Do Accuracy-Related Penalties Improve Future Reporting Compliance by Schedule C Filers?
Do Accuracy-Related Penalties Improve Future Reporting Compliance by Schedule C Filers?1

EXECUTIVE SUMMARY

INTRODUCTION

BACKGROUND
Accuracy-related penalties may provide an incentive to report income accurately. Accuracy-related penalties may promote compliance by deterring noncompliance, setting expectations, influencing norms, and increasing the perceived fairness of the tax system. Reasonable cause penalty exceptions may also increase compliance, if properly applied. Accuracy-related penalties may not have the same effect on compliance when assessed by default, appealed, or abated.

METHODOLOGY
TAS identified sole proprietors subject to audit adjustments in 2007 and used changes in their “DIF” scores as a proxy for changes in their reporting compliance. TAS identified matched pairs of similarly situated taxpayers — those subject to a penalty and those not subject to a penalty.

FINDINGS
Accuracy-related penalties had no significant effect on the subsequent reporting compliance (as measured by DIF) of those subject to them. Accuracy-related penalties did not improve reporting compliance (as measured by DIF) among taxpayers subject to default assessments or who appealed, and five years later these taxpayers appeared less compliant than those not subject to penalties. Accuracy-related penalties did not improve reporting compliance (as measured by DIF) among taxpayers whose penalties were later abated, and five years later these taxpayers appeared less compliant than those whose penalties were not abated.

CONCLUSION

1 The principal authors of this study are Tom Beers, Senior Research Advisor, Jeff Wilson, Research Director, Mike Nestor, Research Analyst, Amy Ibbotson, Research Analyst, Joseph Saldana, Research Analyst, and Eric LoPresti, Senior Attorney Advisor, of the Office of the Taxpayer Advocate.
EXECUTIVE SUMMARY

Accuracy-related penalties are supposed to promote voluntary compliance. Congress has directed the IRS to develop better information concerning the effects of penalties on voluntary compliance, and it is the IRS’s official policy to recommend changes when the Internal Revenue Code (IRC) or penalty administration does not effectively do so. The objective of this study was to estimate the effect of accuracy-related penalties on Schedule C filers (i.e., sole proprietors) whose examinations were closed in 2007. TAS compared their subsequent compliance to a group of otherwise similarly situated “matched pairs” of taxpayers who were not penalized. TAS used Discriminant Function (or “DIF”) scores — an IRS estimate of the likelihood that an audit of the taxpayer’s return would produce an adjustment — as a proxy for a taxpayer’s subsequent compliance.

While all groups of Schedule C filers who were subject to an examination assessment improved their reporting compliance (as measured by reductions in their DIF scores), those subject to an accuracy-related penalty had no better subsequent reporting compliance than those who were not. Thus, accuracy-related penalties did not appear to improve reporting compliance among the Schedule C filers who were subject to them. Further, penalized taxpayers who were also subject to a default assessment or who appealed their assessment had smaller reductions in DIF scores, suggesting lower reporting compliance five years later as compared to similarly situated taxpayers who were not penalized.2 Similarly, those whose penalty was abated had smaller reductions in DIF scores, suggesting lower reporting compliance five years later as compared to taxpayers whose penalty was not abated.

Prior research suggests that a taxpayer’s perception of the fairness of the tax law, the IRS and the government drive voluntary compliance decisions, and the findings of this study are consistent with that research. Taxpayers subject to default assessments may be more likely to feel the penalty assessment process was unfair, which may have caused lower levels of future compliance. Similarly, those who appeal may be more likely to feel that the actual result was unfair, which may have caused lower levels of future compliance. Finally, those subject to a penalty assessment that is later abated may also feel that the IRS initially sought to penalize them unfairly, potentially causing lower levels of future compliance.

These findings have a number of policy implications. First, the IRS should revise its procedures to ensure that it does not propose a penalty before exhausting efforts to communicate with a taxpayer to determine whether a penalty actually applies.3 By design, automated procedures — those that presume a penalty applies unless a taxpayer explains and documents why it does not — are likely to generate more default assessments and penalty abatements than other examination methods. As taxpayers who were penalized after default assessments or whose penalties were abated had smaller reductions in DIF scores, suggesting lower levels of voluntary compliance after five years than those who were not, these automated procedures may be inconsistent with the IRS’s goal of promoting voluntary compliance.

Second, the IRS’s Appeals function should consider doing more to objectively evaluate and then explain its determinations, particularly when it sustains a penalty. As taxpayers who were penalized after an

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2 Except as otherwise indicated, all differences discussed in this report are statistically significant (with 95 percent confidence). We note, however, that the DIF is an approximate measure of reporting compliance, and small differences, although statistically significant, may not indicate a real difference in reporting compliance.

