some cases where auditors detected a potential issue on the individual tax return. A new NRP study is currently examining underreporting of flow-through entities and the findings will be used to supplement the results of the individual taxpayer study. Beyond this, using recently available computerized data linking K1 returns issued by partnerships with income from partnerships reported on individual tax returns, the IRS has recently developed tools to improve detection of avoidance that takes the form of transactions that reallocate positive income of flow-through entities to tax-indifferent parties (tax-exempt and foreign entities), thereby enabling high-income U.S. individual taxpayers and corporations to avoid tax. A large amount of avoidance may take the form of income shifting among entities that would escape detection in traditional audits of any one tax return (see box 1).<sup>15</sup>

## **CURRENT IRS ENFORCEMENT EFFORTS**

### IRS Enforcement Activities

*The variety of enforcement programs.* The IRS conducts four main enforcement programs to detect underreporting on tax returns and nonfiling: examination, document matching, math error, and nonfiler programs (Internal Revenue Service 2003). It also conducts a variety of collection programs to capture amounts taxpayers owe that have been agreed to but not paid. *Examinations* (or audits) include face-to-face audits and correspondence audits. Face-to-face audits require an examination of taxpayers' books and records and typically are the most expensive and thorough taxpayer contact. Correspondence audits are done through the mail, are limited to one or several issues, and do not require review of detailed accounting records. *The document-matching program* (also called automated underreporter, or AUR) matches data on third-party information returns from employers and financial institutions to wage and investment income data reported by taxpayers. Notices are sent to taxpayers when discrepancies are found and

---

<sup>14</sup> See, for example, Sullivan (2004).

<sup>15</sup> See DeBarr and Harwood (2004).

verified by human screeners, with the number of contacts varying with budgetary resources. The *math error program* checks tax returns for internal consistency at the time they are processed and adjusts tax refunds or payment due amounts, subject to review by the taxpayer. Errors detected include both computational errors and inconsistent and/or missing taxpayer identification data, such as Social Security Numbers of dependents claimed for purposes of personal exemptions, child credits, and the earned income tax credit. The IRS sends notices for all math errors, so the number of math error contacts is determined by taxpayer errors, not IRS budgetary resources. *The nonfiler program* identifies potential individual nonfilers based on information returns and historical filing information and assesses tax liability based on assumed tax return information, subject to taxpayer review and correction.

### **Box 1. Tax Evasion Using Linked Entities**

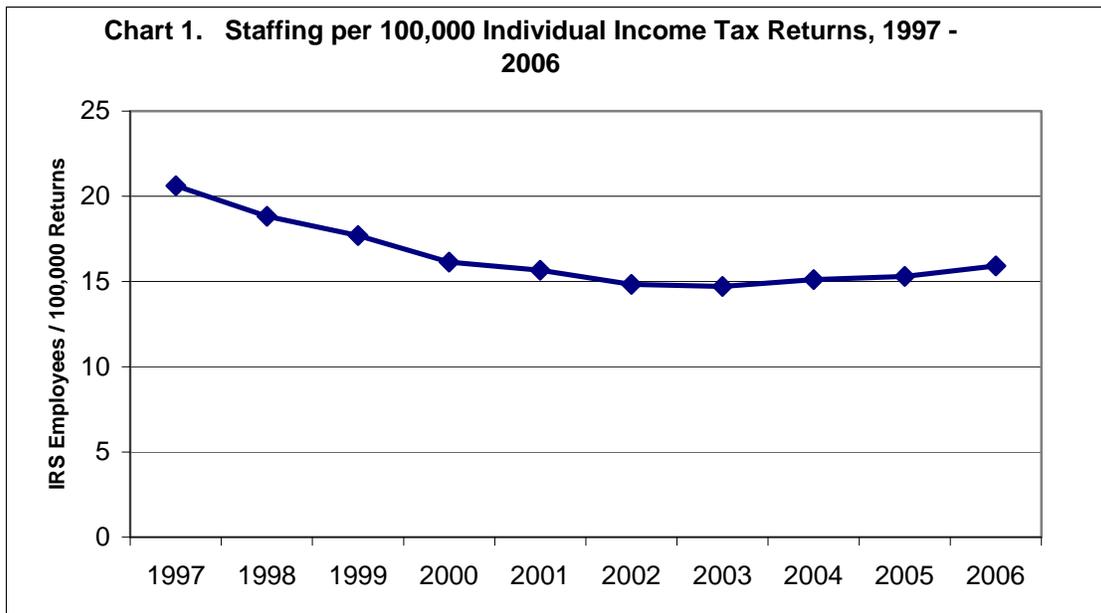
Traditional IRS examination techniques focus on examining one taxpayer at a time. But sometimes tax evasion can take the form of complex transactions that shift reported income from taxpayers to tax-indifferent entities and shift deductible expenses in the opposite direction. Corporations and high-income individuals sometimes use sophisticated schemes and tax shelters, often designed by promoters, to conceal suspicious financial flows. These schemes can involve distributions to offshore and foreign entities and to domestic tax-exempt entities. They can be buried in complex networks that involve multiple levels of flow-through entities. Essentially the schemes involve the creation by taxpayers of losses in transactions with tax-indifferent entities that can be used to offset positive income.

