Different From You and Me: Tax Enforcement and Sophisticated Tax Evasion by the Wealthy

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ABSTRACT

This paper reviews recent research on tax evasion by high-income, high-wealth individuals and attempts to draw out some lessons for policymaking. We review the key concepts around tax evasion, and we summarize the key insights from economic studies of tax evasion in the full population. We contrast the understanding of tax evasion that emerges from such prior work with the findings of recent studies on high-income, high-wealth taxpayers specifically, which highlights the relative sophistication of the evasive strategies favoured by wealthy taxpayers. Finally, we characterize the key steps in the tax enforcement process as they pertain to the high-wealth population, and describe how these steps have played out in specific areas like the fight against offshore tax evasion (JEL H24, H26, K34).

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committed this crime usually requires establishing intent.[2] To describe any under-payment of tax, intentional or not, tax lawyers and authorities tasked with enforcing the law usually use the term *non-compliance*. Meanwhile, legal writers often reserve the term *avoidance* for tax reduction strategies that exploit ambiguities in the tax law or loopholes that lawmakers opened unintentionally, that is, without referring to a distinction based on real economic costs. In complex situations where there is uncertainty about what the law allows, moreover, one can adopt a position that reduces one's tax burden, but which may or may not withstand scrutiny were it competently litigated and adjudicated. Legal writers often call such behaviour 'avoidance,' *even though some of the underlying behaviour may be unlawful*.[3]

We illustrate the subtleties in the definition of 'tax avoidance' with two examples. The first example is the well-known strategy of 'tax loss harvesting.' To do this, investors who have realized capital gains in a given year can, in that same year, realize capital losses that offset the taxes on their capital gains. No one doubts the legality of tax loss harvesting,[4] and both wealthy and not-so-wealthy taxpayers do it [4], though the wealthy likely benefit more because they have larger, more complex portfolios. For an economist, tax loss harvesting is clearly tax avoidance because individuals can reduce their tax burden while incurring negligible real costs. However, some tax lawyers would not call this behaviour tax avoidance, because tax law expressly permits it.[5] Often experts use additional terms like *tax planning* for such behaviours.

Our second example is the US conservation easement. US law allows landowners to donate the development rights on their land for conservation purposes and claim an income tax deduction equal to the effect of the donation on the 'fair market value' of the land (i.e., the value of the foregone development rights). In practice, the legal standard for a fair market value in this domain is weak. In many cases, the deduction taxpayers claim massively exceeds the value at which the land itself was recently purchased [5, 6]. There are also 'syndicated' conservation easement schemes, in which many people invest in a company that exploits a conservation easement, thereby generating an exorbitant return on investment entirely driven by tax reductions. From an economists' perspective, such aggressive valuations cannot possibly be consistent with fair market valuations, but purveyors of syndicated conservation easements nevertheless contend that the law allows them to do what they do. The IRS and many legal experts disagree. Combating this type of avoidance can require lengthy litigation. Legal writers typically call these types of schemes tax avoidance, while an economist is more likely to place them in the grey area between avoidance (legal) and evasion (illegal).

Unlike tax loss harvesting, exploiting a conservation easement requires sophistication and professional advisors, so this scheme is generally the sole domain of HIHW individuals. In fact, many sophisticated grey-area avoidance strategies involve hard-to-value assets, and virtually all the strategies that we know of are employed predominantly by the very wealthy. One should keep this in mind when invoking the old platitude that 'the poor evade, and the rich avoid.'

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2   There are interesting differences between countries here. For example, in the UK, the crime called 'tax evasion' is actually one of a number of related criminal offenses with which tax cheats might be charged, including a common law offense dating back to at least the 12th century called 'cheating the public revenue.' The definition of this common law offense includes intent, but there are also less serious offenses for careless or reckless underpayment of tax. We thank Andy Summers for illuminating these complications.

3   Some legal writers will also draw a distinction between situations in which the taxpayer violated their reporting requirements (non-compliance), and those in which the taxpayer complied with reporting requirements but took an aggressive position on how tax law applied to their situation (avoidance). In the latter case, if the taxpayer's position is disallowed by tax authorities or the courts, legal writers may call this 'unsuccessful' avoidance. We know of no specific term for avoidance which would have been overturned but was not challenged.

4   We should note that tax loss harvesting is not completely devoid of any grey area. Generally, to prevent the most trivial form of loss harvesting, one cannot sell a depreciated asset and then repurchase the exact same asset in order to realize a loss without changing one's portfolio whatsoever. In the US, so-called 'wash sale' rules prevent this by disregarding loss realizations that are immediately undone by subsequent repurchases (within 30 days) of a 'substantially identical' asset. The definition of 'substantially identical' creates some grey area. In practice, this term is narrowly defined from an economic perspective, so one can typically maintain the key characteristics of one's portfolio (the level of risk, the expected return, etc) by repurchasing some 'non-identical' asset following a loss realization.

5   In our experience, one encounters some further differences in usage between legal experts in the US and in the UK on this particular semantic question, with those in the UK being more reluctant to attach the avoidance label to clearly legal and intentionally created sheltering opportunities. However, we have not consulted a representative sample of legal experts in either country.

In fact, the rich evade and avoid. And much of what legal writers and, especially, lawyers representing wealthy taxpayers will call 'avoidance' is not unambiguously lawful.

Henceforth, we will use 'tax evasion' to refer to behaviours that violate tax law, intentionally or not. We do not discuss unambiguously legal tax avoidance further. We do discuss the adoption of dubious legal positions and call this 'grey-area avoidance,' noting that the portion of grey-area avoidance that is not lawful overlaps, according to our definitions, with tax evasion.

ECONOMIC THEORY

Economists' predominant theoretical framework for thinking about tax evasion relies on three main elements: deterrence, third-party information, and tax morale. To model deterrence, one views tax evasion as a form of risk-taking, by which someone tries to reduce their tax bill but risks punishment if they are detected. In deterrence models like the canonical work by Allingham and Sandmo [7], the likelihood that evasion is detected and the penalties for evasion are critical policy determinants of tax evasion, because they control the strength of deterrence. The second element is third-party information reporting. Tax authorities requisition information from third parties like employers and financial institutions, which they can use to check that individuals are reporting accurately. Empirical evidence from audits suggests that where robust third-party reporting occurs, such as for wage and salary income, tax evasion is minimal [8, 9]. The third key element, tax morale, incorporates ideas from psychology and behavioural economics, which suggest individuals have motives for paying taxes that are not captured by models of informed, self-interested decision-making [10]. Motives such as the ethical desire to tell the truth can partly explain, for example, why taxpayers might comply in the absence of deterrence incentives and third-party information [11]. We have not seen evidence that tax morale has as strong an effect on evasion as robust third-party information reporting.