3 For examples of such failures, see National Taxpayer Advocate 2013 Annual Report to Congress vol. 1, supra (Most Serious Problem: The IRS Inappropriately Bans Many Taxpayers From Claiming EITC) and National Taxpayer Advocate 2007 Annual Report to Congress 275 (Most Serious Problem: The Accuracy-Related Penalty in the Automated Underreporter Units).
appeal had smaller reductions in DIF scores, suggesting lower levels of compliance after five years than those who were not penalized, it is possible that they did not perceive Appeals as fairly evaluating whether the penalty should apply. Finally, in the case of penalties that taxpayers generally regard as unfair (e.g., where a reasonable cause exception does not apply, or where it may be interpreted so narrowly as to, in effect, create a strict liability penalty), the IRS should consider applying a broader reasonable cause exception (or work with the Treasury Department to propose one) that is simple, fair, transparent, and easy to administer.
INTRODUCTION

According to Congress and IRS policy, the IRS should administer civil tax penalties to promote voluntary compliance. An IRS task force expressly rejected other purposes such as raising revenue, punishing noncompliant behavior, and reimbursing the government for the cost of compliance programs, because policies designed to fulfill other purposes may conflict with the primary goal of enhancing voluntary compliance.

In 1989, Congress recommended that the IRS “develop better information concerning the administration and effects of penalties.” In addition, the IRS’s official policy is to collect information “to determine the effectiveness of penalties in promoting voluntary compliance… [and recommend] changes when the Internal Revenue Code or penalty administration does not effectively promote voluntary compliance….” Accordingly, this report investigates the effect of penalties on future compliance, as proposed in the National Taxpayer Advocate 2012 Annual Report to Congress.8

Because different penalties apply to different conduct and different taxpayer populations might respond differently, TAS had to choose a particular penalty and taxpayer segment to study. The single largest component of the tax gap — the gap between the amount of tax due and the amount voluntarily and timely paid — is underreporting of business income by individuals. Thus, this study focuses on the effect of accuracy-related penalties, which apply to underreporting, on Schedule C filers.

In light of the IRS’s increasing use of automated processes (e.g., correspondence examinations and the automated underreporter or AUR process) to assess penalties before communicating with the taxpayer (i.e., penalties assessed based on incomplete information and that may not be warranted) one hypothesis was that “default” penalty assessments might have a different effect on future compliance than other penalty assessments. For similar reasons, TAS separately analyzed assessments that were later abated or appealed.

BACKGROUND

Accuracy-related penalties may provide an incentive to report income accurately.

A taxpayer may be subject to a 20 percent accuracy-related penalty on the portion of any underpayment attributable to (1) the taxpayer’s negligence or disregard of rules or regulations, or (2) a “substantial
understatement” of income tax. A taxpayer may be subject to the “negligence” penalty if he or she fails to make a reasonable attempt to comply with the internal revenue laws; does not exercise ordinary and reasonable care in preparing his or her tax return; or fails to keep adequate books and records or substantiate items properly. In assessing a penalty, the IRS may also consider factors such as the taxpayer’s compliance history; actions taken by the taxpayer to ensure the tax was correct and timely filed; and the taxpayer’s explanation for any inaccuracies.

An individual may be subject to a “substantial understatement” penalty if the understatement exceeds the greater of $5,000 or ten percent of the tax required to be shown on the return. Generally, an “understatement” is the difference between (1) the correct amount of tax and (2) the amount reported on the return, reduced by any rebate. Understatements are usually reduced by any portion attributable to (1) an item for which the taxpayer had substantial authority; or (2) any item for which the taxpayer adequately disclosed the relevant facts affecting the item’s tax treatment, provided the taxpayer had a reasonable basis for such treatment.

A taxpayer generally is not subject to an accuracy-related penalty if he or she establishes a “reasonable cause” for the underpayment and acted in good faith. The most important factor in establishing reasonable cause is the extent of the taxpayer’s effort to determine the correct tax liability. Thus, the combination of accuracy-related penalties and reasonable cause exceptions may provide an incentive for taxpayers to make reasonable and good faith efforts to report their income accurately.

Accuracy-related penalties may promote compliance by deterring noncompliance, setting expectations, influencing norms, and increasing the perceived fairness of the tax system. Penalties obviously deter some people from cheating, but others comply voluntarily for a variety of other reasons. Penalties may help taxpayers understand what compliance requires. So-called “tax morale”

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10 IRC § 6662(b)(1) (negligence or disregard of rules or regulations); IRC § 6662(b)(2) (substantial understatement). Although the IRS may assess more than one accuracy-related penalty, the total penalty rate cannot exceed 20 percent (or 40 percent in certain circumstances) because the penalties are not “stackable.” Treas. Reg. § 1.6662-2(c). There are several accuracy-related penalties, but this discussion focuses on the accuracy-related penalties for negligence and substantial understatements because they are the most common.