In the past few years, the development of computerized files that match forms K-1 issued by partnerships to the K-1 data reported on returns filed by partners (some of them corporations and tax-exempt entities and some of them also partnerships that issue K-1 forms to other taxpayers and flow-through entities) has enabled IRS to examine financial flow among multiple entities more closely. IRS has recently funded development of advanced computational and data mining techniques to detect patterns of flows between entities that suggest the possibility of abuse. Returns associated with inter-entity flows that are assigned a high risk score based on these techniques can then be assigned to IRS auditors for further examination. Preliminary tests of the new techniques identified numerous abusive transactions involving millions of dollars.

While the use of these computational techniques is still in an early stage, they do have the potential to detect many abusive schemes that have previously gone unnoticed. At the same time, the evidence of avoidance that occurs through complex transactions among related entities suggests a potentially important source of noncompliance that may escape detection in tax gap studies.

*Recent trends in enforcement resources.* IRS enforcement resources declined sharply in the late 1990s and only recently have begun to increase. They remain far below levels attained in the mid-1990s.

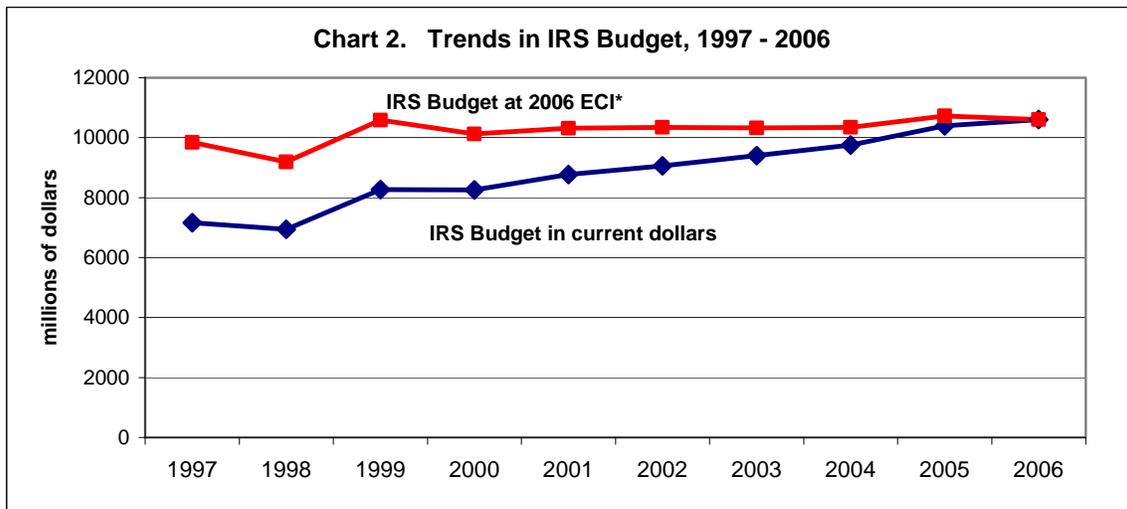
The number of key IRS enforcement personnel (revenue officers, revenue agents, and special agents) dropped by almost 23 percent between fiscal years 1997 and 2003 from 24,893 to 19,258 and have since recovered a bit to 21,322 in 2006, still 14 percent below the 1997 level. Relative to the number of individual income tax returns filed (the main source of the tax gap), the number of key enforcement personnel declined about 30 percent between 1997 and 2003, but has increased since then (figure 1).



Source: IRS Data Books, 1997 through 2006.

Between fiscal years 1997 and 2006, the IRS budget in nominal dollars increased by 48 percent (4.5 percent per year). (Chart 2) It will decline slightly (by \$136 million) in fiscal year 2007 under the decision by Congress to adhere to spending at levels in the Continuing Resolution enacted in late 2006 for the entire fiscal year. The president's budget proposes to increase funding for the IRS to \$11.1 billion in fiscal year 2008, a \$521 million (4.9 percent) increase over 2006 levels. Between 1997 and 2006, the total IRS budget increased slightly faster than the rise in labor costs; in relation to an employment cost index for service industries prepared by the U.S. Bureau of Labor Statistics, the IRS budget in 2006 was 7.7 percent above its 1997 level.<sup>16</sup>

<sup>16</sup> See Council of Economic Advisors (2007), table B-48, p. 287.