This three-pronged framework for understanding tax evasion falls short when we turn our attention to the HIHW population. First, existing research largely neglects actions that taxpayers take to make their evasion more difficult for authorities to detect. As we shall see, these types of more sophisticated evasion are prevalent among HIHW persons. Second, economists often study tax avoidance completely separately from tax evasion [1], and there has been little work in economics on grey-area avoidance strategies. Relatedly, most studies that test the predictions of models of evasion studies mainly the bottom 99% of the income and wealth distributions [12].[6]

3. THE CHARACTER OF EVASION BY THE WEALTHY

In this section, we review a recent body of research that improves our understanding of how tax evasion among HIHW individuals differs from the rest of the population. We focus our discussion on the *tax gap* – the amount of tax that should legally be paid but is not.

RANDOM AUDITS AND THEIR LIMITS

Until recently, most academic and government research on the individual tax gap came from the analysis of data from random audits of tax returns [8, 9]. If audits detect all tax evasion, then auditing a random sample of tax returns would allow researchers to paint a comprehensive, representative picture of tax evasion. Of course, audits do not actually detect all evasion. Researchers at the IRS and, recently, in other countries have used statistical methods to account for undetected evasion, leveraging for instance the fact that some auditors appear to detect systematically more evasion than others [9, 14]. However, these statistical methods shed little light on the HIHW population specifically, and they do not account for forms of evasion that are undetectable for even highly skilled auditors [15]. Where grey areas are concerned, tax gap research usually defers to auditors' assessments and interpretations of rules, which creates some additional limitations [15, 2].

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6   One notable exception is Slemrod et al. [13]. These authors found that deterrence messaging in a letter campaign had the predicted effect of increasing reported income for low- and middle-income taxpayers but the opposite effect on high-income taxpayers.

Consequently, according to recent research, existing random audit data teach us a great deal about individuals in the bottom 99% of the distribution, but they yield comparatively fewer insights into tax compliance among HIHW individuals. Using additional data, the literature suggests that the tax gap among HIHW individuals is likely much larger and much harder to measure than random audit data alone would suggest.

OFFSHORE TAX EVASION

Several recent studies have focused on tax evasion via offshore financial intermediaries. This literature has grown in parallel with public interest and a multi-pronged effort by policymakers around the world to combat offshore tax evasion.

One set of papers finds that the value of assets held in tax havens is quantitatively large and important [16, 17, 18]. Zucman [16] showed that wealth held in offshore tax havens causes large distortions in statistics on the international investment positions of most countries. Building on these discrepancies and some supplementary macroeconomic statistics, Alstadsæter et al. [18] estimated that about 10% of world GDP is held in offshore tax havens. At the country level, they estimate that offshore wealth as a share of GDP is extremely large in a few countries, at over 40% in Russia, Venezuela, Saudi Arabia, and the UAE, while it is more modest in most other developed countries, including just over 7% in the US and 3–6% in Scandinavian countries.

The available evidence suggests that most of this wealth was undeclared and untaxed. United States Senate reports [19, 20] estimate that 85%–95% of accounts held by US clients of prominent Swiss banks were undeclared to the IRS before FATCA; Johannesen and Zucman [21] and Roussille [22] estimate that 80–90% of the wealth held in Switzerland by Europeans was undeclared, and Alstadsæter et al. [23] find that 90–95% of all accounts held in HSBC Switzerland by Danish and Norwegian taxpayers were not reported either. Importantly, however, we have virtually no evidence about compliance for wealth in tax havens besides Switzerland.

How much does offshore wealth contribute to the tax gap? With a few percentage points of GDP held in offshore tax havens, offshore wealth is unlikely to make a massive difference in percentage terms for the overall tax gap, except perhaps in those countries where it is a much larger share of GDP. For example, Guyton et al. [24] estimate that the US lost about $15 billion in income tax revenue from offshore tax evasion in 2007, which is about 3% of the overall tax gap and 6% of the tax gap for income taxes in this year [25].[7,8]

Although offshore tax evasion is a small share of the total tax gap, it is a large component of tax evasion by high-wealth individuals. Figure 1 illustrates this fact with the findings from two recent studies of Scandinavia [23] and the US [24]. These studies use data on portions of evasive offshore wealth that became visible recently, due to leaks or individuals' coming into compliance during policy crackdowns. Such data reveal that offshore wealth, and thus offshore tax evasion, is extremely concentrated among those at the very top of the income or wealth distribution. Even if there is uncertainty in identifying the exact concentration, multiple sources of data in both the US and Scandinavia tell a broadly consistent story. They suggest for instance that 55–77% of offshore wealth belong to the top 0.1% of the wealth distribution.

Alstadsæter et al. [23] and Guyton et al. [24] quantify the possible importance of concealed offshore wealth in terms of the extent of tax evasion according to income or wealth distribution. Using comprehensive wealth records in Scandinavian countries, Alstadsæter et al. [23] find that offshore tax evasion increases the fraction of taxes unpaid from about 4% to over 25% in the top 0.01% of the wealth distribution; Guyton et al. [24] estimate that it increases the fraction of unreported income from less than 1% to 4% in the top 0.01% of the income distribution.[9] These estimates are uncertain and only include evasion of taxes on financial capital income.[10]

