

THE TAX GAP'S MANY SHADES OF GRAY

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ABSTRACT

The "tax gap"—the difference between the amount of taxes owed and the amount of tax actually paid—has garnered widespread attention in recent months. Much of the commentary on the subject equates the tax gap with "tax evasion," a term broadly understood to connote intentional (and potentially criminal) underreporting. This paper cautions against conflating the tax gap with tax evasion. The tax gap includes substantial gray areas where the law is ambiguous and the Internal Revenue Service's (IRS's) determination of true tax is debatable. The IRS's methodology for measuring the tax gap also includes upward adjustments that are recommended by frontline examiners but reversed on administrative appeal or judicial review. Moreover, a substantial portion of the estimated tax gap is derived from a statistical technique called "detection controlled estimation" that potentially magnifies the impact of later-reversed recommendations on the ultimate tax gap measure. Weighing in the opposite direction, the IRS's approach to measuring the tax gap excludes some amounts that clearly constitute tax evasion (most significantly, underreporting of tax on illegal-source income).

Understanding the tax gap's shades of gray can inform discussions of tax law and policy. We explain how proposals to use the tax gap as a performance target may produce perverse incentives for the IRS. We further explain how additional IRS funding—though necessary to improve the agency's ability to enforce tax laws—may have counterintuitive effects on tax gap estimates. We also illustrate—using examples from the taxation of passthrough entities—how legislative reforms can reduce the size and scope of gray areas in the tax code that

contribute to the tax gap. Our analysis highlights the importance of increased IRS funding levels and substantive tax law changes as complementary strategies for improving tax compliance.

INTRODUCTION

The "tax gap"—the difference between taxes owed to the government and taxes actually collected—has gained new attention in recent months. In May 2021, the Treasury Department projected that the gross tax gap—the difference between taxes owed and taxes voluntarily and timely paid—totaled \$630 billion in tax year 2019 (after "adjusting the tax gap for passthrough and offshore evasion").¹ The net tax gap—which accounts for enforced and other late payments—was still a staggering \$554 billion in tax year 2019, according to Treasury's adjusted projection.² The Biden administration's May 2021 American Families Plan Tax Compliance Agenda aims to reduce the gross tax gap by roughly 10 percent over the next decade.³ Senator Elizabeth Warren (D-MA) and Representative Ro Khanna (D-CA) both have introduced bills that would set an even more ambitious target, instructing the Internal Revenue Service (IRS) to reduce the net tax gap by at least one-third over the next 10 years.⁴

Notwithstanding its prominence, the tax gap is also a subject of considerable confusion. In particular, the tax gap is frequently—and misleadingly—equated with "tax evasion." For example, the American Families Plan Tax Compliance Agenda refers to the tax gap and tax evasion interchangeably. A recent essay by five former Treasury secretaries outlining strategies to close the tax gap was titled, "We Ran the Treasury Department. This Is How to Fix Tax Evasion." News reports often lead with provocative headlines that characterize the tax gap as a consequence of cheating—for example, "The U.S. Is Losing \$1 Trillion Annually to Tax Cheats" (New York Times) and "IRS Chief: Cheats Are Costing U.S. \$1 Trillion" (Washington Post).

However, the tax gap as defined by the IRS includes amounts that definitely do not constitute tax evasion—at least in the legal sense of the term (Olson 2021, 6). Under federal law, tax evasion is a felony involving a willful attempt to evade or defeat the assessment or payment of a tax. By contrast, the IRS's definition of the tax gap includes all taxes that are underreported, whether willfully or not. It includes instances in which taxpayers try to exploit ambiguities—gray areas—in the tax code but are ultimately found by the IRS and the courts to be on the wrong side even if their close-to-the-line conduct falls far short of criminality. It also includes instances in which taxpayers make honest mistakes while trying to comply with ever-changing and often-opaque tax laws. On top of that, the tax gap includes the liabilities of well-intentioned taxpayers who acknowledge what they owe but are unable to pay because of financial distress. For all these reasons, official IRS documents are generally careful not to characterize the tax gap as tax evasion (though other sources—including other government sources).

Moreover, several features of the IRS's methodology create the possibility that the agency's estimate of the tax gap will include amounts that a court—or even the IRS itself—will not ultimately deem the taxpayer to owe. The IRS's measure of "true tax"—the starting point for its calculation of both the gross and net tax gaps—

includes any amount of additional tax recommended by an examiner after an audit included in its compliance studies, even if the examiner's post-audit recommendation is subsequently reversed on administrative appeal or court challenge. Data from the Treasury Inspector General for Tax Administration (TIGTA) indicate that only 63 percent of additional taxes recommended by examiners in operational audits in fiscal years 2015 through 2019 were ultimately assessed (after administrative appeals and abatements). That figure is likely even lower after taking into account further reductions on judicial review. Moreover, the IRS uses a method called "detection controlled estimation" (DCE) in its compliance studies to scale up the recommendations of all examiners to the level of the examiners who recommend the largest upward adjustments in types of personal income, controlling for observable characteristics of the cases assigned to each examiner. DCE potentially magnifies the impact of later-reversed recommendations on the overall tax gap.

Weighing in the opposite direction, other features of the IRS's methodology cause the agency's estimate of the tax gap to *exclude* amounts that are tax evasion by any definition. Of particular note, the IRS's tax gap estimates do not include underreporting attributable to illegal-source income. ¹⁴ Taxpayers are required to report all of their income whether from legal or illegal sources, and nearly two-thirds of all convictions for federal tax crimes involve illegal-source income. ¹⁵ Nonetheless, the IRS says that it omits noncompliance attributable to illegal-source income from its tax gap estimates because (1) illegal-source income is "extremely difficult to estimate" and (2) "the government interest in pursuing this type of noncompliance is, ultimately, to stop the illegal activity, not merely to tax it" (IRS 2007, 6). We highlight below additional areas in which the IRS's official estimates potentially omit significant amounts of underreporting, including but not limited to tax evasion. For example, underreporting attributable to passthrough entities such as partnerships and S corporations may be understated in the agency's official tax gap estimates because audits of those organizations are not routinely conducted as part of IRS compliance studies.

Equating the tax gap with tax evasion generates a distorted perception of the problem of tax noncompliance. Between clear-cut noncompliance and compliance lies a spectrum of many shades of gray, where taxpayers, the IRS, the courts, and Congress may disagree as to what counts as legal or illegal. (Indeed, even within the IRS, there are often various views among examiners and differences of opinion between examiners and appeals officers.) Clarifying the contours of the tax gap not only provides a crisper picture of tax noncompliance but also yields concrete policy implications. We highlight three implications in particular:

1. The tax gap should not be a performance target. The IRS's tax gap research reveals important sources of noncompliance and sheds light on the potential amounts of unpaid taxes that could be collected under current law. But a goal such as reducing the tax gap by a particular percentage aims at an amorphous target. Moreover, setting such a goal for the IRS would produce potentially perverse incentives. For example, one easy way for the IRS to reduce the measured tax gap would be to instruct examiners not to challenge aggressive reporting positions adopted by sophisticated taxpayers who exploit gray areas in the tax code. The IRS would thereby reduce the amount of true tax owed—and

- thus the gap between true tax and the amount actually paid. However, such measures would be at odds with the goals of raising revenue and allocating tax burdens equitably.
- 2. The IRS needs skilled and experienced examiners and up-to-date technology to better address the problem of tax noncompliance. If distinguishing between tax compliance and noncompliance were simple, then the IRS potentially could rely on relatively inexperienced examiners to detect tax underreporting. However, to the extent the tax gap results from sophisticated taxpayers aggressively exploiting ambiguities in the statutes, the IRS's task is more challenging. Our analysis suggests that at least in certain areas, such as the taxation of passthrough entities, noncompliance often involves exploitation of ambiguities. For example, rules regarding special allocations for partnerships and reasonable compensation for S corporation shareholders involve complicated multipart tests that are often unclear in their application. In those circumstances, enforcement would be especially resource intensive and would require a substantial boost in the IRS's budget. The IRS would need to hire, train, and retain revenue agents who are well versed in the relevant areas of law and capable of conducting complex audits, then support their efforts with 21st-century technology. These efforts may take a long time to pay off, especially when the taxpayer appeals the examiner's decision through the administrative process or takes the matter to the courts.
- 3. Tackling the problem of tax noncompliance requires substantive legal reforms. Even the most skilled and experienced examiners will struggle to enforce tax laws that are ambiguous at their core. In those cases, audits are no substitute for clarity in the tax laws. We illustrate this point primarily using examples involving passthrough entities (e.g., partnerships and S corporations), for which current statutes practically invite taxpayers to adopt aggressive reporting positions—some challenged by examiners, some accepted as legal avoidance strategies, and some that are never observed because audits at the passthrough-entity level are rare. We propose straightforward revenue-raising reforms of the tax rules that would make the IRS's task much easier and enforcement more equitable.

To be clear from the outset, the goal of this paper is not to determine whether Treasury or the IRS has overestimated or underestimated the tax gap. Rather, our paper emphasizes that the size of the tax gap is ultimately indeterminate. This indeterminacy stems from two facts: (1) noncompliance is difficult to observe; and (2) the tax laws are often themselves indeterminate, and different observers (indeed, different officials within the IRS) may disagree as to whether a particular taxpayer position is compliant. The challenges of estimating the tax gap have led some tax authorities in other countries to eschew the measure entirely. Our paper does not argue for such a step. Instead, we seek to provide lawmakers, academics, advocates, and others with a clearer understanding of what tax gap estimates do and do not signify so they can use those estimates to improve tax policy.

Our paper proceeds as follows. Section I explains how the IRS defines and measures the tax gap. Section II describes why the IRS's official tax gap estimates may be overinclusive or underinclusive of what taxpayers

legally owe. Section III considers policy implications, highlighting the need for additional IRS resources and substantive legal changes to address areas of persistent noncompliance.

I. WHAT IS THE TAX GAP?

Since 1964, the IRS has periodically conducted studies of tax noncompliance based partly on samples of tax returns.¹⁷ This section focuses on the approach in the IRS's most recently completed tax gap study (for tax years 2011 through 2013). We also highlight the differences between the IRS's tax gap estimates and the legal and colloquial conceptions of tax evasion.

A. Defining the Tax Gap

The IRS defines the "gross tax gap" as "the amount of true tax that is not paid voluntarily and timely" (IRS 2019, 1) and the "net tax gap" as the gross tax gap minus amounts subsequently paid. The difference between the gross tax gap and the net tax gap reflects (1) voluntary late payments and (2) payments that result from enforcement activities. ¹⁸ In its most recent study of noncompliance, the IRS estimated that the gross tax gap was \$441 billion per year for tax years 2011 through 2013. Late payments and enforcement revenue reduced the annual net tax gap by \$60 billion to \$381 billion (see table 1).

The IRS uses its estimates of the gross and net tax gaps to calculate the voluntary compliance rate and the net compliance rate. The voluntary compliance rate is the amount of taxes paid voluntarily and timely divided by the total true tax owed. The net compliance rate is the amount of taxes ultimately paid divided by the total true tax. From 2011 through 2013, the average voluntary and net compliance rates were 83.6 percent and 85.8 percent (IRS, 2019, 1). Remarkably, IRS compliance rates have hovered around those levels for decades (although the dollar amounts have grown).

The IRS divides the tax gap into three primary components: (1) the underreporting tax gap, (2) the nonfiling tax gap, and (3) the underpayment tax gap. The underreporting tax gap is the amount of taxes understated by taxpayers who file returns on time. The nonfiling tax gap is the amount of taxes unreported by taxpayers who owe taxes but do not file a required return on time (if at all). The underpayment tax gap is the amount of unpaid taxes reported on timely filed returns. About 80 percent of the gross tax gap was attributable to underreporting, with the remainder divided roughly in half between the other two sources of noncompliance (see table 1).

B. Measuring the Tax Gap

Underreporting of the individual income tax and self-employment tax represents roughly two-thirds of the IRS's gross tax gap estimate¹⁹ (see table 2). To estimate those portions of the tax gap, the IRS uses results from National Research Program (NRP) audits, supplemented by the DCE method.

