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Information Matters in Tax Enforcement

Leandra Lederman* & Joseph C. Dugan**

Most scholars recognize both that the government needs information about taxpayers' transactions to determine whether their reporting is honest, and that third-party reporting helps the government obtain that information. Given governments' reliance on tax collections, it would be risky to think that information or third-party reporting is not needed by tax agencies. However, a recent article by Professor Wei Cui asserts that "modern governments can practice 'taxation without information.'" Professor Cui's argument rests on two claims: (1) "giving governments effective access to taxpayer information through third parties does not explain the success of modern tax administration" because, he argues, some important taxes—such as the value added tax (VAT)—do not involve information reporting; and (2) modern tax administration succeeds because "business firms" are "sites of social cooperation under the rule of law," fostering compliance. Both arguments are mistaken. As this Article demonstrates, third-party information reporting is highly effective, third-party reporting is used to enforce VATs, and firms are not inherently compliant. In fact, where individuals report on firms, firms' compliance increases. This supports the intuitive notion that third-party reporting increases tax compliance and that information matters in tax enforcement.

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INTRODUCTION

Economists and legal experts have long recognized that the government needs information about taxpayers' transactions in order to determine whether their reporting is honest. Tax experts have likewise long recognized that third-party information reporting (TPIR) is an important tool to promote compliance with the tax law.¹ For example, in its most recent study of

1. See, e.g., Henrik Jacobsen Kleven et al., *Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark*, 79 *ECONOMETRICA* 651, 653 (2011) ("[O]ur findings suggest that tax evasion is low, not because taxpayers are *unwilling* to cheat, but because they are *unable* to cheat successfully due to the widespread use of third-party reporting."); Mark D. Phillips, *Individual Income Tax Compliance and Information Reporting: What Do the U.S. Data Show?*, 67 *NAT'L TAX J.* 531, 563 (2014) ("Using U.S. taxpayer-level data . . . this paper has shown that the presence and amount of unmatched income are the primary determinants of

tax compliance, the Internal Revenue Service (IRS) reported the following voluntary (unenforced) compliance rates for individuals:²

Type of Income	Voluntary Compliance Rate
"Income subject to <i>substantial</i> information reporting and withholding"	99%
"Income subject to <i>substantial</i> information reporting"	95%
"Income subject to <i>some</i> information reporting"	83%
"Income subject to <i>little or no</i> information reporting"	45%

These statistics reveal several important comparisons:

- Substantially complete information reporting by a third party results in almost as much voluntary

income tax noncompliance.""); Joel Slemrod, *Cheating Ourselves: The Economics of Tax Evasion*, 21 J. ECON. PERSP. 25, 37 (2007) ("Line item by line item, there is a clear positive correlation between the rate of compliance and the presence of enforcement mechanisms such as information reports and employer withholding.").

2. See IRS, FEDERAL TAX COMPLIANCE RESEARCH: TAX GAP ESTIMATES FOR TAX YEARS 2011–2013, at 14 fig.3 (2019) [hereinafter TAX GAP ESTIMATES FOR TAX YEARS 2011–2013] (emphasis added), <https://www.irs.gov/pub/irs-pdf/p1415.pdf> (showing noncompliance rates). The IRS explains its methodology, as well as the limitations of the methodology, as follows:

The estimates were prepared by the IRS and are based on original research and analysis conducted or sponsored by the IRS. Estimating the tax gap is inherently challenging and requires assessing the merits of alternative methods, assumptions, and data sources. There is no single approach that can be used for estimating all the components of the tax gap, so multiple methods are used. Each approach is subject to non-sampling error; the component estimates that are based on samples are further subject to sampling error. The uncertainty of the estimates is not readily captured by standard errors that typically accompany estimates based on sample data. For that reason, standard errors, confidence intervals, and significance tests for statistical comparisons across years are not reported. When using these estimates and making comparisons across years, the user should be mindful of these limitations.

Id. at 1.

compliance by the individual taxpayer as actually having the third party withhold those taxes and remit them directly to the government.

- The *extent* of information reporting matters. When only some information about the payment is reported—rather than most or all of the information needed for tax reporting—the compliance rate decreases (from an estimated 95 percent of the dollars due to an estimated 83 percent).
- Individuals have a much lower (45 percent) estimated compliance rate with respect to receipts not subject to information reporting, such as cash received from a small business.

These reductions in estimated tax compliance as third-party reporting decreases are consistent over time in IRS studies.³ Accordingly, the IRS has stated that “[t]he estimates confirm the relationship between reporting compliance and third-party information reporting that was demonstrated in earlier tax gap estimates. For the individual income tax, reporting compliance is far higher when income items are subject to information reporting and even higher when also subject to withholding.”⁴

The logic underlying TPIR relies on a fairly straightforward, two-part insight. First, asymmetric information is a core problem for modern tax laws because the taxpayer knows the relevant facts—such as the details of the transactions that he or she engaged in—while the government does not.⁵ Second, adding a third party (generally a payor or recordkeeper) to the taxpayer-government taxpaying relationship fosters taxpayer compliance

3. See, e.g., *id.* at 14 fig.3; IRS, FEDERAL TAX COMPLIANCE RESEARCH: TAX GAP ESTIMATES FOR TAX YEARS 2008–2010, at 12 fig.1 (2016) [hereinafter TAX GAP ESTIMATES FOR TAX YEARS 2008–2010], <https://www.irs.gov/pub/irs-soi/p1415.pdf> (showing estimated noncompliance rates for the categories in the chart that translate to voluntary compliance rates of 99%, 93%, 81%, and 37%); IRS, TAX GAP FOR TAX YEAR 2006, at 3 fig.1 (2012), https://www.irs.gov/pub/newsroom/overview_tax_gap_2006.pdf (reflecting compliance rates of 99%, 92%, 89%, and 44%); IRS, TAX YEAR 2001 INDIVIDUAL INCOME TAX UNDERREPORTING GAP 2 (2007), https://www.irs.gov/pub/irs-utl/tax_gap_update_070212.pdf (reflecting compliance rates of 98.8%, 95.5%, 91.4%, and 46.1%).

4. TAX GAP ESTIMATES FOR TAX YEARS 2008–2010, *supra* note 3, at 11.

5. Leandra Lederman, *Reducing Information Gaps to Reduce the Tax Gap: When Is Information Reporting Warranted?*, 78 FORDHAM L. REV. 1733, 1735 (2010).

because the taxpayer no longer acts unobserved. Arm's-length parties with a reporting obligation could collude with the taxpayer to underreport, but collusion is riskier than cheating alone, and thus less likely. In addition, reporting parties have several incentives to comply with their obligations, including the difficulty of accomplishing collusion on a large scale and the risk of detection and resulting sanctions.

Yet a 2018 article by Professor Wei Cui, titled *Taxation Without Information: The Institutional Foundations of Modern Tax Collection*, questions the significance of information reporting, asserting that "modern governments can practice 'taxation without information.'"⁶ Cui's article argues that (1) "giving governments effective access to taxpayer information through third parties does not explain the success of modern tax administration";⁷ and (2) instead, what explains this success is that "business firms"⁸ are "sites of social cooperation under the rule of law,"⁹ fostering compliance. Cui's article has attracted some attention, with Professor Daniel Hemel stating in an online review that he believes Cui is "largely right."¹⁰

While Cui's contrarian thesis is provocative, this Article shows that both of its claims are incorrect. With respect to Cui's first argument, while the success of modern tax administration systems may turn on a variety of factors, empirical studies show that information sharing—and TPIR in particular—are critical features of an effective tax administration strategy.¹¹ This is not to suggest

6. Wei Cui, *Taxation Without Information: The Institutional Foundations of Modern Tax Collection*, 20 U. PA. J. BUS. L. 93, 146 (2018) (quoting Henrik Jacobsen Kleven et al., *Why Can Modern Governments Tax So Much? An Agency Model of Firms as Fiscal Intermediaries*, 83 *ECONOMICA* 219, 225 fig.2 (2016)).

7. *Id.* at 99.

8. *Id.* at 100. Cui does not define the term "business firm" or "firm" in his article. His usage seems to encompass all businesses, incorporated and unincorporated. *See, e.g., id.* at 134 (recognizing that "a 'firm' could be a sole business proprietor"). This Article takes the same approach.

9. *Id.* at 100.

10. Daniel Hemel, *Weekly SSRN Tax Article Review and Roundup*, TAXPROF BLOG (Mar. 24, 2017), http://taxprof.typepad.com/taxprof_blog/2017/03/weekly-ssrn-tax-article-review-and-roundup-3.html.

11. *See infra* Section II.A.1.

that TPIR is a panacea; Cui is right to recognize that it is not.¹² Nor is it necessarily the first-best solution.¹³ But, as discussed below, the existing empirical data generally show TPIR to be highly effective.¹⁴

As one of the authors of this Article previously explained, third-party reporting is generally structured with firms (which are far fewer in number) reporting on individuals, both because centralization is efficient and because firms typically have more sophisticated accounting infrastructures than individuals do.¹⁵ This typical structure may initially make it difficult to differentiate the impact of the firm's participation in a transaction from that of the information reporting itself. However, empirical studies have found that information reporting by individuals likewise increases firms' tax compliance—a finding that Cui's contrarian thesis does not explain.¹⁶

Cui's second argument—that pro-social behavior by firms explains the success of modern tax administration—is not correct as a theoretical or empirical matter, as discussed below.¹⁷ For one thing, if firms were inherently pro-social, one would expect even small firms to have high tax compliance rates, which Cui acknowledges is not the case.¹⁸ Instead, small businesses present a major enforcement problem.¹⁹ Large firms—which are much more highly regulated and monitored—generally are more compliant

12. See Lederman, *supra* note 5, at 1736 (“Information reporting . . . is certainly not a panacea. Moreover, it will not be equally effective in all situations.” (footnote omitted)); *id.* at 1739–41 (arguing that some proposals for information reporting are unwise, and developing six factors to consult when evaluating proposals for additional information reporting in the United States); see also *infra* note 90 (noting the challenges for TPIR in countries where the tax administration lacks the capacity to use the information).

13. See *infra* note 104 and accompanying text.

14. See *infra* Section II.A.1; cf. *infra* text accompanying notes 375–86 (discussing the success of programs in which individuals report on transactions with firms).

15. See Lederman, *supra* note 5, at 1740 (including bookkeeping infrastructure and relative centralization of businesses as factors to use when evaluating proposals for additional information reporting).

16. See *infra* notes 378–91 and accompanying text.

17. See *infra* Sections III.A–III.C.

18. See Cui, *supra* note 6, at 105 n.54 (citing Joel Slemrod as “explaining that tax enforcement for small businesses is more challenging than for large firms”); *id.* at 134 (mentioning “small firms and firms under intense competitive pressure and the fact that these firms are more likely to act in disregard of the law than others”); see also *infra* Section III.A.3.a.

19. See *infra* Section III.A.

but have also committed numerous highly publicized frauds and other violations.²⁰

The remainder of this Article proceeds in three principal Parts. Part I sets forth the key contentions in Professor Cui's article, including the reasons why he believes TPIR may not adequately explain the success of modern tax administration and his notion of the business firm as a pro-social locus of compliance. Part II challenges Cui's contentions regarding information reporting, and it argues that taxation without information as a theoretical concept is inconsistent with empirical data and well-settled norms of human behavior. Part III then rebuts Cui's contention that business firms are inherently pro-social. Part III also shows that the existing empirical studies find that firms' tax reporting increases when they are monitored by individuals.

The Article concludes that government access to taxpayer information is a linchpin of effective tax administration; third-party reporting is a valuable component of such information sharing; and firms are not inherently honest, but rather, observability is a key factor in tax administration. Accordingly, information sharing is central to effective tax enforcement.

I. TAXATION WITHOUT INFORMATION? PROFESSOR CUI'S CONTRARIAN THEORY

Though modern tax administration systems differ in their particulars, most include a tax collection authority with civil and criminal enforcement powers²¹ and mechanisms for the tax authority to obtain information about taxpayers' transactions.²² The

20. See *infra* Sections III.A.1–A.2.

21. See OECD, TAX ADMINISTRATION IN OECD AND SELECTED NON-OECD COUNTRIES: COMPARATIVE INFORMATION SERIES (2008), at 10 (2009), <https://www.oecd.org/ctp/administration/CIS-2008.pdf> ("In virtually all the surveyed countries, the tax system is responsible for generating the vast bulk of revenue that is required to fund Government services. . . . [R]evenue bodies need adequate powers and autonomy to perform in an efficient and effective manner."); *id.* at 128 ("While practices vary, a common approach sees penalties for minor offences in the region of 10–30% of the tax evaded while more serious offences involving deliberate evasion are in the region of 40–100% of the tax evaded.").

22. *Id.* at 121 ("All surveyed revenue bodies have powers to obtain relevant information and in 41 out of 43 revenue bodies these powers can extend to third parties. The circumstances in which entry and search powers can be used varies between countries, as does the use of warrants and the extent of the involvement of other government agencies.").

need for information is intuitive: a government cannot effectively tax income sources that are not on its radar.²³

Yet in a startling recent article, Professor Wei Cui argues that “modern governments . . . [can] practice precisely ‘taxation without information.’”²⁴

Professor Cui contends that contemporary tax scholarship’s “emphasis on TPIR is misplaced”²⁵ and that “TPIR cannot play the explanatory role that social scientists have assigned it.”²⁶ Rejecting the theory that TPIR facilitates compliance by overcoming an information asymmetry, Cui ascribes to TPIR a “quite limited” role in tax administration²⁷ because it is “incapable of explaining tax compliance by business firms”²⁸ and “no evidence has been produced that ‘but for’ TPIR, the level of compliance could not be as high as is actually observed.”²⁹

Cui’s article further argues that “modern governments can practice ‘taxation without information’”³⁰ because of the role that business firms play in tax administration: “Compliance with legal rules and norms, and monitoring the compliance of other parties, are intrinsic aspects of the modern business firm as an

23. For this reason, countries with large cash-based or “shadow” economies tend to be countries with high estimated rates of tax evasion. Greece presents a helpful example: one study found that *two out of three* Greek workers understates his or her income, with nearly a quarter of all economic activity undeclared. *Greece’s Shadow Economy: The Treasures of Darkness*, ECONOMIST (Oct. 11, 2014), <https://www.economist.com/news/finance-and-economics/21623742-getting-greeks-pay-more-tax-not-just-hard-risky-treasures>.

24. Cui, *supra* note 6, at 93 (emphasis added). Cui’s argument focuses on both developed and developing countries. *See, e.g., id.* at 140 (“Understanding the institutional foundations of modern taxation has deep policy implications both for developing countries aiming to enhance their state capacity and for developed countries like the United States . . .” (footnote omitted)). Cui’s article is not entirely clear as to whether he is making a broad claim about all forms of information transmission in tax enforcement, as the quotation above suggests, or a narrower claim about TPIR only. It also is not obvious that Cui believes governments *can*, let alone *should*, practice taxation without information. *E.g., id.* at 145 (“None of the arguments in this Article are meant to suggest that the U.S. should roll back any specific type of TPIR that it currently adopts, or to deny that TPIR may have assorted benefits for taxpayers.”). In any event, because TPIR is an important example, but only one example, of information-sharing mechanisms in tax enforcement, this Article emphasizes TPIR but also discusses information more broadly.

25. *Id.* at 93.

26. *Id.* at 99.

27. *Id.* at 104.

28. *Id.* at 127.

29. *Id.* at 114.

30. *Id.* at 146.

institution.”³¹ According to Cui, it is the pro-social tendencies among business firms—not information reporting—that explains the success of tax administration in advanced economies.³²

Cui’s argument is provocative, but it does not withstand scrutiny for three reasons. First, not only does TPIR promote compliance with the personal income tax,³³ but empirical studies have shown that third-party reporting promotes compliance with other taxes, such as the value-added tax (VAT).³⁴ Second, in contexts in which TPIR is not feasible but compliance remains high, other sources of information-transparency serve a similar function to TPIR. These reliable information flows include regulatory reporting requirements to the taxing authority and to other non-tax agencies imposed on business firms, and Cui’s article does not seem to address these pressures to comply.³⁵ Third, the available evidence indicates that business firms are not intrinsically law-abiding.³⁶ The remainder of this Part summarizes Cui’s arguments. Parts II and III then respond to and rebut Cui’s principal contentions.

