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VOLUNTARY COMPLIANCE: The IRS Is Overly Focused on So-Called "Enforcement" Revenue and Productivity, and Does Not Make Sufficient Use of Behavioral Research Insights to Increase Voluntary Tax Compliance

### **RESPONSIBLE OFFICIALS**

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## TAXPAYER RIGHTS IMPACTED<sup>1</sup>

- The Right to Be Informed
- The Right to Quality Service
- The Right to Finality
- The Right to Privacy
- The Right to a Fair and Just Tax System

### **DEFINITION OF PROBLEM<sup>2</sup>**

Insights from behavioral science (*e.g.*, psychology and behavioral economics) reveal that people generally do not perform an elaborate economic analysis when making decisions. For example, they may do what is easy, do what they think others are doing (*i.e.*, follow norms), respond more readily to messages that are clear and relevant, and cheat only if they can maintain a positive self-image (*e.g.*, tax morale).<sup>3</sup>

Such behavioral insights (BIs) help explain why economic deterrence is not the IRS's only lever. They suggest the IRS can directly improve tax compliance by simplifying the rules, explaining them to taxpayers, highlighting apparent reporting and payment discrepancies, and responding promptly and clearly to inquiries, among other things. Moreover, tax administrators around the world have been using randomized controlled trials (RCT) to quantify the return on investment (ROI) and compliance gains that result from such alternative treatments.

See Taxpayer Bill of Rights (TBOR), www.TaxpayerAdvocate.irs.gov/taxpayer-rights. The rights contained in the TBOR that was adopted by the IRS are now listed in the Internal Revenue Code (IRC). See Consolidated Appropriations Act, 2016, Pub. L. No. 114-113, Division Q, Title IV, § 401(a) (2015) (codified at IRC § 7803(a)(3)).

Volume 3 of the 2016 Annual Report to Congress contains an extended literature review related to this topic. Literature Review: Behavioral Science Lessons for Taxpayer Compliance, vol. 3, infra.

<sup>3</sup> See generally Richard Thaler, Misbehaving: The Making of Behavioral Economics (2015) (overview); Dan Ariely, Predictably Irrational: The Hidden Forces that Shape Our Decisions (2008) (overview); Dan Ariely, The Honest Truth about Dishonesty: How We Lie to Everyone — Especially Ourselves (2012) (discussing self-image); Daniel Kahneman, Thinking, Fast and Slow (2011) (discussing mental shortcuts); Jonah Berger, Invisible Influence: The Hidden Forces that Shape Behavior (2016) (discussing norms).

Following recommendations by the National Taxpayer Advocate and an Executive Order, the IRS is also pursuing BI research using RCTs.<sup>4</sup> However, it does not report the resulting "service" revenue or compliance gains as routinely as it reports so-called "enforcement" revenue and productivity.<sup>5</sup> As a result, even if the IRS identifies effective alternative treatments, it may underuse them and overuse enforcement. Moreover, the taxpayer's *right to privacy*, which includes the right to expect that any IRS inquiry or enforcement action will "be no more intrusive than necessary," requires the IRS to try alternative treatments before resorting to coercion.<sup>6</sup> Further, unnecessary coercion wastes resources, burdens taxpayers, and may even reduce voluntary compliance and overall tax revenue (*i.e.*, in other years or due from other taxpayers).<sup>7</sup>

#### **ANALYSIS OF PROBLEM**

Appendices

## **Non-Economic Factors Affect Tax Compliance**

Most people voluntarily report and pay their taxes. About 98 percent of all tax revenue results from voluntary compliance, as compared to about two percent from "enforcement" revenue.<sup>8</sup> Taxpayers report nearly all of the income that is subject to withholding and third-party information reporting (*e.g.*, wage and salary income).<sup>9</sup>

Withholding and information reporting procedures use several BIs, such as the insight that people are motivated by:

- (1) Defaults and loss aversion: It is easier to report income already reflected on information returns and less painful to claim withholding credits for amounts already paid;
- (2) Timing: Information returns arrive when needed at year end;
- (3) Tax morale and visibility: It is more difficult to omit income that is visible on information returns while thinking of yourself as honest;
- See, e.g., National Taxpayer Advocate 2007 Annual Report to Congress 156-61 (Most Serious Problem: Taxpayer Service and Behavioral Research); National Taxpayer Advocate 2007 Annual Report to Congress vol. 2, 138-50 (Marjorie E. Kornhauser, Normative and Cognitive Aspects of Tax Compliance); National Taxpayer Advocate 2014 Annual Report to Congress 112-22 (Most Serious Problem: The IRS Does Not Sufficiently Incorporate the Findings of Applied and Behavioral Research into Audit Selection Processes as Part of an Overall Compliance Strategy); Executive Order 13707, 80 Fed. Reg. 56365 (Sept. 15, 2015), https://www.gpo.gov/fdsys/granule/FR-2015-09-18/2015-23630.
- 5 See, e.g., IRS, Fiscal Year 2015 Enforcement and Service Results (Mar. 8, 2016), https://www.irs.gov/uac/newsroom/fiscal-year-2015-enforcement-and-service-results. When we use the term "enforcement" in quotes we are referring to its overly-broad definition (e.g., any action by a so-called IRS "enforcement" function), and when we use it without quotes we are referring to its more natural meaning the IRS's use of coercive power to compel action (e.g., assessment, summons, lien, levy, and the withholding of refunds). See The Oxford English Dictionary, http://www.oxforddictionaries.com/us/definition/american\_english/enforcement ("The act of compelling ...") and Special Focus: IRS Future State: The National Taxpayer Advocate's Vision for a Taxpayer-Centric 21st Century Tax Administration, supra. For further discussion of this issue, see Nina Olson, The Future of Tax Administration, 2016 TNT 49-11 (Mar. 10, 2016).
- 6 TBOR, www.TaxpayerAdvocate.irs.gov/taxpayer-rights.
- See, e.g., National Taxpayer Advocate 2013 Annual Report to Congress vol. 2, 1-14 (Do Accuracy-Related Penalties Improve Future Reporting Compliance by Schedule C Filers?); Norman Gemmell & Marisa Ratto, Behavioral Responses to Taxpayer Audits: Evidence From Random Taxpayer Inquiries, 65 Nat. Tax J. 33–58 (2012); National Taxpayer Advocate 2015 Annual Report to Congress vol. 2, 1-100 (Audit Impact Study).
- In Fiscal Year (FY) 2015, the IRS collected total tax revenue of about \$3.3 trillion. Government Accountability Office (GAO), GAO-17-140, Financial Audit: IRS's Fiscal Years 2016 and 2015 Financial Statements 25 (Nov. 10, 2016), http://www.gao.gov/products/GAO-17-140. Of that amount, it collected \$54.3 billion through enforcement actions. Id.
- 9 See IRS, Research, Applied Analytics & Statistics (RAAS), Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2008–2010, 12 (May 2016), https://www.irs.gov/pub/irs-soi/p1415.pdf (estimating the net misreporting for wage and salary income at about one percent).

