
TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION

Office of Inspections and Evaluations



*The Internal Revenue Service Needs
to Improve the Comprehensiveness,
Accuracy, Reliability, and Timeliness
of the Tax Gap Estimate*

August 21, 2013

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This report has cleared the Treasury Inspector General for Tax Administration (TIGTA) disclosure review process and information determined to be restricted from public release has been redacted from this document.

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TREASURY INSPECTOR GENERAL
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

August 21, 2013

MEMORANDUM FOR DIRECTOR, OFFICE OF RESEARCH, ANALYSIS, AND
STATISTICS

FROM:

R. David Holmgren

Deputy Inspector General for Inspections and Evaluations

SUBJECT:

Final Evaluation Report – The Internal Revenue Service Needs to
Improve the Comprehensiveness, Accuracy, Reliability, and Timeliness
of the Tax Gap Estimate (# IE-12-013)

This report presents the results of our evaluation to provide the information needed to assist in understanding how the Tax Gap estimate is derived and used and whether additional information is needed.

Synopsis

The Tax Gap is defined as the difference between the true tax liability in any year and the amount of tax that is paid voluntarily and on time. The Internal Revenue Service's (IRS) most recent Tax Gap estimate was \$450 billion for Tax Year 2006.¹ The Tax Gap estimate is a widely used measure in tax policy and administration. Some officials state that the absolute number is unimportant since the estimate is a significant amount. However, an important consideration for concern about accuracy is the relationship between the different forms of noncompliance and the types of tax. Furthermore, as Congress considers tax reform, it is important that the Tax Gap estimate reflects as accurately as possible the many forms and areas of noncompliance so that tax policy options can be considered.

¹ IRS, IRS News Release IR-2012-4, *IRS Releases New Tax Gap Estimate; Compliance Rates Remain Statistically Unchanged From Previous Study* (Jan. 6, 2012), available at <http://www.irs.gov/uac/IRS-Releases-New-Tax-Gap-Estimates;-Compliance-Rates-Remain-Statistically-Unchanged-From-Previous-Study>. IRS, *Tax Gap for Tax Year 2006 Overview* (Jan. 6, 2012), available at http://www.irs.gov/pub/newsroom/overview_tax_gap_2006.pdf.



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Several issues affect the comprehensiveness, accuracy, reliability, and timeliness of the Tax Gap estimate. First, the voluntary compliance rate computation derived from the Tax Gap estimate is now used by the IRS and the Department of the Treasury as the measure for achieving the Agency Priority Goal² of increasing voluntary compliance. This may require more frequent or interim updates to the estimates. Furthermore, in order to have a credible goal, the data should be verifiable and valid. However, the IRS develops the Tax Gap estimates in accordance with its own policies and procedures. While Federal agencies are generally required to follow Office of Management and Budget (OMB) *Standards and Guidelines for Statistical Surveys*³ (hereafter referred to as “OMB standards”), the IRS stated that these standards are not technically applicable to the conduct of the National Research Program. The IRS does adhere to several aspects of the OMB standards through its own policies and procedures, including elements in the planning and design phases, but does not adhere completely to other aspects associated with developing cost estimates, the production of estimates and projections, and conducting a formal peer review process.

Second, the individual income tax underreporting gap estimate could be more comprehensive if it included estimates for the informal economy and offshore tax evasion. While the estimation method does include a process to impute undetected income, separate quantified estimates would provide better information on the size of these compliance issues. These areas present significant challenges to tax administration, and the absence of a related estimate could hinder or delay possible solutions.

Third, the current method to estimate the corporate Tax Gap needs to be improved. There are two concerns about the accuracy and reliability of the Tax Year 2006 corporate income tax underreporting gap estimate. Both concerns relate to using recommended tax from operational examinations as the basis for projecting the Tax Gap.

- ***The difficulty in deriving the actual tax liability of large corporations.*** Unlike recommended tax assessments for individual and small corporate taxes, large corporations often contest recommended taxes. The result is often an assessed amount that is substantially less than the recommended tax. Therefore, using recommended tax as a basis for projections of noncompliance may not provide reliable information.
- ***A significant portion of small corporations are substantially no more than incorporated sole proprietorships.*** In fact, in Tax Year 2003, there were about 758,000 corporations with gross receipts of less than \$100,000 reported. Consequently, it is extremely likely that a large portion of small corporations exhibit the same pathologies as those found in

² See Appendix IV. Reference to the Administration goal to increase the voluntary compliance rate is available at http://goals.performance.gov/goal_detail/TREAS/333#Progress_and_Next_Steps (last visited Mar. 14, 2013).

³ OMB, *Standards and Guidelines for Statistical Surveys* (Sept. 2006), see http://www.whitehouse.gov/sites/default/files/omb/inforeg/statpolicy/standards_stat_surveys.pdf.



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sole proprietorships. That is, a small percentage of these returns also account for a significant portion of the underreporting.

Recommendations

We recommended that the Director, Office of Research, Analysis, and Statistics, take the following actions: (1) conduct a study to determine the feasibility of providing interim updates of the Tax Gap estimate; (2) develop a process and procedures to ensure compliance with the applicable OMB standards; (3) issue a published report to explain the methods, assumptions, and premises used to develop the estimates; (4) develop the capability to estimate the Tax Gap for the informal economy; (5) perform a study to determine the feasibility of creating an estimate of the Tax Gap due to offshore tax evasion; (6) consider modifying the estimation model for large corporations from using recommended tax from operational examinations to tax assessments from operational examinations; and (7) consider conducting a National Research Program review on small corporations filing Form 1120, *U.S. Corporate Income Tax Return*, with total assets of less than \$10 million.

Response

The IRS agreed with our first three recommendations. The IRS substantially agreed with recommendation four by agreeing to perform a feasibility study to estimate the Tax Gap for the informal economy. The IRS agreed with recommendation five and substantially agreed to recommendation six by studying the merits of alternative approaches to estimating noncompliance by large corporations. Finally, the IRS is conducting a National Research Program review of small corporations with less than \$250,000 in assets; however, it is a very small sample and therefore the IRS will consider the feasibility of conducting more studies of small corporations. The complete IRS response is included as Appendix V.

Office of Inspections and Evaluations Comments

The IRS response addressed the substantive issues identified in our evaluation. The corrective action to recommendation four to perform a feasibility study for estimating the informal economy portion of the Tax Gap addresses our concerns. Likewise, the corrective action to study the merits of alternative approaches to estimating large corporation noncompliance and performing a limited study of small corporation noncompliance while considering the feasibility of conducting additional studies addresses our recommendation.

Please contact me at (202) 927-7048 if you have questions or Philip Shropshire, Director, Office of Inspections and Evaluations, at (215) 794-1542.



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Abbreviations

DCE	Detection Controlled Estimation
FY	Fiscal Year
GAO	Government Accountability Office
GPRA	Government Performance and Results Act
IRS	Internal Revenue Service
NRP	National Research Program
OMB	Office of Management and Budget
RAS	Research, Analysis, and Statistics
TCMP	Taxpayer Compliance Measurement Program
TY	Tax Year
VCR	Voluntary Compliance Rate



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Background

The Tax Gap is defined as the difference between the true tax liability in any year and the amount of tax that is paid voluntarily and on time. The Internal Revenue Service's (IRS) most recent Tax Gap estimate was \$450 billion for Tax Year (TY) 2006.¹ The Tax Gap estimate is widely used in tax policy discussions, in congressional hearings, for strategic planning, for the IRS budget process, and for other tax system uses.

It is important to note that a significant portion of the Tax Gap, by its very definition, is not directly observed, but must be inferred from what can be observed.

The IRS began measuring taxpayer compliance for TY 1963 by examining approximately 92,000 individual tax returns in what was called the Taxpayer Compliance Measurement Program (TCMP). The TCMP was a line-by-line examination of randomly selected tax returns. The purpose of the program was to develop tax return examination selection criteria and to study proposed tax law changes. TCMP measurements were performed every two to four years until TY 1988 for individual tax returns. Generally, the IRS examined about 50,000 individual tax returns for any given tax year. Other studies were performed on corporate tax returns, S corporation returns, and partnership returns at various intervals. According to the IRS, about 50 TCMP studies were performed between 1963 and 1988. The IRS began providing estimates of the Tax Gap beginning with TY 1973. It was estimated at \$28 billion to \$32 billion for that year.

As would be expected, the Tax Gap estimation methods have undergone significant changes over the past several decades. The TCMP studies were terminated after the TY 1988 study because of concerns about the cost and the burden to taxpayers. The TCMP concept was redesigned into the less burdensome National Research Program (NRP), the first of which was performed on TY 2001 individual tax returns. In both the TCMP and the NRP, the sample is defined and the sample returns are identified and selected by the Office of Research, Analysis, and Statistics (RAS). The examinations of the sample returns are then performed by IRS operations, after which the examination results are used by the Office of Research to revise tax return selection criteria and develop Tax Gap estimates.

¹ IRS, IRS News Release IR-2012-4, *IRS Releases New Tax Gap Estimate; Compliance Rates Remain Statistically Unchanged From Previous Study* (Jan. 6, 2012), available at <http://www.irs.gov/uac/IRS-Releases-New-Tax-Gap-Estimates;-Compliance-Rates-Remain-Statistically-Unchanged-From-Previous-Study>. IRS, *Tax Gap for Tax Year 2006 Overview* (Jan. 6, 2012), see http://www.irs.gov/pub/newsroom/overview_tax_gap_2006.pdf (last visited Feb. 28, 2013).



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The TY 2006 \$450 billion Tax Gap estimate is an approximation of noncompliance. Furthermore, it is important to note that by its very definition, a significant portion of the Tax Gap is inferred and not observed. This means that the IRS does not actually observe all noncompliance but infers indirectly the extent of noncompliance through the use of statistical and economic models. Because of this, the Tax Gap cannot be significantly reduced through traditional examination techniques. The objective of this report is to provide the information needed to assist in understanding how the Tax Gap estimate is derived and used and whether additional information is needed.

This review was performed at the IRS National Headquarters in Washington, D.C., in the RAS, Office of Research, during the period July 2012 through March 2013. We conducted this evaluation in accordance with the Council of the Inspectors General for Integrity and Efficiency Quality Standards for Inspections. Detailed information on our objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.



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Results of Review

Effective tax administration depends on comprehensive, reliable, accurate, and timely information to identify noncompliance and develop strategies to improve voluntary compliance. In fact, the voluntary compliance rate (VCR) computation derived from the Tax Gap estimate is now being used by the IRS and the Department of the Treasury as the measure for achieving the Agency Priority Goal² of increasing voluntary compliance. In order to have a credible goal, the data should be verifiable and valid.

As a result, there are several areas in the TY 2006 Tax Gap model where the IRS could improve the comprehensiveness, reliability, accuracy, and overall timeliness of the Tax Gap estimates. First, there are no estimates for nonfiling of corporate, employment, or excise taxes. Second, the individual nonfiling and underreporting gap estimates would be more comprehensive if there were estimates for both the informal supplier and offshore tax evasion tax gaps. Third, the reliability and accuracy of the corporate reporting Tax Gap could be improved by:

- Changing the estimation model for large corporations (assets of \$10 million or more) from using recommended tax from operational examinations to tax assessments from operational examinations.
- Changing the estimation model for small corporations (assets of less than \$10 million) from using recommended tax from operational examinations to recommended tax from a NRP sample using the detection controlled estimation (DCE) technique.

The Accuracy and Timeliness of the Tax Gap Estimate Is of Significant Importance to Tax System Decision Makers

The accuracy of the Tax Gap estimate is important for both tax policy and tax administration purposes. For example, the Administration used the VCR determined by the TY 2006 Tax Gap estimate of 83.1 percent as the benchmark for their improvement goal to achieve an 86 percent VCR. Similarly, staff members of the two congressional tax-writing committees³ stated that the accuracy of the estimate was important in two ways:

² See Appendix IV, Criteria for Agency Priority Goals. Reference to the Administration goal to increase the VCR is available at http://goals.performance.gov/goal_detail/TREAS/333#Progress_and_Next_Steps (last visited Mar. 14, 2013).

³ The U.S. House of Representatives Committee on Ways and Means and the U.S. Senate Committee on Finance.



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1. The overall estimate needs to be within acceptable parameters to be of value for overall tax policy purposes.
2. The different tax types making up the Tax Gap (*e.g.*, individual tax, corporate tax, employment tax) are important as they relate to each other.