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7   Zucman [17], Table 1, reports a somewhat larger estimate for the US of $36 billion. This estimate includes lost revenues from income taxes on wealth held in both tax havens and non-havens.
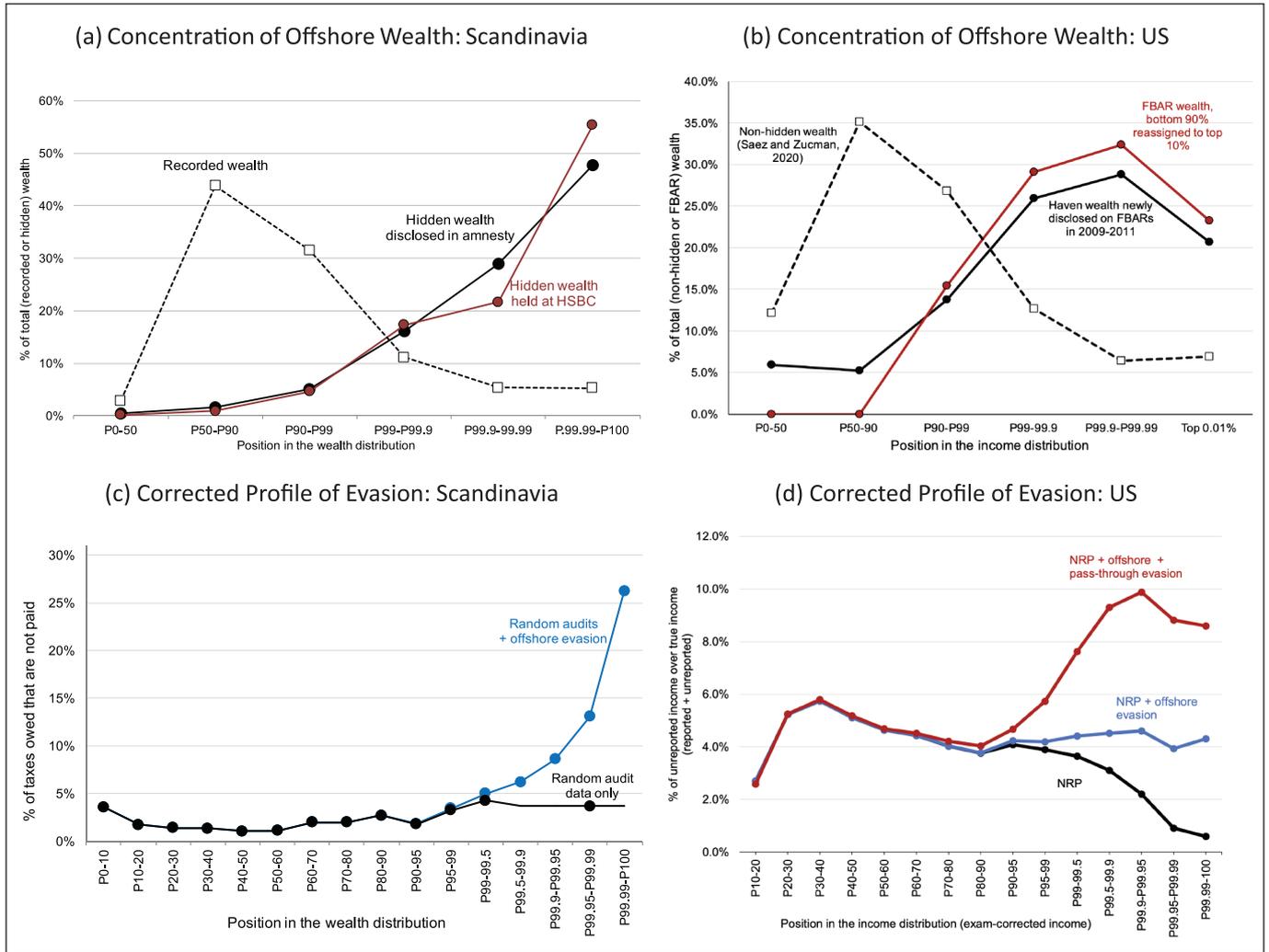
8   Readers should bear in mind that these estimates are uncertain, as discussed further in Alstadsaeter et al. [23] and Guyton et al. [24].

9   They rank individuals by income instead of wealth because comprehensive domestic wealth data are not available in the US.

10   Neither study includes evasion on, for example, business income that is diverted offshore to evade domestic taxes on business income.

Figure 1 Limitations of Random Audit Data and the Importance of Sophisticated Evasion at the Top.

Notes: This figure illustrates the findings of two recent papers on tax evasion by high-income, high-wealth taxpayers: Panels (a) and (c) are drawn from Alstadsæter et al. [23], while (b) and (d) are drawn from Guyton et al. [24]. We show two comparable sets of results across the papers, but note that Alstadsæter et al. [23] rank individuals by their rank in the wealth distribution, while Guyton et al. [24] use the rank in the income distribution (wealth data are more limited in the US and the focus of the paper is on income inequality). In panels (a) and (b) we compare the distribution of offshore wealth based on data from leaks, amnesty disclosures, or voluntary disclosures of offshore wealth with the distribution of wealth that is not concealed offshore (recorded wealth in Scandinavian administrative data or estimated non-hidden wealth based on Saez and Zucman [26]. We observe that across all available data sources for offshore wealth, this wealth is much more concentrated at the top of the distribution than non-hidden wealth (which is already famously concentrated). As discussed in Guyton et al. [24], most disclosed (FBAR) wealth in the bottom two income bins belongs to a small number of accounts worth over $1 million, so following these authors we illustrate the effect of reassigning this wealth to the top of the distribution, which makes a modest difference. In panel (c), we observe that accounting for evasion from offshore wealth massively increases the estimated share of taxes evaded at the top of the wealth distribution in Scandinavia, compared to estimates based on random audit data alone. In panel (d), we observe that accounting for evasion via offshore wealth reverses the sharp decline in the estimated rate of income under-reporting at the very top of the income distribution in US random audit (NRP) data, while accounting for evasion in pass-through businesses sharply increases rates of under-reporting at the top.

(a) Concentration of Offshore Wealth: Scandinavia

(b) Concentration of Offshore Wealth: US

(c) Corrected Profile of Evasion: Scandinavia

(d) Corrected Profile of Evasion: US

They also pertain to the period preceding the international crackdown on offshore evasion. How much of a difference the crackdown made is a difficult question that we discuss in the next section.

Comparing these results between studies provides clues about how the tax system of a country shapes the sophisticated evasion that occurs there. The estimates of the quantitative importance of offshore evasion at the very top of the distribution are much larger in Scandinavia than in the US, partly because the Scandinavian estimates include evasion on wealth taxes that the US does not have, and because the rates of tax on financial capital income are relatively higher in Scandinavia.[11] Guyton et al. [24] show, however, that offshore tax evasion is not the

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11   Ranking by wealth rather than income also increases the importance of tax evasion from concealed wealth, because, mechanically, those at the very top of the wealth distribution are wealthier than those at the very top of the income distribution.

only form of sophisticated tax evasion by the wealthy that is significantly under-measured in random audit data. Another important channel is tax evasion via complex businesses, which we turn to next.

EVASION VIA BUSINESS ENTITIES

An important development in the US tax system in recent decades is the rise of pass-through businesses – namely *S corporations* and *partnerships*. In these, income passes through to owners for tax purposes rather than being taxed under the corporate income tax. For businesses with few owners, there is essentially no third-party reporting over business income, as owners can control what income the pass-through business reports. Between 1980 and 2013, 41% of the increase in the top 1% income share is attributable to rising pass-through business income, as this income primarily goes to the top 1% of the income distribution [27].[12]

The complexity of pass-through businesses creates opportunities for sophisticated tax evasion.[13] Analyzing the returns filed by pass-through businesses to allocate their share of income to their owners, Cooper et al. [27] find that more than 30% of partnership income cannot be traced back to an identified owner. Instead, 20% of partnership income flows to unclassifiable partners and 15% to circular partnerships (e.g., partnership A owns a share of partnership B, B owns a share of C, and C owns a share of A). Relatedly, the offshore world and the world of pass-through businesses are not entirely distinct, in ways that we are just beginning to document empirically. For example, Love [28] shows that more than $1 trillion of income reported to the IRS by partnerships between 2011 and 2019 went to foreign owners in tax havens, with a large proportion of such income sheltered from US taxation through intermediate 'blocker entities'. These can be used for legal avoidance, but they can also facilitate tax evasion.