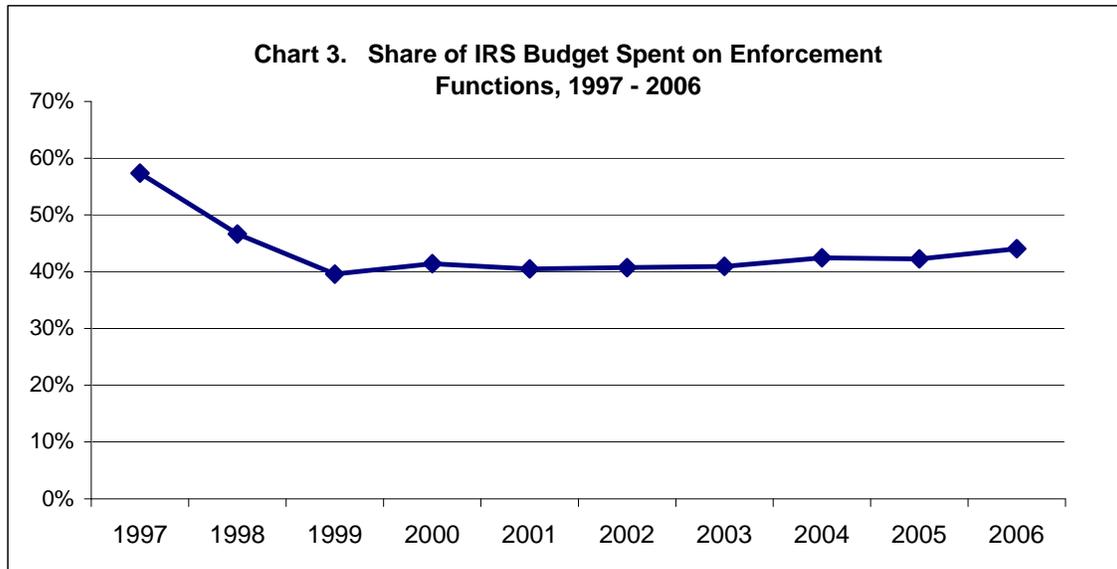


Sources: IRS Data Books, 1997 through 2005, Budget of the United States Government, fiscal year 2008, and Economic Report of the President, 2007.

\*ECI = employment cost index for service industries

This chart was revised on November 8, 2007.

While the total IRS budget was growing slowly, the share of the IRS budget allocated to enforcement dropped sharply in the late 1990s from 57.4 percent in 1997 to 39.6 percent in 1999 and since recovered only a bit to 44.0 percent in 2006. Consequently, spending on enforcement increased by 13.7 percent in nominal dollars between 1997 and 2006 (compared to a total increase in IRS spending of 48 percent) and dropped by 6.6 percent in real dollars (relative to the implicit GDP deflator) and by 17.3 percent in relation to labor costs. Spending on enforcement will remain fixed in nominal dollars (decline in real terms) in 2007 because the new Congress elected in 2006 decided to extend the continuing resolution holding 2007 discretionary spending at 2006 levels.



Sources: IRS Data Books, 1997 through 2006; Budget of the United States Government, fiscal year 2006

Audit rates have also declined. Relative to returns filed in the prior calendar year, IRS closures of individual tax return examinations as a share of returns filed in the previous calendar year dropped sharply from 1.28 percent in fiscal year 1997 to 0.49 percent in fiscal year 2000, but have since recovered to 0.98 percent in fiscal year 2006. (Internal Revenue Service, 2006b) Over the past decade, however, the share of examinations accounted for by the more comprehensive field audits instead of correspondence audits dropped from 47.1 percent in fiscal year 1997 to 23.4 percent in fiscal year 2006. Between 2004 and 2006, the closure rate for field audits of individual returns increased sharply (by over 50 percent for all returns and by about 60 percent for returns with income over \$100,000), but there has not been a proportional increase in examination personnel or spending. This could mean that IRS productivity is increasing, but could also indicate that on average exams are being conducted less intensively and more evasion on audited returns is going undetected.<sup>17</sup>

Clearly, in spite of some improvement in the past few years, the picture in the past decade is one of highly constrained resources for IRS enforcement activities. If Congress is truly interested in reducing the tax gap, or *simply keeping it from growing relative to tax liability*, it will have to do a better job than in the past in providing the funds to support sustained growth in IRS enforcement budgets.

### Effects of IRS Enforcement Activities on Receipts

IRS enforcement activities bring in revenues in two ways. There is the *direct* effect of additional revenues that flow from adjustments made on audits and enforced collections of unpaid taxes due paid by those who IRS contacts directly in enforcement programs. There is also the *indirect* effect on voluntary compliance that occurs when

<sup>17</sup> Reducing the time and effort per examination could raise overall efficiency if there are declining marginal returns from more time (relative to the current average) spent on an audit and if subjecting more taxpayers to some IRS contact raises voluntary compliance even if the contact is less intensive.

taxpayers change their compliance behavior in response to IRS enforcement activities. This can happen through a deterrence mechanism through which taxpayers perceive an increase in the probability that underreported tax liability will be detected or through an assurance mechanism through which taxpayers perceive that others are being made to pay their fair share. The indirect effect is potentially much larger than the direct, but it is also very difficult to quantify with any precision.

*Direct effects.* Different IRS enforcement programs have very different average returns per dollar spent. The automated underreporter program (AUR) and automated collection activities (sending letters to taxpayers with a balance due) have the highest return per dollar of cost because they mostly involve contacts with taxpayers where the amount of underreported or underpaid tax is known with a high degree of accuracy and the cost of the contact to the IRS is low. Traditional audits of high income returns, corporate returns, or individual returns with business income have lower returns per dollar spent. They potentially can produce very large returns from an audit, but are labor-intensive and sometimes not cost-effective. Audits of low-income taxpayers under the earned income tax credit (EITC) program have comparable returns per dollar as audits of high-income taxpayers. EITC audits have limited yield potential per return, but are mostly pre-refund correspondence audits that are inexpensive to perform. (In correspondence audits, the IRS sends a letter to the taxpayer asking for verification of at least one and at most only a few items on a tax return. In the case of pre-refund EITC audits, if the taxpayer does not reply to the letter or fails to supply the requested documentation, the IRS simply freezes payment of the EITC claim by reducing or eliminating any refund the taxpayer would otherwise receive.)