A key point to remember is that if a Tax Gap estimate for a specific type of tax is significantly in error, it could affect policy decisions about that tax.

Former Commissioners of the IRS also expressed their views about the importance of the Tax Gap estimates for tax policy and administration purposes. In general, the Commissioners agreed that the process to develop the Tax Gap (TCMP and NRP) led to a better selection of returns for examination. This results in maximizing scarce compliance resources and lowering the burden on compliant taxpayers.

The Tax Gap estimate reflects the overall scale of voluntary compliance and the persisting sources of low compliance. For instance, refundable credits create problems with erroneous payments. The Tax Gap estimation process allows decision makers to determine what thresholds of noncompliance are tolerable. Moreover, as an important element of tax morale, taxpayers want to know whether the tax system is fair.⁴

A final important factor is the frequency and timeliness of updates. The first update of the Tax Gap using the NRP⁵ was for the TY 2001 individual income tax returns that were filed in Calendar Year 2002. The information on that study was released in March 2005,⁶ or three years after the returns were filed, and a final revised estimate was provided in February 2006,⁷ four years after the returns were filed. Likewise, the Tax Gap estimate for TY 2006 was not released until January 2012, or almost five years after the returns were filed. The result is that the data for compliance and the Tax Gap estimates are somewhat dated when the IRS releases the estimates. For instance, the economic changes caused by the Great Recession of 2008 on overall tax compliance remain unknown.

⁴ Ronald Cummings, Jorge Martinez-Vazquez, Michael McKee, & Beno Torgler, *Effects of Tax Morale on Tax Compliance: Experimental and Survey Evidence* (Oct. 2005), available at <http://www.yale.edu/leitner/resources/docs/botswana.pdf>.

⁵ The NRP goal is to design and implement a successful strategy to collect data that will be used to measure payment, filing, and reporting compliance and to deliver data to the IRS's operating divisions to meet a wide range of needs including support for the development of strategic plans and improvements in workload identification. See [http://www.irs.gov/uac/National-Research-Program-\(NRP\)](http://www.irs.gov/uac/National-Research-Program-(NRP)) (last visited Feb. 28, 2013).

⁶ IRS, IRS News Release IR-2005-38, *New IRS Study Provides Preliminary Tax Gap Estimate* (Mar. 29, 2005), available at <http://www.irs.gov/uac/New-IRS-Study-Provides-Preliminary-Tax-Gap-Estimate>.

⁷ IRS, IRS News Release IR-2006-28, *IRS Updates Tax Gap Estimates* (Feb. 14, 2006), available at <http://www.irs.gov/uac/IRS-Updates-Tax-Gap-Estimates>.



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The IRS employs several different methods to estimate the Tax Gap depending on the resources available, the component, and the type of tax

When the IRS presents the Tax Gap estimate, it is usually graphically depicted on the “Tax Gap Map.” The Tax Gap Map is divided into the three components of noncompliance: nonfiling,⁸ underreporting,⁹ and underpayment.¹⁰ Within these components, it is further divided by type of tax (e.g., individual, corporate, employment).

As shown in Figure 1, the Tax Gap Map¹¹ provides information about the Gross Tax Gap (the total estimate of noncompliance, \$450 billion) minus the estimated enforcement revenue and late payments that will be eventually collected of \$65 billion, which results in the Net Tax Gap of \$385 billion. The \$65 billion in late payments is an estimate of what will eventually be collected for TY 2006 taxes and includes enforcement revenue, estimates of payments made with late-filed and extended-due-date returns, and some transfers of credit amounts.

The Tax Gap Map also shows the contribution of each tax type by component and is color-coded to show the category of estimate. For example, the Tax Gap estimate for the nonfiling component is \$28 billion. The Tax Gap Map shows two updated estimates for this component, individual income tax and estate tax. There are no estimates for the nonfiling of corporate, employment, or excise tax returns. There are no current plans to develop estimates for the nonfiling of these tax returns.

Without an estimate, there is an information void that also affects the overall accuracy of the Tax Gap estimate.

⁸ The nonfiling gap is defined as the amount of tax liability that is not paid on time by taxpayers who do not file required returns on time. The estimate is net of amounts prepaid through withholding, estimated payments, and other credits. The nonfiler population does not include legitimate nonfilers (those who are not required to file).

⁹ The underreporting gap is defined as the amount of tax liability not voluntarily reported on timely filed returns. The estimate is net of amounts over-reported (by, for example, overstating income or failing to claim a tax benefit to which the taxpayer is entitled). The underreporting gap consists of three components: underreported income, overstated offsets, and net math errors. Underreported income involves such taxable income items as wages and salaries, rents and royalties, and net business income. Overstated offsets include offsets to income (such as itemized deductions) and offsets to tax (such as tax credits). Net math errors involve arithmetic mistakes and transcription errors made by taxpayers as well as certain adjustments and disallowances that the IRS has special authority to apply when the returns are being processed.

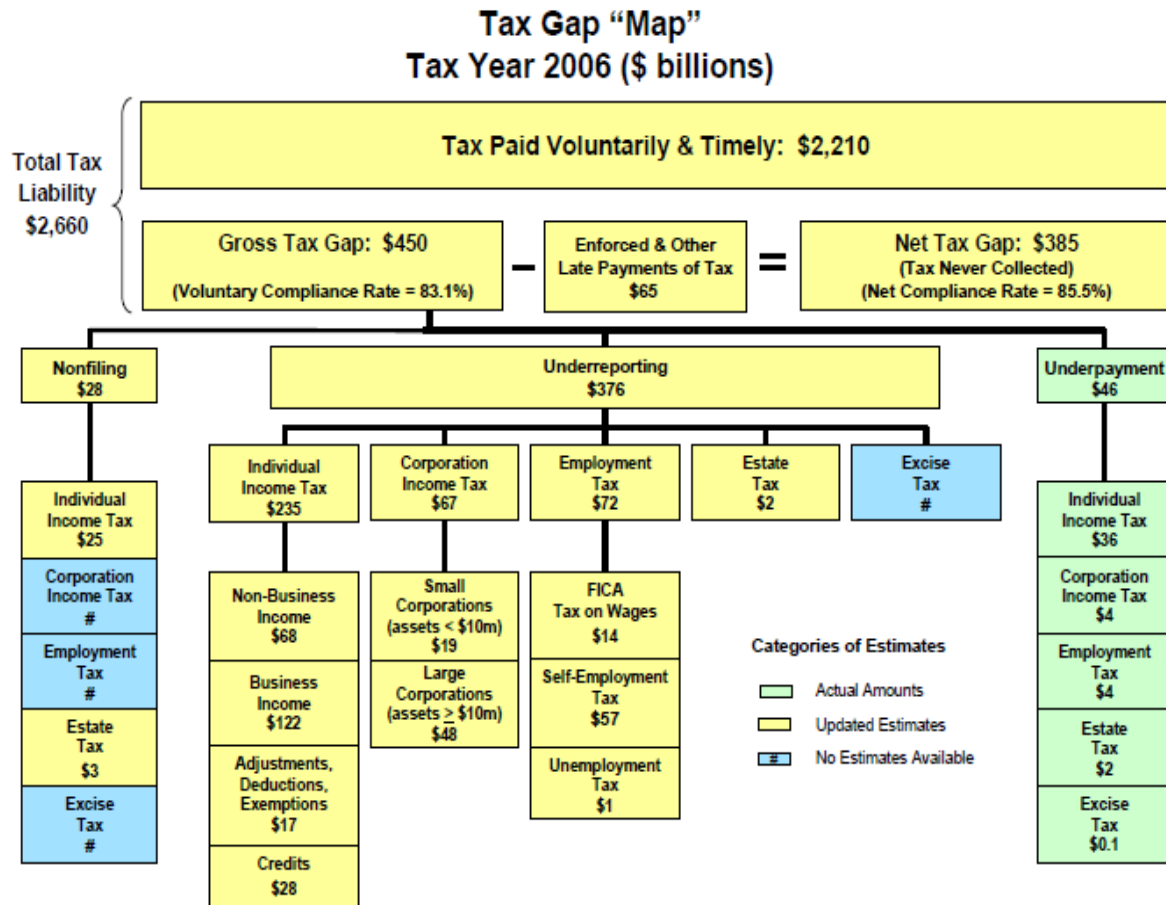
¹⁰ The underpayment gap is the amount of tax liability that taxpayers report on timely filed returns but do not pay on time. It includes, in addition to the insufficient remittances of individuals, amounts of income tax withheld by employers from employees’ wages but not paid to the Government on time. Payment of these amounts is the responsibility of the employers, not of the employees; however, since these amounts represent individual income tax liability that is not paid on time, they are part of the individual income tax gap.

¹¹ IRS, *Tax Gap Map Tax Year 2006*, see http://www.irs.gov/pub/newsroom/tax_gap_map_2006.pdf (last visited (Feb. 28, 2013)).



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Figure 1: Tax Year 2006 Tax Gap Map



Internal Revenue Service, December 2011

Source: IRS.

For reference purposes, Figure 2 shows the variety of data sources used to estimate the different categories of noncompliance by type of tax. Underpayments are the only category in which the gap is not inferred. Underreporting uses random sampling, operational examinations, and updates on old studies where estimates are provided. Nonfiling uses random sampling and modeling for where estimates are made.



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**Figure 2: Summary Table of TY 2006 Tax Gap
Estimation Data Sources by Component and Tax Type**

Tax Type	Underreporting	Underpayment	Nonfiling
Individual Tax	Audits of a random sample	IRS Master File ¹² records	Random sample of Social Security Numbers matched to administrative data
S Corporation	Audits of a random sample	Pass-through to individual	
Partnership		Pass-through to individual	
Corporation (small)	Based on operational examinations	IRS Master File records	No estimate
Corporations (mid-size and large)	Based on operational examinations	IRS Master File records	No estimate
Employment Tax (self)	Audits of a random sample (from individual tax)	IRS Master File records	
Employment Tax	Estimated compliance rate from 1984 to current	IRS Master File records	No estimate
Estate Tax	Based on operational examinations	IRS Master File records	Modeling from Michigan Health and Retirement Study and National Center for Health Statistics
Excise	No estimate	IRS Master File records	No estimate

Source: IRS RAS Working Paper.¹³

Recommendation 1: The Director, Office of RAS, should conduct a study to determine the feasibility of providing interim updates to Tax Gap estimates. More frequent updates would facilitate tax system decisionmaking and assist the Department of the Treasury in monitoring the Agency Priority Goal for increasing voluntary compliance.

¹² The IRS database that stores various types of taxpayer account information. This database includes individual, business, and employee plans and exempt organizations data.

¹³ IRS, *IRS Research, Analysis & Statistics Working Paper: Federal Tax Compliance Research: Tax Year 2006 Tax Gap Estimation* (March 2012), available at <http://www.irs.gov/pub/irs-soi/06rastg12workppr.pdf>.



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Management's Response: IRS management agreed to conduct a study of the pros and cons of providing interim updates, including annual updates.

The Tax Gap Estimate Could Be Improved by Following Office of Management and Budget Standards for Statistical Surveys

The IRS develops the Tax Gap estimates in accordance with its own policies and procedures. Although Federal agencies are generally required to follow Office of Management and Budget (OMB) *Standards and Guidelines for Statistical Surveys*¹⁴ (OMB standards), the Office of Research stated that these standards are not technically applicable to the conduct of the NRP. The IRS does adhere to several of the OMB standards, including elements in the planning and design phases, but does not completely adhere to other requirements associated with developing cost estimates, the production of estimates and projections, and conducting a formal peer review process. Putting the applicability of the OMB standards to the IRS aside, these standards provide a best practice approach to developing the Tax Gap estimate. The area where best practices could be adopted start with cost estimating because underlying the relative simplicity of the Tax Gap Map is a highly complex and costly effort.¹⁵

More specifically, while the OMB standards require cost estimates and tracking when conducting statistical studies, the IRS tracks full-time equivalents.¹⁶ The cost estimates can vary significantly between studies because various estimation methods are used for the different components and types of tax (see Figure 2). The data source used is dependent on factors such as whether the IRS has available resources to perform audits of a random sample or whether data are created through operational tax return examinations or modeling. Likewise, contracts with experts in statistics and economics are used to obtain additional expertise. Each choice of method has cost and resource implications. If costs were estimated and tracked in accordance with OMB standards, then more informed decisions could be made about the costs associated with modifying an estimation method or with the frequency of updates.