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**Problems** 

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**Problems** 

- (4) Social norms and salience: When a third party reports income to you on a Form W-2 or 1099, he or she identifies specific income and suggests that reporting it is the norm; and
- (5) Deterrence: The omission of income reported to the IRS by third parties is more likely to be detected and punished.<sup>10</sup>

Even where income is not subject to information reporting, some have suggested that relatively high levels of tax compliance cannot be explained by economic deterrence alone. Taxpayers comply (or fail to do so) for a wide variety of non-economic reasons. Research suggests that trust, social norms, fairness, reciprocity, tax morale, and similar non-economic factors also drive tax compliance. Virtually all taxpayers (94 percent) surveyed by the IRS Oversight Board in 2014 expressed non-economic motives, mostly or completely agreeing that "it is every taxpayer's civic duty to comply." Some tax administrators report that norms are the most important non-economic factor, though other factors can affect norms. For example, economic deterrence can either crowd out compliance norms (e.g., by suggesting that most people do not comply without coercion) or support them.

- 10 For a discussion of tax-related insights, see, e.g., Andrew Reeson and Simon Dunstall, Behavioural Economics and Complex Decision-Making Implications for the Australian Tax and Transfer System iii (CMIS Rept. No. 09/110, 2009), http://taxreview.treasury.gov.au/content/html/commissioned\_work/downloads/CSIRO\_AFTS\_Behavioural\_economics\_paper.pdf. See also Nina Mazar et al., The Dishonesty of Honest People: A Theory of Self-Concept Maintenance, 45 J. MARKETING RES. 633-644 (2008).
- 11 See, e.g., Erich Kirchler et al., Why Pay Taxes?: A Review of Tax Compliance Decisions 18 (Georgia State Univ., Int'l Studies Prog., Working Paper 07-30, 2007), http://icepp.gsu.edu/files/2015/03/ispwp0730.pdf. Similarly, one study found that about 20 percent fully paid a church tax, even though they knew the tax was not enforced. See Nadja Dwenger et al., Extrinsic and Intrinsic Motivations for Tax Compliance: Evidence from a Field Experiment in Germany, 8 Am. Econ. J. 203, 204-05 (2016). Others have tried to explain how deterrence could produce the observed levels of compliance. See, e.g., Mark Phillips, Reconsidering the Deterrence Paradigm of Tax Compliance, IRS Research Conference (2011).
- 12 Social scientists have identified at least eight types of noncompliance, including: Procedural, Lazy, Unknowing, Asocial, Brokered, Symbolic, Social, and Habitual. See Robert Kidder and Craig McEwen, *Taxpaying Behavior in Social Context: A Tentative Typology of Tax Compliance and Noncompliance*, in Taxpayer Compliance, Vol. 2, 47-72 (Jeffrey Roth & John Scholz, eds., 1989).
- 13 See, e.g., National Taxpayer Advocate 2007 Annual Report to Congress vol. 2, 138-50 (Marjorie E. Kornhauser, Normative and Cognitive Aspects of Tax Compliance); National Taxpayer Advocate 2012 Annual Report to Congress vol. 2, 1-28; OECD, Forum on Tax Administration, Small/Medium Enterprise (SME) Compliance Subgroup, Understanding and Influencing Taxpayers' Compliance Behaviour (Nov. 2010); OECD, Forum on Tax Administration Subgroup, Right from the Start: Influencing the Compliance Environment for Small and Medium Enterprises (Jan. 2012); Tom Tyler, Why People Obey the Law (2006); Tom Tyler, Legitimacy and Criminal Justice: The Benefits of Self-Regulation, 7 Ohio St. J. Crim. L. 307-359 (Fall 2009); Erich Kirchler, The Economic Psychology of Tax Behaviour (2007).
- 14 IRS Oversight Board, 2014 Taxpayer Attitude Survey 8 (Dec. 2014), https://www.treasury.gov/IRSOB/reports/Documents/IRSOB%20Taxpayer%20Attitude%20Survey%202014.pdf.
- Organisation for Economic Co-operation and Development (OECD), Forum on Tax Administration, Small/Medium Enterprise (SME) Compliance Subgroup, Understanding and Influencing Taxpayers' Compliance Behaviour 21 (Nov. 2010). This is consistent with studies finding that norms, trust for the government, and trust for the IRS are correlated with estimated reporting compliance by small business. See National Taxpayer Advocate 2013 Annual Report to Congress vol. 2, 33-56 (Research Study: Small Business Compliance: Further Analysis of Influential Factors). In addition, these factors may vary by locale. See National Taxpayer Advocate 2012 Annual Report to Congress vol. 2, 1-70 (Research Study: Factors Influencing Voluntary Compliance by Small Businesses: Preliminary Survey Results).
- See, e.g., Steven Sheffrin and Robert Triest, Can Brute Deterrence Backfire? Perceptions and Attitudes in Taxpayer Compliance, in Why People Pay Taxes: Tax Compliance and Enforcement (Joel Slemrod, ed., 1992); Dan M. Kahan, The Logic of Reciprocity: Trust, Collective Action, and Law, 102 Mich. L. Rev. 71 (2003); Bruno S. Frey & Lars P. Feld, Deterrence and Morale In Taxation: An Empirical Analysis 7 (CESifo Working Paper Series No. 760, 2002). See also James Heyman & Dan Ariely, Effort for Payment: A Tale of Two Markets, 15 Psych. Sci. 787, 792-93 (2004) (suggesting that because people sometimes expend more effort in exchange for no payment (a social market) than when they receive low payment (a monetary market), adding monetary incentives can reduce those efforts); Uri Gneezy & Aldo Rustichini, A Fine Is a Price, 29 J. Legal Studies 1 (2000) (introducing a fine for late daycare pickups increased late pickups).

## **Unnecessary Coercion Can Reduce Voluntary Compliance**

When the IRS adopts fair procedures designed to help taxpayers comply, it makes compliance easier and sends the message that most people are trying to comply, supporting compliance norms. Fair procedures also promote the view that the agency is legitimate and trustworthy, potentially making it more difficult for people to justify noncompliance while maintaining a positive self-image.<sup>17</sup> Perhaps because unnecessary coercion erodes these perceptions, research suggests that it can reduce voluntary compliance.<sup>18</sup> As a result, the IRS's efforts could be misdirected if it focuses primarily on direct "enforcement" results and efficiencies (*e.g.*, closures, cycle time, and dollars assessed or collected), which it often quantifies and highlights for stakeholders.<sup>19</sup>

# The IRS May Underuse Alternative Treatments Because It Has Difficulty Measuring Their Effectiveness

During the 1990s, the IRS and its stakeholders recognized that to be effective the IRS would have to identify the root causes of noncompliance by specific taxpayer segments (e.g., confusion, local norms, competitive pressures, and economic conditions), and use a tailored multi-functional approach to address them (called "Compliance 2000").<sup>20</sup> Largely because it was difficult for the IRS to measure the revenue and compliance gains from such alternative treatments, however, Compliance 2000 lost support.<sup>21</sup>