National Research Program. The NRP starts with a stratified random sample of individual income tax returns that are selected for audit.²⁰ For the simplest returns, if the IRS can reconcile reported amounts with information supplied by third parties (e.g., W-2s and 1099s) and there is no indication of any significant compliance issue, the IRS does not follow up with the taxpayer. For somewhat more complicated returns, the IRS will conduct correspondence audits that usually focus on just a few items on a return. For the most complicated returns, the IRS will conduct a face-to-face interview with the taxpayer at an IRS office or at the taxpayer's home, place of business, or accountant's office (IRS 2019, 17).²¹ At the end of the audit, the examiner makes a recommendation (additional tax, no change, or a refund). That recommendation is the foundation for the underreporting gap estimate.

Detection Controlled Estimation. NRP audits do not detect all instances of unreported income. To estimate the amount of undetected income, the IRS uses the DCE method. The basic idea behind DCE is that although the IRS cannot observe true income, it can observe differences in recommended adjustments across examiners who have audited returns involving similar tax issues with the same propensity for underreporting, then use those differences to estimate how much is being missed by the less "successful" examiners (i.e., examiners with a propensity to recommend lower adjustments for similar tax returns). The IRS then calculates the additional taxes that should have been paid if taxpayers had reported their DCE-adjusted income and other corrected items on their tax returns.

For example, imagine that three NRP examiners named Daniel, Janet, and Steve audit similar returns reporting income on Schedule C (profit or loss from a sole proprietorship). On average, Daniel detects \$1,000 of underreported self-employment income per Schedule C examined, Janet detects \$5,000, and Steve detects \$10,000. The implicit assumption underlying the DCE method is that Steve is the "best" of the three examiners and that both Daniel and Janet would have detected \$10,000 of underreported self-employment income per Schedule C if they had been as skilled or conscientious as Steve. If Steve's detection rate were perfect, then Daniel's determinations of underreported Schedule C income would be scaled up by a factor of 10, and Janet's determinations would be scaled up by a factor of 2.²²

The individual income tax underreporting gap thus includes (1) the recommended additional tax at the end of NRP audits and (2) the amount of additional tax implied by the DCE (scaled up to reflect the fact that the NRP captures only a small sample of the population). The effect of the DCE approach on IRS estimates of the tax gap is large. For example, John Guyton and coauthors report that the DCE approach effectively triples the average individual income tax underreporting gap for tax years 2006 to 2013 (i.e., for every \$1 of noncompliance detected by NRP audits, the DCE approach implies another \$2 of undetected noncompliance). In other words, approximately two-thirds of the individual income tax underreporting gap is attributable to the DCE. The accuracy of the DCE approach is therefore a central concern in tax gap estimation. 24

C. Distinguishing the Tax Gap and Tax Evasion

The tax gap encompasses much more than evasion. We focus first on the underreporting component of the tax gap, then on its underpayment component.

1. REASONS FOR UNDERREPORTING

The underreporting component of the tax gap, as estimated by the IRS, encompasses any instance in which an examiner recommends additional tax after a random audit. Underreporting sometimes reflects evasion but also can result from various other causes. For example, a taxpayer may make an unintentional mistake, ranging from misunderstanding the law to forgetting to include a one-off payment for a few hours of work. Likewise, an IRS examiner may make a mistake that is subsequently reversed on supervisory review or appeal. In addition, a taxpayer and a revenue agent may disagree about how confusing or ambiguous laws apply to particular factual circumstances, and those disagreements over the gray areas of the tax code may spill over into the measurement of the tax gap.

To illustrate the wide room for disagreement between taxpayers and revenue agents, consider the following cases:

- Valuation of illiquid assets. Taxpayers may be required to establish the fair market value of illiquid assets in a variety of circumstances: for example, when partnership interests or shares of private-company stock are transferred in connection with the performance of services, ²⁵ sold to an individual retirement account (IRA), ²⁶ or donated to a public charity or donor-advised fund. ²⁷ In those cases, valuation comes down largely to a "matter of opinion" (US Government Accountability Office [GAO] 2014, 50). When a taxpayer and an NRP examiner disagree about valuation, the disagreement becomes part of the underreporting gap. ²⁸
- Business versus personal expenses. Taxpayers other than employees generally can deduct ordinary and necessary business expenses but not expenses incurred for personal purposes. For some items (e.g., meals and travel), the line between deductible and nondeductible expenses is often, in the Tax Court's words, "blurry."²⁹ For example, a taxpayer may take a client who is also a friend out to dinner and discuss both business and personal matters; a taxpayer may use a vehicle to pick up business supplies but drop off his child at school along the way. The underreporting gap includes instances in which an NRP examiner disputes the taxpayer's claim that a particular expense was for the business.
- Employee versus independent contractor. A taxpayer's status as an employee or a self-employed independent contractor will matter for a range of tax-related reasons. For example, independent contractors but not employees are potentially eligible for the 20 percent deduction for qualified business income under section 199A.³⁰ Independent contractors are eligible to set up their own solo 401(k)s and simplified employee pension (SEP) plans, thus deferring up to \$58,000 of income in 2021 (\$64,500 if over the age of 50), whereas employees are generally limited to the retirement savings options offered by their employers. The IRS applies a 20-factor test (tracing back to a 1987 revenue)

ruling) to determine whether a worker is an employee or an independent contractor, though it emphasizes that these factors "are designed only as guides" and "the degree of importance of each factor varies depending on the occupation and the factual context in which services are performed." ³¹ The underreporting gap includes instances in which a taxpayer and an NRP examiner differ over the application of the 20-factor test to a particular work arrangement. ³²

- Partnership special allocations. The "most fundamental issue" in the taxation of partnerships is the allocation of a partnership's tax items (Polsky 2010, 97). Partnerships have an incentive, for example, to allocate ordinary-income items to tax-exempt partners, and deductions and long-term capital gains to partners in high tax brackets. A "special allocation"—an allocation that is not in proportion to ownership interests—will not be respected by the IRS unless it has a "substantial economic effect." Commentators describe the regulations setting forth this test as "infamously lengthy," "inscrutable," and "impossible to apply" (Cauble and Polsky 2014). The underreporting gap encompasses some instances in which a partnership has pushed the special-allocation envelope too far.
- Reasonable compensation. Wages paid by an S corporation to a shareholder-employee are subject to employment tax, but nonwage distributions are not subject to employment or self-employment tax (and are exempt from net investment income tax if the shareholder materially participates in the business).³⁴

 Active shareholders of S corporations therefore have a strong incentive to pay themselves low wages and to take large nonwage distributions.³⁵ However, a 1974 revenue ruling requires S corporations to pay their active shareholders "reasonable compensation for services performed."³⁶ As the IRS has noted, "there are no specific guidelines for reasonable compensation in the Code or the Regulations."³⁷ The IRS and the courts generally rely on a nine-factor test, but no single factor is decisive.³⁸ When a taxpayer and an NRP examiner disagree on what constitutes "reasonable compensation," the disagreement adds to the underreporting gap.³⁹

To be sure, complicated and ambiguous laws can affect the underreporting gap in both directions, especially when the IRS is constrained by limited resources. Even the examiners who are most likely to recommend an upward adjustment may decline to do so when they lack the time, budget, and institutional support to contend with sophisticated and well-compensated tax lawyers. Hence the tax gap may exclude some instances where a better-resourced examiner would have concluded that the taxpayer's position was not supported by the facts and circumstances and thus should have been included in the tax gap.

2. REASONS FOR UNDERPAYMENT

A tax debt may remain unpaid for numerous reasons, in addition to taxpayers willfully refusing to pay even the taxes they report on their tax returns. Congress has instructed the IRS—when it settles tax debts—to ensure that taxpayers "have an adequate means to provide for basic living expenses." Congress also requires the IRS to release a levy (i.e., a legal seizure of property, such as the garnishment of wages) when the levy "is creating an economic hardship due to the financial condition of the taxpayer." Moreover, tax debts are dischargeable in bankruptcy absent unusual circumstances, ⁴² and tax debts exceeding the value of a decedent's estate

generally cannot be collected from her heirs. Clearly, not all people with unpaid tax debts are tax evaders. Some are just poor, bankrupt, or dead.⁴³

In sum, the tax gap can be viewed as a rough gauge of how far we are from a world in which everyone pays their taxes in full. But measuring what is legally owed is challenging.

II. OFFICIAL TAX GAP ESTIMATES MAY BE TOO HIGH—OR TOO LOW

As noted, the IRS's latest tax gap estimates date to tax years 2011 through 2013. For those tax years, the IRS estimates an average gross tax gap of \$441 billion per year (IRS 2019, 8). The Treasury Department recently projected that if the tax gap grew with overall income since then, the gross tax gap would have reached \$584 billion by tax year 2019. 44 Treasury supplemented that number with an "adjusted" projection putting the gross tax gap for tax year 2019 at \$630 billion (see table 3). Treasury's adjustment was based on estimates from a paper by John Guyton and coauthors arguing that the official tax gap omits a significant amount of underreporting attributable to passthrough entities and offshore investments (Guyton et al. 2021, 15).

Official size estimates of the tax gap may err in either direction—overstating or understating the amount that taxpayers legally owe but don't pay. With the caveat that the true tax gap ultimately depends upon contestable determinations of tax liability, we review here potential sources of upward and downward bias.

A. Reasons Why Official Estimates Might Be Too High

There are at least four reasons why official estimates of the tax gap may overstate the actual amount of unpaid taxes.

1. RECOMMENDED ADDITIONAL TAX VERSUS TRUE TAX

The IRS defines the tax gap as the difference between the amount of true tax and the amount of tax actually paid on time, but bases its estimate of the largest portion of the tax gap—the individual income tax underreporting gap—on the recommended additional tax after an NRP random audit. Especially when tax laws and taxpayers' circumstances are complicated, the amount of true tax often lies in the eyes of the beholder. To the extent NRP data reflect the examiner's excessively strict interpretation of a tax provision, the NRP estimates of true tax may be overstated.

We know from nonrandom operational audits that the examiner's recommendation can be revised downward on supervisory review or administrative appeal—especially in audits of business tax returns. ⁴⁵ According to the TIGTA, only 70 percent of the additional tax (or credit reduction) recommended by an examiner in a case closed in fiscal years 2015 through 2019 by the IRS's Small Business/Self-Employment Division was assessed (net of abatements) after supervisory review or administrative appeal. ⁴⁶ (Inclusive of all individual and corporate tax returns, that ratio drops to 63 percent, largely driven by the very high rate of successful challenges by large businesses.) The TIGTA's figures do not account for cases in which a taxpayer

prevails against the IRS in Tax Court or obtains a refund in a lawsuit filed in federal district court or the Court of Federal Claims.

To be sure, the fact that an IRS appeals officer reduces an adjustment does not always mean that the examiner made a mistake. Unlike examiners and supervisors, the IRS Office of Appeals is empowered to consider the hazards and costs of litigation as well as the merits of the case.⁴⁷ The appeals officer thus may reduce the recommended assessment even though she agrees with the examiner on the merits (e.g., because she thinks that a court likely would see the matter differently). The key point for present purposes is that what constitutes true tax lies in the eyes of the beholder, and NRP data reflect a particular perspective (that of the examiner).

Compare how tax practitioners typically approach uncertain tax positions. Anticipating disputes between clients and the IRS, lawyers measure uncertain tax positions in shades of gray. When providing tax opinions to clients, many lawyers rank the probability that a taxpayer's position will prevail by using opinion standards like the following:

- "Not frivolous": 10 to 20 percent;
- "Reasonable basis": 33 percent;
- "Substantial authority": 40 percent;
- "More likely than not": at least 50 percent;
- "Should": at least 60 percent; and
- "Will": at least 90 percent.⁴⁸

Similarly, accountants use probabilities to disclose, and reserve for, uncertain tax positions in financial statements, pursuant to Financial Accounting Standards Board Interpretation No. 48 (FIN 48).⁴⁹

As the tax opinion and accounting standards illustrate, practitioners measure tax positions in degrees of uncertainty, not in binary categories of noncompliance or compliance. The true tax construct underlying the IRS's tax gap estimates seeks to collapse these shades of gray into categories of black and white.

2. EXAMINER ACCURACY VERSUS EXAMINER AGGRESSIVENESS

To estimate the tax gap from NRP audits, the DCE approach "scales up" recommended additional tax to the level of the examiners who detect the largest amount of an underreported income type, given comparable incidences and amounts of underreporting across those returns. In the NRP examiner example, Steve's recommendation of \$10,000 of underreported income per Schedule C is taken as true, and Daniel and Janet's lower recommendations are multiplied to roughly equal Steve's. But this scaling-up raises an important concern: What if Steve is simply more aggressive than Daniel and Janet, recommending adjustments that his colleagues would deem unwarranted?