Because of pass-throughs' complexity, detecting tax evasion occurring via pass-through businesses is difficult; very little evasion on pass-through income is detected in US random audit data. Comprehensively auditing an individual's pass-through business income would require auditing at least another business, if not a network of them, so auditors conducting random audits very rarely examined the tax returns of associated pass-through businesses. Guyton et al. [24] find that estimated evasion for pass-through businesses in individual random audit data is much smaller than one would expect given estimates for other businesses or random audits of pass-through businesses themselves.[14] Building on these supplementary sources of data, they estimate the importance of pass-through evasion for the overall rate of under-reporting of income through the income distribution in Figure 1d. Accounting for pass-through evasion raises the rate of income under-reporting from 4% to 9%. This is almost double the effect of accounting for offshore evasion, reflecting the relative importance of pass-through business structures for wealthy US taxpayers.

PROFIT SHIFTING

Finally, the wealthy are likely beneficiaries of evasion on corporate income taxes, because ownership of large corporations is highly concentrated.[15]

Though most of the literature on corporate profit shifting and other tax sheltering uses the term 'avoidance', these strategies often constitute grey-area avoidance [33]. This fact is evidenced by the frequency of corporate tax disputes, with almost half of the additional tax levied by the IRS on US C-corporations in 2020 disputed by these corporations (see Table 1). Furthermore,

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12   The top 1% of the income distribution receives almost 70% of pass-through income being earned by individuals [27].

13   Some of the same issues exist for large, complex, closely held businesses in other countries. Depending on the tax system, the evaded taxes from this type of business might belong in the corporate income rather than the individual income tax base.

14   Guyton et al. [24] obtain data on random audits of pass-through businesses via a small-scale random audit study of pass-throughs themselves. These data pertain to S corporations only and not partnerships; they were not used for tax gap estimation in official tax gap studies [9].

15   Equity in corporations subject to the corporate income tax (C-corporations) accounts for 25–26% of the wealth of the top 1% of the wealth distribution in the US, and as much as 35–41% for the top 0.01% [29, 30]. We note also that owners may not be the sole beneficiaries of corporate tax evasion or avoidance. Owners might pass some benefits of evasion on to workers or consumers; we know of little evidence on this question, though there is evidence that changes in business income tax rates are partially incident on workers [31, 32].

TAX RETURNS	NUMBER OF RETURNS AUDITED			ADDITIONAL TAX AMOUNTS (IN THOUSANDS OF $)		
	EXAMINED	UNAGREED	PERCENTAGE	RECOMMENDED	UNAGREED	PERCENTAGE
Individual returns, total	**452,515**	**9,965**	**2.2%**	**5,534,356**	**1,071,981**	**19.4%**
Size of positive income						
No total positive income	56,279	1,109	2.0%	1,766,902	167,087	9.5%
$1 – $100,000	294,609	4,092	1.4%	1,602,398	175,078	10.9%
$100,000 – $1M	89,822	3,954	4.4%	1,194,213	341,993	28.6%
$1M – $5M	8,157	683	8.4%	504,700	253,141	50.2%
$5M – $10M	1,213	d	d	119,073	d	d
$10M or more	1,520	54	3.6%	344,961	92,128	26.7%
Corporation returns, total	**9,695**	**803**	**8.3%**	**6,082,864**	**2,782,899**	**45.7%**
Size of balance sheet returns						
No balance sheet returns	1,103	101	9.2%	99,325	15,968	16.1%
Under $10M	4,115	391	9.5%	234,266	94,326	40.3%
$10M – $100M	1,799	104	5.8%	129,104	66,997	51.9%
$100M – $500M	898	46	5.1%	205,542	115,554	56.2%
$500M – $1B	340	23	6.8%	81,714	20,347	24.9%
$1B – $5B	602	48	8.0%	422,452	182,476	43.2%
$5B – $20B	336	34	10.1%	784,315	496,156	63.3%
$20B or more	302	46	15.2%	4,092,722	1,790,675	43.8%

a number of well-known avoidance strategies involve the sale of intellectual property (e.g., a software patent) from the home country to a subsidiary in a low-tax country. In order to derive value from such a scheme, the US parent must sell the IP below its fair market value. Arms-length transfer pricing rules aim to prevent exactly this, but they struggle to because the market value of intellectual property is often ambiguous. Such practices may therefore be *de facto* legal because existing anti-avoidance rules cannot prevent them but *de jure* illegal because of under-valuation.

The overall extent of corporate sheltering activities is large. By comparing the profitability of foreign firms to that of domestic firms, Tørsløv et al. [34] estimate that about 36% of multinational profits are shifted to tax havens ($600 billion in 2015). US multinationals shift a particularly high share of their earnings to low-tax jurisdictions.[16] The estimated loss for the US government ranges from about 20% [17] to more than 40% [36] of corporate tax revenues.[17]

4. POLICY RESPONSES

How should tax enforcement policy aim to enforce compliance among high-income, high wealth individuals? Much of the literature on policy responses to tax evasion focuses on two responses: obtaining more information from third parties and increasing audit scrutiny of tax returns. However, tax enforcement is a multi-step process. These two types of intervention may be effective for the overwhelming majority, but weaknesses at any step of the process can be exploited by the top 1%. We begin by reviewing each step in the enforcement process and the

Table 1 IRS audit and disagreements rates, by type and size of the return, Fiscal Year 2020.

Notes: This table displays the number of returns audited and additional tax amounts recommended by IRS auditors for Fiscal Year 2020, as well as the number of audited taxpayers who disagreed with their assessment and the amounts of additional tax that were disagreed on. The upper half of the table describes these key figures for individuals, while the bottom half describes corporations. Both are ranked by the size of their positive income. Money amounts are in thousands of dollars. The 'd' indicates that the figures are not shown to avoid disclosing information about specific taxpayers. However, the data are included in the total rows. Source: IRS [41], Table 18.

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16   This is partly due to the fact that prior to 2018, the US tax code provided disincentives for US multinationals to repatriate their foreign profits [35]. These disincentives were removed by the Tax Cuts and Jobs Act of 2017, which eliminates taxation of foreign earnings upon repatriation; rather, the profits of MNEs are now taxed where they are earned.

17   Blouin and Robinson [37] question the size of these estimates, indicating that the BEA net income series, one of the main sources to study profit shifting in the US, double counts the income of indirectly owned US affiliates. They propose a new measure of multinationals' income that does not suffer from the same drawback, but that is missing part of the shifted income [38, 39]. Using macro-data, it might be impossible to really get a proper grasp of the extent of profit shifting; indeed, information about accounting profits only is available in macroeconomic statistics, while taxable profits are more directly informative about tax sheltering activities of MNEs [40]. For further discussion, see Clausing [38].

types of interventions that pertain to that step. We then present two illustrative case studies of crackdowns on specific types of sophisticated tax evasion and draw further insights from these.