11 IRC § 6662(c); Treas. Reg. § 1.6662-3(b).

12 Internal Revenue Manual (IRM) 4.10.6.2.1 (May 14, 1999).

13 IRC § 6662(d)(1)(A)(i)-(ii). For corporations (other than S corporations or personal holding companies), an understatement is substantial if it exceeds the lesser of ten percent of the tax required to be shown on the return or $10,000. IRC § 6662(d)(1)(B)(i), (ii).

14 IRC § 6662(d)(2)(A).

15 IRC § 6662(d)(2)(B). No reduction is permitted, however, for any item attributable to a tax shelter. IRC § 6662(d)(2)(C)(i).

16 IRC § 6664(c)(1).

17 Treas. Reg. § 1.6664-4(b)(1).


19 See, e.g., National Taxpayer Advocate 2012 Annual Report to Congress vol. 2, 1-28 (Factors Influencing Voluntary Compliance by Small Businesses: Preliminary Survey Results).

may play a role for those who value integrity, honesty, and the benefits of government;\textsuperscript{21} and “social norms” may play a role for those who want to comply because they believe that other similar taxpayers do. Those motivated by reciprocity may be influenced by their perception of whether the government or the IRS is respecting the basic elements of procedural justice by acting with impartiality, honesty, fairness, courtesy, and respect for taxpayer rights.\textsuperscript{22} Indeed, recent research finds a correlation between perceptions of fairness and voluntary compliance.\textsuperscript{23} Moreover, the IRS generally acknowledges that such perceptions drive compliance and excessive or undeserved penalties can discourage it.\textsuperscript{24}

**Reasonable cause penalty exceptions may also increase compliance, if properly applied.**

As noted above, a penalty generally will not apply to a taxpayer who can show a good faith “reasonable cause” for the failure to comply.\textsuperscript{25} To the extent that a reasonable cause exception reduces the perceived likelihood that noncompliance will trigger a penalty, it may reduce the incentive to comply. If properly applied, however, a reasonable cause exception should motivate taxpayers to use good faith efforts to comply with tax laws because it reassures them that their efforts will pay off (\textit{i.e.}, a penalty will not apply so long as the taxpayer makes a reasonable good faith effort to comply, even if he or she fails). Properly applying the exception also promotes the perception that the penalties are fair.\textsuperscript{26} Thus, the IRS’s application of a penalty may affect the extent to which it promotes or discourages voluntary compliance.

**Accuracy-related penalties may not have the same effect on compliance when assessed by default, appealed, or abated.**

The IRS sometimes proposes penalties automatically, before performing a careful analysis of the relevant facts and circumstances.\textsuperscript{27} As shown by the following table, the IRS may use different levels of effort to locate taxpayers and ascertain the reason for the apparent discrepancy, depending on the type of examination.

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\textsuperscript{21} A similar theory is that taxpayers comply because of their “self-concept” as being honest. See, e.g., Nina Mazar, \textit{The Dishonesty of Honest People: A Theory of Self-Concept Maintenance}, 45 J. Mkt’g Res. 633-644 (2008).

\textsuperscript{22} See National Taxpayer Advocate 2012 Annual Report to Congress vol. 2, 1-28 (Factors Influencing Voluntary Compliance by Small Businesses: Preliminary Survey Results) (finding that sole proprietors who believe the government, the IRS, and the tax laws are fair may be more likely to comply). Accord Nina Mazar, \textit{The Dishonesty of Honest People: A Theory of Self-Concept Maintenance}, 45 J. Mkt’g Res. 633-644 (2008).

\textsuperscript{23} National Taxpayer Advocate 2012 Annual Report to Congress vol. 2, 1-28.

\textsuperscript{24} IRM 20.1.1.2.1(10) (Nov. 25, 2011) (“Penalties best aid voluntary compliance if they support belief in the fairness and effectiveness of the tax system.”); IRM 4.26.16.4(4)(5) (July 1, 2008) (“examiners should consider whether the issuance of a warning letter and the securing of delinquent FBARs, rather than the assertion of a penalty, will achieve the desired result of improving compliance in the future ... [O]pportunity is necessary because the total amount of penalties that can be applied under the statute can greatly exceed an amount that would be appropriate in view of the violation.”); IRM 20.1.1.3(4) (Dec. 11, 2009) (“A wrong [penalty] decision, even though eventually corrected, has a negative impact on voluntary compliance.”).