- 17 See generally Tom R. Tyler, The Psychology of Self-Regulation: Normative Motivations for Compliance, in Explaining Compliance:
  Business Responses to Regulation 78 (Christine Parker & Vibeke Nielsen eds., 2011); Kristina Murphy, Procedural Justice and the Regulation of Tax Compliance, in Developing Alternative Frameworks for Explaining Tax Compliance 191, 208 (James Alm et al. eds., 2010)
- See, e.g., National Taxpayer Advocate 2013 Annual Report to Congress vol. 2, 1-14 (*Do Accuracy-Related Penalties Improve Future Reporting Compliance by Schedule C Filers*?) (finding small businesses subject to an accuracy-related penalty had lower estimated subsequent compliance if the penalty was assessed by default, was abated, or was appealed, suggesting that penalties perceived as unfair may reduce future compliance); Norman Gemmell & Marisa Ratto, *Behavioral Responses to Taxpayer Audits: Evidence From Random Taxpayer Inquiries*, 65 Nat. Tax J. 33–58 (Mar. 2012) (suggesting that audits of compliant taxpayers may reduce voluntary compliance); National Taxpayer Advocate 2015 Annual Report to Congress vol. 2 1-100 (*Audit Impact Study*) (same). See also Colin Camerer & Richard H. Thaler, *Ultimatums, Dictators and Manners*, 9 J. Econ. Perspectives 209, 216-18 (1995), https://www.aeaweb.org/articles?id=10.1257/jep.9.2.209 (observing that people seem to punish those who behave unfairly (*i.e.*, reciprocity) even when no future encounters are expected because they "have simply adopted rules of behavior they think apply to themselves and others, regardless of the situation" (*i.e.*, manners)).
- 19 See, e.g., National Taxpayer Advocate 2010 Annual Report to Congress 28-48 (Most Serious Problem: IRS Performance Measures Provide Incentives That May Undermine the IRS Mission). For example, LB&l's "Key Stats" report contains 14 substantive worksheets. LB&l response to TAS information request (June 23, 2016). The first 12 worksheets contain detailed enforcement productivity statistics (e.g., closures, dollars per hour, yield, hours per return, cycle time, no change rates, etc.) broken out by type of taxpayer, income level and issue (i.e., activity code). Id. Only the last two worksheets are devoted to quality, customer and employee satisfaction, which are not broken out by activity code, and for the last few years have not been broken out by industry. Id. The report does not contain any behavioral response indicators such as measures of self-correction or future compliance.
- GAO, GAO/GGD-96-109, IRS Has Made Progress but Major Challenges Remain 11 (June 1996), http://www.gao.gov/assets/230/222671.pdf ("about 63 percent of those [IRS officials] we [GAO] interviewed believed that this approach [Compliance 2000] will reduce the tax gap, and nearly 70 percent, who had knowledge of previous attempts, believed that it will be more cost effective."); National Commission on Restructuring the Internal Revenue Service, A Vision for a New IRS 23 (1997), http://www.house.gov/natcommirs/report1.pdf ("The traditional enforcement approach ... [was not only] expensive, but it did not identify patterns of noncompliance. The new approach shifts emphasis to preventing noncompliance by identifying areas in which noncompliance is most likely to occur."). Similarly, traditional police enforcement is not as effective in reducing crime as working with community partners to address the underlying problems (called problem-oriented policing or POP). See, e.g., David Weisburd et al., Is Problem-Oriented Policing Effective in Reducing Crime and Disorder? Findings From a Campbell Systematic Review, 9 Crim. & Pub. Pol. 139, 141 (2010), http://www.smartpolicinginitiative.com/sites/all/files/POP%20 Weisburd\_et\_al.pdf. Moreover, an excessive focus on reducing reported crimes, rather than on the means used, can lead to misreporting of crime, abuse of power, and a dysfunctional organizational culture. See, e.g., Malcolm Sparrow, Handcuffed, What Holds Policing Back, and the Keys to Reform 20-22 (2016).
- 21 GAO, GAO/GGD-96-109, IRS Has Made Progress but Major Challenges Remain 11 (June 1996). By contrast, POP is still widely supported by local enforcement agencies and the U.S. Department of Justice (DOJ). POP goes hand in hand with community oriented policing, which is so successful that the DOJ Office of Community Oriented Policing Services (COPs) provides grants to facilitate its adoption. DOJ, Congressional Justification, FY 2017 Performance Budget (Feb. 9, 2016), https://www.justice.gov/jmd/file/821491/download.

**Most Serious** 

**Problems** 

The IRS replaced Compliance 2000 with Compliance Initiative Projects (CIPs).<sup>22</sup> CIPs enable exam to collaborate with other functions to implement alternative treatments,<sup>23</sup> but it uses them primarily to identify returns to examine.<sup>24</sup> If exam identifies an alternative treatment, the CIP process does not require anyone to pursue it.<sup>25</sup> Even if the IRS initiated an alternative treatment, it would not necessarily report on the results in connection with the CIP.<sup>26</sup> Rather, the IRS evaluates CIPs using exam productivity metrics (called "records of tax enforcement results" or ROTERS), such as dollars per hour, dollars per return, and the examination no-change rate.<sup>27</sup> It does not use RCTs or otherwise evaluate the impact of a CIP on taxpayer behavior (*e.g.*, self-correction or future compliance) or attitudes (*e.g.*, customer satisfaction with or trust for the agency).<sup>28</sup>

Large Business and International's (LB&I's) new "campaigns" may be similar to Compliance 2000 projects (or CIPs) because they can involve alternative treatments, but LB&I has not disclosed how it will identify appropriate treatments or the metrics it will use.<sup>29</sup> The Tax Exempt and Government Entities (TE/GE) Employee Plans Compliance Unit's (EPCU) projects have similar features, but EPCU does not always report the revenue and compliance gains from alternative treatments in its project reports.<sup>30</sup>

- 22 See Internal Revenue Manual (IRM) 4.19.10.2.5 (Jan. 1, 2011).
- 23 IRM 4.17.1.4 (Feb. 25, 2010); IRM 4.17.4.4.1 (Feb. 25, 2010); Form 13498, Compliance Initiative Project Authorization Part Two (Apr. 2009).
- 24 There may have been a few multifunctional CIPs, but they are not the norm. IRS response to TAS information request (June 22, 2016) ("SBSE Exam is not aware of any non-enforcement function working Compliance Initiative Projects."); SB/SE response to TAS information request (Oct. 22, 2016) ("SBSE is still not aware of any non-enforcement functions working Compliance Initiative Projects."); SB/SE response to TAS fact check (Nov. 21, 2016) ("During a cursory review of CIPs for this fact check request response, SB found two examples of multi-Functional CIPs ... We also have [six] examples where our Communication and Stakeholder Outreach function (CSO) [formerly known as Communication, Liaison, and Disclosure (CLD)] has worked with our Examination function on a CIP and signed off on the CIP"). Alternative treatments could be used in most CIPs. For example, the IRS could send soft notices and educational materials to all of the taxpayers with apparent discrepancies to give them an opportunity to self-correct so that an examination would not be necessary.
- 25 Only IRM parts 4 and 5, which apply to examination and collection employees, discuss the implementation of CIPs, and these IRMs do not direct enforcement employees to implement alternative treatments.
- 26 IRM Exhibit 4.17.2-1 (Feb. 25, 2010); Form 13497, Compliance Initiative Project Authorization Termination Report (2008).
- 27 CIP analysts prepare and review monthly CIP data overview reports, which focus on ROTERs. IRM 4.17.2 (Feb. 25, 2010); IRM Exhibit 4.17.2-1 (Feb. 25, 2010). Similarly, the CIP Termination Report form asks for: number of returns examined, number of returns no-changed, number of returns surveyed, average time per return, average deficiency or adjustment (1120S, 1065), number of referrals to Criminal Investigation, and number of joint investigations from such referrals. IRS Form 13497, Compliance Initiative Project Authorization Termination Report (2008).
- 28 10
- See, e.g., Dolores Gregory, Corporate Taxes: LB&I to Focus on Audit Approach, Cultural Shift, 008 DTR S-18 (Jan. 13, 2016) (a campaign "issue could be to initiate a number of audits, O'Donnell [LB&I Commissioner] told Bloomberg BNA in December. 'But it could also be some other tailored treatment specific guidance, change to a form, updated instructions there are a host of things we could be doing ...'"); LB&I response to TAS information request (June 22, 2016) ("Campaign Metrics will be specific to each campaign. We are in the process of developing metrics for our approved campaigns. We have just approved four campaigns. We do not have results at this time."). But, LB&I does not accurately track audit adjustments by issue so that it knows where taxpayers are making the most significant errors. See Treasury Inspector General for Tax Administration (TIGTA), Ref. No. 2016-30-089, The Large Business and International Division's Strategic Shift to Issue-Focused Examinations Would Benefit From Reliable Information on Compliance Results (Sept. 14, 2016), https://www.treasury.gov/tigta/auditreports/2016reports/201630089fr.pdf.
- 30 See IRS, EPCU Completed Projects Projects With Summary Reports (June 13, 2016), https://www.irs.gov/retirement-plans/employee-plans-compliance-unit-epcu-completed-projects-projects-with-summary-reports.