A. *Cui’s View of the Role of Information and TPIR*

Cui begins with an uncontroversial statement: “[b]uilding effective tax administration is one of the most urgent tasks facing the poorer countries of the world in their pursuit of sustainable development.”³⁷ As Cui acknowledges, existing scholarship emphasizes that developed countries, with comparably successful tax administration regimes, typically have robust information reporting and, in particular, TPIR systems.³⁸

Yet, Cui believes the emphasis on TPIR is misplaced. Departing from the conventional view that taxpayers are more honest when

31. *Id.* at 138.

32. *Id.* at 100.

33. *See supra* notes 1–4 and accompanying text; *infra* text accompanying notes 88–96.

34. *See infra* notes 379–80.

35. *See infra* Section III.B.1.

36. *See infra* Part III.

37. Cui, *supra* note 6, at 94–95.

38. *Id.* at 96–97. Examples of TPIR that will be familiar to readers in the United States include Form W-2 (by which an employer reports on an employee’s wages) and Form 1099. Form 1099 is used by to report on various types of payments, including a payment to a contractor (on Form 1099-MISC), a retirement fund beneficiary (Form 1099-R), or an investor (Forms 1099-DIV and 1099-INT).

they believe the government has access to their information,³⁹ Cui questions whether information asymmetry is “the most important kind of enforceability constraint for taxes.”⁴⁰ Cui contends that TPIR is “most pronounced in the individual income tax context, and only for wage and passive investment income,”⁴¹ whereas “there is no obvious way in which the corporate income tax is enforced through TPIR,”⁴² and “TPIR with respect to individual business income is largely incomplete.”⁴³ In Cui’s view, “emphasizing TPIR seems to privilege, without obvious justification, (certain elements of) the individual income tax.”⁴⁴

Cui contends that the (supposed) lack of third-party reporting in the context of VATs or corporate income taxes supports his thesis that TPIR is not central to tax enforcement.⁴⁵ And Professor Daniel Hemel agrees, writing that “[Cui] has persuaded me that third party reporting is not nearly as integral to tax collection as I previously believed.”⁴⁶ In part that is because Hemel accepts Cui’s assertion⁴⁷ that VATs do not use third-party reporting.⁴⁸

39. See, e.g., U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-12-652T, OPPORTUNITIES TO IMPROVE THE TAXPAYER EXPERIENCE AND VOLUNTARY COMPLIANCE 8 (2007), <https://www.gao.gov/assets/600/590425.pdf> (“IRS research shows that when taxpayers know that IRS is receiving data from third parties, they are more likely to correctly report the income or expenses to IRS.”); OECD, TECHNOLOGY TOOLS TO TACKLE TAX EVASION AND TAX FRAUD 13 tbl.2.1 (2017), <https://www.oecd.org/tax/crime/technology-tools-to-tackle-tax-evasion-and-tax-fraud.pdf> (“Regular data transmission of the records to the tax authority deters taxpayers from altering records as they know the tax authority will have direct data.”); Junmin Wan, *The Incentive to Declare Taxes and Tax Revenue: The Lottery Receipt Experiment in China*, 14 REV. DEV. ECON. 611, 611–12 (2010) (“[L]ike the other countries in the world, China’s government suffers the issue of tax evasion because of the asymmetry of information. For example, to collect the sales tax . . . , the government needs to obtain financial records of transactions between a firm and a consumer . . .”).

40. Cui, *supra* note 6, at 103; see *id.* at 104.

41. *Id.* at 105.

42. *Id.* at 104.

43. *Id.* at 105.

44. *Id.* at 106.

45. *Id.* at 105–06.

46. Hemel, *supra* note 10.

47. *Id.* Hemel’s comment in this regard is addressed below. See *infra* text accompanying note 139.

48. Cui, *supra* note 6, at 104 (“Under the VAT . . . , firms generally do not transmit information about payments to and specific transactions with vendors and customers to the government, but instead aggregate transaction information into lines on simple tax returns.”). This claim is rebutted below. See *infra* Section II.B.

Cui offers three reasons why TPIR may be less important than the literature suggests. First, Cui argues that information transmission is illusory in the sense that “for any item of income such that there is a payor that possesses both complete information about it and control over its payment, information reporting is only one among several ways in which the government can collect tax.”⁴⁹ That is, both final withholding (where the payor withholds the precise amount of tax due from payment) and the imposition of an excise tax on the payor (instead of taxing the payee) are potential alternatives to TPIR.⁵⁰

Second, Cui argues that payor compliance with reporting requirements is a “puzzle.” Why, Cui asks, might third parties responsible for TPIR choose to comply with the tax law instead of colluding with the income recipients to evade that law?⁵¹ As discussed below,⁵² Cui posits that payor firms comply not because it necessarily makes economic sense for them to do so, nor because they fear sanctions for noncompliance, but because firms are inherently law-abiding.⁵³

Finally, Cui argues that it is difficult to assess the importance of TPIR because it is hard to disentangle TPIR from the nature of the income itself and the nature of the payor.⁵⁴ Cui writes that most financial transactions create some kind of paper trail, and the mere existence of that trail (apart from any TPIR) might induce compliance.⁵⁵ He speculates that the presence of large firms in developed economies with relatively high tax compliance may better explain such high compliance than does TPIR.⁵⁶

B. Cui’s View of the Role of Business Firms

According to Cui, while scholars have traditionally “[thought] of business firms as ‘fiscal intermediaries’” that collect and remit taxes, a better approach may be to view them “as sites of social

49. Cui, *supra* note 6, at 107.

50. *Id.*

51. *Id.* at 111.

52. See *infra* Section I.B.

53. Cui, *supra* note 6, at 138–39.

54. *Id.* at 114.

55. *Id.*

56. *Id.* at 115. The role of firm size is discussed *infra* in Section III.C.

cooperation under the rule of law.”⁵⁷ This is so, Cui reasons, both because (1) firms are constrained by a wide array of legal rules and norms, such that even firms that choose to violate some rules (his examples are Volkswagen and Wells Fargo⁵⁸) comply with many others;⁵⁹ and (2) the worst of the bad actors that violate many rules tend to be “small firms and firms [that operate] under intense competitive pressure.”⁶⁰ Cui argues that “few firms are organized with the expectation that [they] would deliberately profit from the violation of all laws that are profitable to violate, and few firms grow and remain competitive by profiting from illegal activities.”⁶¹

In so reasoning, Cui takes issue with an important article on the topic of business firms and tax compliance. In 2016, Professors Kleven, Kreiner, and Saez (KKS) described “a three-tiered . . . model” under which business firms report information to the government on behalf of individual income earners.⁶² In theory, KKS argued, “the firm and its employees could collude to report smaller incomes . . . to the government than those actually earned.”⁶³ But “[i]n practice, breakdowns can occur because of random shocks such as conflicts between employees and the employer, moral concerns of employees or an employee accidentally revealing the true business records to tax inspectors.”⁶⁴ The more employees a firm retains, the likelier these “breakdowns” become.⁶⁵ Even in a very large firm (say, a multinational corporation) with massive resources and thousands of employees, “a single employee can denounce collusive tax cheating between employees and the employer by . . . revealing true books to the government.”⁶⁶ The KKS model acknowledges that business firms play a central role in modern tax administration – not because they

57. Cui, *supra* note 6, at 100.

58. *Id.* at 131.

59. *Id.* at 134.

60. *Id.*

61. *Id.*

62. Kleven et al., *supra* note 6, at 219–20.

63. *Id.* at 220. Cui agrees with this. See Cui, *supra* note 6, at 113 (“[W]hen parties are not subject to the same tax rates . . . the potential will always exist for the parties to collude and lower the net payment to the government.”).

64. Kleven et al., *supra* note 6, at 220.

65. *Id.*

66. *Id.* at 241.

are inherently pro-social but because there is an inverse correlation between the size of a firm and the feasibility of cheating.

Professor Cui thinks KKS have it backwards. Business firms, he argues, do not decide to comply with the tax law only when an internal collusive bargain cannot be sustained; “[i]nstead, firms are places where members of society actively cooperate under regimes of law.”⁶⁷ Cui’s claim in this regard is that, because the development of the modern business firm and the regulatory state were intertwined,⁶⁸ “complying with the tax law, like complying with other bodies of laws, is the default option” for firms.⁶⁹

Thus, Cui argues that it is the presence of firms, not TPIR, that explains the success of modern tax administration. In developing his argument, Cui raises the trope that the deterrence model of tax compliance, developed by Professors Allingham and Sandmo,⁷⁰ does not explain observed compliance levels in developed countries.⁷¹ Under the deterrence model, the taxpayer compares the cost of compliance with the expected cost of evading.⁷² The reason for the trope is that audit and penalty rates may seem to be too low in advanced economies such as the United States for a rational taxpayer to comply with the tax laws at all,⁷³ yet the IRS consistently estimates an overall voluntary compliance rate of over

67. Cui, *supra* note 6, at 140.

68. *See id.* at 139 (“Because the operation of most business firms was inseparable from the implementation and following of legal orders, the decision to comply with the tax law was a natural one for firms to make.”).

69. *Id.* at 134–35.

70. Michael G. Allingham & Agnar Sandmo, *Income Tax Evasion: A Theoretical Analysis*, 1 J. PUB. ECON. 323, 323–26 (1972). The model is based on Gary Becker’s economic model of crime. *See* Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968).

71. *See* Cui, *supra* note 6, at 129 (“It has been widely observed that by itself, this simple model of the choice about whether to evade taxes seems unable to explain the high level of tax compliance observed at least in developed countries: the actual levels of penalties, audits, and evasion detected during audits in real life are all far too low to lead a rational individual considering only these factors to decide against tax evasion.”).

72. Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 OHIO ST. L.J. 1453, 1463 (2003).

73. *See* J. Manhire, *Toward a Perspective-Dependent Theory of Audit Probability for Tax Compliance Models*, 33 VA. TAX REV. 629, 629 (2014) (“The classic deterrence theory model of income tax evasion first articulated in 1972 has met significant criticism because it does not comport with the observed rate of tax compliance.”); *see also* Dan M. Kahan, *Signaling or Reciprocating? A Response to Eric Posner’s Law and Social Norms*, 36 U. RICH. L. REV. 367, 377 (2002) (“Tax compliance rates—which vary dramatically across nations—seem to bear no connection to enforcement levels.”).

eighty percent.⁷⁴ A key reason the trope is inaccurate, as one of the authors of this Article explained in prior work, is that it treats audits as the only detection mechanism, ignoring the fact that information reporting makes much income transparent to the tax authority.⁷⁵ “Opportunity [to evade] has often been documented as a major explanatory factor in non-compliance.”⁷⁶

Cui raises the trope because he says that “scholars have suggested that the Allingham and Sandmo model can be salvaged if one considers the role of business firms.”⁷⁷ Cui states that these scholars argue as follows:

When firms both automatically provide information to the government and maintain information relevant to audits, then the probability of detection of tax evasion (conditional upon an audit being carried out) is increased. Moreover, when there are fewer firms than individual taxpayers, the audit rate for firms is higher than for individuals, which also increases the probability of detection.⁷⁸

74. See TAX GAP ESTIMATES FOR TAX YEARS 2011–2013, *supra* note 2, at 8 fig.1 (estimating an 83.6% voluntary compliance rate); *id.* at 10 fig.2 (reporting slightly revised estimate of 83.8% for tax years 2008–10, of 82.3% for tax year 2006, and of 83.7% for tax year 2001). Note that the IRS’s voluntary compliance estimates likely are overstated. See TREASURY INSPECTOR GEN. FOR TAX ADMIN., 2013-IE-R008, THE INTERNAL REVENUE SERVICE NEEDS TO IMPROVE THE COMPREHENSIVENESS, ACCURACY, RELIABILITY, AND TIMELINESS OF THE TAX GAP ESTIMATE 2 (2013), <https://www.treasury.gov/tigta/iereports/2013reports/2013IER008fr.pdf> (“[T]he individual income tax underreporting gap estimate could be more comprehensive if it included estimates for the informal economy and offshore tax evasion.”).

75. See, e.g., Lederman, *supra* note 5, at 1738–39 n.18; Leandra Lederman, *Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance*, 60 STAN. L. REV. 695, 697–99 (2007) [hereinafter Lederman, *Statutory Speed Bumps*]; Leandra Lederman, *Tax Compliance and the Reformed IRS*, 51 U. KAN. L. REV. 971, 974–99 (2003) [hereinafter Lederman, *Reformed IRS*]; Lederman, *supra* note 72, at 1460.

76. Bernadette Kamleitner et al., *Tax Compliance of Small Business Owners*, 18 INT’L J. ENTREPRENEURIAL BEHAV. & RES. 330, 335 (2012) (citations omitted) (also noting that where noncompliance opportunities exist, inadvertent errors may also increase); see also Kleven et al., *supra* note 1, at 653 (“[O]ur findings suggest that tax evasion is low, not because taxpayers are *unwilling* to cheat, but because they are *unable* to cheat successfully due to the widespread use of third-party reporting.”); TAX GAP ESTIMATES FOR TAX YEARS 2008–2010, *supra* note 3, at 11 (IRS reports that “[f]or the individual income tax, reporting compliance is far higher when income items are subject to information reporting[.]”).

77. Cui, *supra* note 6, at 129 (citing Kleven et al., *supra* note 6, at 241; Wojciech Kopczuk & Joel Slemrod, *Putting Firms into Optimal Tax Theory*, 96 AM. ECON. REV. 130, 133–34 (2006)). The Kopczuk and Slemrod article does not cite Allingham and Sandmo. Kopczuk & Slemrod, *supra*, at 134 (listing references).

78. Cui, *supra* note 6, at 129 (footnote omitted).

In other words, the presence of firms that serve as information reporters increases the likelihood of detection, further deterring tax noncompliance.⁷⁹ Cui argues that this insight “merely begs a further question: why do decision-makers in firms—owners, managers, and employers—choose not to evade tax? Why do they provide accurate information about other taxpayers to the government?”⁸⁰ The answer, Cui argues, is that firms are pro-social.⁸¹

Professor Daniel Hemel agrees with Cui’s arguments that TPIR is relatively unimportant to tax compliance and that firms are the key.⁸² Where Hemel disagrees with Cui is with respect to Cui’s “‘social cooperation’ theory” of firms.⁸³ Hemel states that Cui’s claim “is equally consistent with the claim that business firms facilitate legal compliance precisely because they *fail* to engender close cooperation among their members.”⁸⁴ That was also a point made by KKS in the article to which Cui’s article responds.⁸⁵

79. See Lederman, *Reformed IRS*, *supra* note 75, at 974–99 (“[The] simple comparison of relatively high rates of voluntary compliance rates with relatively low audit rates and penalties is flawed because it does not account for the role of information reporting and withholding in constraining the opportunity to evade tax.”).

80. Cui, *supra* note 6, at 129–30. Cui argues in part,

A typical answer given to this question is that employers can claim deductions for wage payments, which lower the employer’s income tax liability. The employee and the employer thus have adverse interests, or opposing incentives, with respect to reporting wage payments: while the employee stands to lose from employer reporting, the employer gains from it. Information reporting is therefore “self-enforcing.”

Id. at 111–12. The only footnote with a citation is at the end, accompanying the quoted phrase “self-enforcing.” *Id.* The footnote reads, “Lederman, *Reducing Information Gaps*, *supra* note 15, at 1739, 1747, 1751 n.93; Lederman, *Statutory Speed Bumps*, *supra* note 15, at 711, 729–30.” *Id.* at 112 n.88. However, the first Lederman article cited does not use the phrase “self-enforcing” (or variations such as “self-enforced”) anywhere in the article. Lederman, *supra* note 5, at 1733–59. The second article uses the phrase only on page 711, stating, “Audit rates are quite low, so tax provisions that are effectively self-enforcing are much more administrable than provisions that are not self-enforcing.” Lederman, *Statutory Speed Bumps*, *supra* note 75, at 711 (footnote omitted). The context there is the structural advantage for tax enforcement that exclusions of reimbursed amounts have over deductions for expenditures. See *id.*

81. Cui, *supra* note 6, at 140.

82. See *supra* note 46 and accompanying text.

83. Hemel, *supra* note 10.

84. *Id.*

85. See Kleven et al., *supra* note 6, at 220 (“When a firm has many employees, breakdowns of collusion will occur with a high probability. Critically, it is the combination of a large number of informed employees, and the existence of business records evidence, which makes third-party tax enforcement successful.”).