A second best practice area is the production of estimates and projections standard. This standard requires agencies to develop projections in accordance with accepted theory and practices. However, the IRS uses nonrandom sampled data for corporate Tax Gap estimates; therefore, the confidence in these samples is not quantifiable. Yet, the IRS does not provide an

¹⁴ OMB, *Standards and Guidelines for Statistical Surveys* (Sept. 2006), see http://www.whitehouse.gov/sites/default/files/omb/inforeg/statpolicy/standards_stat_surveys.pdf.

¹⁵ The estimated cost for performing the TY 2001 individual taxpayer NRP was approximately \$150 million. This estimate was developed without using structured methods to capture costs.

¹⁶ A full-time equivalent is a measure of labor hours in which one full-time equivalent is equal to eight hours multiplied by the number of compensable days in a particular fiscal year. For Fiscal Year 2012, one full-time equivalent was equal to 2,080 staff hours. For Fiscal Year 2013, one full-time equivalent is equal to 2,088 staff hours.



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adequate explanation of the effect this has on corporate Tax Gap estimates. (See page 19 of this report for a detailed analysis.)

Finally, the IRS peer review and dissemination of the Tax Gap estimate would benefit from following the OMB standards. This includes undergoing a formal peer review and having the agency issue the Tax Gap report as a publication. The IRS did not officially issue a publication that provided the details of the estimation methods, the assumptions and premises made, or the information on whether the estimate was subjected to sensitivity analysis.¹⁷

There are several reasons why compliance with the OMB standards is needed. First, the IRS uses a broad variety of estimation methods where the confidence and reliability cannot be quantified. Second, a rigorous peer review from another of the Government economic research units like the Census Bureau, Bureau of Economic Analysis, or Bureau of Labor Statistics could identify areas of concern and opportunities for improvement. Finally, more information disclosure could provide decision makers and the public with better information concerning the confidence that can be placed in the estimates. (See Appendix IV on Agency Priority Goals.)

Recommendation 2: The Director, Office of RAS, should develop processes and procedures to ensure compliance with applicable OMB standards to improve the overall confidence that can be placed in the accuracy and reliability of the Tax Gap estimate. This includes developing a method to estimate the total costs for performing each Tax Gap estimate and study. This information will assist decision makers in determining the methods and frequency of future studies.

Management's Response: The IRS agreed with this recommendation. For the next comprehensive estimate of the Tax Gap, IRS management agreed to develop a method to estimate costs consistent with guidelines outlined in the *OMB Standards and Guidelines for Statistical Surveys*.

Recommendation 3: The Director, Office of RAS, should issue a published report to explain the methods, assumptions, and premises used to develop the estimates. Furthermore, the report should also include comments about the confidence of the reliability and accuracy of the estimate and comparisons with previous estimates. The report should specifically state instances where no estimates have been developed and whether the absence of an estimate could affect the final estimate and the VCR. Finally, the report should be subject to peer review.

Management's Response: The IRS management provided the documentation and conducted the review included in the recommendation. Documentation of methods,

¹⁷ Sensitivity analysis is defined as the study of how the given model depends on the information fed into it and of how the variation in the output of a model, numerical or otherwise, can be apportioned, qualitatively or quantitatively, to different sources of variation.



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assumptions, and premises can be found at <http://www.irs.gov/uac/IRS-The-Tax-Gap>. The IRS agrees to supplement these documents with a comprehensive official IRS report. The IRS remains committed to continuing its efforts to seek peer review.

The Individual Tax Gap Estimation Methodology Has Changed Significantly Under the National Research Program

It is important to note that researchers make many decisions about how to treat data. For example, decisions are made about which data to include or exclude, how to weigh different data, and whether to use information from outside of the study to augment the estimate. Each decision can have an effect on the final estimate. The individual Tax Gap estimate is an example of a study that requires many decisions that can ultimately affect tax policy decisions.

Individual income taxes account for 55 percent of Federal revenue. Correspondingly, individuals account for the largest portion of the Tax Gap. The NRP study of reporting compliance for individual income taxes is designed to accomplish three major objectives:

1. Allows the IRS to develop computer algorithms to better identify tax returns for examination.
2. Provides the basis for Tax Gap estimations by the IRS Office of Research.
3. Develops reporting compliance information for returns claiming the Earned Income Tax Credit.¹⁸

The NRP sample must be designed to meet the requirements of each of these objectives. Some basic facts of the NRP are important to understanding how the individual Tax Gap is estimated.

- The NRP tax return examination methods differ markedly from the methods used in the TCMP. The TCMP used line item by line item examination techniques to identify noncompliance in all of the returns selected in the sample. The NRP uses a less intrusive, albeit less comprehensive, examination method, so many returns are accepted as filed and are not examined. For those tax returns examined, only certain specific line items are examined rather than every line item on the return.
- The TY 1988 TCMP identified significantly more changes in sole proprietor reporting of several line items that caused the understatement of tax. These included mortgage interest deductions, child care credits, and total credits.
- The TCMP examinations were performed face-to-face, while the NRP performs examinations both face-to-face and through correspondence.

¹⁸ The Earned Income Tax Credit is a tax expenditure in the form of a refundable tax credit for working individuals and families with income below established limits.



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- The fundamental concept of measurement is the tax change, which is the amount of increase or decrease in tax liability shown on the tax return. The key variable in measuring compliance is the examiner. Since examiners vary in skill and experience, the same tax return could result in different tax changes depending on the skill and experience of the examiner assigned. Because of this, the DCE method¹⁹ is used to compensate for the variability in examiner detection skills.
- The Office of Research determined that examiners detect less than one-third of unreported income, while detecting all misreported adjustments, deductions, exemptions, and credits. The DCE method compensates for different examiner skill levels by identifying the examiner skill level for income detection capability.
- The TY 2006 individual income tax NRP sample was the first phase of a three-year study for TY 2006 through TY 2008 tax returns. Altogether, about 43,000 returns were selected. Since the 2006 sample is too small to support the DCE analysis, the DCE was based on TY 2001 data and then used to impute undetected income on the TY 2006 NRP returns.

Two overall observations can be made by analyzing these facts.

- By design, the NRP method is less comprehensive than the TCMP method. Therefore, there is the opportunity that some noncompliance will be undetected and the overall Tax Gap estimate will be understated.
- The DCE methodology compensates for examiner skill levels, which enhances Tax Gap estimates; however, it also implies that the underreported income portion of the Tax Gap cannot be effectively reduced through additional tax return examinations since examiners miss detecting more than two-thirds of unreported income during examinations.

Beyond these observations, the individual underreporting Tax Gap estimate could be more comprehensive if it included estimates for the informal economy and offshore tax evasion. While the DCE method may impute undetected income, separate quantified estimates would provide better information on the size of these compliance issues and the possible solutions available. These areas present significant challenges to tax administration, and the absence of an estimate can hinder or delay possible solutions.

¹⁹ The DCE method was initially developed by Jonathan Feinstein while he was a professor at Stanford University; he is now a professor at Yale University. Feinstein, Jonathan S., *Journal of Law and Economics*, Vol. 33, No. 1, *Detection Controlled Estimation* (April 1990), available at <http://www.jonathanfeinstein.com/PDFs/detection.pdf>. Feinstein, Jonathan S., *Rand Journal of Economics*, Vol. 22, No. 1, *An Econometric Analysis of Income Tax Evasion and Its Detection* (Spring 1991), available at <http://www.jstor.org/stable/2601005>.

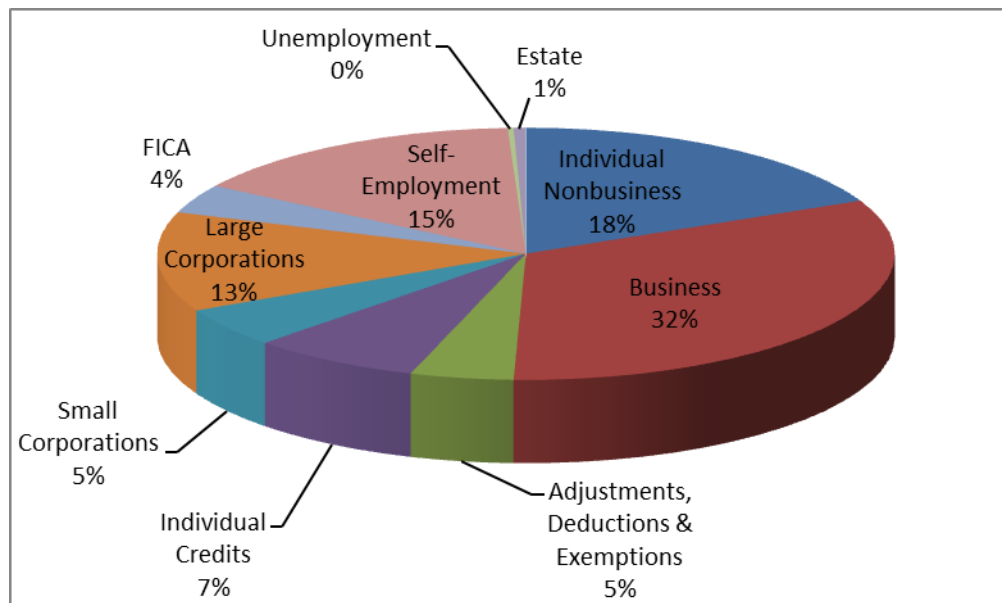


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The IRS needs to improve the methods for estimating and presenting the informal economy

Underreporting accounts for about 84 percent of the TY 2006 Tax Gap estimate. Figure 3 shows the contributions of the major components of the underreporting gap. The chart shows that about one-third of the underreporting is attributed to underreported net business income on individual returns. A similar pattern is observed from the TY 2001 Tax Gap estimate. While it is unknown whether the underreporting gap associated with business income is accurate within the parameters required by decision makers, the relative size of its underreporting compared to all other components is substantial.

Figure 3: Distribution of Underreported Tax by Tax Gap Component



Source: IRS RAS Working Paper. Note: FICA = Federal Insurance Contributions Act.

The IRS RAS Working Paper explains the TY 2006 Tax Gap estimates but lacks details on what comprises “business income.” For these estimates, the Office of Research provided information that business income includes legal-source net income from farm and nonfarm sole proprietorships, partnerships, S corporations, rental property, royalties, and estates. The description is silent on whether business income includes estimates for the informal supplier (informal suppliers is a term used by the IRS in TCMP studies to describe participants in the informal economy). What is included or excluded under the individual business income category



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is critical to analyzing and developing strategies to reduce the Tax Gap.²⁰ As might be expected, the TY 2001 Tax Gap estimates created considerable concern for the small business community. In fact, the concern was so great that it led the Small Business Administration to expend nearly \$100,000 for a study of the TY 2001 Tax Gap estimate.²¹

The difficulty stems from combining small business noncompliance with the informal supplier income into one estimate. Whereas the TCMP method needed to separate business income from informal supplier income with a consumer survey approach (involving very approximate tax assumptions), the DCE method, in theory (according to the Office of Research), does not need to do that. The TY 1988 TCMP individual reporting compliance study and IRS-sponsored consumer surveys showed that the informal supplier underreporting gap was about 31 percent of the business income underreporting gap.

The Office of Research had concerns about measuring the informal supplier portion of the Tax Gap and contracted with economists to develop an estimation method. However, the method was never employed, and the Office of Research presented the individual business income estimate without separating informal supplier noncompliance from other business income underreporting.

Measuring the informal economy with any precision is not a problem unique to the IRS.²² Several measurement problems exist:

- There are definitional problems, but most agree that illegal income should not be included. That is, if the work would otherwise be legal (*i.e.*, home improvement), then the activity could be considered as an informal supplier activity. If the activity is selling illegal narcotics, then it is not considered part of the informal economy and is part of the illegal economy. While these seem like clear distinctions, there are areas where the difference is not so clear. For example, selling goods on the Internet and not reporting the income could be classified as an informal supplier activity; however, trafficking in

²⁰ Department of the Treasury, Office of Tax Analysis, Technical Paper 4, *Methodology to Identify Small Businesses and Their Owners* (Aug. 2011). This technical paper used new data to develop criteria for small businesses that separates six tax forms and schedules into business and nonbusiness groups. The paper states that theirs is but one reasonable approach that could be used to identify small businesses and their owners.