# Alternative Treatments That Use Behavioral Insights Can Have a Significant and Measurable Return on Investment (ROI)

Small changes or "nudges" can remove barriers that impede public policy goals, such as hard-to-understand information, burdensome forms, or poorly presented choices.<sup>31</sup> For example, financial aid applications pre-filled with information from tax returns can significantly increase qualifying applications and college attendance, even though there are already significant economic incentives for filling out the application and going to college.<sup>32</sup> Because the government designs tax rules, procedures, and communications that create or minimize such barriers, it cannot avoid nudging taxpayers in one direction or another.

In 2010, the United Kingdom (U.K.) government created the Behavioural Insights Team (BIT or the "Nudge Unit") to help various government agencies apply BIs, including Her Majesty's Revenue and Customs (HRMC), the U.K. tax agency. It focused on BIs described using the acronym MINDSPACE:<sup>33</sup>

- Messenger we are heavily influenced by who communicates information;
- Incentives our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses (rather than cost benefit computations);
- Norms we are strongly influenced by what others do;
- Defaults we 'go with the flow' of pre-set options;<sup>34</sup>
- Salience our attention is drawn to what is novel and relevant to us;
- Priming our acts are often influenced by sub-conscious cues;
- Affect our emotional associations can powerfully shape our actions;
- Commitments we seek to be consistent with our public promises, and reciprocate acts; and
- Ego we act in ways that make us feel better about ourselves.<sup>35</sup>

<sup>31</sup> See, e.g., Daniel Kahneman, Maps of Bounded Rationality: Psychology for Behavioral Economics, 93 Am. Econ. Rev. 1449 (2003); Richard H. Thaler & Cass R. Sunstein, Nudge (2008); Christine Jolls, Cass R. Sunstein, & Richard Thaler, A Behavioral Approach to Law and Economics, 50 Stan. L. Rev. 1471 (1998).

<sup>32</sup> Eric P. Bettinger et al., The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment, 127 Q. J. Econ. 1205 (2012).

<sup>33</sup> David Halpern, *Inside the Nudge Unit, How Small Changes Can Make A Big Difference* 50 (2015). MINDSPACE was later replaced by EAST, which means: Easy, Attractive, Social, and Timely. *Id.* at 60 and 149. For further discussion of the insights, see, e.g., BIT, *Applying Behavioural Insights to Reduce Fraud, Error and Debt* 4 (2012); Laura Haynes et al., Cabinet Office, BIT, *Test, Learn, Adapt: Developing Public Policy with Randomized Controlled Trials* (2012), https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/62529/TLA-1906126.pdf.

<sup>34</sup> For example, filing and reporting compliance might increase in the U.S. if taxpayers (and preparers) could easily download into their tax software the third-party information return data needed to prepare returns, as recommended by the National Taxpayer Advocate. National Taxpayer Advocate 2013 Annual Report to Congress vol. 2, 68, 79 (Research Study: Fundamental Changes to Return Filing and Processing Will Assist Taxpayers in Return Preparation and Decrease Improper Payments).

<sup>35</sup> BIT also found that treatments were more effective for taxpayers with a history of compliance. David Halpern, Inside the Nudge Unit, How Small Changes Can Make A Big Difference 131 (2015). Thus, spending extra resources to help first-time taxpayers and startups establish good tax compliance habits could help avoid the need to spend more resources to address noncompliance after bad habits develop.

**Most Serious** 

**Problems** 

Tax agencies have been using RCTs and field experiments to measure the effectiveness of various alternative treatments using BIs, as described below:36

- HRMC and the Australian Office of State Revenue (OSR) revised tax delinquency letters to include norms statements such as "9 out 10 UK citizens pay their self-assessment tax on time," while increasing the clarity and salience of the letters.<sup>37</sup> The most successful message led to a five percentage point increase in payments in the U.K. and a three point increase in Australia, as compared to the standard notice.<sup>38</sup>
  - HMRC found tailored messages, which increased the salience of the delinquency letters for a specific population (e.g., doctors), increased the response rate from 3.8 percent to 35.3 percent.39
  - By sending taxpayers directly to a form, rather than a webpage that contained the form, HMRC increased the response to delinquency notices by four percentage points.<sup>40</sup>
- The U.S. Treasury's Debt Management Service (DMS) prompted about 45 percent more individuals to pay online (from 1.5 to about 2.2 percent) by shortening the web address.<sup>41</sup>

- BIT, EAST, Four Simple Ways to Apply Behavioural Insights 5 (July 2015), http://www.behaviouralinsights.co.uk/wp-content/ uploads/2015/07/BIT-Publication-EAST\_FA\_WEB.pdf; Premier & Cabinet Behavioural Insights Unit, Understanding People, Better Outcomes Behavioural Insights in NSW 4-5 (Oct. 2014).
- BIT, EAST, Four Simple Ways to Apply Behavioural Insights 23 (July 2015). See also David Halpern, Inside the Nudge Unit, How Small Changes Can Make A Big Difference 88 (2015). A similar approach worked with other professionals such as plumbers.
- 40 David Halpern, Inside the Nudge Unit, How Small Changes Can Make a Big Difference 74 n.10 (2015) (citing an increase from 19.2 to 23.4 percent); BIT, EAST, Four Simple Ways to Apply Behavioural Insights 12 (July 2015), http://www.behaviouralinsights.co.uk/ wp-content/uploads/2015/07/BIT-Publication-EAST\_FA\_WEB.pdf.
- 41 Fact Sheet: President Obama Signs Executive Order: White House Announces New Steps to Improve Federal Programs by Leveraging Research Insights (Sept. 15, 2015), https://www.whitehouse.gov/the-press-office/2015/09/15/fact-sheetpresident-obama-signs-executive-order-white-house-announces. In 2014, the White House Office of Science and Technology Policy (OSTP) established the Social and Behavioral Sciences Team (SBST), a cross-agency team organized under the National Science and Technology Council to identify how behavioral insights could help U.S. agencies. Nat'l Sci. & Tech. Council, Exec. Off. of the President, Soc. & Behav. Sci. Team (SBST), 2015 Annual Report (Sept. 2015), https://www.whitehouse.gov/sites/ default/files/microsites/ostp/sbst\_2015\_annual\_report\_final\_9\_14\_15.pdf. SBST worked with Treasury on this project.