\textsuperscript{25} See, e.g., IRC § 6664(c).

\textsuperscript{26} According to the IRM, “[v]oluntary compliance is achieved when a taxpayer makes a good faith effort to meet the tax obligations defined by the Internal Revenue Code.” IRM 20.1.1.2.1(6) (Nov. 25, 2011). If so, then penalizing taxpayers who have made a good faith effort does not promote voluntary compliance very effectively because it penalizes some who have done so.

\textsuperscript{27} See e.g., National Taxpayer Advocate 2013 Annual Report to Congress vol. 1, supra (Most Serious Problem: The IRS Inappropriately Bans Many Taxpayers From Claiming EITC); National Taxpayer Advocate 2007 Annual Report to Congress 275 (Most Serious Problem: The Accuracy-Related Penalty in the Automated Underreporter Units); National Taxpayer Advocate 2010 Annual Report to Congress 198 (Most Serious Problem: The IRS’s Over-Reliance on Its “Reasonable Cause Assistant” Leads to Inaccurate Penalty Abatement Determinations).
Automatic penalties — those assessed based on a presumption that they apply before obtaining all relevant information from the taxpayer to determine whether they actually apply — seemingly ignore direction from Congress that the IRS should "make a correct substantive decision in the first instance rather than mechanically assert penalties with the idea that they will be corrected later." Other stakeholders have expressed similar concerns. From the taxpayer's perspective, penalties that the IRS proposes automatically (as well as default assessments) and similar assessments that the taxpayer appeals may not take the taxpayer's effort to comply into account, and may be less likely to promote the sense that the tax system is fair. For this reason, default penalty assessments and those later appealed or abated may not have the same positive effect on voluntary compliance as other penalty assessments. Thus, TAS analyzed these taxpayer segments separately.

28 Compare IRM 4.10.2.7.2 (Apr. 2, 2010) (describing how field and office exam employees may use asset locator services, postal traces, credit reports, internet searches, IDRS searches, third party contacts, research of related TINs, and personal visits to locate the taxpayer) with IRM 4.19.13.13 (Jan. 1, 2013) (discussing how corr. exam employees research addresses using IDRS).

29 See IRM 4.10.1.5.3.2(4) (May 14, 1999) ([For field and office exams] "[A]ll correspondence must contain an employee name, contact telephone number, employee identification number, and signature"). While corr. exam letters include a general number, an examiner may not be assigned to a case in corr. exam unless the IRS receives a response to its computer-generated letters. See, e.g., IRM 4.19.20.1(1) (Jan. 1, 2013). Accordingly, the IRS cannot list the examiner's name or number.

30 For field and office exams, employees are required to communicate with the taxpayer before asserting penalties. See IRM 4.10.6.3.5 (May 14, 1999) ("To ensure the proper consideration and appropriate application of penalties, it is very important to solicit the taxpayer's explanation for adjustments"); IRM 4.10.6.4(3) (May 14, 1999) ("The assertion of penalties, including alternative positions, should be discussed with the taxpayer and/or representative prior to issuing an examination report"). These requirements do not apply in corr. exam. See, e.g., IRM 4.19.13.5.3 (Jan. 1, 2013) ("[When documenting penalties on a lead sheet] the taxpayer's position must be addressed [only] if the taxpayer responds to the Exam report and addresses the underpayment in the response.").

31 Compare IRM 4.10.2.7.2.7 (Apr. 2, 2010) (for field and office exams a penalty is not assessed unless non-assessment would undermine compliance) with IRM 20.1.5.7.1(5)(a) (Jan. 24, 2012) (indicating corr. exam will assert the negligence penalty even if a taxpayer is not located).

32 IRM 4.10.8.11 (Aug. 11, 2006).

33 id.

34 IRM 4.19.10.1.6 (Feb. 24, 2011).


36 American Institute of Certified Public Accountants (AICPA), Report on Civil Tax Penalties: The Need for Reform (Aug. 28, 2009) ("[I]ncreasingly, penalties are assessed using automated processes ... without the benefit of pre-assessment rights to pursue reasonable cause and other defenses. In many instances, taxpayers pay penalties even if they are unwarranted because it is so difficult and costly to challenge a penalty once it is assessed."). American Bar Association (ABA) Tax Section, Comments Concerning Possible Changes to Penalty Provisions of the Internal Revenue Code (1999), http://www.americanbar.org/groups/taxation/policy/public_policy/provisions12.html ("Automatic assertion, followed by abatement, is far less satisfactory than assertion after inquiry, because taxpayers resent being penalized first and then having to prove compliance, and because many penalties that are asserted and paid probably should never have been assessed."). Similarly, the IRS's penalty handbook states, "[E]rrorous penalty assessments and incorrect calculations confuse taxpayers and misrepresent the overall competency of the IRS.") IRM 20.1.1.2.2(1)(b) (Nov. 25, 2011).