²¹ Quantria Strategies, LLC, *An Examination of the 2001 IRS Tax Gap Estimates' Effects on Small Businesses* (March 2011), available at http://www.sba.gov/sites/default/files/2001%20IRS%20Tax%20Gap_0.pdf.

²² Organisation for Economic Co-operation and Development, *FORUM ON TAX ADMINISTRATION: SME COMPLIANCE SUB-GROUP, Information Note: Reducing opportunities for tax non-compliance in the underground economy* (Jan. 2012), available at <http://www.oecd.org/site/ctpfta/49427993.pdf>.



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counterfeit goods is a violation of Federal law and a felony.²³ Thus, the division between “otherwise legal” and “criminal” is not always clear.

- Many people participating in the informal economy have poor records from which to construct their income.
- Many people participate across a wide spectrum of activities, often for small amounts.
- The informal activities are often concealed to make them more difficult to detect.

A potential starting point for evaluation and modeling of the informal economy is from information the IRS already receives. For instance, the information documents the IRS receives sometimes have errors in the Social Security Number reported to the IRS. This condition can allow the payee’s income to go unreported without detection. For TYs 2008 through 2010, this occurred on over 8.1 million Forms 1099-MISC, *Miscellaneous Income*.

Similarly, we previously reported²⁴ that for TYs 2001 through 2004 the IRS received about 48 million miscellaneous income and wage statements (reporting \$913 billion of income) that it was unable to use in determining if the recipients filed tax returns and reported the income. The majority of the income involved nonemployee (e.g., independent contractor) compensation reported on unusable miscellaneous income statements. In TY 2004 alone, the IRS received about 3.8 million miscellaneous income statements (reporting approximately \$150 billion in earnings) that could not be computer matched to a filed tax return because of missing or erroneous identification numbers.

Even though precise measurement of the Tax Gap may not be possible, the effort is likely to provide valuable insights for the tax system.²⁵ Some estimates show that the informal economy in the United States is about 8.8 percent of the gross domestic product. Thus for TY 2006, the informal economy would be approximately \$1.2 trillion. For another perspective, if the same compliance ratio is applied from the TY 1992 Tax Gap study²⁶ to the TY 2006 study, then the

²³ 18 U.S.C. § 2320 defines counterfeiting offenses and establishes maximum penalties for individuals and nonindividuals (corporations) ranging from fines of not more than \$30 million in the event of counterfeiting military equipment and imprisonment up to and including life when a death occurs as a result of the counterfeiting activity.

²⁴ Treasury Inspector General for Tax Administration, Ref. No. 2007-30-159, *Mismatched Names and Identification Numbers on Information Documents Could Undermine Strategies for Reducing the Tax Gap* (Aug. 2007).

²⁵ Organisation for Economic Co-operation and Development, *FORUM ON TAX ADMINISTRATION: SME SME COMPLIANCE SUB-GROUP, Information Note: Reducing opportunities for tax non-compliance in the underground economy* (Jan. 2012), available at <http://www.oecd.org/site/ctpfta/49427993.pdf>. The report attempts to define the unobserved economy and provides caveats on some nongovernmental estimates of the size of the unobserved economy in relation to the gross domestic product.

²⁶ IRS, Publication 1415 (Rev. 4-96), *Federal Tax Compliance Research: Individual Income Tax Gap Estimates for 1985, 1988, and 1992* (April 1996) Publication 1415 (Rev. 4-96), available at <http://www.irs.gov/pub/irs-soi/p141596.pdf>.



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informal supplier underpayment gap would be approximately \$63 billion. That is 94 percent of the underreporting estimate for all corporate noncompliance. Thus, measuring the informal economy and identifying methods to tax the related income are important to ensure that all taxpayers pay their fair share of America's tax burden.

Another important consideration is that estimates show that over 80 percent of taxes are remitted by businesses.²⁷ The consequence of tax evasion by the informal supplier goes beyond underreported income, since employment taxes are likely also evaded. Some of this is evident in the \$57 billion of underreported self-employment taxes. However, depending on the accuracy of the estimate, the amounts could exceed this threshold. In summary, the informal economy may be a significant contributor to the Tax Gap and should be separately quantified so that strategies to increase voluntary compliance can be initiated.

The IRS needs to improve the methods for estimating and presenting the costs of offshore tax evasion

Some concerns about the comprehensiveness of the Tax Gap estimate center on the extent of offshore tax evasion. For decades, the IRS has attempted to identify taxpayers who evade U.S. taxes, mainly through what are commonly known as tax havens.²⁸ According to the January 1981 report on a study requested by the Commissioner of Internal Revenue, the Assistant Attorney General (Tax Division), and the Assistant Secretary of the Treasury (Tax Policy),²⁹ an estimate on offshore tax evasion could not be developed because of a lack of information. Thirty years later the information void still exists.

In a May 2007 Senate Finance Committee hearing on the topic of offshore tax evasion, Committee Chairman Senator Baucus stated:³⁰

²⁷ Kevin Christensen, Robert Cline, & Tom Neubig (Ernst & Young LLP), National Tax Journal, Vol. LIV, No. 3, *Total Corporate Taxation: "Hidden," Above-the-Line, Non-Income Taxes* (Sep. 2001), available at <http://ntj.tax.org/wwtax/ntjrec.nsf/175d710dff186a385256a31007cb40f/dc65785ae95536cd85256b4b00667dc2?OpenDocument>.

²⁸ The Organisation for Economic Co-operation and Development, in *Harmful Tax Competition: An Emerging Global Issue*, p. 23 (1998), available at <http://www.oecd.org/tax/transparency/44430243.pdf>, identifies four key factors to determine whether a jurisdiction is a tax haven: low or no taxation, whether or not there is transparency, whether there are laws or administrative practices that prevent the effective exchange of information with other governments on taxpayers benefiting from the no or nominal taxation, and whether there is an absence of a requirement that the activity be substantial. Economists and others also have definitions for tax havens that differ from that above; therefore, the term is without an agreed-upon definition.

²⁹ Richard A. Gordon, IRS Publication 1150 (4-81), *Tax Havens and Their Use by United States Taxpayers – An Overview* (Jan. 1981).

³⁰ *Offshore Tax Evasion: Stashing Cash Overseas: Hearing Before the U.S. Senate Committee on Finance*, 110th Cong. (2007).



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Part of the problem is that the Treasury, the IRS, and the American institutions know far less than they should. With international trade increasingly flowing across national boundaries at the speed of light, it is more and more difficult to make sure that we are collecting the taxes that are owed and the honest American taxpayers who work hard and do not have the ability to engage in offshore activity are not left holding the bill.

For clarification, there are no laws that prevent individual taxpayers from having foreign investments.³¹ The problem occurs when the taxpayer chooses not to pay taxes on income earned through offshore investments. A U.S. taxpayer is required to pay tax on their worldwide income. A simple example of offshore tax evasion is a practice called “round tripping,”³² in which a taxpayer creates a foreign entity in a low- or no-tax jurisdiction, receives income, and does not report that income to the IRS. Often, the income is earned in U.S. debt and equities markets. To the U.S. bank, financial services, or investment firm, the disguised ownership appears to be a non-U.S. resident exempt from U.S. income taxes on most interest and capital gains income and thus exempt from withholding. The U.S. Senate Permanent Subcommittee on Investigations August 2006 report, *Tax Haven Abuses: The Enablers, the Tools and Secrecy*,³³ provides other detailed examples of how offshore evasion is achieved.

The term “offshore” suggests that there are physical locations. However, a more accurate description of offshore is transactions that take place in legal spaces that decouple the real location from the legal location. Offshore has little to do with geography but rather with legislative spaces.³⁴ In March 2009, the Joint Committee on Taxation prepared a document, *Tax Compliance and Enforcement Issues With respect to Offshore Accounts and Entities*.³⁵ The document stated:

Under present law, nonresidents who receive payments of U.S.-source investment income are generally subject to U.S. withholding tax imposed at a 30 percent rate. This withholding tax serves as the only mechanism for collection of tax in the case of payments made to foreign persons who are not otherwise required to file a U.S. income

³¹ There are requirements to disclose information about foreign bank and financial accounts in 31 U.S.C. § 5314 and I.R.C. § 6038D.

³² Michelle Hanlon, Edward L. Maydew, & Jacob R. Thornock, *Taking the Long Way Home: Offshore Investments in U.S. Equity and Debt Markets and U.S. Tax Evasion* (Aug. 22, 2011) Available at the Social Science Research Network, <http://ssrn.com/abstract=1915429> or <http://dx.doi.org/10.2139/ssrn.1915429>.

³³ U.S. Senate Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, *Tax Haven Abuses: The Enablers, the Tools and Secrecy* (Aug. 1, 2006), available at <http://www.hsgac.senate.gov/download/report-tax-haven-abuses-the-enablers-the-tools-and-secrecy>

³⁴ Ronen Palen, Richard Murphy, & Christian Chavagneux, *Tax Havens: How Globalization Really Works*, p. 21 (Eric Helleiner & Jonathan Kirshner ed, Cornell University Press 2010).

³⁵ Joint Committee of Taxation, JCX-23-09, *Tax Compliance and Enforcement Issues With respect to Offshore Accounts and Entities* (March 30, 2009), available at https://www.jct.gov/publications.html?func=download&id=3520&chk=3520&no_html=1



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tax return. There are, however, a number of significant statutory exemptions from the 30-percent withholding tax (including interest paid on bank deposits, portfolio interest and most capital gains), and income tax treaties typically provide additional withholding relief.

Distinguishing U.S. from foreign persons is therefore important in this context. The IRS has a variety of enforcement tools (including information reporting and backup withholding) to enforce compliance by U.S. taxpayers. The IRS faces significant enforcement challenges, however, in confirming the status of an offshore payee as a bona fide non-U.S. investor. These challenges include resource constraints (and the resulting need to rely on compliance by both U.S. and foreign intermediaries), the difficulties inherent in determining beneficial ownership of income earned through intermediate vehicles (for example trusts or partnerships), which typically are organized under foreign law and often do not have close analogies in U.S. trust or company law practice, and disclosure limitations imposed by foreign law.

If a U.S. person can arrange to receive investment income through means that permit the U.S. person to appear to be a foreign person, the U.S. investor may be able to evade U.S. income tax entirely.

The Joint Committee on Taxation statements are directly supported by the statements contained in the U.S. Portfolio Report,³⁶ which states in part:

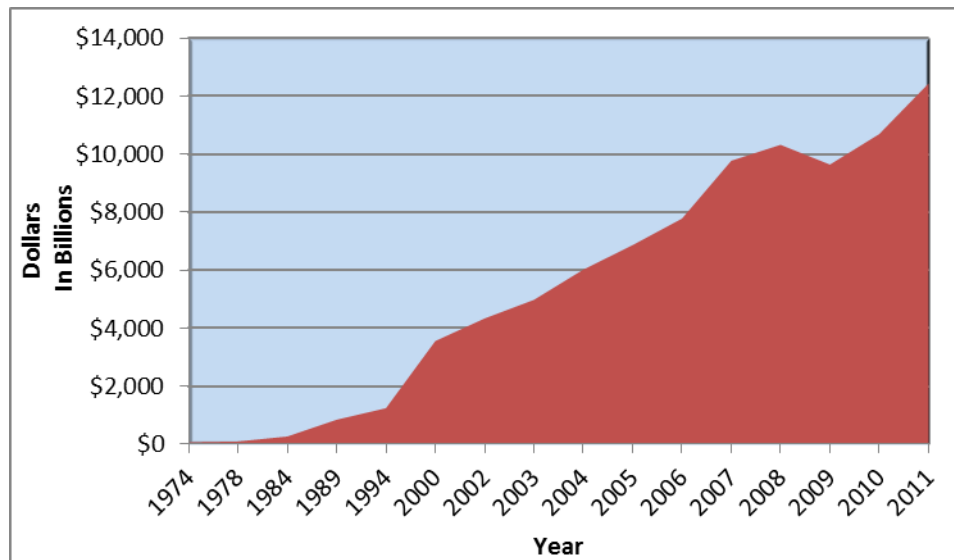
It should be noted that the country attribution presented in this table is imperfect, because obtaining accurate information on the actual foreign owners of U.S. securities frequently is not possible. This problem arises because chains of foreign financial intermediaries are often involved in the custody or management of these securities, and because ownership information is not available for bearer securities.