The remainder of this Article demonstrates how the existing evidence is inconsistent with Cui's contrarian thesis. The next Part explains the demonstrable significance of information reporting, and the final Part rebuts Cui's argument that business firms are inherently pro-social.

II. THE IMPORTANCE OF INFORMATION TO TAX ENFORCEMENT

This Part demonstrates that the scholarly consensus regarding information is well-founded: (1) there can be no effective taxation without information, and (2) TPIR is a highly effective means of obtaining that information in appropriate contexts.

A. *The Effects of Information Transparency*

Although tax evasion is a crime, enforcement authorities have finite, sometimes modest, investigative and prosecutorial resources,⁸⁶ making the risk of criminal sanction by itself unlikely to deter all evasion.⁸⁷ Likewise, while the IRS (like comparable tax administrative agencies in other advanced economies) conducts audits and may impose penalties, the IRS is in a disadvantaged position vis-à-vis the taxpayer, as the IRS generally knows only what the taxpayer reports—or what others report about the taxpayer.

1. *Observability*

The literature shows that taxpayers are more compliant when they believe the government can observe their noncompliance. For example, one study found that cash-based business owners generally regard credit card receipts as being distinct from cash, such that they consistently report the former but not always

86. The IRS provides an example. See IRS, BUDGET IN BRIEF FY 2017, at 2 (2016), <https://www.irs.gov/pub/newsroom/IRS%20FY%202017%20BIB.pdf> ("Over the last several years, the IRS has experienced significant budget reductions that are creating serious obstacles to its ability to fulfill its mission.").

87. In 2018, for example, the IRS initiated 2,886 investigations in total, of which 1,099 were for legal-source tax crimes. It reported 614 incarcerations for legal-source tax crimes. IRS, 2018 DATA BOOK 44 tbl.18 (2019), <https://www.irs.gov/pub/irs-pdf/p55b.pdf>. The likelihood of detection is very important. See Mihailis E. Diamantis, *White-Collar Showdown*, 102 IOWA L. REV. ONLINE 320, 327 (2017) ("Recent data suggest[] . . . that the probability of getting caught looms larger [than the penalty] in white-collar criminals' calculus.").

the latter.⁸⁸ This suggests that these individuals regard amounts with a paper trail as more visible to the government. Similarly, a study with respect to Chile's VAT found that an audit threat from the Chilean tax authority resulted in an immediate increase in VAT remittances, primarily driven by the transactions for which there is no paper trail—sales to consumers—suggesting that the presence of a paper trail between firms in the supply chain deters cheating.⁸⁹ That study's author, Dina Pomeranz, referred to the paper trail as “the self-enforcing mechanism of the VAT.”⁹⁰

Perhaps the starkest example in U.S. history of the relationship between information transparency and compliance is when, in the mid-1980s, Congress began requiring individual taxpayers to provide the Social Security number of anyone age five or older whom they claimed as a dependent.⁹¹ “Seven million dependents

88. Susan Cleary Morse et al., *Cash Businesses and Tax Evasion*, 20 STAN. L. & POL'Y REV. 37, 50 (2009). Taxpayer behavior in the credit-card context also makes TPIR less important there. See *infra* text accompanying note 116.

89. Dina Pomeranz, *No Taxation Without Information: Deterrence and Self-Enforcement in the Value Added Tax*, 105 AM. ECON. REV. 2539, 2540 (2015).

90. *Id.* at 2541.

A study in Pakistan similarly found “that VAT is indeed self-enforcing.” Mazhar Waseem, *Information, Asymmetric Incentives, or Withholding? Understanding the Self-Enforcement of Value-Added-Tax* 4 (CESifo, Working Paper No. 7736, July 2019), <https://ssrn.com/abstract=3422631>. That study used the fact that the VAT was phased in Pakistan to isolate what caused an increase in reported taxable sales. It found that what is effectively a withholding-tax aspect to the VAT caused the increase. *Id.* at 34. Withholding functions as a structural system, constraining noncompliance. See Lederman, *Statutory Speed Bumps*, *supra* note 75, at 697 (explaining the use of withholding as a constraining structural mechanism).

Waseem's results may reflect the fact that, in a developing country in which enforcement capacity is limited, information-transparency in the absence of governmental capacity to actually use that information may not have a strong effect on compliance. See Waseem, *supra*, at 10 (“[E]vidence has started to emerge recently that casts doubt on the effectiveness of third-party information in [a] low-enforcement-capacity setting. . . .” (citing Paul Carrillo et al., *Dodging the Taxman: Firm Misreporting and Limits to Tax Enforcement*, 9 AM. ECON. J. 144 (2017)). In other words, effective TPIR likely requires a belief on the part of taxpayers that governments will receive and make use of the information. See Shekhar Mittal & Aprajit Mahajan, *VAT in Emerging Economies: Does Third Party Verification Matter?* 33 (Working Paper, 2017), <https://ssrn.com/abstract=3029963> (finding in a study of Delhi, India, that “results suggest that information and monitoring are complements in that we see the strongest effect of improved third-party verification from firms that are more likely to interact with other registered firms and are more closely monitored by the tax authority.”).

91. See Tax Reform Act of 1986, Pub. L. No. 99-514, § 1524, 100 Stat. 2085, 2749. The age threshold was eliminated in 1994, requiring all dependency claims to include an identifying number. See Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (1994).

vanished from the tax rolls in 1986, and the IRS recovered \$3 billion in revenue with a simple enforcement measure . . . [T]his measure worked because taxpayers who had found it easy to cheat previously now feared that they could be caught in real-time.”⁹²

This example shows that self-reporting can be an effective compliance mechanism if the risk of detection is (or seems) sufficiently high. TPIR—amounts reported by payors on forms such as the W-2 or 1099—provides another example of an information-sharing mechanism under which the taxpayer knows that his or her actions can be observed by the government.⁹³ Through TPIR, the IRS obtains information about payments from payors. If the taxpayer’s reporting differs, the IRS may take action. As indicated at the beginning of this Article, IRS studies estimate that the percentage of dollars timely and voluntarily paid is much higher with partial information reporting—and even higher with complete information reporting—than without information reporting.⁹⁴

The key to TPIR’s effectiveness in increasing up-front “voluntary” compliance is that it does not operate only after the fact, in the enforcement context. Rather, each taxpayer receives a copy of the W-2, 1099, and other information returns sent to the government on his or her behalf, and is informed that a copy went to the government.⁹⁵ Accordingly, the taxpayer both benefits from

92. Richard T. Ainsworth & Goran Todorov, *Stopping VAT Fraud with DICE – Digital Invoice Customs Exchange*, 72 TAX NOTES INT’L 637, 637 n.3 (2013) (citing STEVEN D. LEVITT & STEPHEN J. DUBNER, *FREAKONOMICS: A ROGUE ECONOMIST EXPLORES THE HIDDEN SIDE OF EVERYTHING* 238 (2006)).

93. See Thomas G. Vitez, *Information Reporting and Withholding as Stimulants of Voluntary Compliance*, in *INCOME TAX COMPLIANCE: A REPORT OF THE ABA TAX SECTION INVITATIONAL CONFERENCE ON TAX COMPLIANCE* 191, 192 (Phillip Sawicki ed., 1983) (“With an information document system in place, voluntary compliance rises dramatically because the taxpayer is aware that the income is being reported to the IRS and that its omission from the tax return is likely to trigger an examination.”).

94. See *supra* text accompanying note 2; see also TAX GAP ESTIMATES FOR TAX YEARS 2011–2013, *supra* note 2, at 3 (“Based on the TY 2011–2013 estimates, misreporting of income amounts subject to substantial information reporting and withholding is 1 percent; of income amounts subject to substantial information reporting but not withholding, it is 5 percent; and of income amounts subject to little or no information reporting, such as nonfarm proprietor income, it is 55 percent.”).

95. See U.S. GOV’T ACCOUNTABILITY OFF., GAO-08-266, *TAX ADMINISTRATION: COSTS AND USES OF THIRD-PARTY INFORMATION RETURNS* 23 (2007), <https://www.gao.gov/assets/270/269658.pdf> (“Information reporting involves third-party payers, such as

the tax information provided by the third party and knows that the government can observe any noncompliance with respect to these payments.⁹⁶

Information reporting thus decreases the perceived opportunity to evade tax. It is not surprising that there is a strong correlation between the presence or robustness of TPIR and reporting compliance.⁹⁷ Opportunity is an essential element of fraud and similar wrongdoing. As one article stated, “[i]f opportunity is not present, fraud is impossible.”⁹⁸

Accordingly, contemporary tax scholarship has generally emphasized the effectiveness of information reporting in fostering compliance.⁹⁹ For example, KKS argued that “third-party information reporting by employers can sustain tax enforcement in spite of low fines and low audit rates.”¹⁰⁰ Professor Dina Pomeranz

employers or banks, filing returns with IRS and taxpayers after each calendar year that provide information on a variety of taxpayers’ transactions and payments, such as wages and miscellaneous income.”).

96. Lederman, *Statutory Speed Bumps*, *supra* note 75, at 697 (“[I]nformation reporting,’ like red light cameras, provides information to the government, and it is information that the taxpayer knows the government is receiving.”).

97. See *supra* note 3 and accompanying text; see also U.S. GOV’T ACCOUNTABILITY OFF., GAO-18-39, TAX GAP: IRS NEEDS SPECIFIC GOALS AND STRATEGIES FOR IMPROVING COMPLIANCE 10 (2017), <https://www.gao.gov/assets/gao-18-39.pdf> (“As we have previously reported, the extent to which individual income tax taxpayers accurately report their income is closely aligned to the amount of income that is reported to them and to IRS by third parties.”). TPIR is not relevant only for the U.S. federal income tax: a recent study found that the introduction of state income tax withholding (and concomitant information reporting) by firms has led to, on average, an increase in state income tax revenues of about 28 percent. See Libor Dušek & Sutirtha Bagchi, Third-Party Reporting and Tax Collections: Evidence from the Introduction of Withholding for the State Personal Income Tax 3 (May 2, 2018) (unpublished manuscript), <https://ssrn.com/abstract=1585119>.

98. James A. Tackett et al., *A Criminological Perspective of Tax Evasion*, 110 TAX NOTES 654, 655 (2006). The Tackett et al. article describes accounting’s “fraud triangle” and briefly applies it to tax evasion. See generally *id.*

99. See, e.g., Kleven et al., *supra* note 1, at 653 (“[O]ur findings suggest that tax evasion is low, not because taxpayers are *unwilling* to cheat, but because they are *unable* to cheat successfully due to the widespread use of third-party reporting.”); Alex Raskolnikov, *Revealing Choices: Using Taxpayer Choice to Target Tax Enforcement*, 109 COLUM. L. REV. 689, 729 (2009) (“It is no accident that for income subject to information reporting and withholding at the source, the level of compliance approximates one hundred percent. Gamers lacking the opportunity to game the system pay their taxes.” (footnote omitted)).

100. Kleven et al., *supra* note 6, at 219, 241.

A recent study found that a society’s “transition from self-employment to employee-jobs explains growth in tax capacity” and attributes the increased tax capacity to the creation of “third-party information trails.” Anders Jensen, *Employment Structure and the Rise of the*

went farther, arguing that “understanding information flows is central to effective taxation,” such that there can be “no taxation without information.”¹⁰¹ One of the authors of this article has likewise argued that information reporting is a “prime example” of a technique to solve for information asymmetries.¹⁰²

To be sure, information reporting is not a panacea and should not apply to every transaction.¹⁰³ Information transparency, which relies on enforcement, is likely not as good as a system that constrains compliance *ex ante*, *structurally*, particularly in countries with low enforcement capacity.¹⁰⁴ However, structural systems that constrain tax compliance in the way that, for example, speed bumps constrain vehicles from speeding, are not always possible to implement. Not surprisingly, tax administrations and governments have increasingly relied on information reporting and other information-sharing mechanisms to spur compliance.¹⁰⁵ In fact, the global trend is toward *more* information sharing, not less.¹⁰⁶

Modern Tax System 1 (NBER Working Paper Series, Paper No. 25502, 2019), <http://www.nber.org/papers/w25502>.

101. Pomeranz, *supra* note 89, at 2539. TPIR, of course, is just one source of information for the taxing authority. Self-reporting is another source of information, as is the government’s enforcement activities. However, TPIR is particularly helpful because it involves the report of a third party that can be compared to the taxpayer’s own report.

102. Lederman, *supra* note 5, at 1736; *see also id.* at 1735 (“The taxpayer’s perception of the probability that cheating will be detected influences the compliance decision. Accordingly, any information that the taxpayer knows the government has about the taxpayer’s activities will foster honesty.”).

103. *See id.* at 1736, 1739–41 (mentioning costs as well as benefits, and proposing six factors for identifying contexts in which information reporting may be successful).

104. *See* Lederman, *Statutory Speed Bumps*, *supra* note 75, at 696 (explaining the use of structural systems in tax enforcement, and analogizing to speed bumps, which constrain speeding structurally and thus require less enforcement than “speed limit” signs); *see also supra* note 90 (mentioning the use of structural mechanisms, such as withholding taxes, that foster tax compliance).

105. For discussion of the role that third-party reporting plays in many countries, see section 2.2.2 of the National Reports for the 2018 European Association of Tax Law Professors conference. Funda Başaran Yavaşlar & Johanna Hey, *TAX TRANSPARENCY* 6 (2018), <http://www.eatlp.org/congresses/310-national-reports-2018> (linking the questionnaire and reports for 26 countries).

106. *See* Dušek & Bagchi, *supra* note 97, at 23 (“Expanding third-party information reporting has been a common theme in the steps taken by revenue agencies from around the world to reduce tax evasion.”).

In the United States, for example, Congress has expanded domestic TPIR mechanisms over time.¹⁰⁷ It also enacted the Foreign Account Tax Compliance Act (FATCA) in 2010 to tackle offshore tax evasion.¹⁰⁸ FATCA “requires that foreign financial [i]nstitutions and certain other non-financial foreign entities report on the foreign assets held by their U.S. account holders or be subject to withholding on withholdable payments.”¹⁰⁹

Beyond the United States, the Common Reporting Standard (CRS), an Organisation for Economic Co-operation and Development (OECD) project inspired by FATCA, provides another example of expanded information-sharing. The CRS “calls on jurisdictions to obtain information from their financial institutions and automatically exchange that information with other jurisdictions on an annual basis.”¹¹⁰ “As of February 2020, there are over 4000 bilateral exchange relationships activated with respect to more than 100 jurisdictions committed to the CRS,” and over 100 jurisdictions had signed on to a “multilateral Convention on Mutual Administrative Assistance in Tax Matters.”¹¹¹ While the simple fact that governments are adopting new information-reporting mechanisms would not by itself prove that such mechanisms are effective, the emerging empirical data suggest that they are working.¹¹²

107. See Lederman, *supra* note 5, at 1749–51 (discussing the addition of Code section 6050W, and its accompanying Form 1099-K, as a method for gathering information on income produced from online auction sites); *id.* at 1742 (mentioning the expansion of securities broker information-reporting requirements under section 6045 to include enhanced basis reporting).

108. Hiring Incentives to Restore Employment (HIRE) Act of 2010, Pub. L. No. 111-147, §§ 501–541, 124 Stat. 71, 97–117.

109. *Foreign Account Tax Compliance Act*, IRS, <https://www.irs.gov/businesses/corporations/foreign-account-tax-compliance-act-fatca> (last reviewed Jan. 31, 2020).

110. OECD, *What Is the CRS?*, AUTOMATIC EXCH. PORTAL, <http://www.oecd.org/tax/automatic-exchange/common-reporting-standard/> (last visited Jan. 4, 2020).

111. OECD, *International Framework for the CRS*, AUTOMATIC EXCH. PORTAL, <http://www.oecd.org/tax/automatic-exchange/international-framework-for-the-crs/> (last visited Mar. 15, 2020).