37 Surveys consistently find that taxpayers report that personal integrity is the strongest factor influencing tax compliance. See, e.g., IRS Oversight Board, 2012 Taxpayer Attitude Survey (Feb. 2013), http://www.treasury.gov/irsob/reports/2013/IRSOB-TAS%202012~FINAL.pdf.
METHODOLOGY

**TAS identified sole proprietors subject to audit adjustments in 2007 and used changes in their “DIF” scores as a proxy for changes in their reporting compliance.**

TAS sought to determine how accuracy-related penalty assessments affect subsequent reporting compliance by sole proprietors (i.e., those who file Form 1040, *U.S. Individual Income Tax Return*, with a Schedule C, *Profit or Loss from Business*).\(^{38}\) TAS focused on those subject to an examination adjustment in 2007 for tax year (TY) 2003 or later.\(^{39}\) TAS gauged reporting compliance using the IRS's computer algorithms (called a Discriminant Function or “DIF” score) that estimate the likelihood that an audit of the taxpayer's return would produce an adjustment (i.e., a higher DIF generally corresponds to lower reporting compliance).\(^{40}\)

Because DIF scores are computed separately for taxpayers in each “exam activity code” (EAC) each year, the scores of those in one EAC are not comparable to the scores of those in another EAC or to DIF scores computed for different tax years. To compare taxpayers in different EACs and for different years, TAS scaled the DIF scores. For each year, TAS first sorted all of the taxpayers in each EAC by DIF, and then assigned the taxpayers a scaled DIF score based on the decile into which they fell. For example, TAS assigned those in the first decile a scaled DIF score of 1 and those in the 10th decile a scaled DIF score of 10. TAS used changes in the taxpayer’s scaled DIF score as a proxy for changes in reporting compliance.\(^{41}\)

**TAS identified matched pairs of similarly situated taxpayers — those subject to a penalty and those not subject to a penalty.**

If the IRS consistently assessed an accuracy-related penalty against all similarly situated taxpayers, then it would be difficult to determine whether differences in future compliance were due to differences in the taxpayers, the audit, or the penalty itself. In technical terms, the analysis would suffer from “selection bias.” To minimize this problem, TAS sought to analyze matched pairs of similarly situated taxpayers that were different in only one respect: One was assessed a 20 percent accuracy-related penalty and the other

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38 TAS pulled examination results data from the Automated Information Management System (AIMS), and merged it with data from the Individual Returns Transaction File (IRTF), and the IRS Master File. TAS relied on IMF transaction codes 240 (assessment) and 241 (abatement) with an accuracy-related penalty reference number of 680 to determine if penalty assessments or abatements had been made. TAS removed tax returns from the study where a 40 percent accuracy-related penalty was assessed so that we could focus on the 20 percent penalty. Only 25 returns were removed on this basis.

39 TAS focused on Schedule C filers whose returns were examined and adjusted in 2007 (rather than 2012 or 2013) so that we could analyze the taxpayer’s future compliance. TAS eliminated taxpayers with adjustments to pre-2003 tax returns as potentially anomalous. TAS also excluded the low income taxpayers claiming the earned income tax credit (EITC) because they may present a unique set of tax compliance issues.

40 See, e.g., IRM 4.19.11.1.4 (Nov. 9, 2007). The IRS selects some returns for examination using the Discriminant Function (DIF) computer scoring system. IRM 4.1.1.2.6 (Oct. 24, 2006). It develops DIF scores based on information obtained and periodically updated from National Research Program examinations. Returns with high DIF scores generally have a higher probability of being adjusted on audit than other returns of the same type. IRM Exhibit 4.1.7-1(12) (May 19, 1999). The IRS classifies tax returns into mutually exclusive groups called examination “activity codes” (“EAC”), and develops a separate compliance risk scoring algorithm (i.e., a DIF algorithm) for each activity code. For Schedule C filers, the activity codes reflect the amount of gross receipts reported on the Schedule C and the taxpayer’s total positive income (TPI), which is the taxpayer’s positive income (i.e., excluding negative income and losses) from all sources before adjusting for deductions and exemptions. For a more detailed discussion of the DIF score methodology, see National Taxpayer Advocate 2012 Annual Report to Congress vol. 2 (Factors Influencing Voluntary Compliance by Small Businesses: Preliminary Survey Results).