The combination of (1) using recommended additional tax rather than tax assessed after administrative or judicial appeals, and (2) scaling up everyone else's recommendations to the additional tax recommended by Steve, raises the risk that the DCE adjustment reflects something other than the fact that Steve is "better" at detecting unreported income.⁵⁰ As a result, the DCE multiplier may effectively amplify an improper adjustment. This risk is especially concerning because two-thirds of the individual income tax underreporting gap is attributable to the DCE scale-up.⁵¹

In sum, official tax gap estimates do not reflect the amount of additional tax that examiners, on average, would recommend after audit. They reflect the amount of additional tax that would be recommended if all returns were audited by the examiners with the highest propensity to recommend upward adjustments (ignoring downward adjustments that might then occur in the appeals process). The IRS's official tax gap estimates thus potentially include positions to which even a cautious tax practitioner would give a "more likely than not" or "should" opinion.

3. ASYMMETRIC TREATMENT OF OVERREPORTING AND UNDERREPORTING

A third source of potential upward bias in IRS tax gap estimates relates to the treatment of overreporting. Because the underreporting gap is the difference between true tax (as determined by the IRS) and the amount actually paid, overreported amounts ought to be netted against underreported amounts. The IRS recognizes this logic, and accordingly, NRP examiners are instructed to look for cases of overreporting. However, only underreported amounts are scaled up via the DCE method; overreported amounts are not. The implicit assumption is that NRP audits catch only a fraction of underreporting but *all* overreporting (Erard and Feinstein 2011; Alm and Erard 2015).

The assumption that NRP audits detect all overreporting is certainly open to question. Recall that some NRP audits are completed on a no-contact or correspondence basis. It is highly unlikely that those audits would catch, for example, a child or other dependent in a household who would entitle a taxpayer to an additional credit. As Eric Toder observes, "one might suspect that IRS examiners are not over-zealous in searching for and finding unclaimed tax benefits." (Toder, 2007) When overreporting goes undetected in random audits, the IRS's official tax gap estimates will be inflated.

4. POST-2013 CHANGES IN LAW

The IRS's official tax gap estimate, by design, is based on the laws in effect for tax years 2011 through 2013. Changes in tax law since 2013 alter the true tax baseline and thus the resulting tax gap.

For example, the 20 percent deduction for qualified business income under section 199A, introduced in December 2017 by the law commonly known as the Tax Cuts and Jobs Act (TCJA),⁵² significantly reduced the effective tax rate for most sole-proprietor income (as well as some partnership and S corporation income, rents, and royalties). If compliance rates remain constant, reducing the amount of true tax that sole proprietors owe will mechanically reduce the tax gap.⁵³ Weighing in the other direction, TCJA's inclusion of section 199A creates

a new set of compliance issues surrounding the definition of a "specified service" for which the deduction is limited⁵⁴ and the reasonable-compensation standard for S corporation shareholders claiming the deduction.⁵⁵

The TCJA also increased the standard deduction and capped the popular itemized deductions for home mortgage interest and state and local taxes. In combination, those changes resulted in significantly more taxpayers claiming the standard deduction rather than itemized deductions. ⁵⁶ The IRS attributes \$20 billion of the tax gap in tax years 2011 through 2013 to nonbusiness "adjustments, deductions, [and] exemptions" (IRS 2019, 20, table 5). That component of the tax gap is likely to shrink as more taxpayers claim the standard deduction. ⁵⁷

Last, the December 2017 tax law reduced the tax rate on C corporations from 35 percent to 21 percent. As with section 199A, reducing true tax on corporations mechanically reduces the tax gap. Moreover, reductions in the effective tax rate may increase compliance (Allingham and Sandmo 1972). For example, TCJA's corporate rate reduction made it much less profitable for corporations to underreport income. Given the lags and challenges in compliance research, we may not know for years—if ever—the direction or extent of TCJA's effect on compliance behavior.

B. Reasons Why Official Estimates Might Be Too Low

The preceding issues all relate to reasons why the IRS's official tax gap estimates may be overstated or why the tax gap may have declined in real terms since tax years 2011 through 2013. In its May 2021 report, the Treasury Department estimated that the gross tax gap in 2019 could be as high as \$630 billion after accounting for underreporting of income from passthrough entities and offshore evasion—\$46 billion higher than if the gap had grown apace with income since the most recent IRS study. IRS commissioner Charles Rettig suggested that the real tax gap could be much higher—in excess of \$1 trillion per year "for tax years going forward." Rettig cited four types of underreporting that the IRS's latest tax gap estimates might be missing: underreporting attributable to passthroughs and offshore evasion (as echoed by the Treasury report) plus underreporting attributable to cryptocurrency and illegal activities. We elaborate on each.

1. PASSTHROUGH INCOME

The most recent IRS tax gap report (for tax years 2011 through 2013) estimated that the underreporting rate for all passthrough income (including partnerships, S corporations, estates, and trusts) was only 11 percent (IRS 2019, 20, table 5), down from 16 percent for tax years 2008 through 2010 (IRS 2016, 18, table 6). The IRS tax gap reports do not provide separate estimates of underreporting by partnerships, S corporations, estates, or trusts. However, Treasury's adjusted projection of the tax gap in its May 2021 report—which tracks Guyton et al.'s (2021) estimate—adds more than \$20 billion of underreported tax attributable solely to passthrough income.⁶⁰

We share Guyton et al.'s (2021) concern that NRP audit results might understate passthrough underreporting. The two-level structure of passthrough-income reporting poses a serious challenge for NRP

examiners. Partnerships and S corporations first file entity-level returns, which report the entity's net income and other tax items. ⁶¹ Partners and S corporation shareholders then file individual income tax returns, on which they report their share of the entity's income and other tax items. Underreporting may occur at either level (i.e., on the entity's return or on the partners' and shareholders' individual income tax returns). However, in recent NRP studies, only the individual income tax returns were included in the set of returns randomly selected for audit—entity-level returns were not. ⁶² In some cases, the NRP examiner assigned to the individual income tax return of a partner or S corporation shareholder may have audited the partnership or S corporation as part of the review process. ⁶³ Still, the set of entity-level returns that were examined in recent NRP studies are not representative of all such returns. ⁶⁴

In theory, the DCE adjustments reflected in recent IRS tax gap studies may account for the fact that examiners only sometimes review entity-level returns when auditing individual partners or S corporation shareholders. If the most "successful" examiners routinely conduct entity-level audits as part of their review of individual returns, then other examiners' estimates will be scaled up accordingly. However, even the most skilled examiners are likely to overlook substantial amounts of underreporting in partnership-level audits, and the examined entities are not representative of all passthrough entities. As a recent Joint Committee on Taxation report summarizes, "the flow-through nature of the partnerships and the frequently multi-tiered structure of partnerships . . . renders it difficult to determine whether income has been properly reported by the ultimate beneficial owner of the income" (Staff of the Joint Committee on Taxation 2021b, 52). Note that this issue is more severe for partnerships than for S corporations, which by law must have much simpler structures and are limited to one class of stock.⁶⁵

Ultimately, estimating the underreporting gap for passthrough entities raises the same difficulty emphasized throughout this paper: the size of the gap is uncertain because the amount of true tax is itself uncertain. Many of the passthrough tax laws—particularly the rules for partnerships in subchapter K—are shrouded in ambiguity. The partnership special allocation issue is one example, but far from the only one. As Professor Lawrence Lokken summarized the state of affairs two decades ago:

Subchapter K is a mess. . . . It is a system of such complexity that full compliance is only theoretically possible. . . . Taxpayers and tax advisers who want to comply account for partnership transactions in ways that are consistent with their conceptions of the basic aims of subchapter K; others account as adventurously as they believe the IRS is likely to tolerate. IRS auditors challenge partnership accounting only if it seems to be seriously out of whack. No one has the ability, resources, and incentive to figure out exactly what the rules require. (Lokken 1999, 1)

What we can say with confidence is that passthrough noncompliance poses a first-order problem for the federal income tax system. The IRS's last tax gap report put the portion of the gross tax gap attributable to passthrough entities at \$19 billion for tax years 2011 through 2013 (IRS 2019, 20, table 5). This is a substantial sum, and the actual total may be higher. We return to this issue in section III.C, where we highlight steps that Congress can take to reduce this portion of the tax gap.

2. OFFSHORE INCOME

The IRS's tax gap reports do not distinguish between underreporting of income earned in the United States and income from economic activities abroad, but random audit studies may not fully reflect noncompliance attributable to offshore income. The Treasury Department, in its May 2021 report, adds roughly \$20 billion to the official tax gap to account for its estimate of additional underreporting of foreign income to the IRS in 2019. As with the adjustment for passthrough income, the department bases its projection on the study by Guyton et al.⁶⁶ And as with the passthrough adjustment, Commissioner Rettig also cited that study as another reason why the tax gap may be as much as \$1 trillion.⁶⁷

Monitoring taxpayers' income from investments and activities in foreign countries presents several challenges that could result in an undercount of offshore noncompliance. Historically, some US citizens have taken advantage of privacy laws in certain countries, such as Switzerland, that allowed them to shield their assets in secret bank accounts. In other instances, US citizens—including some who were born and lived their entire life in another country—hold accounts in the foreign banks closest to where they live rather than in distant US financial institutions. Prior to 2014, foreign financial institutions did not typically file information returns with the IRS, and the lack of data likely impeded the agency's efforts to detect noncompliance. And it may be difficult for examiners to disentangle the finances of multinational enterprises that shift funds within a complex network of foreign and domestic entities. The last issue primarily affects the corporate income tax underreporting gap, but it also may affect large partnerships with foreign affiliates.

Guyton et al. estimate that US households held approximately \$1.058 trillion in offshore wealth in 2007 and concealed 95 percent of that wealth from the IRS (Guyton et al. 2021, 20 and table 1). Their estimate of the concealment rate is based on sources suggesting that between 88 and 95 percent of US clients' accounts in Swiss branches of Credit Suisse and UBS were not declared to the IRS in the mid-2000s. ⁶⁸ Guyton et al. take the number at the high end of that range (95 percent) and apply it uniformly to their estimates of offshore wealth in all countries. ⁶⁹ They further estimate that in 2007, US households failed to pay approximately \$15 billion in taxes on interest, dividends, and capital gains attributable to those offshore holdings assumed to be concealed. ⁷⁰ They observe that underreported tax attributable to offshore underreporting is "almost never detected by NRP auditors" (Guyton et al. 2021, 15).

The Treasury Department accepts the \$15 billion figure and projects an "adjusted" tax gap for tax year 2019 based on the premise that offshore evasion increased in step with income growth (by type of income).⁷¹ Setting aside any concerns about the \$15 billion figure as an estimate for 2007,⁷² there are strong reasons to believe that offshore underreporting by US households has fallen since 2007—not risen in step with income. Indeed, three of the authors of the Guyton et al. paper emphasize in a 2021 comment that their estimates "reflect a time before the [US offshore tax] enforcement that began in 2008," and they specifically caution against "mapping the offshore estimates to today's policy environment" without more data.⁷³

As Reck and colleagues note, the United States ramped up offshore enforcement efforts dramatically starting in 2008.⁷⁴ Since then, Justice Department investigations of financial institutions in Switzerland, Israel, Liechtenstein, and the Caribbean have yielded settlements in which institutions agreed to turn over the names of thousands of US customers and pay around \$6 billion in aggregate penalties.⁷⁵ From 2009 through 2018, more than 56,000 US taxpayers have entered the IRS's Offshore Voluntary Disclosure Program, paying over \$11 billion in back taxes, interest, and penalties to avoid prosecution for tax evasion.⁷⁶

The Foreign Account Tax Compliance Act (FATCA), enacted in 2010, almost certainly has had a further impact on offshore evasion (beyond the effect of the Justice Department investigations and the Offshore Voluntary Disclosure Program). FATCA imposes a 30 percent excise tax on payments to foreign financial institutions unless they register with the IRS and provide extensive information about their US account holders. From 2014—the first year of implementation—through 2018, an estimated 97 percent of all foreign financial firms with at least \$100 million in assets and sales have registered (Belnap, Thornock, and Williams 2019). The IRS's deputy commissioner for services and enforcement stated in 2019 that "the implementation of FATCA has . . . made it much harder for U.S. taxpayers to hide assets in offshore accounts and evade U.S. tax" (Wielobob 2019, 66).