TYPOLOGY OF POLICY RESPONSES

Table 2 summarizes each step of the tax enforcement process, along with a description of the key policy decisions that influence each step, the challenges policymakers face in making these decisions, and some examples of empirical research on each step.

STEP	POLICY INTERVENTIONS	CHALLENGES	EXAMPLES OF RELEVANT EMPIRICAL STUDIES
Creation of rules, regulations, penalties	- Revising rules and regulations - Altering penalties	- Precluding the exploitation of significant tax shelters - Defining clear legal standards to resolve ambiguities	- Exploitation of shelters [45] - Criminal vs civil offshore penalties: [46, 47] - Grey areas [2]
Reporting requirements	- Third-party reporting requirements - Taxpayer reporting requirements	- Crafting reporting requirements for complex situations. - Finding reliable third parties from which to gather information. - Avoiding unduly burdensome reporting requirements	- Importance of third-party reporting [8] - Impact of offshore third-party reporting [48, 49, 50, 51] - Dodging third-party reporting [52, 53] - Complexity and taxpayer reporting [27, 28]
Selection of returns for examination	- Information processing - Audit-targeting strategy - Whistleblower schemes	- Processing reported information in complex situations. - Predicting compliance risk - Identifying priorities for revenue recovery/deterrence - Incentivizing whistleblowers without unduly rewarding bad actors	- Machine learning and audit selection [54, 55, 56] - Impact of whistleblower programs [57]
Audits, examinations, investigations	- Resources available - Audit procedures	- Staffing skilled examiners - Designing audit procedures that facilitate detection - Auditing complex ownership structures comprehensively - Avoiding undue burdens on compliant taxpayers	- Audit heterogeneity and detection [14, 24] - Direct revenue gains from audits [58, 59] - Dynamic effect of audits [60, 61, 62, 63, 64]
Disputes and litigation	- Resources available - Selection of cases/issues to litigate	- Staffing skilled litigators - Dedicating adequate resources to complex cases - Pursing outcomes that deter others from attempting to litigate	- Audits and ambigious positions [65]
Collections	- Resources available - Procedures for collecting tax debts	- Collecting from uncooperative taxpayers - Avoiding undue burdens, especially on low-income taxpayers	- Effectiveness of collections strategies [66, 67]

Table 2 Steps in the tax enforcement process.

Notes: This table displays the different steps of the tax enforcement process (column 1), the key policy decisions that influence each step (column 2), the challenges policymakers face in making these decisions (column 3), and a non-exhaustive set of examples of research papers on each step (column 4). We focus on examples of research from empirical and economics in column 4; see Slemrod [12] for a review of the recent theoretical and empirical economics research.

The first step is to define tax liabilities and penalties for evasion. This is a crucial one because failure to write clear and enforceable rules can create ambiguities or outright loopholes. Given their financial sophistication and access to professional advisors, high-wealth taxpayers are especially likely to turn to their advantage any ambiguities or legal sheltering opportunities.

Once tax liabilities are defined, the next step is to gather information from taxpayers and from third parties to administer these liabilities. Because of the growing consensus about the importance of third-party information reporting, this is probably the step on which the most economic studies about tax enforcement have been written, while other steps have received comparatively less attention. There has also been little work on the information that should be reported by taxpayers, but, especially in complex circumstances, 'first-party' reporting rules matter. For example, these reporting rules govern the extent to which US pass-through business income can be linked to owners using the information reported on tax returns, especially when the owners are foreign persons [27, 28]. For another example, policymakers in some countries

require that taxpayers self-report when they undertake specific tax avoidance schemes, which helps tax authorities identify, track and deter grey-area avoidance [42].

Following the reporting of information to the tax authority, the tax authority must decide which returns to scrutinize, that is, whom to audit. A number of papers discussed above employ data from random audits, but most audits are non-random and selected based on suspected non-compliance. The evidence base on the causal effects of policy interventions here, such as to improve the selection of audits or to increase audit rates, is relatively thin.[18] An important part of the effect of a change in audit policy is the effect on taxpayers' reporting behaviour, that is, the deterrence effect. Studies on the effects of receiving threatening letters from the tax authority or the effect of being audited on future reporting behaviour suggest that deterrence effects are potentially large and significant [12]. However, we have very little empirical evidence on the deterrence effects of changing (non-random) audit rates, as most studies on the revenue return to increasing audit rates do not account for deterrence (see Table 2). Existing studies also do not focus on the HIHW population, even though, in this population, audit rates are relatively high, tax liabilities are quite concentrated, and tax positions are relatively complex. Moreover, the evidence in Guyton et al. [24] suggests that the type of audit and audit procedures matters a great deal for high-income taxpayers due to their sophistication. Some audits, like those conducted within the IRS Global High Wealth Program, are more thorough and sophisticated [43]. Separately, we note that the prior step on reporting rules has downstream implications here: better reporting rules provide the tax authority with more useful information, which it can use to improve the audit selection process.

Following audits, examiners assess additional taxes and penalties for non-compliance. One key question here is the nature of the penalty, which can range to simply paying back taxes, to minor financial penalties, to criminal prosecution and prison time. In practice the latter is extremely rare.[19] In the US, for example, wealthy taxpayers adopting grey-area avoidance strategies sometimes obtain letters from legal experts arguing that their position is compliant, which provides a shield against criminal penalties – recall that proving criminal evasion requires establishing intent.

Next, if taxpayers disagree with their assessments, they can dispute them. Resolving these disputes can entail substantial costs for both the taxpayer and the government. Due to ambiguities in the rules and the risk of mistakes, disputes are common, and tax authorities must decide how to allocate resources to disputes. Disputes are especially common among HIHW taxpayers: in the US, over 50% of assessed tax is challenged at the very top of the distribution, in comparison to less than 20% for most of the population [24] (see also Table 1). That these disputes in the US are often settled in the taxpayers' favour has led many observers, including the current commissioner of the IRS, to argue that in attempting to collect tax from sophisticated high-wealth taxpayers, the IRS is often legally 'outgunned' [44].[20]

Finally, after disputes are resolved and the amount of tax someone owes is determined, the IRS must collect any additional taxes due. There has been public discussion here around questions like whether the tax authority should recoup taxes owed by garnishing wages. For the high-wealth population, however, the collections process is seemingly a less pressing policy concern: once disputes are resolved, these taxpayers pay what they owe.

In summary, while the economic literature has mainly focused on information reporting, reflecting the economists' underlying view of tax evasion as an asymmetric information problem, a number of other inter-connected components of tax enforcement policy are essential to limiting tax evasion and legal avoidance by high-wealth individuals. The next wave of tax enforcement research should focus on these other types of policy interventions.

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18   Many tax authorities conduct internal research to evaluate, for example, their audit selection rules, but such studies are seldom published publicly.