³⁶ Department of the Treasury, Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, *Report on Foreign Portfolio Holdings of U. S. Securities as of June 30, 2011* (Apr. 2012).



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Figure 4: Foreign Portfolio Investment in U.S. Securities



Source: Our analysis of U.S. Department of the Treasury: Treasury International Capital System.

Based on these caveats, there is little assurance that some portion of the \$12.4 trillion foreign portfolio investments in U.S. securities is not owned by U.S. taxpayers. Figure 4 shows the growth of foreign investment in the United States over the past several decades. Foreign portfolio investment has grown from about \$67 billion in 1974 to \$12.4 trillion in 2011.³⁷ For comparison, if the 1974 dollars were translated into 2011 dollars, the value of foreign investment in the United States would be approximately \$305.5 billion.

There are estimates about how large the Tax Gap is for U.S. individual taxpayers who evade taxes by moving assets offshore. These estimates range from about \$40 to \$70 billion a year.³⁸ However, these estimates are not made by the IRS.

Recommendation 4: The Director, Office of RAS, should develop the capability to estimate the Tax Gap for the informal economy. The information developed can then be used by tax policy decision makers and tax administration officials to develop strategies to improve voluntary compliance.

³⁷ Department of the Treasury, *Foreign Portfolio Holding of U.S. Securities*, historical data from the surveys during 1974–2011, see <http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/fpis.aspx> (last visited Mar. 6, 2013).

³⁸ Jane G. Gravelle, Congressional Research Service, *Tax Havens: International Tax Avoidance and Evasion* (July 9 2009), available at <http://www.fas.org/sgp/crs/misc/R40623.pdf>.



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Management Response: The IRS agrees to conduct a study of the feasibility of breaking out the portion of the tax gap associated with informal supplier income from the current tax gap estimate.

Office of Inspections and Evaluations Comment: We concur with the IRS corrective action to perform a feasibility study.

Recommendation 5: The Director, Office of RAS, should perform a study to determine the feasibility of estimating the Tax Gap for offshore tax evasion. The information developed can then be used by tax policy decision makers and tax administration officials to develop strategies to improve voluntary compliance.

Management Response: The IRS agrees to conduct a study of the feasibility of breaking out the portion of the tax gap associated with offshore tax evasion from the current tax gap estimate.

***The Corporate Tax Gap Estimation Methodology Improved
Significantly Between Tax Years 2001 and 2006, but Additional
Changes Would Improve the Reliability and Accuracy of the Estimate***

The Office of Research staff estimated the corporate underreporting Tax Gap for TY 2006 to be \$67 billion. Separate estimates were made for small and large corporation underreporting gaps:

- Small corporation (assets of less than \$10 million) gap estimate is \$19 billion.
- Large corporation (assets of \$10 million or more) gap estimate is \$48 billion.

The \$67 billion estimate represents over a 120 percent increase from the TY 2001 estimate of \$30 billion. The TY 2006 estimate is based on a combination of new data and methodologies, whereas the TY 2001 estimates were based on projections of earlier published estimates dating back to the 1970s and 1980s. Recent research suggests that the TY 2001 estimate was underestimated; therefore, the TY 2006 increase represents a correction to the underestimate and does not indicate a significant increase in noncompliance between the two periods.

There were several factors contributing to underestimating the TY 2001 corporate underreporting gap. First, the small corporation estimate was based on the TY 1980 TCMP small corporation reporting compliance study, as projected to TY 1987 and TY 1992. Second, the large corporate estimate was based on operational audits that dated back to the 1980s. To project these results to TY 2001, the Office of RAS premised that the percentage of corporate tax noncompliance would grow in proportion to the growth of corporate tax liabilities. Continuing this premise, no adjustments were made for known changes in the corporate tax environment. Consequently, several critics determined that the corporate estimates were not sufficiently robust.



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Among the criticisms was a March 2011 report completed for the Office of Advocacy of the Small Business Administration:³⁹

Operational audit data from the 1980s fails to capture significant changes in the way that large corporations have approached Federal income tax liability beginning in the 1990s. The growth in the economy during the 1990s fueled increased interest in ways for corporations to minimize their Federal tax liability. Sophisticated tax planners competing for corporate business began to develop transactions that would reduce Federal tax liability and increase corporate earnings for financial reporting purposes, making corporations' bottom line look even better.

Similarly, in a June 2006 testimony,⁴⁰ the Government Accountability Office (GAO) also criticized the IRS Tax Gap estimate for corporations. The testimony noted:

...the available tax gap estimates are highly uncertain and incomplete. IRS has not systematically measured the level of compliance for large corporations...IRS's level of certainty with respect to the accuracy of the corporate tax gap estimate is low for reasons such as use of incomplete and old data, interpretation of complex laws and resource constraints.

Finally, economist Eric Toder opined about concerns with the TY 2001 estimate:

*...Using operational audits...raises important challenges of how best to extrapolate sample results that may be unrepresentative to the entire corporate taxpaying population and how to account for non-detection. Nonetheless, given how much has changed with the internationalization of U.S. corporations and how much has been written about changes in the behavior and motivations of corporate tax departments and public accounting firms, it is simply not credible to base corporate tax gap estimates on 20-year-old data. Even estimates based on somewhat imprecise extrapolations of operational audit data would be an improvement.*⁴¹

³⁹ Quantria Strategies, LLC, *An Examination of the 2001 IRS Tax Gap Estimates' Effects on Small Business*, March 2011, available at http://www.sba.gov/sites/default/files/2001%20IRS%20Tax%20Gap_0.pdf.

⁴⁰ GAO, GAO-06-851T, *Tax Compliance: Challenges to Corporate Tax Enforcement and Options to Improve Securities Basis Reporting* (June 2006) available at <http://www.gao.gov/products/GAO-06-851T>.

⁴¹ Eric Toder, Tax Notes, October 22, 2007, *What Is the Tax Gap?* (Oct. 2007), available at http://www.urban.org/UploadedPDF/1001112_tax_gap.pdf. Eric Toder is currently co-director of the Urban Institute-Brookings Institution Tax Policy Center. Mr. Toder is also a chair of the Tax Gap Subgroup, which assists the IRS in its analyses of taxpayer compliance, and treasurer of the National Tax Association. Before joining the Urban Institute, Mr. Toder held a number of tax policy offices in the United States including the Deputy Assistant Secretary (Tax Analysis) at the U.S. Department of the Treasury, the Deputy Assistant Director for Tax Analysis at the Congressional Budget Office, and the Director, Office of Research, at the IRS.



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The Office of Research staff recognized the shortcomings of the TY 2001 estimate and developed a new approach. Accordingly, the TY 2006 corporation income tax underreporting gap estimates are based on a combination of new data and methods that address some of the aforementioned concerns. For example, the data sources are more current since the TY 2006 estimates are based on operational audit results.⁴² Complementing this change, compensating methods were used to adjust for the nonrandom selection methods used for operational audits.

Additionally, to compensate for undetected noncompliance, corporate underreporting is estimated based on the tax adjustments recommended by the examiners at the time the cases are closed out of Examination function. While the amounts eventually assessed do represent the legal tax liabilities, there are three main reasons why the Office of Research staff uses recommended amounts rather than the corresponding assessed amounts:⁴³

1. The assessed amounts are the legal tax liability only for the issues and subsidiaries that were audited. Unlike the NRP audits, operational audits are not conducted to collect detailed compliance data on all the potential issues on the return. Instead, they are more narrowly focused on areas of suspected noncompliance.
2. Unlike the individual income tax, there is no similar technique like the DCE method available for estimating income underreporting that is not detected by the examiner. Given the resource constraints and differences in examiner skill levels, it is highly unlikely that examiners perfectly detect all corporate noncompliance (this is also in part because corporate returns are typically more complex than individual returns).

⁴² Operational audits are identified and selected from the filing population based on formulas or information indicating the likelihood that an adjustment exists on the return. NRP audits are randomly selected from the filing population. As a result, there is a question of how representative operational audits are of the entire corporate population.

⁴³ GAO (formerly known as the General Accounting Office), GAO/GGD-98-128, *Tax Administration: IRS Measures Could Provide a More Balanced Picture of Audit Results and Costs* (June 1998), available at <http://www.gao.gov/assets/230/225886.pdf>. According to this report, the IRS has a multistage process that governs examinations and settlements of disputes over the additional taxes recommended. In an examination, an examiner reviews a taxpayer's books and records to determine compliance with tax laws. Examiners usually recommend additional tax assessments but may recommend a decrease or no change in the tax reported on the return, depending on the documentation provided by the taxpayer. If the taxpayer agrees to pay or does not respond to the IRS's notices on recommended additional taxes, the IRS assesses the tax—that is, formally notifies the taxpayer that the specified amount of tax is owed and that interest and penalties may accrue if the tax is not paid by a certain date. Taxpayers who do not agree with the recommended additional taxes can: (1) file a protest with the IRS Office of Appeals, (2) take the dispute to tax court without paying the recommended tax, or (3) pay the tax and claim a refund in the U.S. Court of Federal Claims or a Federal district court. Of these options, taxpayers usually protest to the IRS Office of Appeals. The Office of Appeals settles most disputes, with the remainder docketed for trial. If the Office of Appeals is unsuccessful in settling the dispute, the Office of Chief Counsel gets involved in the settlement as well as in any trial. The agreements made in settlements and the rulings made in trials dictate how much of the disputed amounts get assessed. The assessed amount—not the recommended amount—establishes the taxpayer's liability.



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3. The data available on corporation examination adjustments often understate the actual adjustments made in the examinations. Corporations can apply net operating losses from other tax years to offset agreed-upon audit adjustments. IRS systems capture the net audit adjustments after the application of any net operating losses rather than the total audit adjustment. That is, if a corporation elects to apply sufficient net operating losses at the time the audit is closed, the resulting audit adjustment will appear as a “no-change” audit in the data.

Because of these three reasons, on any tax return examined, the recommended amount may overstate or understate the true amount of noncompliance, while the assessed amount is clearly a lower bound. Consequently, while using recommended tax may be an improvement over the previous estimation methods, concerns about the corporate underreporting gap estimates remain.

The TY 2006 changes addressed some concerns, but additional improvements are needed

There are two concerns about the accuracy and reliability of the TY 2006 corporate underreporting gap estimate. The first concern is with the difficulty in deriving the actual tax liability of large corporations. Unlike recommended tax assessments for individual and small corporate taxes, large corporations often contest recommended taxes. The result is often an assessed amount that is substantially less than the recommended tax.

Undoubtedly, large corporate taxation is highly complex. Along with the complexity, large corporate tax planning strategies span a continuum from “perfectly legal” to “clearly illegal.” The assessments recommended by examiners are not simply accepted and paid. Some tax professionals refer to large corporate tax filings as the “opening bid” in a complex and protracted negotiation strategy.⁴⁴

More specifically, large, multinational corporations can engage in aggressive tax positions because they have the tax departments and resources for protracted engagement with the IRS. In addition, many areas of multinational corporate law are exceedingly complex, and the determination of the proper taxation is open to interpretation. The Internal Revenue Code and the related regulations have complex provisions that allow for legal tax avoidance, which can sometimes appear to be tax evasion. Economist Eric Toder described how sophisticated tax avoidance techniques can create inherent difficulties in measuring the corporate tax gap:

Sophisticated avoidance techniques may be thought of as coming in two general forms. The first involves the use of devices to hide income or transactions that if detected would clearly trigger increased tax liability.... For transactions that are clearly outside the tax

⁴⁴ GAO, GAO-06-851T, *Tax Compliance: Challenges to Corporate Tax Enforcement and Options to Improve Securities Basis Reporting* (June 2006), available at <http://www.gao.gov/products/GAO-06-851T>.