The IRS has not released detailed estimates of the marginal or average returns per dollar spent on different enforcement programs. Recent testimony by former Commissioner Mark Everson (2007), however, confirms that different programs have highly varying returns. The figures Everson cites suggest yields of 12.6 to 1 for additional spending on nonfiling programs, 6.5 to 1 for additional spending on document matching, and 2.8 to 1 for additional spending on audits of large multinational businesses. Overall, the former commissioner stated that over the past 11 years the IRS estimates that an additional dollar spent on enforcement generated an average of four dollars of increased revenue to the Treasury.

*Indirect effects on voluntary compliance.* Indirect effects of IRS activities on compliance are difficult to quantify, but some econometric studies suggest that they are multiple times larger than direct effects (Dubin, Graetz, and Wilde 1990; Dubin 2005; Plumley 1996). These studies use pooled cross-section time series data that compare IRS enforcement and service activities (such as audit coverage rates, criminal investigations, and levels of telephone service contacts) over time and across states with surrogate measures of compliance (such as ratios of income reported on tax returns to income measures in the national income accounts, adjusted for changes in the tax base over time). Everson (2007) suggests the indirect effects may be about three times as large as the direct effects, while acknowledging the high uncertainty surrounding any estimate.

Indirect effects occur because audits increase the awareness of nonaudited taxpayers (through conversations with friends and associates and local press stories) that they are at risk of being audited too. In addition to audits, criminal prosecutions have been shown to have significant effects on reported income, even though they do not raise revenue directly. Improved taxpayer service may also increase voluntary compliance, although the studies have not successfully identified a statistical relationship between reported income and any quantifiable measure of service.

## **ADDITIONAL STEPS TO REDUCE THE TAX GAP**

Three broad approaches for reducing the tax gap are by (1) enacting legislation to facilitate IRS enforcement and voluntary compliance, especially by providing the IRS and taxpayers with more comprehensive information reports from third parties, (2) providing the IRS with additional enforcement resources, and (3) reforming and simplifying the tax law. The first two approaches are under active consideration and are worth pursuing, but are likely to yield relatively modest revenue gains and leave most of the tax gap untouched. Tax law reform involves much broader policy choices. Discussion of tax reform is beyond the scope of this paper, but I comment on its relationship to the tax gap briefly.

### Legislation to Give IRS More Enforcement Tools

As noted above, compliance rates are much higher for sources of income subject to withholding and/or information reporting. From this observation, it follows that expanding the scope of information reporting to include more transactions and cover more income sources could improve overall compliance. The president's FY 2008 budget includes a number of proposals for new and expanded information reporting requirements. In addition, increases in some penalties could improve incentives for compliance.

*Options Proposed by the Treasury and listed by the Joint Committee on Taxation (JCT).* The Treasury (2007) describes compliance proposals in the president's budget for fiscal year 2008. These include, among others, proposals to:

- Require brokers to report to the IRS and taxpayers the adjusted basis of assets in connection with sales of certain publicly-traded securities (they currently are only required to report gross sales price)
- Require brokers to report to the IRS and taxpayers the gross proceeds from certain sales of tangible personal property for a customer for whom the broker has handled 100 or more separate transactions generating at least \$5,000 in gross proceeds in a year (this would include many transactions on e-Bay)
- Allow the IRS to write regulations that would require organizations that process credit card payments to report to the IRS and merchants the gross reimbursement payments they make to merchants in a calendar year

- Require businesses to file an information return with the IRS for payments of \$600 or more in a calendar year to a corporation (there are exceptions to such payments under long-standing regulations)
- Expand the scope of certain penalties for underreporting tax due, overstating claimed refunds, and failing to comply with regulations that mandate electronic filing for some taxpayers

Last year, the JCT released a pamphlet that also discussed some options to improve information reporting, some of which overlap with the president's proposals. The JCT pamphlet included options to:

- Require brokers to report the adjusted basis in publicly-traded securities (similar to the president's proposal).
- Expand required reporting by brokers of gross proceeds of auction sales by individuals (also similar to one of the president's proposals).
- Require state and local taxing jurisdictions to report to the IRS the amount of taxes paid, excluding nondeductible payments and/or require mortgage lenders to report to the IRS the amount of real estate taxes paid by taxpayers through a mortgage escrow account.
- Expand present law information reporting requirements for mortgage interest deductions

*How much revenue might they raise?* Treasury estimates that the proposals in the president's budget will raise \$29.5 billion between 2008 and 2017 (Table 1). The estimated annual revenue gains increase over time as the scope of transactions subject to additional information reporting expands (for example, basis reporting only applies to assets purchased after January 1, 2008), but even in 2017 Treasury estimates a revenue gain of only \$4.7 billion. This revenue gain would be less than 1 percent of the baseline 2017 tax gap, if the baseline tax gap remained fixed as a percentage of tax liability. JCT did not supply revenue estimates for the options discussed in their 2006 report, but presumably will be scoring proposals as they are introduced in the current Congressional session. The combination of proposals under consideration are, however, highly unlikely to close a significant portion of the tax gap.