19   For example, in 2017, the IRS recommended adjustments for 400,000 individuals after audits, but referred about 2,200 individuals for criminal prosecution. The rarity of prison time for evasion is similarly low in most countries (IRS [41], Tables 18 and 24).

20   There has been some related debate about what to make of disputes in tax gap estimation. The tax gap is typically estimated using data on auditors' initial assessments, so they include the grey-area avoidance that auditors believe are not compliant with the law. See Guyton et al. [15] and Hemel et al. [2] for further discussion of this question.

CASE STUDY: CRACKING DOWN ON OFFSHORE EVASION

Prior to recent reforms, auditors faced challenges in detecting offshore tax evasion because of a lack of information [24], a challenge for the second phase of the enforcement process described above. Consequently, governments have focused a large part of their enforcement efforts on acquiring information from offshore financial institutions, especially in countries where concealed assets tend to be located.

We can distinguish roughly two waves of policies aimed at curbing offshore tax evasion. In the first wave, governments focused on gathering information from specific countries or financial institutions. Following Birkenfeld's 2007 whistleblowing, the US government sued the Swiss Bank UBS for helping Americans to evade taxes. UBS ultimately settled, paying a $780 million penalty, and providing the names of its American clients to US authorities [46]. The US then took similar action against several other foreign banks. The US and many other governments also used offshore voluntary disclosure programs (OVDPs), which allow taxpayers who voluntarily disclose their previously unreported offshore assets to pay reduced penalties and/or to avoid criminal sanctions. The OECD reports that more than €37 billion has been identified under such programs over the 2009–2014 period [68].[21] Additionally, to help detect noncompliance, G20 countries from 2008–2009 pressured tax havens to sign bilateral Exchange of Information upon Request (EoIR) treaties;[22] allowing tax authorities to requisition information from a partner administration if they suspect wrongdoing. However, the scope of this first wave of measures was possibly too narrow, as many of these measures targeted specific countries or financial institutions.

Consequently, countries have recently adopted broader Automatic Exchange of Information (AEoI) policies, enabling governments to solicit financial information on *all* of their taxpayers with assets in other countries. The US introduced unilateral AEoI under FATCA, which was implemented starting in 2014. Shortly thereafter, the OECD initiated a multilateral AEoI agreement, the Common Reporting Standard (CRS). The CRS is the most ambitious measure addressing offshore tax evasion as it establishes AEoI between over 100 jurisdictions, including the major tax havens. As such, AEoI policies and the CRS in particular have been shown to be relatively effective at decreasing the amount of wealth held in tax havens [49, 50, 51].

Throughout, the focus of the offshore crackdown has been on the 'third-party reporting' step of the enforcement process outlined above. The effectiveness of these measures in deterring evasion depends on the relative costs and benefits of three alternatives faced by previously evasive taxpayers: comply, dodge new reporting requirements, or do nothing. Available evidence provides a number of clues regarding the importance of these three possible responses for the current global crackdown. Johannesen et al. [46] show that following the first wave of enforcement in the US starting around 2008, US taxpayers disclosed about $100 billion in offshore wealth, that is perhaps 10% of Americans' total concealed wealth according to prevailing estimates at that time [17].[23] Regarding the second, more comprehensive wave, FATCA in the US, De Simone et al. [51] find that investment out of financial accounts in tax havens fell sharply post-FATCA, suggesting that FATCA made significant progress above and beyond the initial wave of enforcement studied by Johannesen et al. [46]. Casi et al. [49] arrive at similar findings in their analysis of the CRS, with an important caveat discussed below. A recent study by Alstadsæter et al. [69] found that the Norwegian crackdown on offshore tax evasion also caused virtually no substitution toward legal avoidance strategies, suggesting that effective crackdowns do indeed raise revenue.

To what extent did taxpayers revise their tax evasion strategies rather than come into compliance? There are three main options available to non-compliers, depending on which

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21 Ultimately, an OVDP is only effective if taxpayers believe their evasion will be discovered. Interestingly, however, OVDPs themselves can increase this probability by revealing previously unknown schemes. For example, the US used information gathered from OVDPs, in particular data about specific foreign financial institutions used by disclosing evaders, as a basis for issuing John Doe Summonses – legal summons that forced banks to turn over information on individuals suspected of tax evasion, where the government does not know the identities of the suspected individuals.

22 Havens which would not sign at least 12 of these treaties were threatened with economic sanctions.

23 Most of these newly compliant taxpayers employed 'quiet' disclosures, entering into compliance and disclosing wealth *without* entering into OVDPs, apparently in order to avoid the steep penalties that they would incur.

specific part of the crackdown we consider. The first option is to change the location of the assets held offshore, from cooperative to non-cooperative havens. Johannesen and Zucman [21] show that this response was widespread after the implementation of G20 EoIR treaties. The broader measures in the second wave of enforcement described above makes this more difficult, although following the CRS, there is evidence of a flight of deposits from 'classical' tax havens to the US, who is not providing information to other countries under the CRS [49]. Still, the number of 'safe' locations to store offshore assets is declining and could plausibly fall to zero if international cooperation broadens.

The second option is to switch to more sophisticated concealment strategies. The most common way of doing so is to obscure the ownership of the assets using intermediary entities or individuals, with the wealthiest much more likely to use such strategies [47].[24] Johannesen [48] shows that the European Savings Directive, introducing a withholding tax on deposits held directly by European taxpayers in 15 participating tax havens, was evaded by some in such a way. Omartian [52] provides evidence that banks had an active role in this process, by facilitating the creation of the new concealment structures.

A third way to avoid reporting assets after the enactment of new transparency policies is to reinvest in alternative assets. In particular, as international enforcement efforts have focused on financial wealth in tax havens, investing in non-financial assets is a way to avoid information disclosure. Bomare and Le Guern Herry [53] show that the announcement of the CRS, which only covers financial assets, led to a large increase in investments out of tax havens into the UK real estate market. This suggests that many sophisticated individuals circumvented the CRS by reallocating their offshore portfolios toward real estate.

Finally, rather than comply or substitute to a different evasive scheme, taxpayers could also choose not to react to new transparency policies. Doing nothing is a rational response if the deterrence effect of the new policies is insufficiently strong, with two factors particularly pertinent here. First, tax enforcement agencies have limited resources to analyze the information they obtain and to audit non-compliant and potentially litigious wealthy taxpayers. Second, information from foreign countries might not always be sufficient to link offshore assets to domestic taxpayers, given the complexity of offshore structures used to hold wealth in tax havens [71, 72]. In other words, third-party information on its own may be insufficient to deter evasion, especially when other components of the enforcement process are starved of resources.