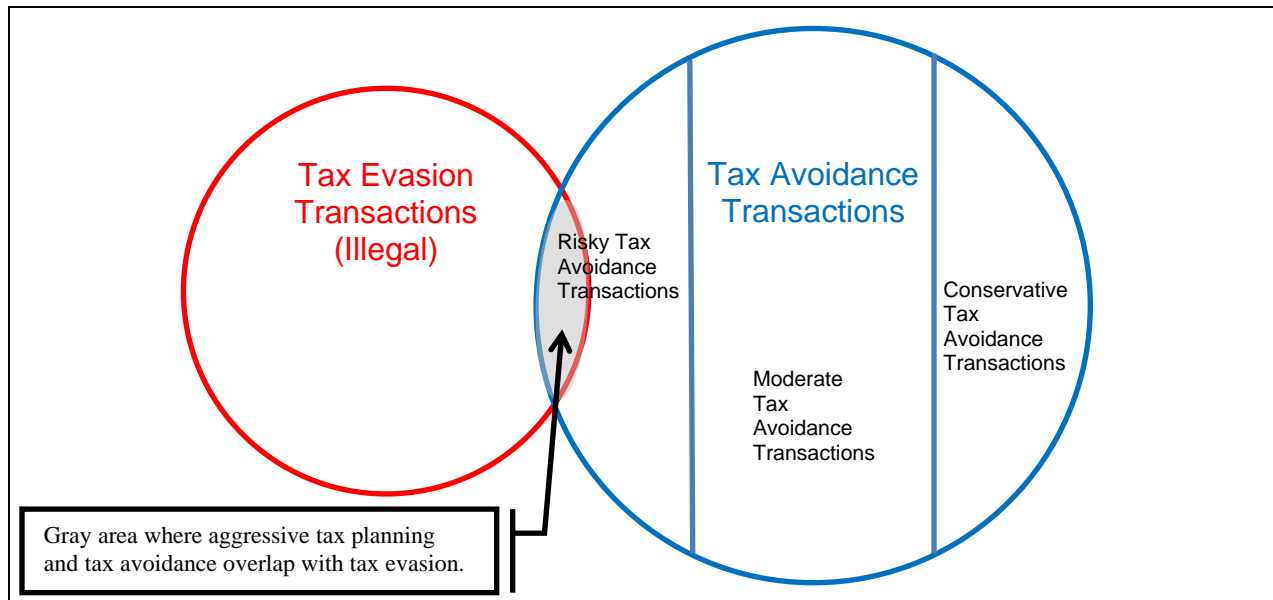


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law, the only question for tax gap measurement is the ability of IRS to find and identify them.

A second set of transactions straddle the boundary between tax avoidance (legal) and tax evasion (illegal). Often these consist of a series of separate transactions, all of them within the letter of the tax law, that reduce tax liability, but produce no expectation of pretax economic gain. Currently many 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. But courts differ in how they rule on such transactions and IRS assessments based on application of this economic substance doctrine are sometimes sustained and sometimes overruled. These transactions create issues for tax gap measurement because it is not always clear what “true” tax liability should be, even when the terms of the transaction are transparent.⁴⁵

Figure 5: The Relationship of Tax Evasion and Tax Avoidance



Source: Treasury Inspector General for Tax Administration.

Figure 5 illustrates the relationship between tax evasion and tax avoidance. But these relationships are relative. What one tax professional may see as a moderate tax avoidance transaction could easily be viewed by another tax professional as a risky tax avoidance transaction and by the IRS as outright tax evasion. The intersection of risky tax avoidance transactions and tax evasion is an area of conflict between the IRS and large corporate taxpayers.

⁴⁵ Eric Toder, Tax Notes, October 22, 2007, *What Is the Tax Gap?* (Oct. 2007), available at http://www.urban.org/UploadedPDF/1001112_tax_gap.pdf.



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For clarity, there is an important difference between tax avoidance and tax evasion. For definition purposes, a tax avoidance transaction is a legal, tax-compliant transaction if it meets all the requirements of the laws and regulations. Tax avoidance is the process whereby a business or individual plans finances so as to apply all exemptions and deductions provided by tax laws to reduce taxable income. When the rules are not followed, then there is noncompliance that would theoretically be included in the Tax Gap estimate.

Sometimes, aggressive tax avoidance may result in noncompliance and may actually be tax evasion. Legally, tax evasion is defined in Internal Revenue Code Section 7201 as, “Any person who willfully attempts in any manner to evade or defeat any tax imposed by this title or the payment thereof shall, in addition to other penalties provided by law, be guilty of a felony and, upon conviction thereof, shall be fined not more than \$100,000 (\$500,000 in the case of a corporation), or imprisoned not more than 5 years, or both, together with the costs of prosecution.” Tax evasion is determined through court proceedings.

Unfortunately, some commentators mistakenly characterize legal tax avoidance strategies as equivalent to tax evasion. For example, U.S. corporations not repatriating more than \$1 trillion in foreign earnings back to the United States is not tax evasion. It is tax avoidance. Similarly, a foreign corporation paying less U.S. taxes than their U.S. counterparts, again, in most cases, is not tax evasion but tax avoidance. The Internal Revenue Code and regulations allow these transactions. At times, the difference between tax avoidance and noncompliance is difficult to distinguish. This leads to challenges in estimating the Tax Gap for large corporations.

When a taxpayer disagrees with recommended tax assessments, they have the option to either appeal or dispute the issue in court. For large corporations, appeals are often the rule rather than the exception. An October 1995 GAO report⁴⁶ stated that large businesses appeal most recommended amounts—they appealed about 66 percent in 1994. When an assessment was appealed, the IRS usually settled for about 27 percent of the recommended amount. Our analysis of available IRS information showed that Fiscal Year (FY) 2010 results correlate with these results.

To illustrate, according to the Enforcement Revenue Information System, the IRS made \$27 billion in large business recommended assessments during FY 2010 and subsequently collected approximately \$7 billion from large business assessments. This represents about 26 percent of the \$27 billion recommended, which closely follows the 1994 GAO analysis of 27 percent agreement. This means that approximately \$19 billion was not sustained. It is important to note that appealed cases can be time-consuming and cross fiscal years because they are often complex cases.⁴⁷ Tax law complexity is a contributing factor to the large disparity

⁴⁶ GAO (formerly the General Accounting Office), GAO/GDD-96-6, *Tax Administration: Audit Trend and Taxes Assessed on Large Corporations* (Oct. 1995), available at <http://www.gao.gov/products/GGD-96-6>.

⁴⁷ In FY 2010, the average large business case took about 285 days.



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between recommended assessments and the actual amounts collected. So while there is some validity to the reasons the Office of Research provided for using recommended tax as a basis for an estimate, it is difficult to ascertain whether recommended tax provides an accurate estimate of the Tax Gap, while using assessed tax does more likely provide a realistic conservative amount that would be sustained.

Recommendation 6: The Director, Office of RAS, should consider changing the estimation model for large corporations from using recommended tax to using tax assessments from operational examinations to more clearly reflect the noncompliance found and ultimately sustained on large corporate examinations.

Management's Response: The IRS agrees to conduct a study on the merits of alternative approaches to estimating noncompliance using large corporation audits.

Office of Inspections and Evaluations Comment: We concur with the IRS management decision to study alternative approaches to estimating noncompliance by large corporations.

Small corporations may provide opportunities to employ the DCE method

Like large and mid-sized corporations, recommended tax from operational examinations extrapolated to the population of small corporations may not provide the proper basis for estimating the Tax Gap. However, the reasons differ. Frequently, small privately owned corporations more closely resemble and behave like sole proprietorships as opposed to large and mid-sized corporations in several ways:

1. Small corporations that are owner operated are more likely to behave like sole proprietorships and be less formal.
2. Small corporations, due to their size and the costs associated with controls, have accounting and managerial controls similar to those of a sole proprietorship. As a result, the owner/manager can override controls unobserved. In comparison, as organizations increase in size, segregate duties, and hire professional management and accounting staffs, there is less opportunity to override control systems unobserved.



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3. Small corporations have an examination coverage rate of 1 percent⁴⁸ that closely resembles the sole proprietorship coverage rate of 1.9 percent rather than the 18 percent⁴⁹ coverage rate of large and mid-sized corporations.
4. Small corporations and sole proprietorships, in contrast to larger corporations that employ a professional tax staff and have sufficient resources to contest recommended assessments, are likely to settle their tax assessments with the IRS quickly and without negotiations as described below:

A small business owner contacted by the IRS often does not have access to sophisticated tax advice to help him or her deal with the issues the IRS has raised. Small business owners are more likely than larger businesses to represent themselves (pro se representation) when challenging the IRS in court.⁵⁰ ...The small business owner is much more likely to accept the IRS claims without regard to whether they are correct or not compared to a large corporation. Further, the small business owner is more likely to settle for the amount that the IRS has assessed compared to a large corporation.⁵¹

Consequently, small corporations may behave towards taxation in ways similar to sole proprietorships. In a July 2007 study regarding the TY 2001 NRP results for sole proprietorships, GAO disclosed:⁵²

Most sole proprietors underreported net business income for tax year 2001, but a small proportion of them accounted for the bulk of understated taxes. This underreported income was caused by misreporting of both gross income and expenses. Based on what was detected in NRP reviews, at least 61 percent of sole proprietors⁵³ underreported their net income by \$93.6 billion in 2001. IRS recognizes that these are underestimates because detecting underreported income is difficult, especially cash receipts. After upward adjustment, IRS estimated that underreported net income resulted in sole proprietors understating their taxes by \$68 billion. Although most sole proprietors had

⁴⁸ The 1 percent coverage rate for small corporations is based on 19,697 small corporate examinations completed in FY 2011 divided by 1.9 million small corporate filings made during Calendar Year 2010.

⁴⁹ The 18 percent coverage rate for large and mid-sized corporations is based on 10,459 large and mid-sized corporate examinations completed in FY 2011 divided by 59,291 large and mid-sized corporate filings made during Calendar Year 2010.

⁵⁰ Pro se representation means self-representation. In other words, the individuals or businesses choose to represent themselves or cannot afford legal counsel to represent them in their case against the IRS.

⁵¹ Quantria Strategies, LLC, *An Examination of the 2001 IRS Tax Gap Estimates' Effects on Small Businesses* (March 2011), available at http://www.sba.gov/sites/default/files/2001%20IRS%20Tax%20Gap_0.pdf.

⁵² GAO, GAO-07-1014, *Tax Gap: A Strategy for Reducing the Gap Should Include Options for Addressing Sole Proprietor Noncompliance* (July 2007), available at <http://www.gao.gov/products/GAO-07-1014>.

⁵³ For TY 2001 there were 18 million individual income tax returns filed with sole proprietorships (Form 1040 (Schedule C), *Profit or Loss From Business (Sole Proprietorship)*).



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understated taxes, the amounts were skewed. Of all sole proprietors who understated taxes, the lower half understated by less than an estimated \$903. Over 1 million sole proprietors had understatements above \$6,200, which accounted for the upper 10 percent of understatements. These understatements averaged an estimated \$18,000 and accounted for 61 percent of all understated taxes on returns filed by sole proprietors.

In fact, in a July 1988 IRS publication explaining the methods for computing the underreporting portion of the small corporate Tax Gap, the IRS indicated that the method it used for estimating small corporation underreporting was similar to the method it used to estimate underreporting for individuals (as shown in Figure 6).

Figure 6: Excerpt of Publication 1415, Income Tax Compliance Research: Supporting Appendices to Publication 7285

C. Tax Gap from Unreported Income Expansion

In examinations of small corporations, TCMP detected some unreported income. As in the case of individual TCMP, however, corporate examinations were unable to discover all unreported income. To estimate the tax gap attributable to "undetected" unreported income, IRS followed nearly the same procedure it followed for individuals.

Source: *Income Tax Compliance Research, IRS Publication 1415 (July 1988).*

Equally important is size by business receipts. Significantly, a portion of small C corporations are substantially no more than incorporated sole proprietorships with returns that are similar to the returns studied in the TY 2001 NRP study. This is likely true of many business entities with gross receipts under \$100,000, as is illustrated in Figure 7.



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Figure 7: Business Returns Filed for Tax Year 2003

Form of Businesses	Size of Business Receipts				
	Under \$25,000	\$25,000 to Under \$100,000	Total Under \$100,000	\$100,000 or More	Total
Sole Proprietorships	13,308,130 68%	4,255,216 21%	17,563,346 89%	2,146,733 11%	19,710,079 100%
C Corporations	450,597 22%	307,399 15%	757,996 37%	1,301,635 63%	2,059,631 100%
S Corporations	829,112 25%	561,043 17%	1,390,155 42%	1,951,451 52%	3,341,606 100%
Total Corporations	1,279,709 24%	868,442 16%	2,148,151 40%	3,253,086 60%	5,401,237 100%
Partnership	1,284,396 54%	397,461 17%	1,681,857 71%	693,518 29%	2,375,375 100%
Total	15,872,235 58%	5,521,119 20%	21,393,354 78%	6,093,337 22%	27,486,691 100%

Source: IRS.