41 This analysis assumes, for example, that taxpayers who fall into the 7th DIF decile for EAC 77 in TY 2007 have reporting compliance similar to taxpayers who fall into the 7th DIF decile for EAC 76 in TY 2008.
was not.\textsuperscript{42} Otherwise, the paired taxpayers were similar. They were in the same EAC (e.g., had similar levels of positive income and receipts), subject to the same type of examination (e.g., a field examination, office examination, or correspondence examination), and subject to an adjustment of a similar dollar amount (i.e., in the same quartile).

**FINDINGS**

Accuracy-related penalties had no significant effect on the subsequent reporting compliance (as measured by DIF) of those subject to them.

Reporting compliance (as measured by scaled DIF score) significantly improved following an examination assessment, potentially suggesting that examinations generally improve subsequent reporting compliance.\textsuperscript{43} However, reporting compliance by those also subject to an accuracy-related penalty was no higher following the examination than the compliance of similarly situated taxpayers who were not penalized. In other words, an accuracy-related penalty assessment in 2007 had no statistically significant effect on future (TY 2007 or TY 2011) DIF-measured reporting compliance by those who were penalized, as shown on the following table.

**TABLE 2: Changes in DIF Following an Examination Assessment**

<table>
<thead>
<tr>
<th>Tax Year</th>
<th>No Penalty</th>
<th>Penalty</th>
<th>Difference in Scaled DIF\textsuperscript{45}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taxpayers</td>
<td>Scaled DIF</td>
<td>Change from Base Year\textsuperscript{44}</td>
</tr>
<tr>
<td>Base\textsuperscript{46}</td>
<td>22,372</td>
<td>8.57</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>20,509</td>
<td>7.31</td>
<td>-14.8%</td>
</tr>
<tr>
<td>2011</td>
<td>16,781</td>
<td>7.09</td>
<td>-17.3%</td>
</tr>
</tbody>
</table>

The positive effect of some penalties on reporting compliance may have offset the negative effect of other penalties on voluntary compliance, as further discussed below. Thus, this finding may suggest that the way the IRS administers accuracy-related penalties impairs or enhances their effectiveness.

\textsuperscript{42} For a more detailed description of the matched pair methodology, see National Taxpayer Advocate 2011 Annual Report to Congress vol. 2, 92, 99 (Estimating the Impact of Liens on Taxpayer Compliance Behavior and Income). For those with a technical interest, TAS used a “5->1Greedy” matching technique to form the matched pairs by performing a logistic regression. In the logistic regression, the presence or absence of a penalty assessment was the dependent variable and the characteristics (listed above) were the independent variables. The regression produced a “propensity score” for each taxpayer in each group, reflecting the likelihood that he or she would be penalized based solely on the independent variables. TAS then paired taxpayers with similar scores from each group (i.e., those who were penalized and those who were not), as described in Lori S. Parsons, Ovation Research Group, Seattle, WA, Working Paper 214-26, Reducing Bias in a Propensity Score Matched-Pair Sample Using Greedy Matching Techniques (2001).

\textsuperscript{43} For each group of taxpayers that TAS analyzed, the scaled DIF score was significantly lower in TY 2007 than in the base year, as described below. Unless otherwise indicated, TAS performed all statistical tests using a 95 percent level of confidence.

\textsuperscript{44} In each of the tables, figures in the “Change from Base Year” column are calculated at three decimal places and rounded to one decimal place.

\textsuperscript{45} The differences in scaled DIF scores between the two groups are not statistically significant. In other words, the nominal differences shown on the table may be due to random variations rather than any statistically significant differences in the scores. For all of the tables in this analysis, only the differences that are highlighted are statistically significant at a 95-percent level of confidence.

\textsuperscript{46} For each of the figures in this discussion, the “base year” DIF score is the score for the tax year of the return that the IRS initially selected for examination (i.e., TY 2003, TY 2004, TY 2005, or TY 2006).
Accuracy-related penalties did not improve reporting compliance (as measured by DIF) among taxpayers subject to default assessments or who appealed, and five years later these taxpayers appeared less compliant than those not subject to penalties.⁴⁷

Among taxpayers who were subject to a default assessment or who appealed examination's determination, those subject to penalties were no more compliant (than similar taxpayers who were not penalized) immediately following the assessment. In addition, five years later they were significantly less compliant than those who were not penalized, as shown in the following tables.⁴⁸