<sup>36</sup> See, e.g., Laura Haynes et al., Cabinet Office, BIT, Test, Learn, Adapt: Developing Public Policy with Randomized Controlled Trials, Policy Paper, (2012); World Bank, Mind Society and Behavior 198 (2015). http://www.worldbank.org/content/dam/ Worldbank/Publications/WDR/WDR%202015/WDR-2015-Full-Report.pdf; BIT, Applying Behavioural Insights to Reduce Fraud, Error and Debt (2012), https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/60539/ BIT\_FraudErrorDebt\_accessible.pdf; Joana Sousa Lourenço et al., Behavioural Insights Applied to Policy, European Report 2016, EUR 27726 (2016), http://publications.jrc.ec.europa.eu/repository/bitstream/JRC100146/kjna27726enn\_new.pdf.

See Michael Hallsworth, The Behavioralist As Tax Collector: Using Natural Field Experiments to Enhance Tax Compliance (NBER Working Paper No. 20007, 2014), http://www.nber.org/papers/w20007; Premier & Cabinet Behavioural Insights Unit, Understanding People, Better Outcomes: Behavioural Insights in NSW (Oct. 2014), http://bi.dpc.nsw.gov.au//assets/ Behavioural-Insights/Library/Understanding-People-Better-Outcomes.pdf. See also BIT, Update Report 2013-2015, 55 n.1 (2015) (referencing House of Lords, Science and Technology Select Committee on Behaviour Change (Nov. 2010), http://www. parliament.uk/documents/lords-committees/science-technology/behaviourchange/BCOralandWrittenEvCompiled180711.pdf); David Halpern, Inside the Nudge Unit, How Small Changes Can Make A Big Difference 113-15 (2015).

Appendices

- The National Tax Agency of Colombia (DIAN) increased the probability of payment by eight percentage points with a letter, 17 points with an email, and about 87 points with a personal visit, which in each case delivered the same deterrence and moral suasion messages.<sup>42</sup>
- The Guatemalan tax authority tested social norms and deliberate choice messages in its delinquency letters. These messages increased the average amount paid per taxpayer by 210 percent and 269 percent, respectively, relative to no letter. The deliberate choice message stated: "Previously we have considered your failure to declare an oversight. However, if you don't declare now we will consider it an active choice and you may therefore be audited and could face the procedure established by law." The ROI for the social norms and deliberate choice letters was about 35 to 1.44 They also increased the likelihood that taxpayers would both declare and pay the following year with no further reminder.

Although reporting compliance may be more difficult to measure, both norms- and deterrence-based messages can also increase reporting compliance by measurable amounts, particularly if carefully tailored. For example, a 2007 study found that letters with normative appeals ("most people in this country pay ... [and mistakes mean] less money available for public spending on things like hospitals, schools and pensions") and deterrence messages (the agency is increasing inquiries and "your return may be one of those chosen") both prompted small businesses in the U.K. to increase reported sales (above the simplified reporting threshold) and net profits. <sup>45</sup>

<sup>42</sup> Daniel Ortega and Carlos Scartascini, *Don't Blame the Messenger: A Field Experiment on Delivery Methods For Increasing Tax Compliance* 31 (CAF, Development Bank of Latin America, Working Paper No. 2015/09, 2015), http://scioteca.caf. com/handle/123456789/821. The authors suggest email may have been superior to letters because "[T]he agency had been moving many of its transactions online, so the email may have had a relatively higher salience, which may not export easily to other places. Additionally, given the fact that payments can be made online, the act of paying may have been more spontaneous than after receiving a letter (the person was already sitting at the computer)." *Id.* at 27 n31. Another study by the same researchers found that phone calls have an intermediate effect between the impersonal methods and in-person visits. *Id.* at 3 (citing Daniel Ortega & Carlos Scartascini, Inter-American Development Bank, *Who's Calling? The Effect of Phone Calls as a Deterrence Mechanism* (2015)).

<sup>43</sup> Stewart Kettle et al., Behavioural Interventions in Tax Compliance: Evidence from Guatemala, IRS Research Conference (2015), https://www.irs.gov/pub/irs-soi/15resconhemandez.pdf. The authors explain the deliberate choice message "aims to eliminate omission as an excuse for noncompliance now ... The wording also gives the taxpayer an exemption for not previously declaring, which introduces an element of reciprocity, as the taxpayer is given the sense that he has been granted a favor. The text is also worded to give the impression that the behaviour of the taxpayer is being closely monitored and serves to increase the perception of punishment for noncompliance." Id. at 148.

<sup>44</sup> Id. at 157-58.

See John Hasseldine et al., Persuasive Communications: Tax Compliance Enforcement Strategies for Sole Proprietors, 24 Contemp. Accounting Res. 171-94 (Spring 2007), http://onlinelibrary.wiley.com/doi/10.1506/P207-004L-4205-7NX0/abstract. These findings are generally consistent with prior research. See Joel Slemrod et al., Taxpayer Response to an Increased Probability of Audit: Evidence from a Controlled Field Experiment in Minnesota, 79 J. Pub. Econ. 455–83 (2000) (finding a letter emphasizing "increased audit" probability increased reporting compliance for low income Schedule C or F filers, but reduced it for high income taxpayers), and Richard Schwartz & Sonya Orleans, On Legal Sanctions, 34 Univ. Chicago L. Rev. 274, 299 (1967) (finding taxpayers who had been asked survey questions that either appealed to conscience or that highlighted sanctions both increased their reporting compliance, though the effect of the sanction discussion was weaker). But see, Marsha Blumenthal et al., Do Normative Appeals Affect Tax Compliance? Evidence From a Controlled Experiment in Minnesota, 54 Nat. Tax J. 125–36 (2001) (finding a generic letter which said "[a]udits ... [show people] pay voluntarily 93 percent" of what they owe (a normative appeal) did not improve reporting compliance by Schedule C or F filers; however, the letter stated that "many Minnesotans believe other people routinely cheat" and recipients may not have believed that audits detected all noncompliance).