CASE STUDY: SYNDICATED CONSERVATION EASEMENTS

While offshore tax evasion is clearly illegal but difficult to detect, the case of syndicated conservation easements provides an illustrative example of attempts to combat grey-area avoidance. As discussed in Section 2, the root cause of the problem is ambiguity in the valuation of the development rights that landowners forego when entering a conservation easement. The potential for a problem therefore arises due to policies at the very first step of the enforcement process, with the laws that define and regulate the conservation easement tax deduction. In contrast to offshore enforcement, the next steps of enforcement are relatively straightforward: because taxpayers are exploiting a legal grey area, they do not conceal their position and gathering information is relatively straightforward. Policymakers then have two main options to take down syndicated conservation easements: reform the law to shut down abusive schemes, or disallow the abusive tax deductions and litigate the resulting disputes with taxpayers.

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24   Complex ownership structures and the use of foreign entities also limit what we can learn about tax evasion and tax avoidance using macro data. For example, the Bank for International Settlements (BIS) locational statistics is one of the most frequently used datasets to quantify offshore wealth and evaluate transparency policies. It provides information on cross-border bank deposits on a bilateral basis, for 48 countries. However, deposits ownership is assigned on a direct basis, which means that, for example, assets held by a French taxpayer via a shell company incorporated in the British Virgin Islands will be attributed to the British Virgin Islands. Using data leaked from one of the main banks in the Isle of Man, Collin [70] estimates that a substantial proportion of the funds nominally assigned to tax havens in the BIS data actually belongs to non-haven residents. By re-assigning funds to their ultimate beneficial owners, he computes that the amount of funds allocated to tax havens decrease by up to 32%, while the sums allocated to non-haven beneficial owners more than double.

So far, the US has taken the disputes and litigation path. The IRS issued a notice identifying syndicated conservation easement transactions as a target of future enforcement activity in 2017 [73]. This notice required that taxpayers disclose their participation in syndicated conservation easements (a first-party reporting rule). They then began auditing taxpayers to attempt to shut down the schemes. Unsurprisingly, taxpayers fought back, and a number of cases wound up in court. The IRS had success in a number of these cases early on, but they came from pointing technical errors made by taxpayers when claiming the deductions, not from disallowing some extreme conservation easements deductions [74].

Despite the ongoing crackdown, the value of claimed syndicated conservation easement deductions actually *increased* significantly in the following two years, from $6 billion in tax year 2016 to over $9bn in 2018 [75, 76]. Plausibly, the fact that the early cases disallowed a relatively small number of deductions based on technical mistakes rather than deeper valuation questions limited the deterrence effect. The IRS persisted, broadening the scope of its crackdown. In 2019, they scored a major victory in the first case in which they directly contested a valuation and imposed major penalties on the offending taxpayers [77]. This victory was followed by the first conviction for *criminal tax fraud* against promoters of a syndicated conservation easement scheme in 2020 [78]. However, some taxpayers appear to believe they can avoid the mistakes of those taxpayers who lost their battles with the IRS, and the fight continues. In the years between the initial announcement of the crackdown and the first major victories, the US has lost billions of dollars in tax revenue to these schemes: about $2–3 billion per year based on the total deduction figures above.

Although conservation easements have been a priority for the IRS, they are far from the only type of grey-area avoidance in the US tax system. The IRS's difficulty in using court battles to deter individuals from claiming conservation easements illustrates the difficulty with using litigation to combat grey-area avoidance in the first place. Legal battles are long and costly, and wealthy taxpayers and their advisors can adjust their initial positions in response to whatever tactics the IRS uses. Targeting the *first* step of the enforcement process instead would pre-empt the need for these legal battles. Proposals along these lines are currently under consideration in the US Senate following the publication of an investigative report on the issue [79]. Still, delineating abusive and non-abusive conservation easements remains challenging.

5. CONCLUSION

From the economic literature focused on roughly the bottom 99% of the income or wealth distribution, it might be tempting to adopt a relatively simplistic view of tax evasion: tax evasion occurs when third-party information is absent and perhaps a bit more when tax morale is relatively low. This simple view implies straightforward policy recommendations, for instance the recommendation to expand third-party information reporting, as many countries have in the last few decades, and to audit frequently in those situations where third-party information is absent. Newly amassed evidence suggests that this view falls short when we turn our attention to the very top of the income and wealth distributions. Many high-income taxpayers will dodge new third-party information requirements if they can, by restructuring their interests and reallocating their wealth. With the help of professional advisors, they meticulously scan the tax code for grey areas and legal avoidance opportunities. When tax authorities attempt to assess taxes on them or their businesses via audits, they often fight back and undertake lengthy, costly legal battles. Weaknesses at virtually any step in the enforcement process, from the defining of tax rules, to introducing reporting requirements to staffing audits to litigating tax disputes, can spill over onto other parts of the process and lead to the loss of substantial tax revenue.

In light of these facts, tax enforcement targeting high-income, high-wealth taxpayers or the businesses they own entails a multi-pronged approach, including: 1) facilitating robust information sharing, especially sharing information on assets and capital income across borders, 2) devoting resources to deep, thorough audits, 3) investing resources toward litigating tax disputes, 4) pursuing substantial penalties for the most egregious evaders, 5) monitoring aggressive tax sheltering schemes and undertaking frequent legal reforms to shut them down, and 6) promoting whistleblower disclosures to identify 'blind spots'. The task might sound daunting, but we should not become so cynical or pessimistic as to abandon the fight. Income

40. **Bilicka KA.** Comparing UK tax returns of foreign multinationals to matched domestic firms. *American Economic Review*. 2019; 109(8): 2921–53. DOI: https://doi.org/10.1257/aer.20180496

41. **IRS.** Internal Revenue Service Databook 2020. Washington, DC; 2021. Publication 55-B (rev. 5-2021).

42. **HMRC.** Use of marketed tax avoidance schemes in the UK (2018 to 2019). London; 2021.

43. **Kambas WJ, Farkas-DiNardo E, Gershel DH.** The focus of the IRS Global High-Wealth Group. *Tax Notes Federal*. 2021; 170: 1397–410.

44. **Rettig CP.** Written testimony of Charles P. Rettig, Commissioner Internal Revenue Service before the House Ways and Means Committee, Subcommittee on Oversight on the Filing Season and IRS Operations; 2022.

45. **Advani A, Burgherr D, Savage M, Summers A.** The UK's global economic elite: A sociological analysis using tax data. *CAGE Working Paper*. 570; 2022.