112. See Niels Johannesen et al., *Taxing Hidden Wealth: The Consequences of U.S. Enforcement Initiatives on Evasive Foreign Accounts* (NBER Working Paper Series, Paper No. 24366, 2018), <http://www.nber.org/papers/w24366.pdf>; *id.* at 38 (“[W]e find that these [U.S.] foreign enforcement initiatives increased the number of individuals reporting foreign accounts to the IRS by around 60,000 taxpayers, and increased the total amount of wealth disclosed by about \$120 billion.”); Robert Goulder, *Should the U.S. Adopt the OECD’s Common*

2. *Where TPIR may be less effective*

The effectiveness of TPIR in many contexts does not, of course, mean that TPIR should be deployed in *every* context. As Professor Lederman argued in a 2010 article, certain types of transactions lend themselves to TPIR better than others do.¹¹³ For example, she argued that Form 1099-K, which was slated to be introduced in 2011 for certain sales (such as those conducted via credit cards) and targeted at small businesses such as eBay sellers, held relatively limited promise.¹¹⁴ That was because of the form's high reporting threshold (it only applies to sellers conducting over 200 transactions in a year and receiving over \$20,000 in gross proceeds) and the fact that it does not include tax basis information.¹¹⁵ In addition, the evidence that small businesses generally treat credit card receipts as fairly transparent¹¹⁶ suggests that TPIR would be less effective for transactions that consistently involve such receipts.

Furthermore, as Joel Slemrod et al. pointed out in a 2017 article, “[t]axpayers . . . can substitute expense over-reporting for receipt under-reporting.”¹¹⁷ Thus, those authors stated that “[t]here is good reason to suspect the effect of the Form 1099-K might differ from that of existing information reporting.”¹¹⁸ The availability of alternative arrangements bears on whether a proposed

Reporting Standard?, FORBES (June 29, 2016, 11:14 AM), <https://www.forbes.com/sites/taxanalysts/2016/06/29/should-the-u-s-adopt-the-oecd-common-reporting-standard/#c97ffa744af8> (citing 2016 OECD estimate that the “rise of automatic information exchange between national revenue bodies” had at that time “already shrunk the global tax gap by more than €50 billion”); Robert W. Wood, *Incredibly, 48 Nations Embrace FATCA to Reveal U.S. Depositors*, FORBES (Apr. 7, 2014, 8:56 AM), <https://www.forbes.com/sites/robertwood/2014/04/07/incredibly-48-nations-embrace-fatca-to-reveal-u-s-depositors/#5a7cfcea1281> (describing FATCA as a “bigger success than anyone could have imagined”); see also Elisa Casi et al., *Cross-Border Tax Evasion After the Common Reporting Standard: Game Over?* 4 (Ctr. for Eur. Econ. Research, ZEW Discussion Paper No. 18-036, 2019), <http://ftp.zew.de/pub/zew-docs/dp/dp18036.pdf> (“[U]pon the CRS implementation at national level, cross-border deposits held in offshore countries decrease on average by 11.9% compared to non-offshore countries.”).

113. See Lederman, *supra* note 5, at 1739–41 (developing six factors and using them to evaluate proposals for additional information reporting).

114. *Id.* at 1751–52.

115. *Id.*

116. See *supra* text accompanying note 88.

117. Joel Slemrod et al., *Does Credit-Card Information Reporting Improve Small-Business Tax Compliance?*, 149 J. PUB. ECON. 1, 2 (2017).

118. *Id.*

information-reporting mechanism likely would succeed in increasing compliance.¹¹⁹

Cui relies on the Slemrod et al. study in support of his critique of the importance of TPIR.¹²⁰ There are two problems with that. First, as explained above, the context to which the 1099-K applies predictably is a poor fit for information reporting. Second, the Slemrod et al. study

estimate[d] that the introduction of the Form 1099-K prompted a 24% increase in reported receipts on average for [the subgroup of] firms reporting receipts exactly equal to the 1099-K amount. Strikingly, this group of firms also increased reported expenses by 13%. This offsetting moderated the impact of 1099-K on total tax liability, even in groups strongly affected by 1099-K.¹²¹

Note that the authors found that the 1099-K initiative had a net positive effect, not *no* effect. The effect was modest in magnitude, which is reflective of the context in which it was applied – one that is not typical of when information reporting is used successfully. As discussed in section II.A above, existing evidence shows TPIR generally to be very effective.¹²²

119. See Lederman, *supra* note 5, at 1740 (“To the extent the taxpayer has fewer ways to cheaply avoid an information reporting requirement, it will be more effective and result in fewer distortions.”).

120. Cui, *supra* note 6, at 121–27; see also *id.* at 121 (“The theory just advanced is consistent with the very mixed evidence for the effectiveness of TPIR when implemented beyond the realm of wage and financial income. A uniquely authoritative study on this topic was carried out recently by economists at the IRS and the University of Michigan.”).

121. Slemrod et al., *supra* note 117, at 18–19.

Two studies in developing countries (which have less capacity to enforce the tax laws) found much larger increases in offsets following changes in reported revenue. See Carrillo et al., *supra* note 90, at 146 (“[F]irms [in Ecuador] increased reported costs by 96 cents for every dollar of revenue adjustment.”); Zareh Asatryan & Andreas Peichl, *Responses of Firms to Tax, Administrative and Accounting Rules: Evidence from Armenia* 30–31 (CESifo, Working Paper, Nov. 2017), https://ideas.repec.org/p/ces/ceswps/_6754.html (finding that reported income increased after audit but “every additional dollar of reported income in years *t* to *t*+1 is, on average, matched by a 0.90 dollar increase in reported deductions”). Carrillo explains that “the effectiveness of third-party reporting in developing economies may be limited along two dimensions. . . . [One is that] taxpayers may respond to third-party information by making offsetting adjustments on less verifiable margins of the tax return, thereby reducing the effect of such information on tax revenue.” Carrillo et al., *supra*, at 145.

122. See *supra* Section II.A.

B. *Value-Added Taxes and Information Sharing*

An important tax used in most advanced economies (but not in the United States¹²³) is the VAT (value-added tax). A VAT is a tax on goods and services. It “is conceptually similar to a[] [retail sales tax], but it is imposed via a mechanism that involves every stage of production and distribution.”¹²⁴ This means that instead of all of the tax being collected upon final sale to the consumer, pieces of the tax are collected along the entire supply chain. Each business in the supply chain is thus subject to VAT.

Because Cui cited the VAT as an example of a tax *not* subject to TPIR,¹²⁵ it is important to understand how these taxes work and the role that third-party reporting plays in VAT administration. In terms of the mechanics of a VAT, Itai Grinberg has provided an example involving the sale of a case of wine to a consumer for \$100.¹²⁶ As a baseline, if, as in his example, a 20% retail sales tax were imposed (which is a much higher rate than U.S. retail sales taxes¹²⁷), the tax due on the sale to the consumer would be \$20 (for a total cost to the consumer of \$120).¹²⁸ Under a 20% VAT, the consumer still pays \$120 and the government is still entitled to \$20. However, the \$20 of tax is collected in pieces along the way, rather than only from the retailer:

123. See Sarah Birnbaum, *Why Some Experts Want the US to Adopt a VAT and Other Tax Lessons From Around the World*, PRI'S THE WORLD (Apr. 26, 2017), <https://www.pri.org/stories/2017-04-26/why-some-experts-want-us-adopt-vat-and-other-tax-lessons-around-world> (quoting James Hines as stating, “More than 170 countries have value-added taxes . . . Really, the United States is the only country that doesn’t.”).

124. Itai Grinberg, *Where Credit is Due: Advantages of the Credit-Invoice Method for a Partial Replacement VAT*, 63 TAX L. REV. 309, 313 (2010).

125. See Cui, *supra* note 6, at 104 (“The value added tax (VAT) . . . does not involve information reporting . . . [F]irms generally do not transmit information about payments to and specific transactions with vendors and customers to the government, but instead aggregate transaction information into lines on simple tax returns.”). *But cf.* ALAN SCHENK, VICTOR THURONYI & WEI CUI, *VALUE ADDED TAX: A COMPARATIVE APPROACH* 461 (2d ed. 2015) (describing China’s VAT, under which “tax authorities compare transaction information submitted by sellers (through their IC [integrated circuit] cards) with information gathered from invoices submitted by purchasers in claiming input tax credits”).

126. Grinberg, *supra* note 124, at 314.

127. See Janelle Cammenga, *State and Local Sales Tax Rates, 2019*, TAX FOUND., <https://taxfoundation.org/sales-tax-rates-2019/> (“The five states with the highest average combined state and local sales tax rates are Tennessee (9.47 percent), Louisiana (9.45 percent), Arkansas (9.43 percent), Washington (9.17 percent), and Alabama (9.14 percent).”).

128. Grinberg, *supra* note 124, at 315.

A winemaker buys grapes from a grape grower and uses them to produce a case of wine for sale to retailers. The winemaker buys grapes and other supplies from the grape grower at a cost of \$30 per case of wine before tax. The winemaker sells each case of wine for \$70 before tax. The retailer sells a case of wine for \$100 before tax. . . .

. . . Because the VAT is charged on all sales of taxable goods and services (“taxable supplies”), the grape grower collects 20% VAT on her sales of grapes, charging the winemaker \$6 of tax on each \$30 of sales. The grape grower remits the \$6 of VAT to the government. The winemaker charges the retailer \$84 (\$70 + \$14 [20% of \$70] of VAT) per case of wine. Instead of sending all \$14 of VAT to the government, however, the winemaker subtracts the \$6 of VAT paid by the winemaker to the grape grower from the \$14 collected in VAT, and remits \$8 to the government per case of wine sold. Similarly, instead of remitting \$20 per case of wine sold to the government, the retailer subtracts the \$14 of VAT paid by the retailer to the winemaker from the \$20 collected in VAT from the consumer, and remits \$6 to the government per case of wine sold. *The tax authority receives \$20 in total – \$6 from the grape grower, \$8 from the winemaker, and \$6 from the retailer.*¹²⁹

The example above includes calculations of the VAT due.¹³⁰ There are two principal methods for calculating VAT, the credit-invoice method and the subtraction method, with almost all countries that have VATs using the former.¹³¹ The main substantive difference between the two methods is that a credit-invoice VAT has an *invoice requirement*.¹³² That is, while registered businesses may reduce their VAT liability by a credit equal to the VAT they paid to registered suppliers, taking the credit requires an invoice from the supplier.¹³³ Grinberg explains that “[t]he invoice

129. *Id.* at 314–15 (emphasis added).

130. The example above uses the credit-invoice approach. *Id.* at 309. There is another possible approach; the two approaches are described in *infra* text accompanying notes 131–33.

131. Grinberg, *supra* note 124, at 309. “Japan is the only developed economy that utilizes some subtraction-method features to impose a VAT.” *Id.*

132. *Id.* at 310.

133. *Id.* at 313; see also Michel Aujean, *Towards a Modern EU VAT System: Associating VIVAT and Electronic Invoicing*, 20 EUR. CMTY. TAX REV. 211, 215 (2011) (“In most invoice-credit VAT systems, the invoice plays a central role as it is the commercial document that

requirement makes the VAT partially self-policing because registered traders demand invoices in order to claim the input credits that reduce their own VAT liability.¹³⁴ This reporting involves third-party information.¹³⁵ In fact, third parties are

defines the essential terms of the sale on which VAT will apply and which establishes both the VAT due by the seller and the VAT deductible by the purchaser.”).

In their book on the VAT, Cui and his co-authors note that “[s]ome countries have undertaken ambitious programs to match invoices for input credits to output tax reported by the purported suppliers.” SCHENK, THURONYI & CUI, *supra* note 125, at 339. They critique this matching effort, stating that “[s]uch an exercise can, however, be problematic, in part because many mismatches are a result of errors rather than evasion.” *Id.* Yet, catching reporting errors is the goal of matching, and an error in the taxpayer’s favor is equally costly to the government whether it is intentional or inadvertent. In addition, a review of this book observes that the book’s “discussion of fraud is rather cursory given the worries (for good or bad reasons) about VAT fraud, especially in the EU. Missing trader (or carousel) fraud is the most prominent but by no means the only form of VAT fraud, as shown [by] Keen and Smith (2006) in their classic (but uncited) paper on VAT and sales tax fraud.” Pierre-Pascal Gendron, *Book Review: Value Added Tax: A Comparative Approach, Second Edition* by Alan Schenk, Victor Thuronyi, and Wei Cui, 69 NAT’L TAX J. 247 (2016).

134. Grinberg, *supra* note 124, at 313; *see also id.* at 314 (“The prospect of this type of third-party reporting may induce businesses to comply more fully with the law.”). In addition, the fact that the businesses earlier in the chain have in effect withheld part of the tax, which can be claimed by the businesses later in the chain, *see supra* text accompanying note 129, increases the incentive to comply. *See* Waseem, *supra* note 90, at 33. Waseem finds that “VAT is indeed self-enforcing. Taxable sales reported by manufacturers rise considerably as their exposure to VAT deepens.” *Id.* at 4.

VAT invoices are thus useful with respect to the business-to-business part of the supply chain. However, the final sale to the consumer traditionally was not transparent to the government because the system did not call for the consumer to report to the government the total price or amount of VAT he or she paid. Bahro A. Berhan & Glenn P. Jenkins, *The Economic Cost of “Clever” Tax Administration Ideas*, 5 REV. SOC., ECON. & BUS. STUD. 89, 90 (2004) [hereinafter Berhan & Jenkins, *Economic Cost*] (“If the seller agrees with the buyer not to levy VAT on its final sale, then the government bears the full loss of tax revenue.”). Years ago, some countries undertook measures to increase enforcement at the retail stage of the transaction by using the consumer as a third party. *Id.* at 90–91; *see also infra* text accompanying notes 379–91 (discussing lotteries using consumers’ receipts). For example, in 1986, Bolivia “create[d] another tax—a withholding tax on the payroll of employees and pensioners—which can be reduced or eliminated by deducting the VAT paid on purchases, documented by official VAT invoices.” Bahro A. Berhan & Glenn P. Jenkins, *The High Costs of Controlling GST and VAT Evasion*, 53 CANADIAN TAX J. 720, 724 (2005). Similarly, Turkey introduced a VAT-refund approach for consumers in 1986, *id.*, and Northern Cyprus adopted that approach in 1996, *id.* at 723.

135. *See* Jianjun Li & Xuan Wan, *Does VAT Have Higher Tax Compliance Than a Turnover Tax? Evidence from China*, INT’L TAX & PUB. FIN. § 2.3 (2019), <https://doi.org/10.1007/s10797-019-09567-4> (“It is generally considered that the VAT system possesses a self-enforcing mechanism Each inter-firm transaction is recorded by the buyer and the seller, which generates the *third-party information*. The third-party information dramatically increases the possibility that under-reporting sales and over-reporting costs will be detected.” (emphasis

so important to the VAT process that some countries have begun imposing third-party liability in VAT fraud cases, such as by “refusing the deductibility of input VAT to traders where the purchaser of those goods had turned out to be a (missing trader) fraudster.”¹³⁶

With respect to the role of third-party reporting, Cui claims that “[u]nder the VAT . . . firms generally do not transmit information about payments to and specific transactions with vendors and customers to the government, but instead aggregate transaction information into lines on simple tax returns.”¹³⁷ He adds, “[t]he existence of a paper trail does help audits, but it does not automatically provide the government with any information before an audit.”¹³⁸ Hemel echoes Cui’s analysis of VAT enforcement, stating in part that “the [VATs] that constitute a large source of revenue in most countries other than the United States rely primarily upon first party reporting. . . . Cui notes that in fact, firms generally do not submit information to the government regarding specific transactions.”¹³⁹ However, these descriptions both (1) are out of date and (2) only partially capture how VATs used to be administered.

Decades ago, VATs did rely significantly on first-party reporting. For example, a book authored by Liam Ebrill et al. and published by the International Monetary Fund (IMF) in 2001 explained that “[u]ntil the early 1990s, all countries willing to introduce a VAT broadly followed the same approach—administrative preparations for implementation of the new tax were always based on the assumption that the VAT is a self-assessed tax.”¹⁴⁰ That book further described VATs as closely linked

added)); see also Waseem, *supra* note 90, at 10 (using the phrase “Third-Party Information” as a heading).

136. Rita de la Feria, *Tax Fraud and the Rule of Law* 23 (Oxford Univ. Ctr. for Bus. Taxation, Working Paper, 2018), <http://eureka.sbs.ox.ac.uk/7281/1/WP1802.pdf>. Professor de la Feria critiques this “responsibilisation” approach. See *id.* at 29–31.