Improving the timing and salience of existing messages can also improve reporting compliance.<sup>46</sup> For example, the General Services Administration (GSA) improved the accuracy of government contractors' self-reported sales by moving an online signature box from the bottom to the top of the form, enabling GSA to collect an additional \$1.59 million in fees in a single quarter.<sup>47</sup>

## Alternative Treatments That Ignore Behavioral Science Insights Can Be Ineffective

In February 2009, Wage and Investment's (W&I) Stakeholder Partnerships, Education and Communication function (SPEC) sent a brochure of "common errors" to elderly taxpayers who had a math error on their 2007 returns.<sup>48</sup> The brochures generally did not improve compliance.<sup>49</sup> However, seniors are less responsive than others to impersonal forms of communication.<sup>50</sup> More importantly, the brochure did not remind the recipient that he or she had made an error, which would have increased its salience. For those who read the brochure, its reference to "common errors" reinforced the view that making errors is the norm for seniors — a message that is, potentially, more likely to reduce compliance than improve it. Moreover, it may be particularly difficult to avoid repeating inadvertent errors.

Of course, it would be inaccurate to conclude that all alternative treatments are ineffective because one did not provoke the desired behavior in a specific context with a specific population. Rather, the IRS needs to measure and report on the effectiveness of specific alternative treatments with different populations on a regular basis so that it can better understand why some are more effective than others for a particular segment. If one IRS function identifies an effective alternative treatment, it should publish and index the results so that other functions and stakeholders can benefit.

# The IRS Is Testing Alternative Treatments That Use Behavioral Insights

Preliminary data suggests the W&I Division has improved reporting compliance by sending "soft" notices to taxpayers who appeared (based on third-party reporting) to have violated the Individual Retirement Account (IRA) contribution and distribution rules during 2013-2015.<sup>51</sup> These notices appear to have educated taxpayers, making compliance easier and noncompliance more salient and visible. In some cases, W&I did not use a randomly selected control group.<sup>52</sup> However, its (non-projectable) results indicate that "approximately 91 percent of notice recipients and 85 percent of non-notice recipients stopped contributing in excess …" and "roughly 10 percent of notice recipients self-assessed the excise tax [penalty] in comparison to non-notice recipients whose correction rate remained at 1 percent."<sup>53</sup>

- 46 See, e.g., Lisa L. Shu et al., Signing at the Beginning Makes Ethics Salient and Decreases Dishonest Self-Reports in Comparison to Signing at the End, 109 Proc. Nat'l Acad. Sci. 15197 (2012), http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3458378/ (finding that signing before rather than after the opportunity to cheat makes ethics salient at the right time, and significantly reduces dishonesty).
- 47 Nat'l Sci. & Tech. Council, Exec. Off. of the President, SBST, 2015 Annual Report (Sept. 2015), https://sbst.gov/.
- 48 WIRA, Project No: 4-09-01-S-006, SPEC's Senior Math Error Direct Mail Marketing Campaign (Jan. 2010).
- 49 Id
- 50 IRS, Pub. 4579, *Taxpayer Assistance Blueprint Phase II* 65 (2007), http://www.irs.gov/pub/irs-pdf/p4579.pdf (Figure 3-7). Further, the study does not indicate that the IRS removed taxpayers from the analysis if their brochures were returned as undeliverable. WIRA, Project No: 4-09-01-S-006, SPEC's Senior Math Error Direct Mail Marketing Campaign (Jan. 2010).
- Wage and Investment (W&I) response to TAS information request (June 22, 2016). Both GAO and TIGTA had identified IRA compliance as a problem. See TIGTA, Ref. No. 2008-40-087, Individual Retirement Account Contributions and Distributions Are Not Adequately Monitored to Ensure Tax Compliance (Mar. 28, 2008); GAO, GAO-08-654, Individual Retirement Accounts: Additional IRS Actions Could Help Taxpayers Facing Challenges in Complying with Key Tax Rules (Aug. 14, 2008); TIGTA, 2010-40-043, A Service-wide Strategy Is Needed to Address Growing Noncompliance With Individual Retirement Account Contribution and Distribution Requirements (Mar. 29, 2010).
- 52 W&I response to TAS information request (June 22, 2016).
- 53 W&I Strategies and Solutions Group 3, Project Num. 4-15-03-S-616, Excess Contributions to Individual Retirement Accounts: 2014 Mail-Out Analysis 3 (June 2016).

**Appendices** 

In July 2016, the IRS reported on several ongoing EITC studies mandated by Congress.<sup>54</sup> In one, the IRS reduced the EITC errors that preparers made on returns, by visiting, calling, and sending notices.<sup>55</sup> Mode of communication mattered. In-person visits were more effective, but also more costly. Salience and relevance mattered. Notices that specified the types of errors the IRS was seeing were more effective than generic notices. Timing also mattered. The IRS had more success when it sent notices immediately before the filing season than during the filing season.

In a second study, the IRS improved EITC reporting compliance by working with tax software companies to clarify eligibility questions, and require taxpayers to affirm key facts. This made eligibility easier to determine. It probably also made it harder for taxpayers to justify noncompliance while retaining a positive self-image (*e.g.*, on the basis that the rules were complicated and they did not understand).

In a third study, the IRS sent letters to those with apparent discrepancies, explaining the discrepancy, and asking them to self-correct, if necessary. These letters should also make it easier for taxpayers to comply and harder for them to justify noncompliance.

In fiscal years (FYs) 2013 to 2015, the IRS sent reminders to low income taxpayers who appeared eligible for the EITC, but had not filed a return.<sup>56</sup> The reminders reduced nonfiling for the year in question (and prior years) for both taxpayers with a balance due and those due a refund (*i.e.*, addressing inattentiveness).<sup>57</sup> They also increased voluntary compliance in subsequent years, at least for those who had received a refund. The reminders might have been even more effective if they had explained why the IRS believed the taxpayer should have filed (increasing salience). Researchers projected that an expansion of the effort could bring in an additional 53,000 filers, pay out \$180 million in additional refunds, and bring in an additional \$27 million in unpaid taxes.<sup>58</sup> However, the IRS did not report any of the foregoing "service" revenues to stakeholders in its routine reports.<sup>59</sup>

Similarly, in January 2016, TAS sent letters to taxpayers who claimed the EITC on 2014 returns that were not audited even though the returns appeared to have the same problems as those that were. The letter was salient, highlighting that the purpose was "so that you can avoid an error in the future," explaining the requirements for claiming the EITC in easy to understand language, identifying the exact requirement that the taxpayer did not appear to meet and why, and suggesting sources of additional information and

<sup>54</sup> U.S. Department of the Treasury, Report to Congress on Strengthening Earned Income Tax Credit Compliance Through Data Driven Analysis 16 (July 5, 2016), https://www.treasury.gov/resource-center/tax-policy/Documents/Report-EITC-Data-Driven-Compliance-2016.pdf.

<sup>55</sup> For additional information, see, Karen Masken, *IRS Preparer-Level Treatment Tests* (Dec. 2014), https://www.irs.gov/pub/irs-soi/15resconmasken.pdf.

<sup>56</sup> IRS response to fact check (Dec. 7, 2016); IRS Management's Discussion & Analysis (MD&A) 5-6 (FY 2015), reproduced in, GAO, GAO-16-146, Financial Audit: IRS's Fiscal Years 2015 and 2014 Financial Statements 25 (Nov. 2015), www.gao.gov/assets/680/673614.pdf; RAAS response to TAS information request (July 7, 2016).

<sup>57</sup> Researchers found no difference when the reminder was framed to harness loss aversion (i.e., "avoid losing valuable tax benefits"). RAAS response to TAS information request (July 7, 2016).