46. **Johannesen N, Langetieg P, Reck D, Risch M, Slemrod J.** Taxing hidden wealth: The con- sequences of US enforcement initiatives on evasive foreign accounts. *American Economic Journal: Economic Policy*. 2020; 12(3): 312–46. DOI: https://doi.org/10.1257/pol.20180410

47. **Londoño-Vélez J, Ávila-Mahecha J.** Enforcing wealth taxes in the developing world: Quasi-experimental evidence from Colombia. *American Economic Review: Insights*. 2021; 3(2): 131–48. DOI: https://doi.org/10.1257/aeri.20200319

48. **Johannesen N.** Tax evasion and Swiss Bank deposits. *Journal of Public Economics*. 2014; 111: 46–62. DOI: https://doi.org/10.1016/j.jpubeco.2013.12.003

49. **Casi E, Spengel C, Stage BM.** Cross-border tax evasion after the common reporting standard: Game over? *Journal of Public Economics*. 2020; 190: 104240. DOI: https://doi.org/10.1016/j.jpubeco.2020.104240

50. **Menkhoff L, Miethe J.** Tax evasion in new disguise? Examining tax havens' international bank deposits. *Journal of Public Economics*. 2019; 176: 53–78. DOI: https://doi.org/10.1016/j.jpubeco.2019.06.003

51. **De Simone L, Lester R, Markle K.** Transparency and tax evasion: Evidence from the Foreign Account Tax Compliance Act (FATCA). *Journal of Accounting Research*. 2020; 58(1): 105–53. DOI: https://doi.org/10.1111/1475-679X.12293

52. **Omartian JD.** Do banks aid and abet asset concealment: Evidence from the Panama papers. Available at SSRN 2836635; 2017.

53. **Bomare J, Le Guern Herry S.** Will we ever be able to track offshore wealth? Evidence from the offshore real estate market in the UK. EU Tax Observatory Working Paper 4; 2022.

54. **Hsu KW, Pathak N, Srivastava J, Tschida G, Bjorklund E.** Data mining based tax audit selection: A case study of a pilot project at the Minnesota Department of Revenue. In: *Real World Data Mining Applications*. Springer. 2015; 221–45. DOI: https://doi.org/10.1007/978-3-319-07812-0_12

55. **Black E, Elzayn H, Chouldechova A, Goldin J.** Algorithmic fairness and vertical equity: Income fairness with IRS tax audit models. *ACM Conference on Fairness, Accountability, and Transparency*; 2022. DOI: https://doi.org/10.1145/3531146.3533204

56. **Henderson P, Chugg B, Anderson B, Altenburger K, Turk A, Guyton JL,** et al. Integrating reward maximization and population estimation: Sequential decision-making for Internal Revenue Service audit selection. Unpublished mimeo; 2022.

57. **Amir E, Lazar A, Levi S.** The deterrent effect of whistleblowing on tax collections. *European Accounting Review*. 2018; 27(5): 939–54. DOI: https://doi.org/10.1080/09638180.2018.1517606

58. **Hodge R, Plumley A, Richison K, Yismaw G.** Estimating marginal revenue/cost curves for correspondence audits. *IRS Research Bulletin*; 2015.

59. **Holtzblatt J, McGuire J.** Effects of recent reductions in the Internal Revenue Service's appropriations on returns on investment. *IRS Research Bulletin: Proceedings of the 2019 IRS/TPC Research Conference*. 2020; Publication 1500 (Rev. 6-2020).

60. **DeBacker J, Heim BT, Tran A, Yuskavage A.** Once bitten, twice shy? The lasting impact of enforcement on tax compliance. *The Journal of Law and Economics*. 2018; 61(1): 1–35. DOI: https://doi.org/10.1086/697683

61. **Erard B, Kirchler E, Olsen J.** Audit impact study: The specific deterrence implications of increased reliance on correspondence audits. In: *Taxpayer Advocate Service: Annual Report to Congress*; 2019. 257–68.

62. **Plumley A, Lykke L, McGill M, Nicholl L.** The specific indirect effect of correspondence audits: Moving from research to operational application. *IRS Research Bulletin*. 2020; 9.

63. **Kasper M, Alm J.** Audits, audit effectiveness, and post-audit tax compliance. *Journal of Economic Behavior & Organization*. 2022; 195: 87–102. DOI: https://doi.org/10.1016/j.jebo.2022.01.003

64. **Advani A, Elming W, Shaw J.** The dynamic effects of tax audits. *The Review of Economics and Statistics*. 2021; 1–45. DOI: https://doi.org/10.1162/rest_a_01101

65. **Blumenthal M, Christian C, Slemrod J.** The determinants of income tax compliance: Evidence from a controlled experiment in Minnesota. *NBER Working Paper*. 6575; 1998. DOI: https://doi.org/10.3386/w6575

66. **Turk A, Iuranich J, Orlett S, Datta S.** Resolving unpaid taxes and the notice of federal tax lien: Evidence from the Fresh Start Initiative. *IRS Bulletin*. Washington, DC; 2016.

67. **Hallsworth M, List JA, Metcalfe RD, Vlaev I.** The behavioralist as tax collector: Using natural field experiments to enhance tax compliance. *Journal of Public Economics*. 2017; 148: 14–31. DOI: https://doi.org/10.1016/j.jpubeco.2017.02.003

68. **OECD.** OECD releases full version of Global Standard for Automatic Exchange of Information; 2014. Accessed: 2022-04-07. https://www.oecd.org/tax/oecd-releases-full-version-of-global-standard-for-automatic-exchange-of-information.html.

69. **Alstadsæter A, Johannesen N, Le Guern Herry S, Zucman G.** Tax evasion and tax avoidance. *Journal of Public Economics*. 2022; 206: 104587. DOI: https://doi.org/10.1016/j.jpubeco.2021.104587

70. **Collin M.** What lies beneath: Evidence from leaked account data on how elites use offshore banking. *Brookings Global Working Paper Series*; 2021.

71. **TIGTA.** Despite spending nearly $380 million, the Internal Revenue Service is still not pre-pared to enforce compliance with the Foreign Account Tax Compliance Act; 2018. Publication 2018-30-040.

72. **TIGTA.** Additional actions are needed to address non-filing and non-reporting compliance under the Foreign Account Tax Compliance Act; 2022. Publication 2022-30-019.

73. **IRS.** Listing notice–syndicated conservation easement transactions; 2017. Notice 2017-10.

74. **Parillo KA.** A look ahead: Will the IRS's winning streak on easements continue? *Tax Notes Federal*. 2021; Jan 4, 2021.

75. **National Taxpayer Advocate.** Annual Report to Congress; 2020.

76. **Rettig CP.** Open letter to Senate Finance Committee Chairman Charles Grassley dated 12 Feb 2020; 2020. https://www.finance.senate.gov/imo/media/doc/Exhibit%20003%20-%20Letter%20from%20Rettig%20to%20Grassley%20and%20Wyden%20(2020.02.12).pdf.

77. **IRS.** IRS continues enforcement efforts in conservation easement cases following latest tax court decision. IRS News Release IR-2019-213; 2019.

78. **DOJ.** Atlanta tax professionals plead guilty to promoting syndicated conservation easement tax scheme involving more than $1.2 billion in fraudulent charitable deductions. DOJ News Release 20-1381; 2020.

79. **United States Senate.** Syndicated conservation-easement transactions. *Investigative Report of the Senate Finance Committee*. Washington, DC; 2020.

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