137. Cui, *supra* note 6, at 104.

138. *Id.* at 104 n.48.

139. Hemel, *supra* note 10. Hemel adds, “This point surprised me: I had assumed that credit invoice method VATs required firms to report information about individual transactions with counterparties, against whose returns those reports could be checked.” *Id.*

140. LIAM EBRILL ET AL., *THE MODERN VAT* 138 (2001).

with self-assessment,¹⁴¹ meaning that taxpayers “calculate and pay their own tax liabilities.”¹⁴²

That early VATs were premised upon self-assessment did not preclude third-party reporting, however. For example, the U.S. federal income tax involves both self-assessment¹⁴³ (taxpayer calculation of the tax liability) and third-party reporting of wages, interest, and other amounts.¹⁴⁴ And the backdrop of the VAT, according to Ebrill et al., was the role of third-party invoices in the supply chain: “As background, the VAT literature initially emphasized the self-checking mechanism of the VAT (through the chain of invoices that are required at each stage through the retailer).”¹⁴⁵

Taxpayers were not the only ones making use of these invoices. Even decades ago, countries were using them to facilitate enforcement:

[T]ax departments usually [would] maintain a system of official invoices where the invoices/receipts are numbered and the quantity of invoices/receipts issued to each firm is recorded. Under such a system, a self-policing mechanism exist[ed] with respect to the payment of the VAT on the sales of goods and services between one business and another.¹⁴⁶

That is, a business purchasing a supply generally would want an official invoice in order to be able to support a deduction for the VAT paid.¹⁴⁷ The selling business supplying the invoice would then

141. *Id.* (“In many countries, the development of self-assessment is closely linked to the rise of the VAT.”).

142. *Id.* In 2009, one of the authors of *The Modern VAT* referred to that book as “now starting to show its age . . .” Michael Keen, *What Do (and Don't) We Know About the Value Added Tax? A Review of Richard M. Bird and Pierre-Pascal Gendron's The VAT in Developing and Transitional Countries*, 47 J. ECON. LITERATURE 159 (2009).

143. Bret Wells, *Voluntary Compliance: “This Return Might Be Correct but Probably Isn't,”* 29 VA. TAX REV. 645, 649 (2010) (“As has been recognized by the Supreme Court, the system of self-assessment is the bedrock principal [sic] of our income tax laws . . .”).

144. See *supra* text accompanying note 4.

145. EBRILL ET AL., *supra* note 140, at 140. Ebrill et al. add that the chain of VAT invoices “could be seen as consistent with implementing self-assessment procedures—if the VAT is a ‘self-enforced’ tax, it should also be ‘self-assessed.’” *Id.*

146. Berhan & Jenkins, *Economic Cost*, *supra* note 134, at 90.

147. See Michael Keen & Stephen Smith, *VAT Fraud and Evasion: What Do We Know and What Can Be Done?*, 59 NAT'L TAX J. 861, 865 (2006). Keen and Smith explain:

be more likely to remit the VAT collected because it would know that the buyer (the third party) planned to report the VAT it paid.¹⁴⁸ The registered invoices allowed authorities to monitor the businesses in a supply chain.¹⁴⁹

Cui's assertion that firms liable for VAT "generally do not transmit information about payments to and specific transactions with vendors and customers to the government" is at best an incomplete and outdated description of VAT administration.¹⁵⁰ Even in the Ebrill et al. survey that was conducted over 20 years ago,¹⁵¹ "[o]nly 42 percent of the surveyed countries (13 out of 31) ha[d] implemented"¹⁵² what the book termed "modern collection procedures (using simple filing and payment forms and a self-assessment system)."¹⁵³ More of the countries, even at that time " (15 out of 31), while using self-assessment procedures," had imposed additional requirements.¹⁵⁴ "In these [latter] countries, the forms may [have] include[d] several pages, with taxpayers sometimes requested to attach additional documents (such as copies of invoices and import declarations)" ¹⁵⁵

[T]here is an important sense in which the VAT is self-correcting, if not self-enforcing: if for some reason a supply to some registered trader escapes VAT, that missing VAT will be recovered at the next stage in the VAT charged by that trader on their own sales, since there will in that case be no credit to offset against their liability. For all these reasons, traders selling to other businesses have an incentive to register to charge the VAT even if their annual turnover is below the threshold at which VAT registration is mandatory

Id.

148. See Keen, *supra* note 142, at 162 ("One argument sometimes made for the VAT, for example, is that it can help to propagate compliance: if one firm is registered for the VAT, then anyone supplying to it will also want to register and become VAT compliant (because then they can themselves reclaim any VAT they have been charged, whilst the VAT they have to charge the final seller will simply be credited or refunded by the latter).").

149. *Id.* Writing in 2011, Aujean advocated for electronic invoicing. Aujean, *supra* note 133, at 215. Aujean adds, "I do believe that 'the future of VAT is digital'" *Id.* at 216 (quoting Richard T. Ainsworth, *Carousel Fraud in the EU: A Digital VAT Solution*, 42 TAX NOTES INT'L 443 (2006)).

150. Cui, *supra* note 6, at 104.

151. EBRILL ET AL., *supra* note 140, at 139 (referring to "the countries surveyed in Chapter 6"); *id.* at 62 (stating regarding the survey that "[m]ost questionnaires were completed in Spring/Summer 1998").

152. *Id.* at 139.

153. *Id.*

154. *Id.*

155. *Id.*

Ebrill et al. criticized the approach of these latter countries, referring to these reporting requirements as “complex” and involving “excessive data requirements.”¹⁵⁶ Their concern was with compliance costs¹⁵⁷ in light of their apparent doubt that taxpayers would take advantage of opportunities to evade.¹⁵⁸ But it is one thing to assert as a normative matter that detailed reporting is too costly or inefficient. It is another thing to claim as an empirical matter that detailed reporting is atypical. The Ebrill et al. study reflects that, even in 1998, more of the countries surveyed required additional documentation than did not, a factual point that Cui’s argument overlooks.¹⁵⁹ And, as discussed below, in recent years, technological developments have led to much more line-item reporting.¹⁶⁰

In 2006, Richard Ainsworth argued:

The future of the VAT is digital. In the foreseeable future, all VAT processes will be automated. VAT determinations,

156. *Id.*

157. *See id.* (referring to additional filing requirements as “significantly increasing compliance costs”).

158. For example, in its discussion under “What Are the Main Reasons for Resistance to Self-Assessment?,” *id.* at 142, under the claim “Most businesses underreport their tax liabilities,” the Ebrill et al. book responds:

This has also been mentioned in countries in transition. In these countries, a number of officials seem to be firmly convinced that taxpayers cannot be trusted, especially those in the emerging private sector. However, such reactions should gradually decrease as senior tax officials improve their experience with basic tax administration principles of market-based economies and taxpayers become more familiar with the new tax laws.

Id. at 143. This suggests the views that the problems are (1) a lack of trust by tax administrators (rather than actual noncompliance) and (2) imperfect compliance resulting from inexperience. These explanations give little credit to the insights of administrators regarding the motivations or actions of taxpayers. They also ignore the fact that “[s]elf-employed individuals are widely known for evasion of the income tax, and tax administrators throughout the world have searched for ways to induce the self-employed to comply with their tax obligations.” Piroška Soos, *Self-Employed Evasion and Tax Withholding: A Comparative Study and Analysis of the Issues*, 24 U.C. DAVIS L. REV. 107, 108 (1990). VATs have proven to be subject to fraud both in developing and developed countries. *See, e.g.,* Keen & Smith, *supra* note 147, at 862 (“Sri Lanka, for example, has recently lost substantial revenue—reportedly about ten percent of its net VAT receipts—from a single fraudulent episode. Indeed, the more pervasive informality in developing countries, and typically higher levels of corruption, suggest that fraud and evasion are likely to be even greater problems there.” (footnote omitted)); *id.* at 865–68 (providing a typology of VAT fraud); *see also* Ainsworth, *supra* note 149, at 444–45 (explaining the mechanics of carousel fraud).

159. *See supra* text accompanying note 155.

160. *See infra* text accompanying notes 163–78.

collection, the remission of funds, as well as all reporting, audit, and refund activities will be digitized. *Certified proprietary and third-party software systems will perform all critical VAT functions for large and small taxpayers at minimal cost under real-time compliance conditions.* Government-to-government information exchange will be immediate.

The European Union is transitioning to a digital VAT now.¹⁶¹

And, in fact, as early as 2005, “the 38 member states of the Organisation for Economic Co-operation and Development” agreed to¹⁶² what is “[o]ne of the most well-known real-time reporting format[s] . . . [—]the SAF-T file which stands for ‘Standard Audit File for Tax.’”¹⁶³ Importantly, “[t]he idea behind SAF-T is that companies provide governments with full transparency towards the company’s business transactions. *This will enable tax inspectors to audit companies on an ongoing basis, and have line-item transaction data available at any time.*”¹⁶⁴

SAF-T is thus an electronic file—typically an XML file—that “contains reliable accounting data which has been directly exported from the company’s accounting system. It will basically give the tax authorities . . . easy access to the company’s data in an easily readable format.”¹⁶⁵ SAF-T is a valuable tool for tax administrators to conduct third-party verification. “For example, if Company A makes a taxable supply to Company B, Company B’s tax inspector will be able to confirm whether Company A has paid

161. Ainsworth, *supra* note 149, at 443 (emphasis added) (footnotes omitted).

Brazil has used digital invoices “for securing internal data for cross-border supplies among the 27 Brazilian states since 2006.” Ainsworth & Todorov, *supra* note 92, at 638. Brazil followed a process of making digital invoices mandatory for companies of a certain size, and progressively lowered the size threshold to include more businesses. *Id.* “[B]y the end of 2010 there were over 500,000 firms issuing digitally signed, cross-border NF-e invoices. The system is fully in place today [(November 2013)].” *Id.* at 638 n.6.

162. *Standard Audit File for Tax (SAF-T): Online Tax Reporting Forces Transparency*, SOVOS (Sept. 16, 2016) [hereinafter SOVOS], <https://sovos.com/blog/standard-audit-file-tax-saf-t-online-tax-reporting-forces-transparency/>.

163. Sarah Ahlskog & Tuija Kokko, *Farewell Paper VAT Returns – Digitalization Hits Also the World of VAT*, EY (May 29, 2019), <https://yrityselaman360blog.ey.com/2019/05/29/farewell-paper-vat-returns-digitalization-hits-also-the-world-of-vat/>. This is not the only digital reporting format for this data. *See id.* (“There are also other similar kind of real-time reporting requirements within the EU countries, such as the SII (‘Immediate Supply of Information’) in Spain and live VAT invoice reporting in Hungary.”).

164. SOVOS, *supra* note 162 (emphasis added).

165. Ahlskog & Kokko, *supra* note 163.

over the VAT, before allowing the VAT refund to Company B.”¹⁶⁶ The first country to adopt SAF-T was Poland, in 2016.¹⁶⁷ Now, a number of countries use SAF-T for digital reporting: “The SAF-T scheme has currently been implemented in Austria, Lithuania, Luxembourg, Poland, Portugal and France.”¹⁶⁸ Norway introduced mandatory SAF-T filing effective January 1, 2020.¹⁶⁹

Technology has facilitated line-item reporting. A survey conducted by accounting firm Ernst & Young in 2013 found that “[i]n 23 countries VAT/GST [Goods & Services Tax] payers must provide information about their individual transactions to the tax administration.”¹⁷⁰ In addition, “[i]n 16 countries VAT/GST payers must submit *individual tax invoices* to the tax administration.”¹⁷¹ Though the contents of these invoices vary somewhat depending on the particular country’s VAT laws, they generally include supplier information, recipient information, and details about the taxable transaction sufficient to put the taxing authority on notice of the transaction.¹⁷²

166. SOVOS, *supra* note 162.

167. *Id.*

168. Ahlskog & Kokko, *supra* note 163.

169. Pers Evers & John Henry Askevold Rosseland, *Norwegian Standard Audit File – Tax (SAF-T) from 1 January 2020*, DELOITTE, <https://www2.deloitte.com/no/no/pages/tax/articles/saf-t/english/saf-t-er-vedtatt.html> (last visited Feb. 4, 2020); see also *The New SAF-T Standard Format in Norway Also Apply to NUF / Norwegian Foreign Enterprise*, TIMEVAT (Jan. 6, 2020), <https://www.timevat.com/en/the-new-saf-t-standard-format-in-norway-also-apply-to-nuf-norwegian-foreign-enterprise/>.

170. EY GLOBAL SURVEY, VAT/GST ELECTRONIC FILING AND DATA EXTRACTION 5 (2014) (emphasis added), [http://www.ey.com/Publication/vwLUAssets/EY_-_VAT-GST_electronic_filing_and_data_extraction/\\$FILE/EY-vat-gst-electronic-filing-and-data-extraction.pdf](http://www.ey.com/Publication/vwLUAssets/EY_-_VAT-GST_electronic_filing_and_data_extraction/$FILE/EY-vat-gst-electronic-filing-and-data-extraction.pdf). Six of the 23 are European Union (EU) countries. *Id.* at 20.

171. *Id.* at 5 (emphasis added). Five of the 16 are EU countries (Greece, Hungary, Portugal, Spain, and the UK). *Id.* at 32–33.

172. See, e.g., *VAT Invoicing Rules*, TAX’N & CUSTOMS UNION, https://ec.europa.eu/taxation_customs/business/vat/eu-vat-rules-topic/vat-invoicing-rules_en (last visited Feb. 4, 2020) (European Commission VAT invoicing rules, requiring in all cases, e.g., the supplier’s and customer’s names and addresses; the quantity/extent and type of goods or services; and the unit price of goods or services, excluding taxes, discounts, and rebates); *VAT Record Keeping*, GOV.UK, <https://www.gov.uk/vat-record-keeping/vat-invoices> (last visited Feb. 4, 2020) (describing VAT invoices required in the United Kingdom, which require, except in the simplified invoice for retail supplies, such things as the supplier’s and customer’s names and addresses, a description of the goods or services, and the quantity and VAT-exclusive price of each item).

And the trend continues to be to require detailed VAT reporting.¹⁷³ Currently, the European Union requires, among other things, what is known as a “Recapitulative Statement”¹⁷⁴ or “EC sales list”¹⁷⁵ to accompany the VAT return for sales within the EU, for both goods and services.¹⁷⁶

This listing, filed either monthly or quarterly, provides details of sales or transfers of goods and services to other VAT registered companies in other EU countries. The tax offices in the EU use ESLs [EC Sales Lists] to confirm that VAT is being properly and fully declared by all parties in cross-border transactions.

The listing applies to both goods and services.¹⁷⁷

In addition, Intrastat reporting, originally used to track the movement of goods within the E.U. for statistical purposes “[i]ncreasingly . . . is also being used as a check on potential VAT fraud.”¹⁷⁸ One writer explains that “businesses are now asked to reconcile their VAT returns to their Intrastat filings, in order to identify inconsistencies in their VAT compliance.”¹⁷⁹ Intrastat requires numerous details on the goods, and “Intrastat reporting is almost always monthly across the EU. Filings are generally undertaken at the same time as the VAT return, and are sent [to]

173. A report by Avalara states: “The traditional periodic VAT return is headed for extinction. . . . The underlying momentum has been to move from the self-assessed, historic VAT return towards tax authorities being able to verify live VAT calculations in each invoice.” AVALARA, DEATH OF THE EUROPEAN VAT RETURN 2–3, <https://www.avalara.com/vatlive/en/white-papers/death-of-the-european-vat-return.html>.

174. Richard Ainsworth, *Black Swans: Recapitulative Statements/VIES (VAT) & Use Tax Reciprocity (RST)*, 66 TAX NOTES INT’L 275, 275 (2012) (“The EU has developed a data-sharing mechanism involving recapitulative statements by origin state sellers and a VAT Information Exchange System (VIES) that shares this information with the destination state.”); *id.* at 276 (“VAT registered suppliers in the EU are required to file recapitulative statements (also known as EU sales lists or VIES statements).”).

175. *What Is an EC Sales List?*, VATGLOBAL, <https://www.vatglobal.com/reporting-obligations-vat-guides/what-is-an-ec-sales-list> (last visited Feb. 20, 2020).