Some of the strongest evidence of the United States' enforcement success comes from a paper by Niels Johannesen and colleagues, who estimate on the basis of IRS administrative data that in 2009 alone, US taxpayers disclosed \$100 billion of additional offshore wealth due to enforcement initiatives (Johannesen et al. 2020, 312). As the authors emphasize, the \$100 billion estimate is pre-FATCA (Johannesen et al. 2020, 316), which almost certainly had a further effect on the portion of the underreporting gap attributable to offshore income. Commissioner Rettig, in an article written while still in private practice, also cites data showing that the number of foreign financial-account disclosures received by Treasury more than quadrupled between fiscal years 2009 and 2015—"to a large extent as a result of [Justice Department and IRS] efforts." (Rettig 2016)

To be sure, US implementation of FATCA has not been seamless. For example, a 2018 report by the TIGTA found that approximately 4.3 million of 8.8 million FATCA records received from foreign financial institutions as of September 2017 either had an invalid taxpayer identification number or none at all. A 2019 evaluation by the GAO concluded that "data quality and management issues have limited the effectiveness" of IRS efforts to improve tax compliance using data collected under FATCA (GAO 2019a, highlights). Even so, neither the TIGTA report nor the GAO evaluation implies that the combination of all the post-2008 offshore enforcement efforts—including Justice Department actions and the IRS's Offshore Voluntary Disclosure Program as well as FATCA—cumulatively had zero effect on underreporting. In light of the last dozen years' experience, Treasury's assumption that offshore underreporting has increased in step with income growth seems surprising.

3. CRYPTOCURRENCY

The IRS's official tax gap estimates are based on tax years that pre-date the remarkable rise in cryptocurrency. By 2019, the annual global volume of cryptocurrency transactions reached an estimated \$366 billion.⁷⁹ (We use

2019 figures for consistency with Treasury's tax year 2019 projections; the volume of cryptocurrency transactions increased in 2020.⁸⁰) Roughly 30 percent of the global cryptocurrency market appears to be US based,⁸¹ suggesting that approximately \$110 billion in cryptocurrency transactions in 2019 could be sourced to the United States.⁸²

Use of cryptocurrency can contribute to the underreporting gap in two ways. First, a purchaser of goods and services may pay in cryptocurrency, and the seller may fail to report the value of the cryptocurrency payment as income. Second, a person who holds cryptocurrency that has appreciated since acquisition may exchange her cryptocurrency at a gain for cash, other cryptocurrency, or other property and may fail to report that gain. Depending on the circumstances, exchanges of cryptocurrency may generate ordinary income, short-term capital gain, or long-term capital gain (or, correspondingly, losses). On the extreme assumption that all US-attributable volume reflected unreported income taxable at the top rate (40.8 percent), cryptocurrency would have added approximately \$48 billion to the 2019 underreporting gap.

The \$48 billion figure should be treated as close to a theoretical upper bound for tax year 2019; we expect that the true number is substantially lower. Large corporations that accept cryptocurrency for retail transactions (e.g., Microsoft, Home Depot, Starbucks, and Whole Foods⁸³) almost certainly report those receipts. Even when cryptocurrency transactions go unreported, the amount of unreported income generally will be less than the transaction volume (e.g., an individual accepting cryptocurrency as payment for goods and services will have theoretically deductible expenses; an individual selling cryptocurrency for cash will have a cost basis in those coins). And not all cryptocurrency income is taxed at the top 40.8 percent rate: some accrues to lower-bracket taxpayers, and some qualifies for lower long-term capital gain rates. Moreover, some of the cryptocurrency tax gap may reflect unreported transactions that previously would have taken the form of cash. Insofar as cryptocurrency reflects substitution for cash, then a portion of the cryptocurrency tax gap is potentially included in the IRS's official tax gap estimate already.

The bipartisan infrastructure package that President Biden signed into law on November 15, 2021, included new reporting requirements for cryptocurrency transactions that will potentially require a wide range of cryptocurrency market actors to file information returns. He Joint Committee on Taxation estimated that these new requirements will raise \$4.6 billion per year by 2031 (and \$28 billion over the entire fiscal year 2022–2031 period; Staff of the Joint Commission on Taxation 2021a, 2). The committee does not provide further detail on how it arrived at these estimates. However, the committee estimates reflect either (1) a very pessimistic assessment of the efficacy of new reporting requirements or (2) a view similar to ours regarding the magnitude of cryptocurrency-related underreporting: billions—potentially tens of billions—per year, but not enough to explain a substantial portion of the difference between the IRS's official tax gap estimate and Commissioner Rettig's \$1 trillion figure.

4. ILLEGAL-SOURCE INCOME

A recent Bureau of Economic Analysis study, combining data from several sources, estimated that four categories of illegal activity (drugs, prostitution, gambling, and theft from businesses) added approximately \$231 billion to nominal GDP in 2017, or \$253 billion for 2019 if illegal activity grew with the rest of the economy.⁸⁵ If all \$253 billion represents income taxable at the overall average federal individual income and employment tax rates, then illegal activity would add roughly \$40 billion to the tax gap for 2019.⁸⁶

As noted, the IRS's official tax gap estimates are explicitly limited to legal-source income.⁸⁷ Although some underreporting attributable to illegal-source income may be picked up in the NRP nonetheless,⁸⁸ the IRS's official estimate omits by design a significant source of difference between the amount of true tax and the amount actually paid. Note, though, that illegal-source income raises a very different set of enforcement challenges than, for example, underreporting by large passthrough entities. Notwithstanding the success of the Bureau of Internal Revenue—the IRS's predecessor—in making the case against Al Capone nine decades ago, the IRS probably should not be expected to take the lead in investigating the gamut of nontax crimes that give rise to taxable income.

Our review of the evidence suggests that the IRS's official tax gap estimate should not be considered an upper or lower bound on the difference between true tax and the amount of tax actually paid. Details of the IRS's methodology for estimating the tax gap (particularly the use of the DCE adjustment and the asymmetric treatment of underreporting and overreporting) raise concerns about upward bias. On the other hand, the potential underestimation of certain types of noncompliance, particularly passthrough underreporting and underreporting attributable to illegal-source income, could result in downward bias. In our view, knowing the exact size of the tax gap—an inherently subjective quantity—is less important than understanding what the tax gap does and does not represent.

III. POLICY IMPLICATIONS

Clearing up the confusion about the tax gap and tax evasion can usefully inform tax policy. Here, we highlight three concrete policy implications relevant to current debates.

A. The Tax Gap Should Not Be a Policy Target

The idea that Congress and the IRS should aim to "shrink the tax gap" has gained currency in tax policy circles in recent months. As mentioned, Representative Ro Khanna and Senator Elizabeth Warren both have introduced legislation that would set an explicit goal of reducing the net tax gap by one-third over the next decade.⁸⁹ This sort of "tax gap targeting" raises several serious concerns.

First, estimates of the tax gap are not nearly precise enough for a goal such as reducing the net tax gap by one-third to be meaningful. As our analysis illustrates, methodological choices—such as whether to use the DCE approach and how to treat overreporting—may affect tax gap estimates as much as any changes in compliance

rates. Likewise, changes in the experience and skill levels (and perhaps also the aggressiveness) of examiners who conduct NRP audits also may have large impacts on tax gap estimates, especially in light of the DCE method described in section I.B.

Second, the time lag between the end of the relevant tax year and the publication of an IRS tax gap estimate for that year is long—more than five years. ⁹⁰ Individuals can request a tax return filing extension until October 15 of the following year; information returns are often not ready to be matched to tax returns until early fall; audits can take several years to complete; and only then can the researchers analyze the data and calculate the tax gap and its components. ⁹¹ The agency is currently seeking to accelerate that timeline through machine learning techniques, ⁹² but until it does, the tax gap will reflect tax policy and administration from several years in the past. It remains to be seen, moreover, whether machine learning can replicate the results of thorough in-person audits and accurately account for changes in economic conditions, statutes and regulations, and IRS funding levels.

A third reason is, perhaps, counterintuitive. President Biden has called for an increase in the IRS budget to hire more examiners and to fund upgrades to its computer systems and data analytics. Those steps are critical to improving audit selection and execution. All else being equal, we would expect the tax gap to narrow with investments in the IRS's infrastructure. But those innovations may also enable examiners—and in particular, those assigned to the NRP studies—to detect noncompliance that previously had gone unnoticed and unaccounted for in tax gap estimates (even after DCE adjustments). While such improvements in detection would be a positive development, they also would unavoidably cause estimates of noncompliance to rise and the tax gap to increase.

Fourth, much of the tax gap lies outside the IRS's control. For example, Congress may enact changes to the partnership tax rules that further increase both their complexity and the likelihood of evasion, aggressive reporting positions, and confusion.⁹³ Or to take another example, if the use of cryptocurrency continues to grow exponentially, the tax gap may grow as well because of the unique challenges of tracking cryptocurrency transactions. Holding the IRS to account for trends beyond its influence is not likely to be an effective strategy for sustaining long-term support for the agency.

Fifth, setting issues of measurement and control aside, the fact that a policy narrows the tax gap does not necessarily make it worthwhile. For example, the IRS could narrow the tax gap by rescinding the 1974 revenue ruling that requires S corporations to pay reasonable compensation to active shareholders. ⁹⁴ That would serve to reduce true tax—and thus the difference between true tax and the amount actually paid—but it would be a step backward for tax enforcement. Or the IRS might use its authority to release tax levies less often (in effect, garnishing more wages and seizing more property from individuals with tax debts). That would reduce the net tax gap, but it would be at odds with Congress's instruction to take account of economic hardship in collection.

Last, isolating the tax gap as a performance goal ignores the costs incurred in tax enforcement. At current levels of noncompliance, there is sufficient "low-hanging fruit" to ensure that increasing audits would achieve a positive return on investment (Holtzblatt and McGuire 2020). But tackling some of the most difficult compliance challenges may be very costly relative to the amount of owed taxes that could be recouped from noncompliant taxpayers. Of course, even if the monetary returns to investment are very low or even negative, there may still be reasons to expend the funds—if solely to demonstrate commitment to enforcing the tax code or as a way to gain information that could improve the IRS's efforts in the future. But setting the tax gap as the sole goal ignores a careful consideration of the monetary costs of enforcement as well as the nonmonetary benefits of enforcement actions.

To be sure, virtually any quantitative target for IRS performance raises the risk of perverse incentives. Congressman Khanna's Stop CHEATERS Act, for example, would set explicit targets for audit rates for high-income individual taxpayers and large corporations based on reported income (e.g., 50 percent audit coverage for individual returns with reported total income of \$10 million or more). ⁹⁵ One obvious problem with targeting audits on the basis of reported income is that it may encourage taxpayers to underreport income, thereby reducing their audit risk. Meanwhile, evaluating the IRS on the basis of the revenue yield from audits might incentivize the agency to pursue assessments that the tax laws do not warrant. Moreover, focusing only on measures that simultaneously reduce the tax gap and raise revenues might neglect tax simplification proposals that would make it easier for taxpayers to comply with the tax code and for the IRS to effectively administer the law without relying on costly audits—but that also might reduce revenues.

Ultimately, no single measure will allow lawmakers to determine whether the IRS is fulfilling its mission to "enforce the law with integrity and fairness to all." The tax gap, though, is particularly ill-suited for that purpose. And if policymakers do pursue tax gap targeting, they should do so with a clear understanding of what exactly tax gap measures capture.

Importantly, we are not disputing the need for the IRS to estimate and analyze the tax gap or for policymakers to pay close attention to those findings. The underreporting estimates without the DCE correction provide a realistic perspective on the amount that potentially could be collected by increasing the number of audits if the IRS thoroughly audited 100 percent of filers using the tools and procedures available to examiners at the time of the study. (Note that this figure—sometimes described as the "audit gap" 6—would be approximately one-third of the IRS's DCE-adjusted estimate of the individual income tax underreporting gap.)