Figure 7 shows that 17.6 million of a total 19.7 million sole proprietorships (89 percent) had gross receipts of less than \$100,000. In contrast, 758,000 of 2.1 million corporate returns (37 percent) had gross receipts of less than \$100,000. Likewise, 42 percent of S corporations had gross receipts of less than \$100,000. Many of these entity types share similar business characteristics, such as owners being the managers with complete business control.

Evidently, business control is one predictor of overall compliance. This was observed by the GAO in its study of the NRP performed on S corporation returns filed for TYs 2003 and 2004.⁵⁴ Figure 8 shows noncompliance by the number of shareholders, specifically that the percentage of corporations that misreport certain line items goes up as the number of shareholders goes down.

⁵⁴ GAO, GAO-10-195, *Actions Needed to Address Noncompliance with S Corporation Tax Rules* (Dec. 2009), available at <http://www.gao.gov/products/GAO-10-195>.



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**Figure 8: Percentage of S Corporations Misreporting
Certain Line Items by Number of Shareholders**

Misreported Line Item	One Shareholder	Two or Three Shareholders	Four or More Shareholders
Net income	72	63	53
Other deductions ^a	57	48	34
Distributions	30	25	15
Gross receipts or sales	26	18	11
Cost of goods sold	20	20	11
Depreciation expense	16	13	8
Shareholder compensation ^b	15	10	4
Purchases	20	18	11
Taxes and license expense	11	8	6

Source: GAO Analysis of S corporation NRP data.

Notes: a = Other deductions include amortization; certain business costs; insurance premiums; legal and professional fees; supplies; travel; meals and entertainment; and utilities.

b = Understating compensation generally results in underpayment of employment taxes.

The same GAO S corporation study also revealed that:

- An estimated 68 percent of S corporations that filed returns for TY 2003 and 2004 misreported at least one item affecting net income.
- Misreporting varied according to size as measured by assets, with a concentration of adjustments in S corporations with assets under \$250,000.
- The direction of misreporting provided tax advantages for S corporations and their shareholders by understating income and overstating deductions. For example, in the case of misreporting the line item “gross receipts or sales,” 80 percent understated income, while 20 percent overstated income. In the case of the line item “other deductions,” 91 percent overstated the deduction, while 9 percent understated it.

Therefore, it follows that small C corporations with similar attributes exhibit similar pathologies as those found in sole proprietorships and S corporations with a single or limited number of shareholders. That is, a small percentage of these returns also account for a significant portion of the underreporting. However, at some point, ownership and management become separate and the C corporation behaves more like a mid-sized enterprise. This is clear when a comparison of operational examination results are analyzed.



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**Figure 9: Fiscal Year 2011 Examination Results
of Small C Corporations and Sole Proprietorships**

Description	Small C Corporations	Sole Proprietorships
Returns Filed Calendar Year 2010	1,931,008	14,867,564
Returns Examined	19,697	278,092
Coverage Rate	1.0%	1.9%
Field Return Examinations	19,243	151,033
Recommended Assessments	\$530,738,000	\$2,261,629,000
Field Recommended Assessments	\$527,644,000	\$1,586,680,000
Field No-Change Rate	30%	8%
Dollars Per Return	\$26,945	\$8,133
Field Dollars Per Return	\$27,420	\$10,506

Source: Our computations based on the FY 2011 IRS Databook.

Despite the similarities of some small corporations and sole proprietorships, a comparison of examination results for FY 2011 shows significant differences (see Figure 9).⁵⁵ For example, 30 percent of small corporate examinations result in a no-change (the return is considered correctly filed), while only 8 percent of sole proprietorship examinations do.

- One possible explanation for this difference is that the discriminant function⁵⁶ algorithms for identifying small corporation noncompliance are now ineffective. An analysis shows that between FY 2005 and FY 2009, the small corporate no-change rate can be at least partially attributed to the almost 40-percent no-change rate for discriminant function and discriminant function–related return examinations.
- Another explanation is that the examination results of small corporations that act similar to sole proprietorships are being masked in the data by other small corporations whose examination results more closely resemble those of large and mid-size corporations.
- The no-change rate could also be affected by the corporate net operating loss provisions. That is, even if additional tax was identified during an examination, there would not be additional recommended tax since a net operating loss carry back or carry forward can be used to offset or even completely pay for an audit adjustment. Unfortunately, the audit result included in the data is the amount of adjustment remaining (often zero) *after* the application of a net operating loss.

⁵⁵ Comparable differences can be seen in the data for other fiscal years.

⁵⁶ An audit selection system that uses mathematical formulas to calculate and score tax returns based on their potential for change.



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As a result, even though there were almost eight times as many sole proprietorship field examinations conducted as small corporate field examinations, these examinations resulted in only three times the recommended assessments. Consequently, the fact that the small corporate population has subpopulations, where some small corporations behave like sole proprietorships and some behave more like large and mid-size businesses, affects the operational examination program results.

For these reasons, the primary drawback of using the recommended tax amount from operational examination results to estimate the small corporate underreporting gap is that it is likely unrepresentative of the underlying population. Tax returns for operational examinations are identified and selected based on the likelihood that an adjustment exists, not for their proportion in the population. Consequently, the examination results may not be representative of the entire population, and the operational examinations are functionally the equivalent of a convenience sample.⁵⁷ On the contrary, tax returns chosen for the NRPs and the TCMPs are probability samples⁵⁸ chosen to represent the underlying population. The differences in the average results (point estimates) are made clear in the following quote:

...While TCMP audits are designed to be random, subsequent audits clearly are not. An average non-TCMP [operational examination] audit by the IRS yields over \$5,500 in additional assessments, compared to only \$289 for a random TCMP audit.⁵⁹

In summary, even though the yield curve analysis based on current IRS operational examination data used to develop the TY 2006 Tax Gap estimate for small corporations represents a significant improvement compared to past estimates based on 32-year-old data from the TY 1980 corporate TCMP, it still suffers from a lack of specificity. Specifically:

- Information is unavailable to update the small corporation discriminant function selection formulas.
- There is not a simple approach to compare gross receipt levels of small corporations with comparable gross receipts of sole proprietorships to identify common pathologies.

⁵⁷ A convenience sample, also called an accidental or haphazard sample, is a nonprobability sample that does not involve random selection and cannot rely on the rationale of probability theory. Such samples are problematic because the user has no evidence that they are representative of the underlying population.

⁵⁸ A probability sample or random sample is any method of sampling that utilizes some form of random selection to assure that the different units in a population have equal probabilities of being chosen. In general, researchers consider probabilistic or random sampling methods more accurate and rigorous because the odds or probability that the sample is representative of the population are known, and estimates can be made of the confidence intervals for statistics.

⁵⁹ James Andrenoi, Brian Erard, & Jonathan Feinstein, Journal of Economic Literature, Vol. 36, No. 2, pp. 818–860, *Tax Compliance* (June 1998), available at <http://www.jstor.org/stable/2565123>.



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- There is no data available based on income or asset level to identify when small corporations begin to exhibit the traits different from sole proprietorships and more like mid-sized or large corporations.

Recommendation 7: The Director, Office of RAS, should consider conducting an NRP review on small corporations filing Form 1120, *U.S. Corporate Income Tax Return*, with total assets of less than \$10 million. This will allow the IRS to more accurately model the small corporate Tax Gap by using a random sample results partnered with the DCE method. Subsequently, the IRS could use the results of the NRP to better calibrate the yield curve analysis results used to estimate the small corporate Tax Gap in future years. A small corporation NRP can also deliver other benefits, such as:

- Updating small corporation discriminant function selection formulas so that they reflect how small corporations operate in the 21st Century rather than the latter half of the 20th Century. Such updated discriminant function formulas should impact the selection of returns by reducing the no-change rate, which will increase the yield per return. This will allow the IRS Examination function to operate more efficiently and effectively.
- Developing information, specifically on total gross receipts, to allow the IRS to differentiate and target small corporations that act similar to noncompliant sole proprietorships from other small corporations. Such information would allow the IRS to identify and concentrate resources on the small corporations that act in a similar manner to sole proprietorships and seek to evade taxes through understating income or overstating expenses.
- Identifying the characteristics (asset levels, gross receipts, number of employees, public/private ownership, *etc.*) at which small C corporations cease to behave like sole proprietorships and start to behave more like large and mid-size corporations. This would allow the IRS to implement more sophisticated examinations techniques and to match appropriate examiner skill levels to corporations under examination.

Management's Response: The IRS is currently performing a NRP Form 1120 reporting compliance study of TY 2010 returns and it is anticipated that this study will provide valuable insights on the compliance behavior of the largest subpopulation of C corporations. The IRS agrees to consider the feasibility of conducting additional NRP studies of small corporations.

Office of Inspections and Evaluations Comment: We concur that the current NRP study could provide valuable insights into small corporation compliance behavior. In addition, we concur that after the current study, the IRS should consider whether further studies are feasible.



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Appendix I

Detailed Objective, Scope, and Methodology

Objective

The objective of our evaluation was to provide the information needed to assist the IRS in understanding how the Tax Gap estimate is derived and used and whether additional information is needed.

This evaluation was performed because the Tax Gap is a widely used measure in tax policy and administration and ensuring the best possible estimate is derived is extremely important. Some state that the absolute number is not important since the estimated \$450 billion is a significant amount. However, the important consideration for the accuracy of the estimate is not in the absolute number, but in the relationship between the different forms of noncompliance and types of tax. For example, while the IRS has an estimate for small business underpayments, there is no estimate for offshore tax evasion. Without estimates to measure the size and magnitude of the noncompliance, decision and policy makers have difficulty in determining potential solutions in terms of legislation, budgetary commitments, and resource allocations. Therefore, as Congress considers tax reform, it is important that the Tax Gap estimate reflect as accurately as possible the many forms and areas of noncompliance so that tax policy options can be weighed and considered in all efforts to increase overall voluntary compliance.

Scope

Our evaluation focused on the NRP-era studies performed on TYs 2001 and 2006 individual returns and the Tax Gap estimates for those periods. There are some references to the TCMP studies as historical references. The evaluation did not include reviews of the employment tax or excise tax NRPs, where updated results have not been published.

Our scope was limited because the Tax Gap estimation process employs statistical methods beyond the professional competencies of our evaluators. Although we did informally consult with a subject matter expert on an array of issues, we could not form an opinion on the statistical methods used in the DCE method for individual taxes or the effect of using nonrandom samples from operational examinations to project the corporate Tax Gap.

Methodology

- 1) For the context and background needed to perform our evaluation, overall research included identifying studies and reports that evaluate Tax Gap estimates from sources such as private reviews, academia, public policy research organizations, the GAO, and previous Treasury Inspector General for Tax Administration work.



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- 2) To determine the accuracy of the Tax Gap and its importance, we contacted congressional staffs of the tax writing committees to determine from a policy perspective the importance of the accuracy of the Tax Gap estimate and whether they had any other concerns about the information provided by the estimate, such as frequency of updates. In addition, we contacted former Commissioners of the IRS to identify their views and concerns about the Tax Gap estimate in general and whether they have specific concerns about the accuracy. Next, we contacted Public Policy Research Institute leaders connected to the Internal Revenue Service Advisory Council Tax Gap group to determine their role in ensuring the accuracy of the Tax Gap estimate. Finally, we reviewed the literature from international organizations such as the Organisation of Economic Co-operation and Development.
- 3) We determined whether Pub. L. No. 106-554 § 515 and related regulations concerning the standards for performing studies apply to the IRS Tax Gap estimate by contacting OMB officials.
- 4) We obtained information on the estimation methodology of the Tax Gap for the major tax types from the IRS Office of Research. We requested pertinent documents concerning the plan, design, and conduct of the reviews; the quality assurance process; and the conversion of the NRP into the Tax Gap estimate. Finally, we reviewed any documents prepared by the Office of Research that explain the estimation methods used, barriers encountered, or cautions about the reliability of the information (including the IRS Working Paper). We evaluated whether the estimates include various types of noncompliance and if these are addressed specifically in the estimates.
- 5) We contacted the contractor who performs the portion of the Tax Gap estimate that uses the DCE method to better understand the method employed for estimating the individual NRP and how it is used with smaller annual sample sizes.
- 6) We performed research on prior Tax Gap studies to determine whether the methodology for estimating the Tax Gap has changed and whether the changes add or detract from the reliability of the estimates.
- 7) We performed research on economic and statistical information produced by the Bureau of Economic Analysis concerning any available comparisons for Tax Gap estimates.
- 8) We identified relevant studies concerning the foreign investment portfolios produced by the Department of the Treasury to identify the growth of investment by nonresidents. We identified studies by public policy research organizations and academia concerning tax abuse and foreign portfolio investments through tax havens. In addition, we researched congressional hearings concerning off-shore tax evasion to identify the history of the concerns and any estimates of the magnitude of the related tax evasion. We identified where there are quantified estimates for perspective and comparisons to Tax Gap estimates.