176. *Id.*

177. *Id.*

178. *Intrastat Declarations*, AVALARA [hereinafter *Intrastat Declarations*], <https://www.avalara.com/vatlive/en/eu-vat-rules/eu-vat-returns/intrastat-declarations.html> (last visited Feb. 20, 2020).

179. Giulia Vettore, *Intrastat Declaration Made Easy: The Who, Why and How of This EU Legal Requirement*, ODOO, <https://www.odoo.com/blog/business-hacks-1/post/intrastat-declaration-made-easy-the-who-why-and-how-of-this-eu-legal-requirement-264> (last visited Feb. 5, 2020).

the appropriate statistical office for the country concerned.”¹⁸⁰ The existence of these overlapping regulatory reporting regimes – the EC sales list, Intrastat and VAT returns – should be expected to increase overall VAT compliance.¹⁸¹

Moreover, although different countries’ VATs have different procedures,¹⁸² the modern approach is to require *digital real-time reporting* of transactions to the government. This approach supplies transaction-by-transaction information to the tax administration. Rwanda adopted digital real-time reporting in 2013,¹⁸³ China introduced it in 2015,¹⁸⁴ Hungary launched its system on

180. *Intrastat Declarations*, *supra* note 178.

Intrastat filings require details of all dispatches (sales) of goods to other EU countries, plus the arrivals (purchase). Details required of each transaction include: Description of the goods; Commodity code of the goods; Quantity and value of the goods; Delivery terms; Country of departure and arrival (using country codes); Any shipping costs. . . . There are annual [Intrastat] reporting threshold[s] for each EU country

Id.; see also Paul Carrier, *An Assessment of Regional Economic Integration Agreements After the Uruguay Round*, 9 N.Y. INT’L L. REV. 1, 27 n.169 (1996) (“The [European Economic Community] established a data collecting system called ‘intrastat’ for the purpose of measuring trade between member states and trade with non-member states.” (citations omitted)); Robin Maxwell et al., *Worldwide VAT Update*, 17 J. INT’L TAX’N 60, at *4 (2006) (“EU member states must collect and report information on intra-Community trade for statistical purposes (these reports are known as INTRASTAT).”).

181. See *infra* Section III.B.1 (discussing overlapping sources of information transparency at large firms).

182. See ERNST & YOUNG, *WORLDWIDE VAT, GST AND SALES TAX GUIDE* (2019), [https://www.ey.com/Publication/vwLUAssets/ey-2019-Worldwide-VAT-GST-and-Sales-Tax-Guide/\\$FILE/ey-2019-Worldwide-VAT-GST-and-Sales-Tax-Guide.PDF](https://www.ey.com/Publication/vwLUAssets/ey-2019-Worldwide-VAT-GST-and-Sales-Tax-Guide/$FILE/ey-2019-Worldwide-VAT-GST-and-Sales-Tax-Guide.PDF) (“summariz[ing] indirect tax systems in 124 jurisdictions”). In Europe, for instance, a Council Directive, located at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006L0112-20190116>, sets forth a detailed framework for a European VAT. EU member states incorporate the Directive into their statutory schemes, with some discretion.

183. See Ainsworth & Todorov, *supra* note 92, at 638; Eva Ghirmai et al., *The Incidence and Impact of Electronic Billing Machines for VAT in Rwanda*, INT’L GROWTH CTR. BLOG (Apr. 15, 2016), <https://www.theigc.org/blog/the-incidence-and-impact-of-electronic-billing-machines-for-vat-in-rwanda/> (“In August 2013, the Rwandan government passed legislation requiring VAT-registered firms to provide customers with a certified Electronic Billing Machine (EBM) receipt for each sale. EBMs record and transmit all sales transaction data to the Rwanda Revenue Authority (RRA) in real time . . .”).

184. STATE ADMIN. OF TAXATION OF THE PEOPLE’S REPUBLIC OF CHINA, *STATE TAXATION ADMINISTRATION ANNUAL REPORT 85* (2018), <http://www.chinatax.gov.cn/download/pdf/swnb2018en.pdf> (“In 2015, the STA [State Taxation Administration] promoted an updated VAT invoice system across China The new system shifts from the offline invoicing and regular reporting to online, real-time uploading of information to tax administrations.”).

July 1, 2018,¹⁸⁵ and Italy implemented its system in January 2019.¹⁸⁶ Spain implemented near-real-time reporting in 2017.¹⁸⁷ Some developed countries have been slower to move to digital real-time reporting, but a range of countries have done so, and others are expected to follow soon.¹⁸⁸

185. *Hungary Real-Time Invoice Reporting*, AVALARA, <https://www.avalara.com/vatlive/en/country-guides/europe/hungary/hungary-real-time-invoice-reporting.html> (last visited Feb. 3, 2020) (“From 1 July 2018 Hungary has introduced real-time, electronic reporting of domestic B2B [business-to-business] sales invoice data. The anti-VAT fraud reporting measure applies to all VAT registered businesses, resident or foreign, on invoices with a VAT element of HUF 100,000 (approximately €320) or more.”).

186. Ahlskog & Kokko, *supra* note 163 (“Italy also introduced the mandatory e-invoicing system in January 2019 which requires all companies established in Italy to issue and submit domestic invoices electronically in the Italian Revenue Agency’s e-invoicing platform called ‘SDI.’”); *see also Digitisation of VAT Reporting*, AVALARA VATLIVE, (Apr. 5, 2018), <https://www.vatlive.com/vat-news/digitisation-of-vat-reporting/>.

187. *See* Joe Stanley-Smith, *How Spanish SMEs Are Impacting Companies: Duracell Case Study*, INT’L TAX REV. (Aug. 3, 2017), <https://www.vertexinc.com/sites/default/files/2018-03/International%20Tax%20Review%20Duracell%20Case%20Study.pdf> (“Spain has introduced groundbreaking requirements for companies to file transactional data in near real-time . . . its implementation [is] on July 1 2017.”); *Real Time Reporting for VAT in Spain*, LEXIDY (Aug. 3, 2017), <https://www.lawyersspain.eu/blog/real-time-reporting-for-vat-in-spain> (“According to the new regime, taxpayers have to report within four days those transactions for which an invoice was either issued or received. This applies to those companies that have a turnover which exceeds 6 million EUR per year: large companies in Spain, groups and those types of companies that file monthly VAT returns.”).

188. *See* Stanley-Smith, *supra* note 187, at 2–3 (“[I]t’s clearly a trend in the market to go to a more digital relationship between taxpayer and government,” said “Danny Vermeiren, director of VAT at Vertex.”); Richard Asquith, *Albania Live E-Invoice Reporting 2020*, AVALARA (Aug. 3, 2019), <https://www.avalara.com/vatlive/en/vat-news/albania-live-e-invoice-reporting-2020.html> (“Albania is to require all taxpayers to submit B2B and B2C [business-to-consumer] invoices in real-time from 1 January 2020. From 2020, all invoices must be live reported to the tax authorities.”); *Greece VAT Live Reporting*, AVALARA, <https://www.avalara.com/vatlive/en/country-guides/europe/greece/greek-vat-live-reporting.html> (last visited Feb. 6, 2020) (“Greece is likely to introduce live invoice reporting and e-invoices in January 2020. This will include daily reporting of B2B and B2C invoices through the tax authority’s TAXISnet portal. E-invoices for B2G [business-to-government] transactions have already been mandated for mid-2019.”).

Several countries that do not yet have real-time reporting have taken steps in that direction, such as by “imposing requirements such as the electronic submission of VAT/GST declarations.” Gijsbert Bulk, *Indirect Tax in 2017*, EY (2017), <http://www.ey.com/gl/en/services/tax/vat-gst-and-other-sales-taxes/ey-indirect-tax-in-2017> (also mentioning the digital steps taken by Belarus, Costa Rica, Czech Republic, French Polynesia, Hungary, Moldova, Puerto Rico, Rwanda, Spain, and Uruguay). The United Kingdom has not implemented digital real-time reporting, but beginning on April 1, 2019, “requires VAT registered businesses with taxable turnover above the VAT registration threshold to keep records in digital form and file their VAT Returns using software.” HM REVENUE & CUSTOMS, VAT NOTICE 700/22, MAKING TAX DIGITAL FOR VAT ¶ 1.2 (2019), <https://www.gov.uk/>

Digital real-time reporting may apply to the business-to-business part of the supply chain and/or to the business-to-consumer stage.¹⁸⁹ The latter stage traditionally has been less transparent due to the fact that the consumer often lacked an incentive to report the transaction to the tax administration (though some countries have tried to address that problem).¹⁹⁰ Digital real-time reporting at the business-to-consumer stage makes that final stage in the supply chain more transparent to the tax administration through smart cash-register technology: the cash register (or its programmer) serves as the third party transmitting transaction-by-transaction data to the government in real time.¹⁹¹

The spread of digital real-time reporting in both the business-to-business and business-to-consumer parts of the supply chain likely speaks to the enforcement advantages that timely, detailed transaction data offers to tax administrators, particularly in countries that have faced enforcement challenges.¹⁹² A study focused on Rwanda found that after Rwanda adopted digital real-time reporting, VAT payments increased substantially.¹⁹³

government/publications/vat-notice-70022-making-tax-digital-for-vat/vat-notice-70022-making-tax-digital-for-vat.

189. See, e.g., *supra* text accompanying note 185 (referring to Hungary's application of digital real-time reporting to business-to-business transactions); *infra* text accompanying note 194 (referring to Italy's application of digital real-time reporting to both business-to-business and business-to-consumer transactions).

190. See *supra* text accompanying note 134 (mentioning some techniques countries used to try to address this problem).

191. The authors thank Tina Ehrke-Rabel for this insight.

192. One article, quoting "an international tax partner and global technology tax leader at EY in the United States," explains that "anti-corruption, electronic submissions and data analytics have been identified as a way to push fraud out of the system faster. 'That's why you are seeing it in countries that tend to have had a more difficult history with tax fraud and corruption' . . ." Amelia Schwanke, *Tax Technology: A Brave New World*, 27 INT'L TAX REV. 24, 27, 30 (2016).

193. Ainsworth & Todorov, *supra* note 92, at 638 n.6.

In 2014, the International Growth Center (IGC) conducted research on the incidence of EBM for VAT in Rwanda and found out that, from 2013 to September 2014, EBM contributed to an increase of VAT payment by 6.5 per cent. More to this, the VAT collected on sales declared increased by 20 per cent in 2015 when compared to 2014, while in 2016 (January to August), VAT collected from sales declared registered an increase of 12 per cent compared to the same period in 2015.

Eugène Kwibuka, *RRA: Use of EBM Will Soon Be Mandatory for Every Business*, NEW TIMES (Oct. 10, 2016), www.newtimes.co.rw/section/read/204315/.

Russia provides an analogous example:

Similarly, “Italy is projecting an annual increase in VAT revenues of €4 billion for 2019 following the January extension of its SdI [Sistema di Interscambio] electronic invoicing regime to domestic B2B [business-to-business] and B2C [business-to-consumer] transactions.”¹⁹⁴

Chile, the focus of the study of VAT compliance by Pomeranz that Cui’s article implicitly counters in its title, initially made digital reporting optional.¹⁹⁵ Thus, at the time of Pomeranz’s study, 2008, “[i]n Chile, as in many countries, most firms [did] not have to submit [the firm’s book of purchases] to the tax authority. Only very large firms, and what was at the time of the study a small number who [chose] to use an online filing system, [did] so.”¹⁹⁶ Digital reporting was made mandatory after Pomeranz’s study was completed, by a 2014 amendment to the law.¹⁹⁷ It is not surprising that digital, real-time reporting is the trend: increased government access to information in real time not only increases enforcement capability, it also deters wrongdoing in the first instance.¹⁹⁸

Thus, Cui’s assertion that third-party reporting does not apply to VATs cannot be reconciled with the empirical evidence.

Starting on January 1 2015, taxpayers in Russia were required to submit VAT transactional data along with their electronic VAT returns. That year, domestic VAT revenues increased by more than 12%, the equivalent of around \$4 billion (RUB 267 billion). Was this driven by an improving economy? Perhaps more likely is the fact that the Russian Federal Tax Service had delivered on its vision for a nationwide VAT analytics platform.

Jon Dobell, *The Future of Tax Technology Is Now*, 28 INT’L TAX REV. 41, 41 (2017).

194. Richard Asquith, *Italy SdI VAT E-Invoicing Raises €4bn*, AVALARA (July 10, 2019), <https://www.avalara.com/vatlive/en/vat-news/italy-sdi-vat-e-invoicing-raises-4bn.html>. The application to business-to-business and business-to-consumer transactions is an extension because use of Italy’s SdI electronic invoicing regime “has been required of sales to government bodies since June 2014.” *Italy Sistema di Interscambio (SdI) Real-Time E-Invoices*, AVALARA, <https://www.avalara.com/vatlive/en/country-guides/europe/italy/italy-sdi-real-time-e-invoices.html> (last visited Feb. 6, 2020).

195. See Richard T. Ainsworth & Musaad Alwohaibi, *GCC VAT: The Intra-Gulf Trade Problem*, 84 TAX NOTES INT’L 315, 324 (2016).

196. Pomeranz, *supra* note 89, at 2543.

197. See *Introduce Modificaciones a la Legislación Tributaria en Materia de Factura Electrónica y Dispone Otras Medidas Que Indica*, BIBLIOTECA DEL CONGRESO NACIONAL DE CHILE (Oct. 1, 2014), <https://www.leychile.cl/Navegar?idNorma=1058909> (providing the text of the law); see also *Chile Extends DTE Rollout Deadline for SMEs and Microbusinesses*, THE PAYPERS (Oct. 31, 2014), <https://www.thepayers.com/e-invoicing-scf-e-procurement/chile-extends-dte-rollout-deadline-for-smes-and-microbusinesses/757135-24> (discussing the phase-in of the law).

198. See Lederman, *Statutory Speed Bumps*, *supra* note 75, at 697.

Invoice matching has been used in many VATs for years,¹⁹⁹ and more and more countries have moved over time to digital reporting of line items and individual transactions. This history both reveals that information reporting is highly relevant to VAT administration and reinforces that reliable information flows are essential to effective tax administration.

III. THE (NON)COMPLIANCE OF FIRMS

Cui's article not only downplays the importance of TPIR for tax compliance, it also argues that firms foster tax compliance because they are "sites of social cooperation under the rule of law."²⁰⁰ While Cui does not provide evidence to support this contrarian assertion, this Article undertakes to examine the available evidence. That evidence shows not only that firms are not inherently compliant, but also that firms (like individuals) are responsive to TPIR.

A. *Are Firms Pro-Social, as Cui Argues?*

Cui argues that for "most modern business firms . . . *complying with the tax law*, like complying with other bodies of laws, is the *default option*"²⁰¹ because "the regulatory state . . . has played a crucial role in facilitating the division of economic profit within business firms."²⁰² Cui asserts:

This dynamic has evolved to a point that firms generally do not consider non-compliance with tax law as their default option; after all, the tax law is generally enacted and enforced by the same governments that have enacted and enforced the other legal rules that are crucial to the cohesion of firms.²⁰³

199. See *supra* text accompanying notes 145–49.

200. Cui, *supra* note 6, at 93; *id.* at 100.

201. *Id.* at 134–35 (emphasis added).

202. *Id.* at 143. Cui further argues:

[L]egal rules and norms that developed from the 18th to the 20th century . . . accompanied the growth of the corporate form: organizational law, antitrust and securities regulation, and labor and employment law, in addition to the ever-present bodies of contract, property, tort and other private law. *Because the operation of most business firms was inseparable from the implementation and following of legal orders, the decision to comply with the tax law was a natural one for firms to make.*

Id. (emphasis added).

203. *Id.* at 143.

This statement seems to suggest that firms reciprocate the helpful regulation they receive by complying with regulations that impose costs on firms, but Cui does not cite evidence to support that idea.

For that matter, Cui's article does not provide any evidence for his claim of default compliance by firms. Instead, it begins discussion of the topic by stating, "Consider the postulate that in modern (i.e., industrial and post-industrial) economies, most business firms operate, for the most part, in compliance with the law."²⁰⁴ If this is true, Cui suggests, "then an important social scientific question will be why it is true – what has brought about this state of affairs."²⁰⁵ Of course, this is not evidence, it is merely a postulate.