Moreover, tax gap studies not only identify areas of noncompliance but also can provide insights into solutions. For example, although estimates of noncompliance with child-related tax benefits indicated a problem area, in-depth analysis of those compliance data also revealed how the complexity of family structure contributes to erroneous claims. ⁹⁷ In the past, that type of analysis has resulted in both simplification legislation and new enforcement tools. This experience carries a lesson: inclusion of more audits of passthrough entities in

the NRP studies could provide similar insight into the complexity of business structures and help shape tax legislation and tax administration in ways that would improve tax compliance.

B. Congress Must Provide the IRS with Sustained Support

The IRS clearly requires more resources in order to fulfill its mission irrespective of the distinction between the tax gap and tax evasion. Nonetheless, the distinction underscores both the magnitude of the agency's challenge and the need for sustained support from Congress.

The IRS's recent struggles are well documented but worth recounting:

- Congress has reduced the IRS's budget by 23 percent in inflation-adjusted terms since 2010 (Holtzblatt 2021), even as the total number of returns has risen.⁹⁸ At the same time, the agency's responsibilities have increased considerably, including as a result of the Patient Protection and Affordable Care Act of 2010 and FATCA (discussed in section II.B.2, "Offshore Income").
- From fiscal year 2010 to fiscal year 2020, the number of IRS revenue agents—the employees who typically conduct audits—declined by 44 percent. 99 Of particular concern, over that period the IRS lost a large number of experienced employees who handle complex cases—resulting in a "skills gap" that exacerbates the tax gap (GAO 2019b). As Commissioner Rettig put it, the agency "essentially lost an entire generation of IRS employees" and could not replace them due to a hiring freeze that persisted for most of the 2010s. 100
- The overall audit rate has dropped from an already-low 0.9 percent in fiscal year 2010 to less than 0.4 percent in fiscal year 2019,¹⁰¹ and the audit rate for individual income taxpayers with total reported positive income over \$1 million has fallen even more dramatically—from 8.4 percent in fiscal year 2010 to 2.4 percent in fiscal year 2019.¹⁰²
- For individual and business income taxpayers, the IRS still retains all tax data on an IBM mainframe that dates back to the Eisenhower administration (GAO 2016, 17).

The Biden administration's proposal for \$79 billion in IRS funding over the next decade—on top of the agency's base appropriations—will help to heal the wounds inflicted by the prior decade of budget cuts. But this paper's focus on the gray areas between noncompliance and compliance helps to highlight just how hard it will be for even an adequately resourced IRS to enforce complex laws against sophisticated taxpayers.

Consider again the example of passthrough entities. Forty-four percent of partnership field audits and 33 percent of S corporation field audits closed in fiscal year 2010 resulted in "no change." A no-change outcome after an audit indicates either (1) that the IRS is failing to focus its examination resources on noncompliant returns or (2) that examiners are failing to detect noncompliance. In other words, even before the last decade of budget cuts, the IRS struggled to enforce the tax laws against partnerships. Simply restoring the IRS to fiscal year 2010 funding levels will not solve the problem of passthrough–entity tax enforcement, because all was not well a decade ago either.

Improving enforcement against passthrough entities and other sophisticated taxpayers (such as high-income individuals and large corporations for whom roughly half of recommended additional taxes are reversed after review and appeal) will therefore require a multipronged strategy. First, the IRS needs more money, without which it cannot hire additional revenue agents and other enforcement personnel to replace the thousands who have left in recent years and provide them with up-to-date technology to support long-overdue improvements in detecting and selecting audits. Second, the IRS needs time to train new revenue agents in complex areas of tax law and in audit techniques tailored to complex returns. Training new staff usually requires experienced IRS employees to reduce their own audit activity to conduct the necessary instruction. And even after new employees are hired and trained, it will take several years before the revenue impacts are fully felt, because complex audits take years to complete. To several years before the revenue impacts are fully felt, because

As well, Congress's responsibility for the problem of tax noncompliance extends beyond long-term IRS funding levels. As long as Congress continues to write tax laws that leave large legal and factual gray areas, sophisticated taxpayers will continue to exploit those gray areas. The IRS—however well-resourced it might be—will struggle to fight back. For that reason, investments in tax enforcement must complement, not replace, legal reform. We end by considering legal changes that would effectively address areas of persistent noncompliance, paralleling the discussion of ambiguities in section I.

C. Changes to Substantive Law

Congress cannot realistically eliminate every gray area from the tax laws. However, Congress can constrict zones of ambiguity that arise because of arbitrary or poorly designed tax laws, as follows:

- Valuation of illiquid assets. Although illiquid-asset valuations will always pose compliance challenges, Congress can reduce the frequency and stakes of these disputes. For example, Congress can simply prohibit Roth IRAs—or all IRAs—from investing in nonpublicly traded assets (which, as the IRS itself confirmed in a 2019 GAO report, would remove an obstacle to the IRS's efforts to pursue IRA noncompliance; GAO 2014, 52). That change would eliminate the need to establish a fair market value for illiquid assets sold to an IRA (by barring their sale to IRAs). Likewise, Congress can limit the charitable contribution deduction for gifts of nonpublicly traded assets to only the value of liquidation proceeds received by the charity upon sale, as recently proposed by Senators Angus King (I-ME) and Charles Grassley (R-IA). Verifying the taxpayer's claimed deduction would then be a mechanical process, whereas the status quo requires a revenue agent to spend hours figuring out what a specific asset (e.g., a limited partnership interest in a particular private equity fund) was really worth at the exact moment of contribution.
- Business versus personal expenses. At times, Congress has responded to the inherent ambiguity of the business/personal distinction by imposing Solomonic limits on the deductibility of certain borderline expenses. For example, the Tax Reform Act of 1986 capped the deductibility of business meals at 80 cents for every \$1 of food and beverage expenses (with exceptions). ¹⁰⁸ In 1993 Congress lowered the

cap further to 50 cents for every \$1.109 The 50-cents-on-the-dollar rule stanches the revenue loss from a 100-cents-on-the-dollar deduction that the IRS would be unable to police. As part of the December 2020 COVID-19 relief package, however, Congress allowed a 100-cents-on-the-dollar deduction for calendar years 2021 and 2022 with respect to business meals in restaurants. 110 The motivation for the change was to provide relief to the restaurant industry; another predictable result is to widen the underreporting gap. Congress can instead subsidize the restaurant industry in any number of ways that do not saddle the IRS with a significant enforcement burden. For other expenses that blur the business/personal line, Congress can adopt prophylactic rules like the 50-cents-on-the-dollar business meals deduction cap in order to lower the stakes of misreporting. 111

- Employee versus independent contractor. The line between employees and independent contractors creates tax enforcement challenges largely because Congress has established arbitrary distinctions in tax treatment based on employment status. For example, it is unclear why an independent contractor should be eligible for a 20 percent qualified business income deduction while an employee doing substantively similar work is not, or why an individual who earns income both as an employee and an independent contractor should thereby gain access to additional tax-preferred retirement savings opportunities. Congress can ease the IRS's enforcement burden by eliminating nonemployee preferences—for example, by repealing the section 199A deduction and by establishing uniform limits on contributions to tax-preferred retirement plans. Note again that repealing the section 199A deduction would not necessarily reduce the measured tax gap, because it would increase the amount of true tax owed on sole-proprietor and passthrough income subject to high noncompliance rates. However, repealing section 199A would raise revenue and reallocate tax burdens more equitably, which are more important goals than reducing the measured tax gap. 112
- Partnership special allocations. For years, commentators have called on Congress to abolish partnership special allocations and to require partnerships to allocate tax items in proportion to capital interests (Gergen 1990, 1). In effect, this proposal would align the treatment of partnerships with the treatment of S corporations, which must allocate items in proportion to their shareholders' stockholdings. A more modest proposal would prohibit special allocations only among related partners¹¹³ and, at the very least, prevent some of the most abusive partnership special allocations (e.g., when a partnership whose partners are a taxable individual and that individual's tax-exempt split-interest trust allocates deductions to the taxable individual and ordinary-income items to the trust).
- Reasonable compensation. The policy responses to the S corporation "reasonable compensation" problem are straightforward. First, Congress should apply the self-employment tax to the distributive-share income of active S corporation shareholders. Second, as suggested above, Congress should eliminate section 199A. Encouragingly, the Biden administration's fiscal year 2022 budget includes a proposal to extend self-employment tax to active S corporation shareholders with adjusted gross income over \$400,000.¹¹⁴ Even under the administration's proposal, though, taxpayers—including, it appears, many with AGI over \$400,000—will have opportunities to reduce employment and self-

employment tax by understating compensation.¹¹⁵ And the administration's budget leaves in place the section 199A deduction, thus preserving (and, indeed, expanding¹¹⁶) the income tax incentive for S corporation shareholders to understate compensation.¹¹⁷

These examples illustrate the range of cases in which substantive legal change can accomplish in one fell swoop what would otherwise take thousands of hours of audit work and potentially years of litigation. More ambitious reforms—such as a long-due overhaul of the partnership tax rules—deserve a place on the tax compliance agenda too (Jackel 2021).¹¹⁸ To be clear, we suggest these substantive legal changes as additions to—not replacements for—the increased funding that the Biden administration has proposed. But a better-resourced IRS can only do so much to close the tax gap if lawmakers still leave the agency with an impossible job.

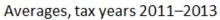
CONCLUSION

This paper has sought to illustrate both what the tax gap is and what it is not. It is not a measure of tax evasion, its contours are not always clear, and it is not a sensible policy target. The tax gap is, however, one of several indicators of deep problems in the US federal tax system, which allows well-advised taxpayers to avoid paying their fair share by exploiting a variety of loopholes and legal ambiguities. An adequately funded IRS is a necessary, but not sufficient, condition for addressing these deep problems. Congress must provide the IRS with more enforcement resources—but also with laws that make the agency's enforcement challenge tractable.

APPENDIX

TABLE 1

Tax Gap, By Source





Source	Amount (billions of dollars)	Share of Gross Tax Gap
Nonfiling Gap	39	9
Individual income tax	31	7
Employment tax	6	1
Corporate income tax ¹	n.a.	n.a.
Estate tax	2	*
Underreporting Gap	352	80
Individual income tax	245	56
Employment tax	69	16
Self-employment tax	45	10
Uncollected Social Security tax and Medicare tax	1	*
FICA and unemployment tax	24	5
Corporate income tax	37	8
Small corporations (less than \$10 million of assets)	11	2
Large corporations (\$10 million or more of assets)	26	6
Estate tax	1	*
Underpayment Gap	50	11
Individual income tax	38	9
Employment tax	6	1
Corporate income tax	5	1
Estate tax	*	*
Excise Tax	*	*
Gross Tax Gap	441	100
Addendum		
Enforcement Revenue and Other Late Payments	60	
Individual income tax	43	
Employment tax	5	
Corporate income tax	10	
Estate tax	2	
Net Tax Gap	381	

Source: Source: Internal Revenue Service, Tax Gap Estimates for Tax Years 2011-2013, Publication 1415, September, 2019

Note: Detail may not add to total due to rounding.

(1) Not estimated

^{*} Less than \$0.5 billion or 0.5 percent.

APPENDIX

TABLE 2
Individual Income Tax Underreporting Tax Gap, By Source
Averages, tax years 2011–2013



Source	Amount (billions of dollars)	Net Misreporting Percentage ¹	Share of Individual Income Tax Underreporting Tax Gap
Individual Income Tax Underreporting Tax Gap	245	18	100
Substantial Information Reporting and Withholding	9	1	4
Wages, salaries, and tips	9	1	4
Substantial Information Reporting	12	5	5
Interest income	*	1	*
Dividend income	1	5	1
State income tax refunds	1	12	*
Pensions and annuities	5	3	2
Unemployment compensation	*	7	*
Taxable Social Security benefits	4	11	2
Some Information Reporting	36	17	15
Partnership, S-corporations, estate and trust, etc.	19	11	8
Alimony income	**	**	**
Capital gains	17	23	7
Short-term capital gains	7	24	3
Long-term capital gains	10	15	4
Little or No Information Reporting	109	55	45
Form 4797 income	2	36	1
Other income	16	42	6
Nonfarm proprietor income	68	56	28
Farm income	6	62	2
Rents and royalties	17	51	7
Other Taxes	1	3	1
Unallocated Marginal Effects ²	10	n.a.	4
Adjustments, Deductions, and exemptions	20	5	8
Total Credits	42	38	17
Filing Status	5	n.a.	2

Source: Internal Revenue Service, Tax Gap Estimates for Tax Years 2011-2013, Publication 1415 (Sept. 2019).