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- 9) We identified public policy research organization studies concerning the informal economy and its effect on the accuracy of Tax Gap estimates. In addition, we researched congressional hearings concerning the informal economy to identify the history of the concerns and any estimates of the magnitude of the related tax evasion. We identified where there are quantified estimates for perspective and comparisons to Tax Gap estimates.
- 10) For the corporate Tax Gap estimate, we reviewed the basis of the estimate. We determined whether the estimation method provides a reasonable, reliable method for quantifying corporate noncompliance. We reviewed public policy research organization information and IRS data concerning corporate tax compliance. We also identified the concerns about determining the difference between tax avoidance and tax evasion and what areas of corporate taxation are susceptible to noncompliance. We evaluated the sampling methods used as a basis for the corporate Tax Gap estimate.



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Appendix II

Major Contributors to This Report

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Appendix III

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Appendix IV

Criteria for Agency Priority Goals

The Tax Gap estimate measurement of the VCR (see Figure 1, Gross Tax Gap Box) is now being used by the IRS and the Department of the Treasury as the measure for achieving the Agency Priority Goal¹ of increasing voluntary compliance. According to OMB Circular A-11 Part 6:²

The GPRA [Government Performance and Results Act] Modernization Act serves as a foundation for engaging leaders in performance improvement and creating a culture where data and empirical evidence play a greater role in policy, budget and management decisions.

The purposes of the GPRA Modernization Act of 2010³ are to:

- Improve the confidence of the American people in the capability of the Federal Government by systematically holding Federal agencies accountable for achieving program results.
- Improve program performance by requiring agencies to set goals, measure performance against those goals, and report publicly on progress.
- Improve Federal program effectiveness and public accountability by promoting a focus on results, service quality, and customer satisfaction.
- Help Federal managers improve service delivery by requiring that they plan for meeting program goals and by providing them with information about program results and service quality.
- Improve congressional decisionmaking by providing more information on achieving statutory objectives and on the relative effectiveness and efficiency of Federal programs and spending.
- Improve internal management of the Federal Government.

¹ Reference to Administration goal to increase the VCR is available at http://goals.performance.gov/goal_detail/TREAS/333#Progress_and_Next_Steps (last visited Mar. 14, 2013).

² OMB, OMB Circular No. A-11, *Preparation, Submission, and Execution of the Budget*, Part 6, *Preparation and Submission of Strategic Plans, Annual Performance Plans, and Annual Program Performance Reports* (Aug. 2012)

³ GPRA Modernization Act of 2010, Pub. L. No. 111-352, (codified as amended in scattered sections of 5 U.S.C. and 31 U.S.C.).



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- Improve usefulness of performance and program information by modernizing public reporting.

One of the foundations of setting performance goals, monitoring progress, and achieving goals is the quality of the underlying measurement data. In order to have a credible goal, the data should be verifiable and valid. Within the GPRA Modernization Act of 2010, three different sections amending the budgeting process⁴ stress the importance of accuracy and reliability of the data in measuring progress toward performance and priority goals by including identification of the same five requirements:

- (A) *The means to be used to verify and validate measured values.*
- (B) *The source for the data.*
- (C) *The level of accuracy required for the intended use of the data.*
- (D) *Any limitations to the data at the required level of accuracy.*
- (E) *How the agency will compensate for such limitations if needed to reach the required level of accuracy.*⁵

Furthermore, the GPRA Modernization Act requires the 24 Federal agencies covered by the Chief Financial Officers Act of 1990⁶ to submit Agency Priority Goal information to OMB and to review progress on the Agency Priority Goals at least on a quarterly basis.⁷ An Agency Priority Goal supports improvements in near-term outcomes, customer service, or efficiencies and advances progress toward longer-term, outcome-focused strategic goals and objectives in the agency's strategic plan. It is a near-term result or achievement that leadership wants to accomplish within approximately 24 months that relies predominantly on agency execution to be accomplished, not new legislation or additional funding.

Amongst other criteria, Agency Priority Goals must possess the following attributes:

- Be able to discern if the goal has been achieved by the end of the 24-month period.

⁴ 31 U.S.C., *Subtitle II – The Budget Process.*, see

<http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE&searchPath=Title+31%2FSubtitle+II%2FCHAPTER+11&oldPath=Title+31%2FSubTitle+II&isCollapsed=true&selectedYearFrom=2011&ycord=1491>.

⁵ 31 U.S.C. § 1115 (b)(8) (2001), 31 USC § 1116 (c)(6) (2001) and 31 U.S.C. § 1122(b)(5) (2011) available at <http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE&searchPath=Title+31%2FSubtitle+II%2FCHAPTER+11&oldPath=Title+31%2FSubTitle+II&isCollapsed=true&selectedYearFrom=2011&ycord=1491>.

⁶ Pub. L. No. 101-576, 104 Stat. 2838 (codified as amended in scattered sections of 5 U.S.C., 31 U.S.C., and 42 U.S.C.).

⁷ OMB, OMB Circular No. A-11, *Preparation, Submission, and Execution of the Budget*, Section 250, *Agency Priority Goals* (Aug. 2012).



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- Be ambitious yet achievable within the 24-month period.

Based on the historic trends of the time required to prepare a Tax Gap estimate, the current VCR measurement does not appear to meet the criteria to be an Agency Priority Goal.

Although the IRS uses rigorous methods to develop the Tax Gap estimate and in turn compute a VCR, the process could be improved and made more transparent. Specifically, now that the VCR is being used as an Agency Priority Goal, it appears that it and the IRS's Tax Gap estimates would fall under the requirements of 31 United States Code (U.S.C.) Section (§) 1122, *Transparency of programs, priority goals, and results*. This includes the requirements of 31 U.S.C. § 1122(b)(5) that stress the importance of accuracy and reliability of the data and require, among other things, the disclosure of the source of the data and the means used to verify and validate the measured values.

The decision to make the VCR an Agency Priority Goal was made by the Department of the Treasury and the OMB. To overcome the issues with the timeliness of Tax Gap estimates, a decision was made to use quarterly diagnostic measures. These are:

- Customer Accuracy – Tax Law (Phones)
- Customer Accuracy – Accounts (Phones)
- Customer Contacts Resolved per Staff Year
- Criminal Investigations Completed

Whether these diagnostic measures are relevant to the VCR could be open to discussion. However, our scope did not include this analysis.



*The Internal Revenue Service Needs to
Improve the Comprehensiveness, Accuracy,
Reliability, and Timeliness of the Tax Gap Estimate*

Appendix V


Management's Response to the Draft Report



**DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, DC 20224**

August 7, 2013

**MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR INSPECTION
AND EVALUATION**

FROM: Rosemary D. Marcuss 
Director, Research, Analysis and Statistics

SUBJECT: Draft Evaluation Report – The Internal Revenue Service
Needs to improve the Comprehensiveness, Accuracy,
Reliability and Timeliness of the Tax Gap Estimate
(#IE-12-013)

Thank you for the opportunity to respond to the draft audit report on the IRS estimate of the Tax Gap.

The IRS agrees that some steps may be taken that would improve the quality of Tax Gap estimates and provide additional insights to policymakers. We have addressed each of TIGTA's recommendations in the attachment to this response.

We appreciate the continued support and assistance provided by your office. If you have any questions, please contact me at (202) 874-0100 or a member of your staff may contact Barbara Vaira, RAS GAO/TIGTA Liaison, at (202) 874-0443.

Attachment



*The Internal Revenue Service Needs to
Improve the Comprehensiveness, Accuracy,
Reliability, and Timeliness of the Tax Gap Estimate*

Attachment

Corrective Actions Arising From Treasury Inspector General Tax Administration (TIGTA)
IE-12-013 Recommendations

Recommendation 1: The Director, Office of RAS should conduct a study to determine the feasibility of providing interim updates to Tax Gap estimates. More frequent updates would facilitate tax system decision making and assist the Department of the Treasury in monitoring the Agency Priority Goal for increasing voluntary compliance.

Corrective Action: The IRS agrees to conduct a study of the feasibility of providing interim updates.

Responsible Official: Director, RAS

Implementation Date: December 31, 2014

Recommendation 2: The Director, Office of RAS should develop processes and procedures to ensure compliance with applicable OMB standards to improve the overall confidence that can be placed in the accuracy and reliability of the Tax Gap estimate. This includes developing a method to estimate the total costs for performing each Tax Gap estimate and study. This information will assist decision makers in determining the methods and frequency of future studies.

Corrective Action: The IRS agrees to ensure compliance with OMB's Standards and Guidelines for Statistical Surveys and develop a method for estimating the research costs of estimating the tax gap.

Responsible Official: Director, RAS

Implementation Date: December 31, 2016

Recommendation 3: The Director, Office of RAS should issue a published report to explain the methods, assumptions and premises used to develop the estimates. Furthermore, the report should also include comments about the confidence of the reliability and accuracy of the estimate and comparisons with previous estimates. The report should specifically state instances where no estimates have been developed and whether the absence of an estimate could affect the final estimate and the VCR. Finally, the report should be subject to peer review.

Corrective Action: Documentation regarding the methods, assumptions and premises used to develop estimates in the Tax Gap are available on [irs.gov](http://www.irs.gov) at <http://www.irs.gov/uac/IRS-The-Tax-Gap> and <http://www.irs.gov/uac/SOI-Tax-Stats-2012-IRS-TPC-Research-Conference>. The IRS agrees to supplement these documents with a comprehensive official IRS report. The IRS remains committed to continuing its efforts to seek peer review.

Responsible Official: Director, RAS

Implementation Date: December 31, 2015



*The Internal Revenue Service Needs to
Improve the Comprehensiveness, Accuracy,
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Attachment

Recommendation 4: The Director, Office of RAS should develop the capability to estimate the Tax Gap for the informal economy. The information developed can then be used by tax policy decision makers and tax administration officials to develop strategies to improve voluntary compliance.

Corrective Action: The IRS agrees to conduct a study of the feasibility of breaking out the portion of the tax gap associated with informal supplier income from the current tax gap estimate.

Responsible Official: Director, RAS

Implementation Date: December 31, 2014

Recommendation 5: The Director, Office of RAS should perform a study to determine the feasibility to estimate the Tax Gap for offshore tax evasion. The information developed can then be used by tax policy decision makers and tax administration officials to develop strategies to improve voluntary compliance.

Corrective Action: The IRS agrees to conduct a study of the feasibility of breaking out the portion of the tax gap associated with offshore tax evasion from the current tax gap estimate.

Responsible Official: Director, RAS

Implementation Date: December 31, 2014

Recommendation 6: The Director, Office of RAS should consider changing the estimation model for large corporations from using recommended tax to using tax assessments from operational examinations to more clearly reflect the noncompliance found and ultimately sustained on large corporate examinations.

Corrective Action: The IRS agrees to conduct a study on the merits of alternative approaches to estimating noncompliance using large corporation audits.

Responsible Official: Director, RAS

Implementation Date: December 31, 2014

Recommendation 7: The Director, Office of RAS should consider conducting an NRP review on small corporations filing Form 1120, U.S. Corporate Income Tax Return, with total assets of less than \$10 million.

Corrective Action: The IRS is currently engaged in a Form 1120 reporting compliance study of Tax Year (TY) 2010 returns and it is anticipated that this study will provide valuable insights on the compliance behavior of the largest subpopulation of C corporations. The IRS agrees to consider the feasibility of conducting additional NRP studies of small corporations.



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Attachment

Responsible Official: Director, RAS

Implementation Date: December 31, 2015