Cui goes on to explain what he means by the notion that "*most* modern business firms *mostly* comply with the law"²⁰⁶:

In other words, for many **firms** that purposely engage in one type of illegal behavior or another, they nonetheless are acting in compliance with a wide range of other applicable laws. They do not cheat "wherever they can," in the sense of exploiting every opportunity to earn an expected profit by violating the law.²⁰⁷

That statement is surely true, but contrary to Cui's argument,²⁰⁸ we could substitute "individuals" for "firms" in the foregoing excerpt from Cui's article, and the statement would remain just as accurate.²⁰⁹

Accordingly, Cui's postulate, even if factually true, does not show that firms are more honest than individuals. As discussed below, it is likely the case that it is easier to engage in bad behavior alone than when the behavior requires others to go along with it.²¹⁰ However, that says nothing about firms as opposed to individuals

204. *Id.* at 133.

205. *Id.*

206. *Id.* at 134 (emphasis added).

207. *Id.* (emphasis added).

208. Cui argues that his account of pro-social behavior applies only to firms: "[I]nstead of postulating general pro-social, norms-respecting motivations for individual taxpayers, the account suggests that they will be motivated to act this way . . . in the context of the firm." *Id.* at 140.

209. Most individuals comply with a wide range of laws (e.g., they refrain from committing violent or property crimes), but they may repeatedly break a particular law and/or occasionally break other laws (e.g., they may consistently drive over the speed limit or occasionally use illegal drugs).

210. See *supra* text accompanying notes 63–66; *infra* text accompanying notes 286–97.

acting outside of a firm. For that matter, there is good reason to guess that the subset of firms organized as corporations may be *less* compliant than individuals, as corporate existence is inherently tied to shareholder wealth maximization,²¹¹ and as the corporate form shields individuals from direct consequences for many acts of misfeasance.²¹²

1. *Noncompliant large firms*

In his article, Cui narrows his argument that firms default to being pro-social to focus on large firms.²¹³ Even with that narrowed

211. See Leo E. Strine, Jr., *Our Continuing Struggle with the Idea That For-Profit Corporations Seek Profit*, 47 WAKE FOREST L. REV. 135, 155 (2012) (“[T]he corporate law requires directors, as a matter of their duty of loyalty, to pursue a good faith strategy to maximize profits for the stockholders.”); see also MICHAEL L. BENSON & FRANCIS T. CULLEN, *COMBATING CORPORATE CRIME: LOCAL PROSECUTORS AT WORK* 21 (1998) (“The bureaucratic form of organization substantially increases efficiency and productivity but it also generates new opportunities for criminal behavior Like the Roman god Janus, the business corporation has two faces: producer of stupefying material wealth on one side, and wrecker of financial, physical, and environmental havoc on the other.” (citation omitted)).

An important exception to this single-minded duty of loyalty is for “benefit corporations,” a topic Cui’s article does not discuss. While states’ statutory requirements for benefit corporations vary, in general, benefit corporations differ from traditional for-profit corporations in that (1) their articles of incorporation must provide for a public benefit; (2) their directors are accountable for considering the impact of a potential corporate action on that benefit objective; (3) the firm must publish an annual benefit report; and (4) shareholders and others may have standing to hold the firm and its directors/managers accountable to its public mission. Joseph Karl Grant, *When Making Money and Making a Sustainable and Societal Difference Collide: Will Benefit Corporations Succeed or Fail?*, 46 IND. L. REV. 581, 584–88 (2013). While some benefit corporations undoubtedly do public good, their existence does not show that corporations are inherently pro-social. In addition, a firm that is focused on maximizing profits might use the benefit corporation model to “greenwash,” that is, to deceive people into believing “that it is producing some public benefit.” Alicia E. Plerhoples, *Nonprofit Displacement and the Pursuit of Charity Through Public Benefit Corporations*, 21 LEWIS & CLARK L. REV. 525, 528 (2017).

212. Prosecutions of corporate executives are famously rare. See, e.g., Peter J. Henning, *Why Is It Getting Harder to Prosecute Executives for Corporate Misconduct*, 41 VT. L. REV. 503, 521 (2017) (“Criminal prosecutions of corporate officers have not happened in the last few years anyway, and it is getting harder to pursue those cases.”); James B. Stewart, *In Corporate Crimes, Individual Accountability Is Elusive*, N.Y. TIMES (Feb. 19, 2015), <https://www.nytimes.com/2015/02/20/business/in-corporate-crimes-individual-accountability-is-elusive.html> (“A particularly egregious example is Pfizer, the large pharmaceutical company, which appears to have been a serial offender despite a string of nonprosecution agreements and guilty pleas in which it promised to behave better. . . . Despite the company’s recidivism, none of its senior executives have ever been charged or convicted.”).

213. See Cui, *supra* note 6, at 102 (“That large firms tend to be more compliant with the tax law (and other types of law) is an important, but not uncommon, observation.”);

scope, the argument is difficult to credit, in part because many large firms have been caught committing organizational fraud or misconduct. Cui mentions a couple of recent examples²¹⁴: Volkswagen's emissions scandal (installation of a "defeat device")²¹⁵ and Wells Fargo's cross-selling scandal (the opening of fake accounts in customers' names).²¹⁶ Other widely reported examples include Enron (accounting);²¹⁷ Worldcom (accounting);²¹⁸ Dewey & LeBoeuf (alleged scheme to defraud creditors);²¹⁹ and Caterpillar (recently alleged tax fraud),²²⁰ among many others.²²¹

As is well known, Enron's demise alone caused substantial losses: "Enron was the seventh-most valuable company in the U.S., until the revelation of its use of deceptive accounting devices to shift debt off its books and hide corporate losses led to losses of more than \$100 billion in shareholder equity before it filed

id. at 135–36 ("The important social scientific question is not why, given the default choice of cheating, most (large) firms don't cheat on their taxes.").

214. *Id.* at 131.

215. See JACK EWING, *FASTER, HIGHER, FARTHER: THE VOLKSWAGEN SCANDAL* 120–22 (2017).

216. Ethan Wolff-Mann, *Every Wells Fargo Consumer Scandal Since 2015: A Timeline*, YAHOO FINANCE (Aug. 8, 2018), <https://finance.yahoo.com/news/every-wells-fargo-consumer-scandal-since-2015-timeline-194946222.html>.

217. See John R. Kroger, *Enron, Fraud, and Securities Reform: An Enron Prosecutor's Perspective*, 76 U. COLO. L. REV. 57, 72 (2005) ("[S]enior Enron executives set out to manipulate Enron's reported financial data to improve the company's apparent financial success."); *id.* at 84 ("Enron was a failing company propped up by accounting games, deceptive transactions, and financial statement manipulation.").

218. See Kathleen F. Brickey, *From Enron to Worldcom and Beyond: Life and Crime After Sarbanes-Oxley*, 81 WASH. U. L. Q. 357, 358 (2003) (referring to "Worldcom, whose less sophisticated accounting fraud led to a larger restatement of earnings, a larger bankruptcy filing, and equally far-reaching civil and criminal investigations").

219. Edward S. Adams, *Lessons from Law Firm Bankruptcies and Proposals for Reform*, 55 SANTA CLARA L. REV. 507, 528 (2015) ("In March of 2014, New York prosecutors filed a 106-count indictment against [former Dewey & LeBoeuf leaders] Davis, DiCarmine, and others alleging that [Dewey & LeBoeuf's] leadership had engaged in a criminal scheme to defraud creditors.").

220. See Jesse Drucker, *Caterpillar Is Accused in Report to Federal Investigators of Tax Fraud*, N.Y. TIMES (Mar. 7, 2017), <https://nyti.ms/2mDrRtd> (describing a government-commissioned report, in which accounting professor Leslie A. Robinson found that Caterpillar failed to follow U.S. tax and accounting rules and opined that the failures were deliberate).

221. See, e.g., *Accounting Scandals*, WIKIPEDIA, https://en.wikipedia.org/wiki/Accounting_scandals (listing numerous accounting scandals, including over 50 since the year 2000); cf. MARSHALL B. CLINARD & PETER C. YEAGER, *CORPORATE CRIME* 9–10 (1980) (describing an older, highly publicized scandal, the "Love Canal" environmental contamination).

for bankruptcy.”²²² But Enron was far from the only large company engaging in accounting fraud.²²³ “The revelation of similar misconduct by other corporations (including Dynergy, Adelphia Communications, WorldCom, and Global Crossing) also led to massive losses.”²²⁴

There are many other examples of misconduct by large corporations, as well, involving many different industries.²²⁵ Regarding why that is the case, one study of S&P 500 manufacturing companies²²⁶ found evidence supporting its hypothesis that “high-performing firms may engage in corporate illegality in order to maintain their performance relative to unsustainably high internal aspirations and external expectations.”²²⁷ That study also found that, unlike less-prominent

222. Sara Sun Beale, *A Response to the Critics of Corporate Criminal Liability*, 46 AM. CRIM. L. REV. 1481, 1483–84 (2009). Enron’s behavior led to criminal prosecutions. See Sara Sun Beale & Adam G. Safwat, *What Developments in Western Europe Tell Us About American Critiques of Corporate Criminal Liability*, 8 BUFFALO CRIM. L. REV. 89, 91 (2004) (“As of July 2004, thirty-one persons connected to Enron had been indicted, and roughly one third of those have been convicted.”).

223. Beale, *supra* note 222, at 1483–84.

224. *Id.* at 1484.

225. For example, one article includes the following descriptions:

In the health care industry, HealthSouth, the nation’s largest operator of rehabilitation hospitals and surgery centers, engaged in an accounting fraud that inflated earnings and assets by as much as \$4.6 billion in order to meet Wall Street forecasts.

Major European corporations also employed similar deceptive practices. Parmalat (a dairy-food giant which was the eighth largest industrial group in Italy and represented .8% of the country’s GDP) collapsed in late 2003 after the revelation that it had falsified its earning reports for thirteen years, while it was losing billions of dollars, and claimed assets in a bank account that did not exist. . . .

Other corporate wrongdoing involved breaches of environmental or health and safety laws. Three major cruise lines—Carnival, Norwegian, and Royal Caribbean—pleaded guilty to charges involving the dumping of waste oil, dry cleaning chemicals, and other toxic substances, and falsifying records to conceal this conduct.

Beale & Safwat, *supra* note 222, at 93–94 (footnotes omitted).

226. Yuri Mishina et al., *Why “Good” Firms Do Bad Things: The Effects of High Aspirations, High Expectations, and Prominence on the Incidence of Corporate Illegality*, 53 ACAD. MGMT. J. 701, 706 (2010) (“Our sample consisted of all manufacturing firms that were part of the S&P 500 between 1990 and 1999 and had December 31 fiscal year-ends. The resulting data set contained 194 firms and 1,749 firm-year observations.”).

227. *Id.* at 703. One possible explanation they propose for these results is loss aversion on the part of top managers. *Id.* at 716.

firms, “prominent firms became increasingly likely to engage in corporate illegality the higher investors’ expectations.”²²⁸

Moreover, some of the largest modern firms have intentionally noncompliant aspects to their business model.²²⁹ In a recent article titled *Corporate Disobedience*, Professor Elizabeth Pollman discusses examples such as the ride-sharing giant Uber, which “launched operations in cities around the world – often in violation of existing laws or, at best, in legal gray areas,”²³⁰ and Google, which has “tested legal boundaries” with such activities as “collecting street views around the globe.”²³¹ As Professor Pollman observes, some scholars have gone so far as to suggest that firms *should* violate some laws in some circumstances.²³²

Corporate misconduct is not necessarily a one-off event, either.²³³ For example, David Uhlmann reports that the 2010 explosion at Massey Energy’s West Virginia mine (the Upper Big Branch mine) that killed twenty-nine people was caused by

228. *Id.* at 716. “[T]he propensity of less prominent firms to engage in illegal actions remained relatively stable, regardless of their performance relative to investor’s expectations.” *Id.* The study “used presence on *Fortune’s* Most Admired Companies list as an indication of prominence. . . . creat[ing] a dichotomous variable that took the value 1 if a firm appeared on the list in a given year and 0 otherwise.” *Id.* at 708.

229. See Elizabeth Pollman, *Corporate Disobedience*, 68 DUKE L.J. 710, 716 (2019) (“Examining corporate disobedience reveals that there is a wide array of lawbreaking, ranging from truly repugnant activity that has no redeeming social value to innovative entrepreneurship that arguably falls into a legal gray area or transgresses laws made in a different technological or social age.”).

230. *Id.* at 712.

231. *Id.* at 736.

232. See Frank H. Easterbrook & Daniel R. Fischel, *Antitrust Suits by Targets of Tender Offers*, 80 MICH. L. REV. 1155, 1177 n.57 (1982) (“[M]anagers do not have an ethical duty to obey economic regulatory laws just because the laws exist. They must determine the importance of these laws. The penalties Congress names for disobedience are a measure of how much it wants firms to sacrifice in order to adhere to the rules . . . [, and] managers not only may but also should violate the rules when it is profitable to do so.”).

233. See Marshall B. Clinard, *Corporate Crime: Yesterday and Today – A Comparison*, in MARSHALL B. CLINARD & PETER C. YEAGER, *CORPORATE CRIME* ix, xix (2005) (stating that “[r]ecidivism among corporations continues into the 2000s” and including as an example that “*Multinational Monitor* . . . has compiled a list of forty-two major law violations of General Electric between 1990 and 2001” (citation omitted)). In Clinard & Yeager’s study of 582 corporations, they found that “for those firms that had at least one [federal enforcement] action brought against them [in 1975 or 1976], the average was 4.4 cases.” CLINARD & YEAGER, *supra* note 221, at 113. They further state that “200 corporations, or 42 percent of the total, had multiple charges against them in 1975–1976.” *Id.* at 116. This study is described further in *infra* text accompanying notes 250–55.

repeated unlawful practices.²³⁴ “In January 2008, Massey paid a then-record \$20 million in civil penalties for thousands of violations of the Clean Water Act committed between January 2000 and December 2006. At the Upper Big Branch mine, Massey had a methane explosion in 1997, and near misses in 2003 and 2004”²³⁵

Similarly, “Volkswagen had been accused of deploying defeat devices as far back as 1973. The company . . . paid \$120,000 [then] to settle with the Environmental Protection Agency. In 2005, Volkswagen paid a \$1.1 million penalty for failing to notify the EPA of emissions problems in some cars manufactured in Mexico.”²³⁶ In his 2017 book about the Volkswagen emissions scandal, Jack Ewing reports that, in 2006, when Volkswagen engineers worked on adapting software Audi used in its diesel engines, they found that that software already contained a defeat device.²³⁷ Volkswagen persisted in this behavior. For example, Ewing reports that, in 2015, when Volkswagen recalled cars emitting excess emissions, “Volkswagen brazenly used the recall to enhance the effectiveness of the defeat device.”²³⁸

Misconduct also is not necessarily confined to one firm within an industry.²³⁹ For example, Ewing states that in deciding whether to actually deploy a defeat device in Volkswagen engines, some employees reportedly argued that “all the carmakers cheated. Volkswagen had to take shortcuts, too, or it wouldn’t be able

234. See David M. Uhlmann, *Deferred Prosecution and Non-Prosecution Agreements and the Erosion of Corporate Criminal Liability*, 72 MD. L. REV. 1295, 1295–96 (2013) (discussing Massey’s practices of intimidating workers and maintaining dual sets of books to deceive safety inspectors).

235. *Id.* at 1296.

236. EWING, *supra* note 215, at 123.

237. *Id.* at 120.

238. *Id.* at 183.