Note: Detail may not add to total due to rounding.

⁽¹⁾ The net misreporting percentage is the net misreported amount divided by the sum of the absolute values of the amounts that should have been reported, expressed as a percentage.

⁽²⁾ The marginal tax rate used to estimate the tax gap associated with an income line item is calculated holding all other line items at their reported amounts. The difference between the total individual income tax underreporting tax gap and the sum of the individual line item tax gaps is the unallocated marginal effects.

^{*} Less than \$0.5 billion or \$0.5 percent.

^{**}Estimate is based on a very small sample size. Estimated tax gap is less than \$0.5 billion and net misreporting percentage is less than 0.5 percent.

APPENDIX

TABLE 3

Tax Gap

Internal Revenue Service's and Treasury Department's Estimates of

Tax years 2011-2013 and 2019 (\$ Billions)

	IRS		Treasury Department
Tax Gap Component	Average, 2011- 2013	Base, 2019 ¹	Adjusted Base, 2019 ²
Gross Tax Gap	441	584	630
Nonfiling Tax Gap	39	52	52
Underreporting Tax Gap	352	466	512
Underpayment Tax Gap	50	66	66
Enforcement Revenues and Other Late Payments	60	76	76
Net Tax Gap	381	508	554

Source: U.S. Department of the Treasury, The American Families Plan Tax Compliance Agenda (May 2021).

⁽¹⁾ Treasury's base projection for 2019 assumes compliance rates, by income type, are unchanged since the 2011 to 2013 period and adjusted for income growth.

⁽²⁾ Treasury added \$46 billion to account for underreporting of income from passthrough entities and offshore assets. The adjustment was based on estimates by Guyton et al (2021) of the amount of unreported taxes attributable to those sources that had not been included in the IRS annual estimates of the tax gap over the period from 2006 through 2013 and adjusted for income growth.2

- ¹ US Department of the Treasury, "The American Families Plan Tax Compliance Agenda" (hereinafter "AFPTCA"), 4–5 and table 1 (May 2021).
- ² AFPTCA, 4.
- ³ AFPTCA, 2-3.
- ⁴ Restoring the IRS Act, S. 1788, 117th Cong., 1st Sess. (May 24, 2021); Stop CHEATERS Act, H.R. 1200, 117 Cong., 1st Sess. (February 22, 2021).
- ⁵ See, e.g., AFPTCA, 4 (referring to the IRS's National Research Program random audit studies as "the 'gold standard' for understanding tax evasion"). As explained in section I.B., the National Research Program random audit studies generate estimates of the underreporting component of the tax gap but they do not, and are not intended to, measure evasion.
- ⁶ Timothy F. Geithner, Jacob J. Lew, Henry M. Paulson Jr., Robert E. Rubin, and Lawrence H. Summers, "We Ran the Treasury Department. This is How to Fix Tax Evasion," New York Times, June 9, 2021. Both the headline and the text of the op-ed refer to the Biden administration's tax gap strategy as a way to "pursue evasion."
- ⁷ Alan Rappeport, "The U.S. Is Losing \$1 Trillion Annually to Tax Cheats," New York Times, April 13, 2021.
- ⁸ "IRS Chief Says Cheats Are Costing U.S. \$1 Trillion a Year," Washington Post, April 13, 2021.
- ⁹ IRC § 7201; Sansone v. United States, 380 U.S. 343, 354 (1965).
- ¹⁰ Gerald Auten and David Splinter, "Comment: Tax Evasion at the Top of the Income Distribution: Theory and Evidence," David Splinter (blog), August 15, 2021, 2 (noting that "the term 'evasion' ... implies the criminal offense of intentionally failing to report income," and recommending the use of "the broader and more accurate terms underreporting and misreporting" when discussing the underreporting component of the tax gap).
- ¹¹ See, e.g., IRS (Internal Revenue Service) (2019) (the term "evasion" is not used in body text).
- ¹² See, e.g., Natasha Sarin, "The Case for a Robust Attack on the Tax Gap," US Department of the Treasury, September 7, 2021 (using "tax gap" and "tax evasion" interchangeably).
- ¹³ TIGTA (Treasury Inspector General for Tax Administration), "Trends in Compliance Activities through Fiscal Year 2019," March 12, 2021, 16, figure 6.
- ¹⁴ IRS 2007, 6 ("It is important to emphasize that IRS estimates of the tax gap are associated with the legal sector of the economy only"); Bloomquist 2007 (noting that illegal source income is "not included in tax gap estimates").
- ¹⁵ IRS Data Book 2020, 56, table 24.
- ¹⁶ For example, the Irish tax agency "does not estimate the tax gap because it has concerns both around accuracy of estimation, and about the usefulness of a tax gap estimate at an operational level." The agency "considers that the science of estimating such a gap is insufficiently developed to provide a useful reliable estimate of tax non-compliance levels" (Irish Office of the Comptroller & Auditor General 2016, 198).
- ¹⁷ For history, see IRS (1979).
- ¹⁸ IRS (2019), 1. Interest and penalty payments are excluded when deriving the net tax gap from the gross gap.
- ¹⁹To estimate the corporate income tax underreporting gap, the IRS starts with operational audit results and makes a series of adjustments to reflect the fact that returns chosen for operational audits are not a random sample of the population of filers (IRS 2019, 21–23). As a recent report by the Staff of the Joint Committee on Taxation (2021b) notes, "These techniques may not overcome all of the data limitations" (6). To estimate the portion of the employment tax underreporting gap associated with the Federal Insurance Contributions Act and Federal Unemployment Tax Act, the IRS uses compliance rates from random audits conducted for tax years 2008 to 2010 (IRS 2019, 23). The estate tax underreporting gap is estimated through a mix of operational and random audits (IRS 2019, 23–24). The underpayment gap is largely estimated on the basis of administrative data reflecting past-due tax balances. Estimation of the nonfiling

- gap raises a range of methodological challenges. Because the nonfiling gap is a relatively small share of the gross tax gap (9 percent), we omit discussion here. For further treatment, see Erard, Payne, and Plumley (2012) and Erard et al. (2020).
- ²⁰ Recent NRP studies have covered three-year spans, using approximately 14,000 individual income tax returns per year; IRS (2019), 17.
- ²¹ Before any of the office and field audits, an experienced IRS examiner reviews the file and "classifies" certain items for further investigation. The NRP examiner assigned to the return is instructed to audit all classified items and also has discretion to audit unclassified items. Some items are routinely classified: for example, Schedule C income (profit or loss from sole proprietorships) and Schedule F income (profit or loss from farming). Items generally subject to third-party information reports (e.g., wages) are not routinely classified.
- ²² In fact, the IRS makes a "very modest adjustment" to the determinations of the top examiners, on the assumption that they uncovered "nearly all" noncompliance (Erard and Feinstein 2011, 129, 132). The IRS generates separate DCE estimates for different income categories. This allows for the possibility that, for example, Janet is more likely than Steve to detect underreported Schedule C income, and Steve is more likely than Janet to detect underreported Schedule F income. In their study, Erard and Feinstein estimated that implicit average DCE multipliers range from 1.46 to 20.0 for different types of income, depending on the extent of examiner-to-examiner variation (Erard and Feinstein 2011, 140, table 1).
- ²³ See, e.g., Guyton et al. (2021, 60, table 6). Note that they use DCE multipliers from the 2001 NRP, which they then apply to returns from the 2006–2013 NRPs (Guyton et al. 2021, 10n14).
- ²⁴ A DCE multiplier of approximately 3 is roughly consistent with estimates based on data from the Tax Compliance Measurement Program (TCMP), the predecessor to the NRP. Using 1976 TCMP data, the IRS estimated that for every \$1 of underreported income detected by TCMP examiners without the help of third-party information returns, another \$2.28 of underreported income went undetected (Feldman and Slemrod 2007, 327, 330).
- ²⁵ IRC § 83(a).
- ²⁶ IRC § 4973, Notice 2004-8, 2004-1 C.B. 333.
- ²⁷ IRC § 170(b)(1)(C)(iv).
- ²⁸ Our main focus here is on the individual income tax underreporting gap, but it bears mention that valuation disagreements play an especially significant role in the context of the estate tax underreporting gap.
- ²⁹ Baca v. Commissioner, TC Memo 2019-78, 2019 Tax Ct. Memo LEXIS 81, at *12.
- 30 IRC § 199A(D)(B).
- ³¹ Rev. Rul. 87-41, 1987-1 C.B. 296.
- ³²We focus in the text on circumstances in which self-employment provides tax advantages for a worker. There are, to be sure, some tax disadvantages of self-employment (e.g., self-employed individuals cannot deduct health insurance costs for self-employment tax purposes—see IRC § 162(I)—whereas employees can exclude employer-sponsored health insurance costs from Federal Insurance Contributions Act wages). And workers who take on independent contractor status to gain the tax advantages of self-employment potentially suffer nontax consequences, such as the loss of labor-law and employment-discrimination protections. Indeed, many workers may have to choose between being classified as an independent contractor or being unemployed, because of the advantages to their employers.
- ³³ Treas. Reg. 1.704-1(b)(2).
- ³⁴ IRC § 1411(c)(4).
- ³⁵ The new section 199A qualified business income deduction, which postdates the IRS's latest tax gap study, supersizes the incentive for active S corporation shareholders to understate their own salaries because S corporation shareholders can claim the 20 percent deduction for distributions but not for "reasonable compensation"; IRC § 199A(c)(4)(A).

- 36 Rev. Rul. 74-44, 1974-1 C.B. 287.
- ³⁷ IRS, "Fact Sheet: Wage Compensation for S Corporation Officers," FS-2008-25, August 2008, 2.
- ³⁸ Owensby & Kritikos, Inc. v. Commissioner, 819 F.2d 1315, 1323 (5th Cir. 1987).
- ³⁹ A similar issue arises in the partnership context. The definition of "net earnings from self-employment income" for purposes of the self-employment tax specifically excludes "the distributive share of any item of income or loss of a limited partner, as such, other than guaranteed payments . . . to that partner for services actually rendered to or on behalf of the partnership to the extent that those payments are established to be in the nature of remuneration for those services"; IRC § 1402(a)(13). This raises the question: Can a limited partner who provides services to the partnership receive reasonable compensation, in the form of a guaranteed payment, for services to the partnership and then claim exemption from self-employment tax for her distributive share of partnership profits?

Treasury and the IRS issued proposed regulations in 1997 that treat all partners as general partners for self-employment tax purposes if they participate in the partnership's trade or business for more than 500 hours during the partnership's taxable year; Prop. Treas. Reg. 1.1402(a)-2(h)(2)(iii), 62 Fed. Reg. 1702, 1704 (Jan. 13, 1997). Although the IRS has not finalized the proposed regulations, the Tax Court has adopted the proposed regulation's view; Renkemeyer, Campbell & Weaver, LLP v. Commissioner, 136 TC 137, 150 (2011): "The legislative history of section 1402(a)(13) does not support a holding that Congress contemplated excluding partners who performed services for a partnership in their capacity as partners (i.e., acting in the manner of self-employed persons), from liability for self-employment taxes." The result in *Renkemeyer* has drawn criticism from practitioners; see, e.g., Browne (2021), 725 (arguing that limited partners and LLC managing members are exempt from self-employment tax on distributive-share income over and above reasonable compensation). Treasury under the Obama administration acknowledged that the issue was ambiguous (US Department of the Treasury 2016, 169). The FY 2022 Greenbook notes that "some partners who might more accurately be considered general partners and some LLC members avoid SECA [the Self-Employment Contributions Act] by claiming the treatment of limited partners"; US Department of the Treasury (2021), 65.

- 40 IRC § 7122(d)(2)(A).
- 41 IRC § 6343(a)(1)(D).
- ⁴² Exceptions apply in cases of tax fraud and tax evasion; 11 U.S.C. § 523(a)(1)(C).
- ⁴³ Olson (2011), 7 ("Are the taxpayers who failed to make tax payments during this period tax evaders and tax cheats because their businesses shut down or went under during this period, or because they lost their jobs?").