**TABLE 3: Changes in DIF Following a Default Assessment**

<table>
<thead>
<tr>
<th>Tax Year</th>
<th>No Penalty</th>
<th>Penalty</th>
<th>Difference in Scaled DIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taxpayers</td>
<td>Scaled DIF</td>
<td>Change from Base Year</td>
</tr>
<tr>
<td>Base</td>
<td>2,462</td>
<td>8.65</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>1,814</td>
<td>7.40</td>
<td>-14.5%</td>
</tr>
<tr>
<td>2011</td>
<td>1,207</td>
<td>7.03</td>
<td>-18.8%</td>
</tr>
</tbody>
</table>

**TABLE 4: Changes in DIF Following an Examination Assessment Against Taxpayers who Appealed**

<table>
<thead>
<tr>
<th>Tax Year</th>
<th>No Penalty</th>
<th>Penalty</th>
<th>Difference in Scaled DIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taxpayers</td>
<td>Scaled DIF</td>
<td>Change from Base Year</td>
</tr>
<tr>
<td>Base</td>
<td>905</td>
<td>8.29</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>867</td>
<td>7.33</td>
<td>-11.5%</td>
</tr>
<tr>
<td>2011</td>
<td>715</td>
<td>6.89</td>
<td>-16.8%</td>
</tr>
</tbody>
</table>

By design, in cases where the IRS assesses a penalty by default — without ever communicating with the taxpayer — it is more likely to assess a penalty that would not apply if it knew all of the relevant facts. Moreover, in the case of both default assessments and assessments after an appeal, taxpayers may be more likely to feel that they do not deserve to be penalized (in the case of an appeal) or that the process by which it was imposed (in the case of a default assessment) was unfair. These findings are consistent with prior research (cited above) showing a correlation between noncompliance by Schedule C filers and the view that the IRS or the tax system is unfair. They are also consistent with the theory (described above) that a penalty may reduce the incentive to comply if it is applied even in cases where the taxpayer made a reasonable good faith effort to do so.⁴⁹

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⁴⁷ As noted above, the DIF score was used as a proxy for reporting compliance. The DIF is an approximate measure of reporting compliance, and small differences, although statistically significant, suggest but do not definitively indicate a real difference in reporting compliance.

⁴⁸ TAS could not determine whether taxpayers were appealing the Examination Division’s proposed tax or penalty.

⁴⁹ Someone might infer that the IRS correctly identified and penalized the “bad” taxpayers — although no different in any measurable way from the relatively “good” taxpayers who were not penalized — and these “bad” taxpayers were more likely to become noncompliant after the exam than the relatively “good” taxpayers who were not penalized. If this explanation were true, however, we would expect to see the same pattern among taxpayers overall (i.e., including those who were not penalized by default and who did not appeal), but we did not. Moreover, we did see the same pattern (long term noncompliance) among “good” taxpayers who were assessed penalties that the IRS later abated, as discussed below.
In addition, these findings suggest that the IRS should reconsider the automated way in which it imposes penalties, particularly in cases where they may not apply. For example, in cases where the taxpayer’s specific facts and circumstances need to be examined, the automatic, automated, or even formulaic application of penalties should be avoided.

These findings may also suggest that the IRS could improve voluntary compliance by doing more to make taxpayers feel that the penalty assessment process is fair. Specifically, Appeals should consider doing more to explain why its determination is correct and fair. Further, in the case of penalties that taxpayers generally regard as unfair (e.g., where reasonable cause does not apply or is so narrowly interpreted as to, in effect, create a strict liability penalty), the IRS should apply a broader reasonable cause exception (or work with the Treasury Department to propose one) that is simple and easy to administer in a way that will be perceived as fair and transparent.50

**Accuracy-related penalties did not improve reporting compliance (as measured by DIF) among taxpayers whose penalties were later abated, and five years later these taxpayers appeared less compliant than those whose penalties were not abated.**

Taxpayers subject to an accuracy-related penalty that was assessed and abated had the same level of DIF-measured reporting compliance as taxpayers whose penalties were not abated in the year after their cases were closed (in TY 2007). However, their DIF-measured reporting compliance was significantly lower than that of those whose penalties were not abated five years later (in TY 2011), as shown on the following table.