**Table 1. Revenue Effects of Administration's Fiscal Year 2008 Compliance Proposals, in billions of dollars**

	2008	2017	2008-17
Require information reporting on merchant payment credit card reimbursements	0.1	1.6	10.7
Require information reporting on payments to corporations	0.1	1.1	7.7
Require basis reporting on security sales	0.0	1.4	6.7
Expand broker information reporting	*	0.3	2.0
Require a certified taxpayer identification number from contractors	*	0.1	0.7
Increase information return penalties	0.0	0.1	0.5
Require increased information reporting for certain government payments for property and services	*	0.0	0.4
Amend collection due process procedures for employment tax liabilities	0.1	*	0.4
All others	*	*	0.3
<b>Total</b>	<b>0.4</b>	<b>4.7</b>	<b>29.5</b>

\* = less than \$50 million

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

*Are there other options?* A number of other options have been discussed over the years to address aspects of the tax gap. These are controversial and may or may not produce positive results. Assessment of the net impacts of these options is beyond the scope of this paper.

One option that has been discussed for a number of years as a way to combat corporate tax shelters is codification of the economic substance doctrine. Currently the courts will disallow tax benefits for transactions that produce no potential for economic profit, even if the tax savings come from a correct literal application of the tax rules. Courts differ in how they rule on such transactions and IRS assessments based on the economic substance doctrine are sometimes sustained and sometimes overruled. Legislative clarification of the economic substance doctrine could produce more consistency in court rulings and strengthen IRS efforts to curb transactions that produce unintended tax benefits. Application of a legislated economic substance requirement to specific cases could, however, still be ambiguous and some tax attorneys believe the system based on judicial interpretations of current law is preferable.<sup>18</sup>

Another option is to increase penalties for understatement of tax liability. The traditional theory of tax evasion views taxpayers as utility maximizing agents who balance the cost of paying taxes against the expected cost and risk of noncompliance (Allingham and Sandmo 1972). The potential cost of noncompliance depends on the probability of detection and any penalty for underreporting taxes due. Under this theory,

<sup>18</sup> See Tax Policy Center and Tax Analysts (2005), comments by Eric Solomon and Donald Korb.

voluntary compliance rates should be positively related to both perceived audit rates and penalties. Yet, higher penalties could also lead courts to be more reluctant to find taxpayers guilty of tax evasion and so may lead to the imposition of fewer penalties (Slemrod 2007). Ultimately, there is a trade-off between making penalties large enough to influence taxpayer behavior, but not so large that they appear disproportionate to the importance of the offense.

### Additional IRS Enforcement Resources

*What level of increase is feasible?* As the previous section discusses, the IRS budget has grown slightly faster than labor costs over the past decade, but the share of the budget allocated to enforcement dropped sharply in the late 1990s and real levels of enforcement spending have not yet rebounded to their earlier peak. The president proposed spending \$11.1 billion on the IRS in fiscal year 2008. In recent years, Congress has often appropriated less money for the IRS than the president requested.

The IRS estimates that a sustained increase in enforcement activities would raise about four dollars of direct enforcement revenue per additional dollar spent across the range of IRS enforcement activities. This suggests that, if Congress were to increase the IRS budget by 20 percent (about \$2.2 billion per year in 2008 dollars) and sustain that higher level of spending over time, we could expect direct enforcement revenues to rise by almost \$11 billion per year. Based on past history, however, an increase in the IRS budget of this magnitude is unlikely and even if it materialized it would close less than 3 percent of the tax gap. Substantial additional revenues might result if voluntary compliance improved in response to the larger IRS enforcement presence, but the amount of such gains is speculative.

*Scoring additional revenues from enforcement.* JCT estimates the effects on receipts of proposals that change the tax law (including proposals that give the IRS more enforcement powers), but does not estimate the effects of spending programs. CBO, which does estimate the budgetary effects of spending programs, does not as a matter of policy score incremental revenue or outlay effects from additional spending on the administration of government programs, including tax administration (Marcuss 1997).<sup>19</sup> This means that, even though additional receipts that more IRS auditors generate will reduce the federal deficit, projections of these additional receipts cannot be used under Congressional pay-go rules to finance tax cuts or spending increases. The limitation on scoring budgetary effects of administration of government programs applies also to other government compliance activities, such as measures to control improper claims in the student loan program or Medicare. In part this reflects a concern that agencies could game the system by appearing to shift resources to collection functions and thereby justify larger budgets for their programs.

---

<sup>19</sup> The principle that “changes in discretionary appropriations for administrative activities do not produce scorable savings or costs in direct spending programs or tax receipts” was included in the scorekeeping rules in the conference report that accompanied the Omnibus Budget Reconciliation Act of 1990 (Marcuss 1997).

In addition, because Congress commits resources to appropriation programs for more than one year at a time, the returns from planned multi-year increases in IRS enforcement spending would not be counted under the Congressional scorekeeping process even if a single year's appropriation were counted. The IRS estimates, however, that additional enforcement resources produce little or no yield in the first year because of the need to divert the time of experienced auditors to train additional staff.

The bottom line is that increasing IRS enforcement resources will raise some additional revenue, but those increases will not get "credited" under Congressional scoring rules and are therefore not available to pay for tax cuts or spending increases.

### Reforming and Simplifying the Tax Law

Commentators and analysts often suggest that tax reform and tax simplification would reduce the tax gap, but the relationship between tax reform and the tax gap has not been studied. While some reforms could reduce the tax gap, others might increase it. And in the face of major changes in the tax system, changes that lower the tax gap could make the tax law less fair instead of fairer.