<sup>58</sup> Id.

<sup>59</sup> Compare IRS MD&A FY 2015, supra 5-6 (not referencing service revenue estimates), with U.S. Department of the Treasury, Report to Congress on Strengthening Earned Income Tax Credit Compliance Through Data Driven Analysis 16 (July 5, 2016), https://www.treasury.gov/resource-center/tax-policy/Documents/Report-EITC-Data-Driven-Compliance-2016.pdf (indicating the study would quantify the results in October 2016) and John Guyton et al., Reminders & Recidivism: Evidence From Tax Filing & EITC Participation Among Low-Income Nonfilers § IV(b)(2) (NBER Working Paper 21904, 2016), http://www.nber.org/papers/w21904.pdf (reporting that "roughly 52% of individuals who had a balance due on the 2013 return recidivated into nonfiling, but the treatment reduced this recidivism to about 42%.").

assistance, including TAS.<sup>60</sup> TAS also considered timing, mailing the letters in the second or third week of January when taxpayers might expect to get tax-related notices, such as W-2's, and noted on the outside of the envelope "important tax information enclosed." These letters improved compliance for some types of recipients as compared to the control group that did not receive a letter, as discussed in volume 2 of this report.<sup>61</sup>

Small Business/Self-Employed (SB/SE) is also working to improve the "alerts" it provides to taxpayers at risk of falling behind on their federal tax deposits (called FTD alerts).<sup>62</sup> It is using BIs related to (1) timing – triggering them earlier, sometimes before a deposit is due; (2) salience and visibility – better targeting taxpayers most likely to fall behind, and explaining why they are receiving a reminder; (3) social norms – including statements like "nine out of ten businesses deposit on time each quarter;" (4) rational appeals or deterrence – disclosing the penalties and interest that could apply, and (5) segmentation – using different modes of communication (*e.g.*, letters, calls, and visits) for different segments.<sup>63</sup>

In addition, SB/SE is sending notices to taxpayers who appear to be under withheld.<sup>64</sup> The notices include rational appeals about the potential consequences of being under withheld (*i.e.*, deterrence), but do not explain why the IRS believes there is a problem.<sup>65</sup> Similarly, the IRS is testing the extent to which sending additional letters to non-filers before it makes substitute for return (SFR) assessments triggers self-correction.<sup>66</sup> While these letters may improve voluntary compliance, the IRS should incorporate BIs to improve the results and report the resulting revenue and compliance gains.

Finally, TAS is investigating the effectiveness of letters that use BIs to improve payment compliance.<sup>67</sup> These letters may include: (1) rational appeals – information on the composition of the outstanding amount and the accrual of interest and penalties; (2) social norms appeals – information about the high rate of on-time tax payments in the taxpayers' area; (3) reciprocation appeals – information on how payments are used for services that benefit taxpayers; (4) threats of enforcement – information on potential penalties and the IRS's capacity to enforce noncompliant behavior; and (5) "extra help" offers – the telephone number of a hotline staffed with TAS employees who will assist with the filing and payment process (including payment alternatives). TAS will also compare the impact of different letter formats, such as those using a typical IRS format and those formatted using cognitive and visual learning concepts. TAS plans to quantify and report the overall and relative effectiveness of each communication. However, it is unclear whether or how the IRS will report any "service" revenues that result from these letters or its other BI projects (discussed above) to stakeholders.

**Most Serious** 

**Problems** 

<sup>60</sup> See National Taxpayer Advocate FY 2017 Objectives Report to Congress 184 (TAS Research Initiatives: *Impact of Education and Outreach on Earned Income Tax Credit (EITC) Taxpayer Compliance*).

<sup>61</sup> Research Study: Study of Subsequent Filing Behavior of Taxpayers Who Claimed Earned Income Tax Credits (EITC) Apparently in Error and Were Sent an Educational Letter from the National Taxpayer Advocate, vol. 2, supra.

<sup>62</sup> SB/SE response to TAS information request (June 22, 2016).

<sup>63</sup> *Id.* Through FY 16 (April), over 85 percent of FTD Alerts were worked in the field, and Field Time overall (all cases in Field Collection), increased by nearly 12 percent compared to last year. SB/SE response to fact check (Dec. 8, 2016). This could improve the salience of the message. The IRS also found that letters increase payments for certain taxpayer segments. *Id.* Although personal contacts are likely superior, letters can nearly always be improved.

<sup>64</sup> Id. Letter 2802C, Withholding Compliance Letter. SB/SE is also working to modify delinquency notices, such as CP 14, and to measure taxpayer responses to different versions using RCTs. SB/SE response to TAS information request (Oct. 19, 2016).

<sup>65</sup> Id.

<sup>66</sup> SB/SE response to TAS information request (June 22, 2016).

<sup>67</sup> National Taxpayer Advocate 2017 Objectives Report to Congress 184.

Appendices

# The IRS Reports "Enforcement" Revenues to Stakeholders More Routinely Than "Service" Revenue From Alternative Treatments, Potentially Biasing Policy Decisions

The IRS reports the revenues from alternative treatments on an *ad hoc* basis (*e.g.*, in connection with studies that it decides to publish), but routinely reports its "enforcement revenue" to stakeholders.<sup>68</sup> "Enforcement" revenue generally include any payments received after a case is assigned to an "enforcement" function (*i.e.*, Exam, Appeals, Chief Counsel, Collection, Information Reporter Program (IRP), and the Automated Underreporter (AUR) Program), even if the taxpayers made them as a result of alternative treatments (*e.g.*, a letter) rather than an enforcement action (*e.g.*, an assessment or levy).<sup>69</sup> The IRS's expansive definition of "enforcement" revenue exaggerates the effectiveness of coercive treatments, and seems to ignore "service" revenue.

More importantly, the IRS is working to quantify the ratio of direct "enforcement" revenue to cost for each of its "enforcement" programs so that it can allocate more resources to those with the greatest marginal ROI.<sup>70</sup> Similarly, the IRS routinely estimates "enforcement" ROIs to justify additional investments by "enforcement" functions, but not to justify additional investment by service functions.<sup>71</sup> Moreover, its "enforcement" revenue computations ignore the indirect effects of enforcement on voluntary compliance (*e.g.*, effects on future compliance or compliance by others).<sup>72</sup> The IRS plans to add

... indirect effects whenever we have reasonable estimates. There is no timeline established at this time. In the meantime, the resource allocation will continue to account for indirect effects by imposing minimum coverage constraints in each Exam category.<sup>73</sup>