According to a March 2021 TIGTA report, approximately \$38.5 billion of unpaid individual income tax liabilities as of May 2019 were attributable to "high-income taxpayers," defined as taxpayers who reported an adjusted gross income of \$200,000 or more on at least one Form 1040 over a five-year span; TIGTA, "High-Income Taxpayers Who Owe Delinquent Taxes Could Be More Effectively Prioritized," March 10, 2021, 4. Although this suggests that not all underpayment reflects inability to pay, note that the \$38.5 billion figure is cumulative of all delinquent tax liabilities (the statute of limitations for collection of a tax debt is 10 years). High-income taxpayers, as defined by TIGTA, accounted for only 22 percent of all delinquent tax liabilities; TIGTA, "High-Income Taxpayers," 4.

- ⁴⁴ AFPTCA, 4, table 1.
- ⁴⁵ It is not clear whether or how NRP data account for adjustments on supervisory review. The Internal Revenue Manual states that "quality review throughout the NRP process will ensure that high-quality data are collected"; IRS, Internal Revenue Manual 4.22.1.3(5), updated September 6, 2017. But we are unaware of any IRS document that explains how these quality reviews are conducted or how NRP data are adjusted in light of these quality reviews.
- ⁴⁶TIGTA, "Trends in Compliance Activities," 16, figure 6. The TIGTA data reflect the results of all audits, not only NRP audits of individual income tax returns. The share of recommended amount that is ultimately assessed varies substantially depending on the type of taxpayer: 94 percent for individual income tax returns without any business income, 70 percent for tax returns with income from corporate and noncorporate businesses with less than \$10 million of assets, and 54 percent for individual and corporate tax returns examined by the Large Business and International Division, which is

responsible for audits of high-wealth individuals and businesses with more than \$10 million of assets. We lack any strong basis for believing that those figures would be significantly different for the random tax audits included in the IRS's estimates of the tax gap.

- ⁴⁷ Treas. Reg. § 601.106(f)(2).
- ⁴⁸ See Wood (2019), 1823. Lawyers must assume that the IRS will examine their clients' uncertain positions (Wood 2019, 1823–24, noting that "an opinion's conclusion can't be based on the audit lottery").
- ⁴⁹ Financial Accounting Standards Board, "Summary of Interpretation No. 48" (2006). FIN 48 now is mostly codified at Financial Accounting Standards Board, "Accounting Standards Codification," 740-10, updated December 2019.
- ⁵⁰ The academic article that provides the intellectual foundation for the DCE method acknowledges this issue: "No possibility of false detection is allowed, in which an examiner falsely claims to detect evasion when none is present. This assumption accords with IRS 'folklore,' but it would be interesting to investigate the importance of this assumption to the findings obtained" (Feinstein 1991, 14, 18).
- ⁵¹ A further concern regarding the DCE adjustment relates to the possibility that between-examiner differences might reflect noise in the data. It is possible that the examiners with the highest propensity to recommend adjustments were randomly assigned to less-compliant taxpayers. The IRS partly addresses this by controlling for taxpayer and tax return characteristics when estimating the DCE equation (Erard and Feinstein 2011, 134). But those controls are unlikely to capture all nonexaminer sources of variation. Thus, there remains a risk of "overfitting" (i.e., attributing differences to examiners that actually result from other causes).

Analysts can use many tools to evaluate the extent of overfitting. One approach is out-of-sample validation: the IRS could calculate DCE multipliers based on, say, half of each examiner's audits and test to see whether these multipliers predict outcomes in the other half of the audits. However, the IRS's tax gap reports do not explain which method (if any) the agency uses to address overfitting.

- ⁵² An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018, Pub. L. No. 115-97, 131 Stat. 2054 (2017). On the origins of the law's lengthy official title, see Naomi Jagoda, "Senate Parliamentarian Rules Against GOP Tax Bill's Name," The Hill, December 19, 2017.
- ⁵³ In contrast, the existence of section 199A creates a new set of compliance issues surrounding the definition of a "specified service" for which the deduction is limited, IRC § 199A(d)(2), and the reasonable-compensation standard for S corporation shareholders claiming the deduction, IRC § 199A(c)(4).
- 54 IRC § 199A(d)(2).
- 55 IRC § 199A(c)(4).
- ⁵⁶ The share of individual income tax returns claiming the standard deduction rose from 68 percent for tax year 2017 to 87 percent for tax year 2018. Compare table 1.2 in Individual Income Tax Returns Complete Report 2017 with table 1.2 in Individual Income Tax Returns Complete Report 2018 (IRS, Statistics of Income Division 2019, 2020).
- ⁵⁷ The December 2017 tax law also temporarily suspended personal exemptions; see IRC § 151(d)(5). However, in light of the partially offsetting increase in the child tax credit and the introduction of a new dependent credit, the net effect on the tax gap is ambiguous.
- ⁵⁸ AFPTCA, 4, table 1.
- ⁵⁹ Charles Rettig, "A Closer Look: Impacting the Tax Gap," IRS, May 2021; Alan Rappeport, "Tax Cheats Cost the U.S. \$1 Trillion per Year, I.R.S Chief Says," New York Times, April 13, 2021.
- ⁶⁰ In its adjusted tax gap projection for tax year 2019, Treasury added \$46 billion of underreported tax attributable to passthroughs and offshore underreporting (on top of its base projection updating the IRS's 2011–2013 data for subsequent income growth). Treasury did not explain how much of the \$46 billion was attributable to passthroughs versus offshore income. However, Treasury noted that the amount was computed by adjusting Guyton et al.'s estimates for post-2012 income growth; AFPTCA, 4, table 1, note 2. Slightly more than half of Guyton et al.'s addition to the IRS's estimate

- appears to be attributable to passthrough underreporting. Compare Guyton et al. (2021), 21 (\$15 billion in underreported taxes attributable to offshore accounts), with 60, table A6 (\$33 billion of underreported tax not included in IRS's DCE-corrected estimate).
- ⁶¹ Partnerships and S corporations do not pay entity-level taxes on their income; instead, these businesses pass their income through to their owners, who are responsible for paying income taxes on their share of their business's net income.
- ⁶² Auten and Splinter, "Comment: Tax Evasion," 11. The IRS last conducted a random audit study of partnerships in 1982 and a small-scale random audit pilot study of S corporations in 2003–2004.
- ⁶³ Indeed, according to Guyton et al., 57.6 percent of all underreporting of partnership and S corporation income detected in NRP audits from 2006 through 2013 resulted from examinations of some entities associated with some owners in the sample (Guyton et al. 2021, 28n36).
- ⁶⁴ Auten and Splinter, "Comment: Tax Evasion," 11 (suggesting that entity-level returns that were audited in recent NRP studies "corresponded to the taxpayer having the business records," and thus "were likely to be smaller, single-owner businesses where the owner could control both entity-level and individual reporting"). Note that a nonrepresentative sample of entity-level returns, when combined with the DCE adjustment, could lead to bias in either direction.
- 65 IRC § 1361(b). Events and trends since tax years 2011 through 2013 (the years reflected in the most recent IRS tax gap estimates) could affect the passthrough underreporting gap in either direction. On the one hand, the entity-level audit rate for partnerships and S corporations has declined—from 0.4 percent in fiscal year 2013 to 0.2 percent in fiscal year 2019; IRS Data Book 2013, 22, table 9a; IRS Data Book 2019, 45, table 17b. The declining audit rate may have resulted in weaker deterrence and therefore lower passthrough compliance. On the other hand, Congress attempted to curb the incentive for partnerships to underreport income by tightening audit rules for large partnerships in the Bipartisan Balanced Budget Act of 2015, Pub. L. No. 114-74, § 1101, 129 Stat. 584, 625. Under the new rules, the IRS generally assesses and collects any understatement of tax at the partnership level, which the partnership divides among current partners. It is unclear whether any positive effect on compliance from the 2015 changes outweighs the potentially negative effect on compliance from declining audit rates.
- ⁶⁶ AFPTCA, 4, table 1, note 2 (citing Guyton et al. 2021).
- ⁶⁷ Rettig, "A Closer Look," 3.
- ⁶⁸ Guyton et al. cite two Senate subcommittee reports that, according to them, "found that 90%–95% of the wealth held by American clients of a number of Swiss banks were [sic] undeclared" before 2010 (Guyton et al. 2021, 20). One of those reports cites internal UBS documents indicating that approximately 88 percent of assets in US clients' Swiss accounts in 2005 were not declared to the IRS: "In October 2005, for example, the data indicate a total of about 18.5 billion Swiss francs of assets in the undeclared accounts and 2.6 billion Swiss francs in the declared accounts" (US Government Printing Office 2008). The other states that "between 85% and 95%" of Swiss accounts opened for US customers at Credit Suisse "may have been hidden from U.S. tax authorities" (US Government Printing Office 2014).
- ⁶⁹ One of the authors of the Guyton et al. paper estimated in 2015 that 80 percent of global offshore wealth was concealed from tax authorities (Zucman 2015, 49). Notably, Zucman's central estimate is lower than the lower bound in Guyton et al.'s sensitivity analysis (85 percent; Guyton et al. 2021, 20, table 1).
- ⁷⁰ Guyton et al. (2021, 18). The authors' estimates do not include noncompliance through offshore hedge funds, which until recently had very limited reporting obligations.
- ⁷¹ AFPTCA, 4, table 1.
- ⁷² We have two main concerns about the \$15 billion figure as an estimate for offshore underreporting in 2007. First, Guyton et al. (2021) attribute to US households approximately 19 percent of the world's \$5.6 trillion in "offshore wealth" (i.e., wealth owned by a household in one country and held in another country). Yet US households account for much less than 19 percent of offshore wealth revealed by available data sources—only 3 percent of foreign-owned fiduciary deposits in Swiss banks in the early 2000s and 7 percent of unique owners of shell companies revealed in the Panama Papers leaks (Alstadsæter, Johannesen, and Zucman 2018, online appendix tables A3, A4). The only support for attributing 19 percent

of global offshore wealth to US households comes from data on the ownership of foreign bank deposits in offshore tax havens (Alstadsæter et al. 2018, 94n12). But the broad category of foreign bank deposits, which includes deposits held by multinational corporations in foreign banks for legitimate business reasons, provides limited information on household-level tax evasion.

Second, Guyton et al. (2021, 20, table 1 and n.27) use 2007 estimates for other parameters but then—without explanation—switch to 2006 rates of return. Since 2006 was a year of unusually strong market performance, the choice has a significant upward effect on the authors' ultimate estimate. We do not fault Guyton et al. for declining to use rate-of-return data from 2007—a year when the S&P 500 total return was –1.4 percent. Other sections of the Guyton et al. study use 2006–2013 as the period of analysis. If the authors had used 2006–2013, their estimate of the underreporting gap attributable to offshore income would decline from \$15 billion to \$7 billion (Guyton et al. 2021, 20, table 1 and n27); Swiss National Bank, "Published Interest Rates for New Transactions" (last updated July 1, 2021) (indicating that the average interest rate on three-month term deposits with a 100,000 Swiss franc minimum for 2006 through 2013 was 0.627 percent); "S&P 500 Return Calculator, with Dividend Reinvestment, DQYDJ" (July 30, 2021) (indicating that the average annualized S&P 500 return from 2006 through 2013 was 6.737 percent).