*Effects of Tax Reform on the Tax Gap.* Even without quantitative estimates, it is possible to speculate about how some types of reforms would affect the tax gap. For example, reforms that broaden the tax base could either increase or decrease the tax gap, depending on whether the base-broadening is accomplished by adding more sources of income to the base or reducing deductions and credits. Bringing more income into the tax base (such as including more fringe benefits in income) could raise the tax gap if some taxpayers fail to report the additional sources of income. In contrast, reducing available deductions and credits (even those that effectively encourage socially desirable activities) will probably reduce the tax gap by reducing the number of items that taxpayers can misreport and eliminating distinctions between activities that do and do not qualify for tax preferences. Using the revenue from any type of base-broadening to finance lower rates could also reduce the gap by making the revenue loss from unreported income and overstatements of any remaining deductions smaller.

A more radical tax reform that replaces the income tax with a consumption tax would have broader effects. Eliminating capital income from the tax base could directly lower the tax gap to the extent people can more easily avoid capital income taxes than taxes on earnings, although there could be an offsetting increase in noncompliance to the extent taxpayers can misrepresent taxable labor compensation as tax-free capital income.<sup>20</sup> But some variants of radical tax reform could raise the tax gap. For example, under a national retail sales tax, the entire tax would be collected from businesses selling to final consumers. The tax authority would not have the benefit of withholding or

---

<sup>20</sup> Some of this noncompliance occurs today by self-employed taxpayers who earn their income through a subchapter-S corporation and understate their compensation (relative to profits) in order to lower payroll tax liability. More generally, Bankman and Schler (2007) discuss how replacing the income tax with a consumption tax that exempts income from capital might either reduce or increase compliance problems.

information returns on these sales and, based on IRS studies showing much lower compliance rates on nonmatched income sources, we can expect the tax gap could rise dramatically.

*Does a Lower Tax Gap Make the Tax System Fairer?* Within the context of current tax laws, compliance measures that lower the tax gap improve tax fairness by preventing noncompliant taxpayers from avoiding their share of the tax burden. But the tax gap measures the difference between what taxpayers are legally required to pay and what they do pay, not the difference between what *an equitable tax system* would require them to pay and what they do pay. A reform that some might think would make the tax system less fair—for example, reducing tax rates on business and investment income for high income taxpayers—could nevertheless lower the tax gap by reducing taxation of income sources with a high noncompliance rate.

*Does Simplicity Itself Reduce the Tax Gap?* Irrespective of how one views proposals to restructure the tax system or to reduce tax incentives, proposals that make the tax system simpler and reduce compliance costs could also reduce the tax gap. The reduction in the cost of compliance from a simpler tax law is itself an important benefit and *should be valued regardless of its effect on the tax gap*. But the fact that simplicity results in fewer taxpayer errors does not itself imply a lower measured tax gap; the tax gap would be reduced only if taxpayer errors lower instead of raise their tax liability. For example, simplifying complex provisions that deter taxpayers from taking full advantage of certain tax incentives (e.g., retirement saving benefits, education credits) could increase the tax gap by helping taxpayers claim benefits to which they are entitled, thereby reducing overpayments of tax liability. Simplification that facilitates use of tax incentives in the law could have the paradoxical effect of making implementation of the tax law fairer (at least in the sense of being closer to Congressional intent) while raising the measured tax gap.

### Assessment of Overall Potential Impacts

This overall assessment of what can be done to reduce the tax gap is discouraging. It is hard to conceive of any combination of actions under current consideration that could raise as much additional revenue as 10 percent of the tax gap and the probable improvements are much smaller. Moreover, those revenue gains that come from increased enforcement resources will not be scored in the Congressional budget process, making them more difficult to enact.

While it appears anomalous that potential actions can raise so little money, given the size of the tax gap, this assessment is consistent with the relative stability of the tax gap over a long time period, in spite of big changes in the tax law, demographics, the composition of economic activity, public attitudes toward the tax system, and the level and form of IRS enforcement activities. It is still worth emphasizing, however, that the continued viability of our tax system has depended and continues to depend on the maintenance of a strong IRS enforcement presence, continued investments in taxpayer

service, and the existence of tools such as wage withholding and information reporting that facilitate compliance. Maintaining and enhancing these activities is critical toward keeping the size of the tax gap within tolerable bounds in the future.

### Is Something Being Overlooked?

It is impossible to prove a negative and foolish to try to do so. Just because this author and others have not come up with specific proposals that can dramatically lower the tax gap without radically changing the tax system or imposing draconian burdens on the citizenry does not mean it can't be done. New insights and technological changes could significantly raise compliance. An example from the past was the development of computerized document matching in the early 1980s, which significantly reduced underreporting of dividend and interest income. Another example was the introduction of the requirement for taxpayers to supply Social Security numbers for dependent children, an idea initially promoted by an IRS employee named John Szilagyi (Dubner and Levitt 2006).

The rebirth of the IRS random audit program and additional research on compliance holds out the potential to gain more insights on the sources of noncompliance and the motivations of taxpayers. This in turn could help generate better ideas for both enforcement strategies and taxpayer education efforts. In addition, improvements in IRS internal efficiency and its use of information technology could also generate better compliance, although it is much easier to proclaim the goal of improved performance than to develop a strategy of how to achieve it.