- 68 See, e.g., IRS, Fiscal Year 2015 Enforcement and Service Results (Mar. 8, 2016), https://www.irs.gov/uac/newsroom/fiscal-year-2015-enforcement-and-service-results. As noted above, the IRS recently collaborated with outside researchers on four studies addressing various ways to improve EITC compliance, and quantified some of its results. See U.S. Department of Treasury, Report to Congress on Strengthening Earned Income Tax Credit Compliance Through Data Driven Analysis 16 (July 5, 2016). However, the IRS mixed the results of alternative treatments with "enforcement revenue" in its routine reports. See IRS MD&A FY 2015, 44.
- 69 LB&I, Operations Planning & Support (OPS), What Exactly Do We Mean by "Enforcement Revenue"? (2016); Bill Gammon & Peter Rose, IRS, Tracking and Estimating the Direct Revenue Effects of IRS Enforcement Actions (Apr. 25, 2005). For a historic discussion of this problem, see IRS, Pub. 1501, Evaluation of the IRS System of Projecting Enforcement Revenue (Oct. 1990). Although the criminal investigation (CI) division is the only function that conducts true law enforcement, it is not considered an enforcement function for this purpose. Id.
- The IRS is implementing a recommendation by GAO, which suggested the IRS should compute the direct marginal "enforcement" revenue ROI for its reporting compliance programs (i.e., automated substitute for return, AUR, correspondence exam, and field exam) by broad taxpayer segments and allocate compliance resources on that basis. GAO, GAO-13-151, IRS Could Significantly Increase Revenues by Better Targeting Enforcement Resources (Dec. 2012), http://www.gao.gov/assets/660/650521.pdf; RAAS, Business Performance Review (2014), http://ras.web.irs.gov/AboutRAS/BPR/RASBPRJulSep2014.pdf.
- 71 See, e.g., IRS, Budget in Brief 10-15 (FY 2017), https://www.treasury.gov/about/budget-performance/budget-in-brief/Pages/index\_17.aspx.
- 72 Ronald H. Hodge II et al., Estimating Marginal Revenue/Cost Curves for Correspondence Audits, IRS Research Conference 1 n.5 (2015), https://www.irs.gov/pub/irs-soi/15resconplumley.pdf ("If we had estimates of the associated changes in voluntary compliance that are induced indirectly by that program [some of the major discretionary categories of correspondence audits] throughout the entire population, those estimates could be added to the direct revenue estimates to represent the full benefit of the program."); Alan H. Plumley & C. Eugene Steuerle, Ultimate Objectives for the IRS: Balancing Revenue and Service, in The Crisis in Tax Administration 311, 329 (Henry J. Aaron & Joel Slemrod, eds., 2004), http://webarchive.urban.org/UploadedPDF/1000636\_IRS\_objectives.pdf ("The appeal of direct revenue maximization is that, for the most part, it is measurable, and it provides a basis for making resource allocation decisions ... To the extent that IRS activities whether enforcement or nonenforcement indirectly affect the voluntary compliance of the general population, it is the combination of direct and indirect revenue that is important."); IRS, Budget in Brief 15 (FY 2017) ("[T]he ROI estimate does not include the revenue effect of the indirect deterrence value of these investments and other IRS enforcement programs, which is conservatively estimated to be at least three times the direct revenue impact." [On average]).
- 73 RAAS response to TAS information request (July 7, 2016).

**Most Serious** 

**Problems** 

If the IRS could collect one percent more revenue through an unresponsive automated enforcement strategy that causes taxpayers to lose faith in the IRS and reduces voluntary compliance by one percent, voluntary compliance revenue would decline by about 60 times as much as "enforcement" revenue increased.

The IRS's minimum coverage strategy is based on the implicit assumption that indirect effects are always positive and driven primarily by deterrence. However, research (discussed above) suggests the indirect effects could be negative, especially when coercion is misapplied to certain taxpayer segments.

If the IRS could collect one percent more revenue through an unresponsive automated enforcement strategy that causes taxpayers to lose faith in the IRS and reduces voluntary compliance by one percent, voluntary compliance revenue would decline by about 60 times as much as "enforcement" revenue increased.<sup>74</sup> Thus, if the IRS allocates resources to increase marginal "enforcement" revenue without regard to indirect effects, it risks making costly and ill-informed resource allocation decisions.<sup>75</sup> Alternative treatments are less likely to have negative indirect effects on voluntary compliance than enforcement treatments, as discussed above. Yet, the IRS does not routinely measure and report the direct (or indirect) revenue from alternative treatments.

#### CONCLUSION

Alternative treatments can be a cost effective way to improve tax compliance while minimizing taxpayer burden, particularly if they use BIs. They also support taxpayer rights. They help alert taxpayers when they may not have complied, promoting the *right to be informed*. They are less intrusive than coercive treatments, furthering the taxpayers' *right to privacy*. They help taxpayers comply more quickly, promoting the taxpayers' *right to finality*. Because coercing those who would respond to nudges seems unfair, they also support the taxpayer's right to a *fair and just tax system*. Because the IRS can over-reach when using coercive tools, they also further the taxpayer right to *pay no more than the correct amount of tax*.

Unless the IRS identifies the best alternative treatments, such as those that leverage BIs, it is more likely to conclude that alternative treatments are ineffective. It should continue to test the effectiveness of different levers with different taxpayer segments using RCTs. Even if the IRS identifies effective alternative treatments, it may underutilize them unless it routinely quantifies and reports the resulting service revenues and compliance gains.

<sup>74</sup> See GAO, GAO-16-146, Financial Audit: IRS's Fiscal Years 2015 and 2014 Financial Statements 25 (Nov. 2015), www.gao. gov/assets/680/673614.pdf (reflecting direct "enforcement" revenue of \$54.2 billion out of \$3.3 trillion). The indirect effect of IRS activities on compliance far exceeds the direct effects, with the indirect effect of an audit exceeding six times the proposed assessment, according to some IRS estimates. See, e.g., Alan H. Plumley, The Impact of the IRS on Voluntary Tax Compliance: Preliminary Empirical Results, National Tax Association, 95th Annual Conference on Taxation 12-13 (2002), http://www.irs.gov/pub/irs-soi/irsvtc.pdf; Jeffrey A. Dubin et al., The Effect of Audit Rates on the Federal Individual Income Tax, 1977-1986, 43 Nat. Tax J. 395, 405 (1990), http://www.ntanet.org/NTJ/43/4/ntj-v43n04p395-409-effect-audit-rates-federal. pdf. Without effective and timely measures of voluntary compliance, any negative indirect effects from more "efficient" exams will go unnoticed.

<sup>75</sup> See, e.g., Treasury Department, Congressional Justification 112 (FY 2017), http://www.treasury.gov/about/budget-performance/Pages/cj-index.aspx. ("Net revenue is maximized only when resources are allocated according to marginal direct and indirect return on investment, but those ratios are much more challenging to estimate than the average ROI shown here.").

<sup>76</sup> See IRC § 7803(a); TBOR, www.TaxpayerAdvocate.irs.gov/taxpayer-rights.

### RECOMMENDATIONS

The National Taxpayer Advocate recommends that the IRS:

- 1. Adopt procedures for routinely testing BIs using RCTs to identify which ones are most effective for various compliance problems and taxpayer segments.
- 2. Adopt procedures to timely disclose the results of IRS studies and RCTs so that all internal and external stakeholders can benefit from them.
- 3. Routinely measure and report the "service" revenue and compliance gains from alternative treatments to internal and external stakeholders.
- 4. Discontinue or modify reports that highlight "enforcement" revenue (as currently defined), which is misleading because it includes "service" revenue and does not include the (potentially negative) indirect effects of unnecessary coercion.
- 5. Incorporate behavioral response metrics (*e.g.*, response rates and future compliance) into all IRS programs to help avoid over-emphasizing the importance of direct revenue.