- ⁷³ Daniel Reck, Max Risch, and Gabriel Zucman, "Response to a Comment by Auten and Splinter on 'Tax Evasion at the Top of the Income Distribution: Theory and Evidence,'" October 22, 2021, 20. Nonetheless, as recently as August 2021, Commissioner Rettig continued to use the Guyton et al. estimate of offshore underreporting in 2007 to project the tax gap for tax year 2019. Letter from Charles P. Rettig, Commissioner, Internal Revenue Service, to Senator Elizabeth Warren, August 27, 2021, 20.
- ⁷⁴ Reck, et. al. (2021), supra note 73.
- ⁷⁵ Laura Sanders, "The IRS Is Still Coming for You, Offshore Tax Cheats," Wall Street Journal, September 14, 2018.
- ⁷⁶ IRS, "IRS to End Offshore Voluntary Disclosure Program; Taxpayers with Undisclosed Foreign Assets Urged to Come Forward Now," press release, March 13, 2018; IRS, "IRS: Offshore Voluntary Compliance Program To End Sept. 28," press release, September 4, 2018.
- ⁷⁷ Pub. L. No. 97-117, 124 Stat. 71 (2010).
- ⁷⁸ TIGTA, Despite Spending Nearly \$380 Million, the Internal Revenue Service Is Still Not Prepared to Enforce Compliance with the Foreign Account Tax Compliance Act, 2018-30-040, July 5, 2018, 12.
- ⁷⁹ Blockchain.com, "Estimated Transaction Value (USD)," accessed June 4, 2021. The market capitalization of all cryptocurrency is around \$2 trillion, but an increase in market capitalization would not give rise to tax liability without a transaction.
- ⁸⁰ The increase was substantial, with approximately \$631 billion of global volume in 2020; Blockchain.com, "Estimated Transaction Value (USD)," accessed December 2, 2021.
- ⁸¹ Gertrude Chavez-Dreyfuss, "U.S. Tax Liabilities for Crypto Currencies in 2017 Seen at \$25 Billion, to Pressure Bitcoin: Fundstrat," Reuters, April 5, 2018.
- 82 Cryptocurrency transactions can cross borders, so a country-by-country breakdown is necessarily imprecise. Nonetheless, multiplying global transactional volume by the US market share offers a rough estimate of the maximum amount of gross income that conceivably could be attributable to cryptocurrency.
- ⁸³ Julie Bennett lannuzzi and Zach Faulds, "Crypto Guide: Companies Accepting Bitcoin and More," The Street, May 5, 2021.
- 84 Infrastructure Investment and Jobs Act of 2021, Pub. L. 117-58, 135 Stat. 429 (2021).
- ⁸⁵ Soloveichik (2019). We adjust based on BEA's estimate of a 9.76 percent increase in nominal GDP from 2017 to 2019; Bureau of Economic Analysis, "National Income and Product Accounts," last revised May 27, 2021, table 1.1.5.

- ⁸⁶ Treasury estimates that the overall average federal individual income tax rate for 2019 was 8.9 percent and the overall average payroll (employment) tax rate was 7.0 percent; US Department of the Treasury, "Distribution Table: 2019 001 Distribution of Families, Cash Income, and Federal Taxes under 2019 Current Law," April 18, 2018.
- 87 See notes 14-156 and IRS (2007), 6.
- ⁸⁸ For example, if an NRP examiner questions a taxpayer about a large check or deposit reflected on a bank statement and the taxpayer acknowledges that the amount should be added to income, the examiner may never know whether the ultimate source of the income was a legal or illegal activity.
- 89 Stop CHEATERS Act, H.R. 1200, 117 Cong., 1st Sess. (February 22, 2021); Restoring the IRS Act, S. 1788, 117th Cong., 1st Sess. (May 24, 2021).
- ⁹⁰ The IRS released its report for tax years 2011–2013 in September 2019. The agency aims to release its report for tax years 2014–2016 in early 2022. Letter from Charles P. Rettiq, 18, supra note 73.
- ⁹¹ For example, as of September 30, 2020, approximately 37 percent of exams of tax year 2018 individual returns remained in process, as did 21 percent of exams of tax year 2017 returns and 4 percent of exams of tax year 2016 returns. See IRS Data Book 2020, 36–38, table 17. These figures primarily reflect timelines for operational audits, most of which are conducted on a correspondence basis, and therefore may not account for the unique challenges of more thorough NRP exams.
- 92 Letter from Charles P. Rettig, 18, supra note 73.
- ⁹³ For example, the "opportunity zone" provisions added by the December 2017 tax law create new complexities, gray areas, and opportunities for aggressive planning. See, e.g., Watkins (2021) (noting that opportunity zone businesses "are required to meet myriad complex tests" and that "there are a number of potentially costly traps for an unwary [fund]").
- 94 Rev. Rul. 74-44, 1974-1 C.B. 287.
- 95 Stop CHEATERS Act, H.R. 1200, 117 Cong., 1st Sess (February 22, 2021).
- ⁹⁶ See note 16 (describing Ireland's approach).
- ⁹⁷ John Szilagyi, a compliance researcher at the IRS in the 1980s, uncovered millions of nonexistent dependents, which led to requirements that taxpayers provide Social Security numbers for each dependent claimed on a tax return; Stephen Dubner and Steven Levitt, "Filling in the Tax Gap," New York Times, April 2, 2006. For discussion of how analysis of the 1988 Taxpayer Compliance Measurement Program (the precursor to the NRP) led to changes in the eligibility criteria for the earned income tax credit and other child-related tax benefits, see Holtzblatt (1991) and Holtzblatt and McCubbin (2004). Further analysis of the impact of complicated family structures is found in a working paper by Leibel, Lin, and McCubbin (2020).
- ⁹⁸ Compare IRS Data Book 2010, 4, table 2 (230.409 million returns in fiscal year 2010), with IRS Data Book 2020, 4, table 2 (240.161 million returns in fiscal year 2020).
- ⁹⁹ Compare IRS Data Book 2010, 67, table 30 (14,588 revenue agents at close of fiscal year 2010), with IRS Data Book 2020, 4, table 2, and 46, table 18 (253,035,393 returns filed in calendar year 2019 and 509,917 examinations in fiscal year 2020)
- ¹⁰⁰ Jory Heckman, "IRS Commissioner: Aging Workforce 'Lost an Entire Generation' to Hiring Freeze," Federal News Network, April 10, 2019.
- ¹⁰¹ See IRS Data Book 2010, 22, table 9a; IRS Data Book 2019, 45, table 17b.
- ¹⁰² IRS Data Book 2010 reports an audit coverage rate of 8.4 percent for individual income tax returns reporting total positive income of \$1 million or more; IRS Data Book 2010, 22, table 9a. The audit rate in the 2010 Data Book is defined as the ratio of the number of audits closed in a given fiscal year to the number of tax returns filed in the prior tax year. The IRS Data Book 2020 does not report comparable audit coverage rates, but it indicates that the IRS closed 10,890 exams of individual income tax returns reporting total positive income of \$1 million or more in fiscal year 2020, and 634,058 such

- returns were filed in the most recent tax year for which data are available (2018); IRS Data Book 2020, 36, table 17, and 46, table 18.
- ¹⁰³ IRS Data Book 2010, 22–23, table 9a. Those figures remained high throughout the decade. See, e.g., IRS Data Book 2019, 45, table 17b (41 percent no-change rate for partnership field audits and 31 percent no-change rate for S corporation field audits in fiscal year 2019).
- ¹⁰⁴ The IRS may cut short the requisite training time in some cases by hiring some mid-career professionals who already have amassed significant subject-matter expertise, but competing with private-sector salaries will be a challenge for the agency.
- ¹⁰⁵ For example, at the end of fiscal year 2019 (September 30), approximately 17 percent of S corporation audits, 20 percent of partnership audits, 35 percent of the highest-income individual audits (positive income of \$10 million or more), and 59 percent of the largest C corporation audits (balance sheet of \$20 billion or more) from tax year 2015 remained in process. See IRS Data Book 2019, 38, table 17a.
- ¹⁰⁶ Accelerating Charitable Efforts (ACE) Act, S. 1981, § 2, 117th Cong., 1st Sess. (2021). The King–Grassley proposal would apply only to contributions to donor-advised funds, though there is a strong argument for applying the rule more broadly.
- ¹⁰⁷ The problem of private-company restricted stock received in exchange for services is somewhat more complicated. Congress allows employees to make an election under section 83(b) to include the fair market value of restricted stock in ordinary income prior to vesting, thus allowing the employees to treat subsequent appreciation as capital gain; IRC § 83(b). In practice, this provision allows start-up employees to claim very low valuations at the time of the 83(b) election and then pay tax at preferential rates when they sell their stock (e.g., after an IPO; Gilson and Schizer 2013, 874, 899, noting that the IRS has been unsuccessful in contesting low valuations). Meanwhile, employees who receive stock options rather than stock cannot make an 83(b) election unless the option has "a readily ascertainable fair market value" (i.e., unless the option is actively traded on an established market); IRC § 83(e)(3); Treas. Reg. § 1.83-7(b)(1). One possible reform would be to extend the "readily ascertainable fair market value" rule to restricted stock (i.e., employees would not be able to make a section 83(b) election unless the property in question had a readily ascertainable fair market value).
- ¹⁰⁸ Tax Reform Act of 1986, Pub. L. No. 99-514, § 142(a), 100 Stat. 2085, 2119.
- ¹⁰⁹ Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, § 13209, 107 Stat. 312, 469.
- ¹¹⁰ Consolidated Appropriations Act of 2021, Pub. L. No. 116-260, § 210.
- 111 Vehicle-expense misreporting lends itself to a prophylactic solution of this sort. In a study of tax year 2001 returns, the Government Accountability Office estimated that 46 percent of sole-proprietor returns include an error with respect to car and truck expenses, and these errors accounted for approximately 8 percent of the sole-proprietor underreporting gap (GAO 2007, 36, table 3). In the past, Congress has responded to the problem of vehicle-expense misreporting by setting dollar caps on the depreciation deductions that taxpayers can claim with respect to passenger vehicles. These dollar caps reflect the reality that the IRS cannot effectively monitor misreporting of vehicle expenses when taxpayers use their vehicles for both business and personal purposes. As part of the December 2017 tax law, though, Congress raised the dollar limits on passenger-vehicle depreciation deductions significantly (from a total of \$8,260 over the first two years to \$26,000, indexed for inflation; Staff of the Joint Committee on Taxation 2018, 128–30). This change is a recipe for increasing the underreporting gap. Congress took a tax benefit that the IRS was already unable to enforce effectively and then dramatically expanded the benefit.
- 112 Among other issues, section 199A gives rise to difficult line-drawing questions regarding the definitions of various professional fields (health, law, consulting, etc.) that are excluded from the deduction when a taxpayer's income exceeds a certain threshold. These questions (e.g., which services do or don't require "skills unique to the creation of performing arts"; see Treas. Reg. § 199A-5(b)(3)(vi)) result in similarly situated taxpayers paying significantly different amounts simply because they had different tax advisers or degrees of risk aversion.

- ¹¹³ See Cauble and Polsky (2014). For a proposal along these lines, see US Senate Committee on Finance, "Wyden Unveils Proposal to Close Loopholes Allowing Wealthy Investors, Mega-Corporations to Use Partnerships to Avoid Paying Tax," press release, September 10, 2021.
- ¹¹⁴ See FY 2022 Greenbook, 66–67.
- ¹¹⁵ The Greenbook is not crystal clear with regard to the treatment of distributions to active shareholders of S corporations. At one point, the Greenbook says that "for taxpayers with adjusted gross income in excess of \$400,000, the definition of net investment tax would be amended to include gross income and gain from any trades or businesses that is not otherwise subject to employment taxes"; FY 2022 Greenbook, 66. Several paragraphs later, the Greenbook provides a formula for determining the portion of S corporation distributions subject to self-employment tax. Under the formula,

the taxpayer would sum (a) ordinary business income derived from S corporations for which the owner materially participates in the trade or business, and (b) ordinary business income derived from either limited partnership interests or interests in LLCs that are classified as partnerships to the extent a limited partner or LLC member materially participates in its partnership's or LLC's trade or business (this sum referred to as the "potential SECA income"). Beginning in 2022, the additional income that would be subject to SECA tax would be the lesser of (i) the potential SECA income, and (ii) the excess over \$400,000 of the sum of the potential SECA income, wage income subject to FICA under current law, and 92.35 percent of self-employment income subject to SECA tax under current law. (FY 2022 Greenbook, 67)

Consider an active shareholder of an S corporation with \$600,000 of S corporation income who characterizes \$100,000 as wages and \$500,000 as a distribution. The formula would seem to imply that she is subject to self-employment tax on \$200,000 (i.e., \$500,000 of potential SECA income + \$100,000 of wages – \$400,000). In other words, she has avoided employment and self-employment tax on \$300,000 by paying herself a wage of \$100,000 rather than \$600,000.

What complicates this analysis is the earlier statement that for taxpayers with adjusted gross income over \$400,000, all gross income and gain from a trade or business that is not otherwise subject to employment tax will be subject to the 3.8 percent net investment income tax. That earlier statement would seem to suggest a net investment income tax cliff at an adjusted gross income of \$400,000; it is unclear whether the administration intended to suggest that.

- ¹¹⁶ The administration's proposal to raise the top marginal rate to 39.6 percent would increase the income tax benefit of understating compensation because the difference between the marginal tax rate on nonqualified business income and qualified business income for top earners would rise from 7.4 percent (i.e., 20 percent × 37 percent) to 7.92 percent (i.e., 20 percent × 39.6 percent).
- ¹¹⁷ See note 39.
- ¹¹⁸ See also US Senate Committee on Finance press release, supra note 113.

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