**TABLE 5: Changes in DIF Following an Examination Assessment Against Taxpayers whose Penalties were Abated**

<table>
<thead>
<tr>
<th>Tax Year</th>
<th>Penalty Abated in Full</th>
<th>Penalty Not Abated51</th>
<th>Difference in Scaled DIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taxpayers</td>
<td>Scaled DIF</td>
<td>Change from Base Year</td>
</tr>
<tr>
<td>Base</td>
<td>488</td>
<td>8.35</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>442</td>
<td>7.17</td>
<td>-14.1%</td>
</tr>
<tr>
<td>2011</td>
<td>370</td>
<td>7.10</td>
<td>-14.9%</td>
</tr>
</tbody>
</table>

50 See, e.g., National Taxpayer Advocate 2008 Annual Report to Congress 419-422 (Legislative Recommendation: Modify Internal Revenue Code Section 6707A to Ameliorate Unconscionable Impact); National Taxpayer Advocate 2012 Annual Report to Congress 134 (Most Serious Problem: The IRS’s Offshore Voluntary Disclosure Programs Discourage Voluntary Compliance by Those Who Inadvertently Failed to Report Foreign Accounts); National Taxpayer Advocate 2011 Annual Report to Congress 544-547 (Legislative Recommendation: Amend the Erroneous Refund Penalty to Permit Relief in Case of Reasonable Cause for Claim to Refundable Credits); National Taxpayer Advocate 2013 Annual Report to Congress vol. 1, supra (Most Serious Problem: The IRS Assessed Penalties Improperly, Refused to Abate them, and Continues to Assess them Automatically, Violating Taxpayer Rights and Reducing Respect for the Law); National Taxpayer Advocate 2013 Annual Report to Congress vol. 1, supra (Most Serious Problem: The IRS Inappropriately Bans Many Taxpayers From Claiming EITC). See also National Taxpayer Advocate 2008 Annual Report to Congress vol. 2 1, 21 (A Framework for Reforming the Penalty Regime).

51 TAS could identify the taxpayers who obtained penalty abatement, but not those whose penalty abatement request was denied.

52 Due to the low sample size of these groups, the difference in DIF between those granted full penalty abatement and a matched set of similar taxpayers who did not is only statistically significant at a 90 percent level of confidence.
The finding that undeserved penalty assessments do not promote reporting compliance (as measured by DIF) — and may actually discourage it in the long term — is not surprising. Although some people might try to avoid further entanglement with the IRS by taking more conservative positions in the future, undeserved penalty assessments likely discourage some taxpayers from complying by communicating that the system is unfair and that the IRS may seek to penalize them even if they try to comply — and even if they actually have complied. It also lends further support to the suggestion (above) that the IRS should reconsider its automated approach to penalties as potentially inconsistent with its goal of promoting voluntary compliance.

CONCLUSION

Accuracy-related penalties are meant to improve reporting compliance. Knowing that tax reporting errors can trigger an IRS examination and penalties provides an incentive for taxpayers to carefully report tax liabilities to the IRS. Indeed, the results of this study suggest that examination assessments promote reporting compliance (as measured by scaled DIF scores) among Schedule C filers who are subject to them. However, it did not find that accuracy-related penalty assessments improve subsequent reporting compliance. This finding may suggest that the effect of penalties on compliance may depend upon whether the IRS is perceived as applying them fairly. Perhaps because automated penalty assessments and those that are later appealed or abated are more likely to be perceived as unfair, they do not appear to have a positive effect on reporting compliance. Worse, they may actually promote long-term noncompliance.

These findings have a number of policy implications. First, the IRS should revise its procedures to ensure that it does not propose a penalty before exhausting efforts to communicate with a taxpayer to determine whether a penalty actually applies. Automated procedures that presume a penalty applies unless a taxpayer explains and documents why it does not apply are likely to generate more default assessments and penalty abatements than other examination methods. As taxpayers who were penalized after default assessments or whose penalties were abated had smaller reductions in DIF scores, suggesting lower levels of voluntary compliance after five years than those who were not, these automated procedures may be inconsistent with the IRS’s goal of promoting voluntary compliance.

Second, the IRS’s Appeals function should consider doing more to objectively evaluate and then explain its determinations, particularly when it sustains a penalty. As taxpayers who were penalized after an appeal had smaller reductions in DIF scores, suggesting lower levels of compliance after five years than those who were not, it is possible that they did not perceive Appeals as fairly evaluating whether the penalty should apply.

Finally, in the case of penalties that taxpayers generally regard as unfair (e.g., where a reasonable cause exception does not apply, or where it may be interpreted so narrowly as to, in effect, create a strict liability penalty), the IRS should consider applying a broader reasonable cause exception (or work with the Treasury Department to propose one) that is simple, fair, transparent, and easy to administer.

53 TAS did not evaluate whether any IRS employee applied the IRS’s procedures improperly in assessing or abating these penalties.
54 To the extent these results suggest that perceived unfairness erodes long term voluntary compliance, they may also support the National Taxpayer Advocate’s legislative proposal to clarify taxpayer rights and provide a remedy to taxpayers whose rights are violated, as these changes might increase the perceived fairness of the tax system. See, e.g., National Taxpayer Advocate 2012 Annual Report to Congress, vol. 2, 131.