### **BENEFITS AND COSTS OF REDUCING THE TAX GAP**

Benefits of policies to reduce the tax gap include improvements in actual and perceived fairness and avoidance of economic efficiency losses from raising the same revenue through explicit tax increases. Costs of closing the tax gap include IRS budgetary costs and compliance burdens on taxpayers and third parties. Decisions about increasing IRS enforcement and imposing additional requirements must balance expected improvements in compliance against these additional costs.

*IRS Budgetary Costs* are the easiest costs to measure and likely the smallest component of costs. Additional receipts from enhanced enforcement far outweigh IRS budgetary costs.

Measures to improve compliance also impose *compliance costs on taxpayers* (in addition to the tax and penalties they must pay) in the form of additional time spent gathering records, meeting with and corresponding with IRS agents, and possibly seeking assistance from outside counsel or tax preparers. These costs should be counted in any overall economic assessment, although most people would place a fairly low weight on burdens imposed on those taxpayers who underreport or underpay their taxes.

But additional enforcement and reporting requirements also impose time and sometimes money *burdens on compliant taxpayers* who must undergo an audit, respond

to IRS correspondence, or supply additional data with their tax returns and *on third parties* such as brokers or credit card companies who must prepare additional reports for the IRS and taxpayers.<sup>21</sup> The language of the Treasury proposals in the budget suggests that Treasury and the IRS are sensitive to these costs and will seek to minimize them, but nonetheless there is rarely a precise accounting of the additional costs that new reporting requirements impose or a quantitative comparison of costs and benefits. Random audit studies, such as the NRP, by their design impose higher costs on compliant taxpayers, but with the goal of reducing their compliance costs in the long run by providing the data to help the IRS improve its audit selection formulas.

### Trade-off Between Costs and Benefits

Economists often point out that costs of administration and compliance represent real resource costs, diverting labor and capital from other productive activities, while the additional receipts from more enforcement or enhanced reporting requirements are merely a transfer between taxpayers and the government. But the alternative of raising the same money by increasing effective tax rates under the income tax also imposes a real resource cost by reducing work effort and saving and increasing the misallocation of economic activity towards currently tax-exempt forms of consumption and investment. Rosen (2004) cites research that estimates that the marginal “excess burdens” of raising an additional dollar of revenue from the income tax is about 35 cents per additional dollar of tax raised. This estimate implies that additional resources spent on tax enforcement would be a more efficient way to raise revenue than raising income taxes if it raised at least three dollars in revenue (including both direct and indirect effects) per dollar of additional cost (including both additional IRS outlays and taxpayer compliance costs).

Beyond this, noncompliance reduces actual and perceived fairness of the tax law. While economists cannot quantify these costs, they may lead the public to demand a higher level of enforcement than the amount that calculations of economic efficiency effects would imply.

## **CONCLUSIONS**

Additional steps can and should be taken to improve tax enforcement. These include new legislation to provide the IRS with improved enforcement tools through enhanced information reporting and budgetary support that will enable the IRS to increase its enforcement activities and sustain that increase in the long run. In addition, the IRS should continue its efforts to learn more about noncompliance through the National Research Program (NRP) and to complete its efforts to upgrade information technology. The administration has advanced a number of proposals in its fiscal year 2008 budget and members of Congress have introduced legislation incorporating these and other ideas.

---

<sup>21</sup> Note, however, that increased third party information reporting requirements could also *lower* compliance burdens for some taxpayers. For example, broker information reporting of the basis of capital gains transactions could relieve some taxpayers of the need to keep detailed records of past transactions.

While all these actions are desirable, no likely set of actions will make an appreciable dent in the long-term federal deficit or the aggregate size of the tax gap. Closing the tax gap is not the magic bullet that will enable politicians to avoid making hard choices about entitlement spending, taxes, or both.

The current political interest in the tax gap has a positive and negative side. The positive side is the renewed emphasis on the importance to the integrity of our tax system and the long run financing of government of maintaining a robust and effective tax enforcement agency and supplying it with the best enforcement tools that are consistent with reasonable reporting burdens on the private sector. The negative side is the fostering of an illusion that the tax gap represents an easy source of free money. That illusion will eventually run up against the hard political realities imposed by the budget scorekeeping process, but the sooner those realities are recognized, the better.

\*This paper represents the views of the author alone and does not necessarily reflect the views of the Urban Institute, its board, its sponsors, or any other organization with which the author has been previously affiliated. I thank Leonard Burman, Ben Harris, Mark Mazur, Alan Plumley, Kim Rueben, and Robertson Williams for helpful comments on earlier drafts. Any remaining errors are my own.

## REFERENCES

- Bankman, Joseph, and Michael Schler. 2007. "Tax Planning Under the Flat Tax." In *Taxing Capital Income*, edited by Henry J. Aaron, Leonard E. Burman, and C. Eugene Steuerle (245–84). Washington, DC: Urban Institute Press.
- Brostek, Michael. 2003. "Challenges Remain in Combating Abusive Tax Shelters." Testimony Before the Committee on Finance. United States Senate. U.S. Government Accountability Office. October 21.
- Burman, Leonard E., William G. Gale, Gregory Leiserson, and Jeffrey Rohaly. 2007. "Options to Fix the AMT." Washington, DC: Urban–Brookings Tax Policy Center.
- Congressional Budget Office. 2007. *The Economic and Budget Outlook: Fiscal Years 2008 to 2017*. Washington, DC: Congressional Budget Office.
- Council of Economic Advisors. 2007. *Economic Report of the President*. Washington, DC: Council of Economic Advisors.
- DeBarr, David, and Maury Harwood. 2004. "Relational Mining for Compliance Risk." The IRS Research Bulletin: Recent IRS Research on Tax Administration and Compliance. Publication 1500. Washington, DC: IRS.
- Dubin, Jeffery A. 2005. "Criminal Investigation Enforcement Activities and Taxpayer Noncompliance." In *The IRS Research Bulletin: Recent IRS Research on Tax Administration and Compliance*. Publication 1500. Washington, DC: IRS.
- Dubin, Jeffrey A., Michael J. Graetz, and Louis L. Wilde. 1990. "The Effect of Audit Rates in the Federal Individual Income Tax, 1977–1986." *National Tax Journal* 43: 395–409.
- Dubner, Stephen J., and Steven D. Levitt. 2006. "Mr. Szilagyi's Billion Dollar Idea." *New York Times Magazine*, April 2.
- Erard, Brian, and Jonathan S. Feinstein. 2007. "Models of Household Tax Underreporting and the NRP Examination Process." Presentation at IRS Research Conference. Washington, DC, June 13.
- Everson, Mark. 2007. "The FY 2008 IRS Budget and the Tax Gap." Written Testimony Before the Senate Committee on the Budget, February 14.
- Feinstein, Jonathan. 2004. "Statistical Analysis of Compliance Using NRP Data: Detection Controlled Models." The IRS Research Bulletin: Recent IRS Research on Tax Administration and Compliance. Publication 1500. Washington, DC: IRS.

Internal Revenue Service (IRS). 1990. "Income Tax Compliance Research: Net Tax Gap and Remittance Gap Estimates." (Supplement to Publication 7285). Publication 1415 (4-90). Washington, DC: IRS.

———. 1996. "Federal Tax Compliance Research; Individual Income Tax Gap Estimates for 1985, 1988, and 1992." Publication 1415 (Rev 4-96). Washington, DC: IRS.

———. 2002. "Compliance Estimates for Earned Income Tax Credit Claimed on 1999 Returns." Washington, DC: IRS.

———. 2003. "Report to Congress: IRS Tax Compliance Activities." Washington, DC: IRS.

———. 2006a. "Tax Gap Figures." Washington, DC: IRS. [http://www.irs.gov/pub/irs-news/tax\\_gap\\_figures.pdf](http://www.irs.gov/pub/irs-news/tax_gap_figures.pdf).

———. 2006b. "Fiscal Year 2006 Enforcement and Service Results." Press Release, November 20. Washington, DC: IRS.

———. 2007. "Tax Gap Map for Tax Year 2001." Washington, DC: IRS. [http://www.irs.gov/pub/irs-utl/tax\\_gap\\_update\\_070212.pdf](http://www.irs.gov/pub/irs-utl/tax_gap_update_070212.pdf)

Joint Committee on Taxation. 2006. "Additional Options to Improve Tax Compliance." Washington, DC: Joint Committee on Taxation.

Marcuss, Rosemary. 1997. "Statement on the Congressional Budget Process." CBO Testimony before the National Commission on Restructuring the Internal Revenue Service. March 13.

Mazur, Mark. 2006. "Understanding the Tax Gap." Presentation to ABA Tax Section. October.

McManus, Jacqui, and Neil Warren. 2006. "The Case for Measuring the Tax Gap." *eJournal of Tax Research* 4-1 (August).

Plumley, Alan H. 1996. "The Determinants of Individual Income Tax Compliance: Estimating the Impacts of Tax Policy, Enforcement, and IRS Responsiveness." Publication 1916 (Rev 11-96). Washington, DC: IRS.

Rosen, Harvey S. 2004. "The Case for Making the Tax Cuts Permanent." Speech to National Tax Association Meetings. Washington, DC, May 20.

Schor, Elena. 2006. "Fiscal Battle Lines Draw." *The Hill*. November 21.

Slemrod, Joel. 2007. "Cheating Ourselves: The Economics of Tax Evasion." *Journal of Economic Perspectives* 21-1 (Winter): 25–48.

Sullivan, Martin. 2004. "Economic Analysis: Profit Shift Out of U.S. Grows, Costing Treasury \$10 Billion or More." *Tax Notes*. September 28.

Summers, Lawrence. 2007. "Prepared Remarks." Washington, DC: Joint Economic Committee, U.S. Congress, January 31.

Tax Policy Center and Tax Analysts. 2005. "Forum on Tax Shelters." Transcript. February 11. Washington, DC: Urban-Brookings Tax Policy Center. [http://www.taxpolicycenter.org/newsevents/events\\_021105\\_transcript.pdf](http://www.taxpolicycenter.org/newsevents/events_021105_transcript.pdf)

Toder, Eric. 2007. "What is the Tax Gap?" Presented at American Bar Association Conference on the Tax Gap, Washington, DC, June 21.

U.S. Department of the Treasury. 2007. "General Explanation of the Administration's Fiscal Year 2008 Revenue Proposals." Washington, DC: U.S. Department of the Treasury.