239. See, e.g., CLINARD & YEAGER, *supra* note 221, at 8 (referring, among other things, to “the electrical price-fixing conspiracy of the 1960s that involved 29 electrical equipment manufacturing companies”); *id.* at 119 (finding in their study of 582 corporations regarding federal enforcement actions brought in 1975–1976, that corporations in “[t]he oil, pharmaceutical, and motor vehicle industries were the most likely to” be the subject of enforcement lawsuits); Beale & Safwat, *supra* note 222, at 94–95 (describing misconduct allegations of major pharmaceutical companies and citing the following amounts reported in 2003 to 2004 as paid by those companies in response: over \$86 million by GlaxoSmithKline, \$271 million by Bayer, \$355 million by AstraZeneca, \$430 million by Pfizer, and over \$622 million by Abbott Laboratories); see also *infra* text accompanying notes 240–44.

to compete.”²⁴⁰ Marshall Clinard labeled the oil industry “One of the Worst,” referring, in part, to violations during the 1990s and 2000s.²⁴¹ And Professor Sara Sun Beale wrote in 2009:

In the past decade, virtually every major pharmaceutical company has pled guilty to or settled charges arising out of serious misconduct. In the previous decade, the 1990s, the most prominent cases concerned antitrust violations. The largest single fine imposed was \$500 million for a worldwide scheme to fix the price of vitamins, and fines from the nine most serious antitrust cases of the decade totaled \$1.2 billion.²⁴²

Corporate misconduct was also rampant during the savings and loan crisis of the 1970s,²⁴³ and more recently in the lead-up to the Great Recession of the late 2000s.²⁴⁴ There are also older examples:

Historically, we can find evidence of business “crime waves” in the United States that date back to the early 19th century The notion of crime waves is especially supported by patterns of financial crime. In the 1920s, broad patterns of financial abuses at major banks joined other patterns of fraud to contribute to the national stock market crash of 1929.²⁴⁵

Thus, large firms are far from exempt from committing misconduct. In fact, corporate misconduct may sometimes involve most of the major players in an industry. One scholar has further

240. EWING, *supra* note 215, at 122.

241. Clinard, *supra* note 233. He also referenced his study of violations committed in 1975–76. *Id.*

242. Beale, *supra* note 222, at 1484 (footnotes omitted). Clinard labels the pharmaceutical industry “The Worst.” Clinard, *supra* note 233.

243. See *Savings and Loan Crisis: Federal Response to Fraud in Financial Institutions*, Hearing Before the S. Comm. on Banking, Hous. & Urban Affairs, 101st Cong. (1990), <https://www.gao.gov/assets/110/103444.pdf> (statement of Richard L. Fogel, Assistant Comptroller General, General Government Programs) (“GAO estimates that losses from thrift failures could be as much as \$500 billion in the next forty years. Though the extent to which fraud contributed to or caused thrift and bank failures is not known, fraud has played a significant role U.S. attorneys . . . are in the process of prosecuting thousands of financial institutions’ officers, directors, major borrowers, accounting firms, law firms, and others.”).

244. See, e.g., Anton R. Valukas, *White-Collar Crime and Economic Recession*, 2010 U. CHI. L. FORUM 1, 5–6; Binyamin Appelbaum, *How Mortgage Fraud Made the Financial Crisis Worse*, N.Y. TIMES (Feb. 12, 2015), <https://www.nytimes.com/2015/02/13/upshot/how-mortgage-fraud-made-the-financial-crisis-worse.html>.

245. Peter Cleary Yeager, *The Elusive Deterrence of Corporate Crime*, 15 CRIMINOLOGY & PUB. POL’Y 439, 441 (2016) (citation omitted).

argued that there is a pattern to cycles of white-collar crime, such that when the economy is strong, there is a push for deregulation that allows malfeasance to go undetected.²⁴⁶ Once a recession occurs, “[r]egulators and prosecutors fix their gaze on the business world and find no shortage of wrongdoing and corruption. Wrongdoing and corruption are not necessarily the cause of economic recessions, but typically recessions bring them to light.”²⁴⁷

2. *The prevalence of fraud by firms*

The examples in the previous section of misconduct by large firms involve high-profile cases. Those cases offer limited insight into the frequency of corporate misconduct. It is difficult to obtain precise statistics on the incidence of crimes and other misconduct by firms, in part because much corporate crime is unreported.²⁴⁸ But available evidence shows that corporate malfeasance is not a rare, isolated occurrence.²⁴⁹ For example, in a study of 582 large corporations, Clinard and Yeager found that, in 1975 and 1976, “350 (60.1 percent) had at least one federal action brought against them”²⁵⁰—administrative, civil, or criminal.²⁵¹ Not included in their

246. Valukas, *supra* note 244, at 2 (“In good times, the public turns a blind eye to questionable practices that develop, but in a recession, a spotlight is shone on people making money through dubious means.”).

247. *Id.* at 4.

248. Clinard, *supra* note 233 (“[C]orporate illegal violations are not reported in central sources like the Uniform Crime Reports.”); cf. Sally S. Simpson et al., *Measuring Corporate Crime*, in UNDERSTANDING CORPORATE CRIMINALITY 115, 122 (Michael B. Blankenship ed., 1993) (stating that in many of the sources of data they cite, such as court records and corporate self-reports to regulatory agencies, “[a]s officially generated statistics, only a portion of the incidence of corporate crime is captured within them”).

249. See Brickley, *supra* note 218, at 358 (“In the beginning, it was widely assumed that the Enron scandal was an anomaly. But it soon became clear that this was anything but an isolated case of financial accounting fraud at a major corporation Federal and state regulators have since initiated fraud investigations involving dozens of corporations, including Adelphia, HealthSouth, McKesson, Tyco, and Qwest. To date [in 2003], some ninety corporate owners, executives, and employees have been criminally charged, and the investigations are ongoing.”).

250. CLINARD & YEAGER, *supra* note 221, at 113.

251. *Id.* at 110. This study is decades old but has the advantage of being detailed. Clinard wrote in 2005 that “[i]t is impossible to state whether corporate crime is greater in the 2000s than in the 1970s. Since then no studies comparable to *Corporate Crime* have been made.” Clinard, *supra* note 233.

study were undetected violations;²⁵² misconduct that was detected by federal agencies but not pursued;²⁵³ “data on certain types of agency cases, such as most cases involving taxes;”²⁵⁴ and “detected violations responded to informally, for example, by telephone.”²⁵⁵ The authors caution that “[w]hat is represented here, then, are only minimal figures of government actions against major corporations: the undercount may be as high as one-fourth to one-third.”²⁵⁶

More recently, former Attorney General Eric Holder stated in 2014, “the Justice Department has brought over 60 cases against financial institutions since 2009, resulting in recoveries totaling over \$85 billion.”²⁵⁷ And this is despite the fact that banking fraud often is difficult to detect.²⁵⁸ Looking beyond financial institutions, between 2004 and 2014, the Justice Department initiated 3,270 corporate prosecutions, for an average of 297 prosecutions per year, though the number trended downward over that period.²⁵⁹ Although these numbers are not large in the context of the total number of corporations, they reflect only *U.S. federal crimes*, and only *actual prosecutions*, so they reflect only a subset of corporate crimes.²⁶⁰

Crimes for which firms are prosecuted may actually reflect only a small percentage of corporate crimes, as such wrongdoing may

252. CLINARD & YEAGER, *supra* note 221, at 112 n.8.

253. *Id.* at 111.

254. *Id.* at 112.

255. *Id.*

256. *Id.* (emphasis removed).

257. Attorney General Holder Remarks on Financial Fraud Prosecutions at NYU School of Law (Sept. 17, 2004), <https://www.justice.gov/opa/speech/attorney-general-holder-remarks-financial-fraud-prosecutions-nyu-school-law>.

258. Adam Davidson, *How Regulation Failed with Wells Fargo*, NEW YORKER (Sept. 12, 2016), <http://www.newyorker.com/business/currency/the-record-fine-against-wellsfargo-points-to-the-failure-of-regulation> (reporting, after talking with an expert, that “it is incredibly easy for banks to conceal their bad behavior”).

259. See *Justice Department Data Reveal 29 Percent Drop in Criminal Prosecutions of Corporations*, TRAC REPORTS, <http://trac.syr.edu/tracreports/crim/406/>.

260. Not only do these statistics not reflect state and foreign prosecutions, they do not reflect undetected crimes and crimes that are not prosecuted. “Over the past 10 years, occupational fraud referrals to prosecution declined 16%” and the “top reason for non-referrals was fear of bad publicity.” ASS’N OF CERTIFIED FRAUD EXAM’RS, REPORT TO THE NATIONS: 2018 GLOBAL STUDY ON OCCUPATIONAL FRAUD AND ABUSE 5 (2018), https://www.acfe.com/uploadedFiles/ACFE_Website/Content/rtrn/2018/RTTN-Government-Edition.pdf.

often be undetected or go unprosecuted.²⁶¹ In his book containing in-depth case studies and analysis of corporate fraud, John O’Gara concludes, “[m]ajor management fraud²⁶² . . . is significantly underdetected. Moreover, when this type of fraud is recognized, it is all too frequently not prosecuted. The risk/reward implications of underdetection and underprosecution are obvious.”²⁶³

Thus, corporate crime and other misconduct is hardly rare or isolated, even among large firms. There are numerous examples of industry-wide corporate misconduct.²⁶⁴ Corporate wrongdoing is also quite costly.²⁶⁵ As one example, in the 2008 financial crisis, “corporate misconduct and malfeasance destabilized the stock market and led to the loss of billions in shareholder equity and the loss of tens (or perhaps even hundreds) of thousands of jobs.”²⁶⁶ More generally, “many believe [corporate crime] dwarfs the total annual loss from street crime.”²⁶⁷

3. *Tax noncompliance by firms*

Having a business infrastructure that includes professional bookkeeping should facilitate tax compliance.²⁶⁸ It is possible that some firms committing non-tax malfeasance are fully compliant

261. BENSON & CULLEN, *supra* note 211, at 27 (describing the special difficulties in identifying and prosecuting corporate crime).

262. “Management fraud (financial statement fraud)” is fraud on behalf of a firm. W. STEVE ALBRECHT ET AL., FRAUD EXAMINATION 9-10 (4th ed. 2011). Corporate and occupational crime may be thought of as on a continuum because some crimes benefit only the corporation, some only the worker, and some benefit both. BENSON & CULLEN, *supra* note 211, at 22.

263. JOHN D. O’GARA, CORPORATE FRAUD: CASE STUDIES IN DETECTION AND PREVENTION 149 (2004); *infra* Section III.A.2. O’Gara’s view that significant management fraud often is undetected stems from “deductive reasoning, a considerable amount of experience, and a dash of intuition.” O’GARA, *supra*.

264. See Beale, *supra* note 222, at 1483; *supra* notes 239-45 and accompanying text.

265. The Association of Certified Fraud Examiners’ 2018 *Report to the Nations* examined occupational fraud. It found that “financial statement fraud schemes are the least common and most costly” at 10% of fraud cases but with a median loss of \$800,000. ASS’N OF CERTIFIED FRAUD EXAM’RS, *supra* note 260, at 4.

266. Beale, *supra* note 222, at 1483.

267. BENSON & CULLEN, *supra* note 211, at 22 (citations omitted); see also Clinard, *supra* note 233, at xii (“The cost of corporate crime far exceeds the total for all the thefts, burglaries, arsons, and robberies put together.”).

268. Cf. Manoj Viswanathan, *Tax Compliance in a Decentralizing Economy*, 34 GA. ST. U. L. REV. 283, 309 (2018) (“With an extant bookkeeping infrastructure, the costs of [third-party] reporting compliance necessarily decrease, making reporting less burdensome.”).

with their tax obligations—though tax violations may also result from some non-tax malfeasance.²⁶⁹ Regardless, firms are certainly not immune from tax violations. It is difficult to find statistics on the actual frequency of tax evasion, given its inherently secret nature. However, a study of corporations using IRS Taxpayer Compliance Measurement Program data for the 1980 tax year²⁷⁰ “reveal[ed] pervasive noncompliance—two-thirds of the sample corporations [we]re noncompliant—that involve[d] a substantial share of profits.”²⁷¹ The problem is not limited to the United States. For example, a recent tax compliance paper found that, in Ecuador, “there is widespread misreporting in the universe of incorporated firms.”²⁷²

More generally, it is well known that small businesses present a tax compliance problem worldwide.²⁷³ Large firms also can be

269. See Grant Richardson et al., *Corporate Profiling of Tax-Malfeasance: A Theoretical and Empirical Assessment of Tax-Audited Australia Firms*, 12 *EJOURNAL OF TAX RES.* 359, 366 (discussing an Australian case study that “suggests that even if the primary incentive by a firm is a [corporate malfeasance] other than tax malfeasance, tax malfeasance and/or misfeasance is almost inevitable as an element of such behaviors”).

Note that firms that fraudulently inflate their earnings may actually pay *more* tax than is actually due to conceal the accounting fraud. See, e.g., Merle Erickson et al., *How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings*, 79 *ACCT. REV.* 388, 389 (2004) (finding, across 27 firms, that the “mean firm paid approximately \$11.84 million in taxes on the overstated earnings, an amount equal to 1.3 percent of the market value of the firms”).

270. Eric Rice, *The Corporate Tax Gap: Evidence on Tax Compliance by Small Corporations*, in JOEL SLEMRUD, ED., *WHY PEOPLE PAY TAXES* 125, 153 app. A (1992). The study focused on medium-sized corporations. *Id.* at 132.

271. *Id.* at 126. Approximately 6 percent of the corporations overstated income, but the median amount of tax overpaid was under \$1,000. *Id.* at 138 tbl.5. Another study, using IRS data from 1961 to 1987, found that “[t]he empirical results indicate that audits act as an effective deterrent to corporate noncompliance and that greater audit coverage could lead to substantial increases in revenues.” Nipoli Kamdar, *Corporate Income Tax Compliance: A Time Series Analysis*, 25 *ATLANTIC ECON. J.* 37, 45–46 (1997) (estimating that “the fraction of true tax liability reported increases by 0.336 of a percentage point when the audit rate increases by a percentage point”).

272. Carrillo et al., *supra* note 121, at 145. Third-party reporting is used in Ecuador but was not being enforced, and the authors found that “[s]elf-reported revenue is lower than third-party reports in 24 percent of filings, suggesting substantial scope for revenue collection through enforcement based on third-party information.” *Id.*

273. See, e.g., Michael Engelschalk & Jan Loeprick, *The Taxation of Micro and Small Businesses in Transition Economies*, 2 *J. TAX ADMIN.* 145 (2016) (discussing efforts at implementing simplified small business tax regimes in developing countries and the failures or shortcomings of these regimes); Piroška Soos, *Self-Employed Evasion and Tax Withholding: A Comparative Study and Analysis of the Issues*, 24 *U.C. DAVIS L. REV.* 107, 113–16 (1990)

noncompliant with their tax obligations, sometimes leading to major scandals. These two contexts are discussed, in turn, below.

a. The role of firm size: Why aren't small firms more tax compliant? Cui notes that large firms tend to be more compliant than small ones.²⁷⁴ He does not specify what he means by a "large" or "small" firm. However, studies generally do find that larger firms—measured a number of ways (such as by asset value or annual receipts)—are more tax compliant.²⁷⁵ For example, James Alm and Chandler McClellan found in a dataset of 8,500 firms from 34 countries that "a one percent increase in revenue increases revenue reported for tax purposes by 3.77 percentage points, so that larger

("Self-employed individuals engaged in business, the professions, and agriculture are sometimes collectively referred to as the 'hard-to-tax.'").

274. See Cui, *supra* note 6, at 138 (arguing that "the basic reason that large firms are more likely to be compliant is not that the probability of motivated whistleblowers is higher in them (or that they have greater external visibility)").

275. See, e.g., SANTIAGO LEVY, GOOD INTENTIONS, BAD OUTCOMES: SOCIAL POLICY, INFORMALITY, AND ECONOMIC GROWTH IN MEXICO 182 figs.7-2 & 7-3 (2008) (showing the declining percentage of illegal (undeclared) employees by increasing firm size and the percentage of illegal (unregistered) firms by increasing firm size); Pierre Bachas et al., *Size Dependent Tax Enforcement and Compliance: Global Evidence and Aggregate Implications* 17–19 (World Bank Grp. Policy Research, Working Paper No. 8363, March 2018) ("[A] 10 percentile increase in the WBES size-rank is associated with a 5.2 percentage point increase in the likelihood of full compliance [Statistical analysis] suggests that firms depress their reported size in order to reduce tax compliance."); Thomas Kenyon, *Tax Evasion, Disclosure, and Participation in Financial Markets: Evidence from Brazilian Firms*, 36 WORLD DEV. 2512, 2512 (2008) ("[L]arger Brazilian manufacturing firms declare a greater proportion of their activities to the tax and labor authorities, but that the difference is small: a doubling of firm size is associated with an increase of just 4 percentage points in the fraction of sales reported."); Todd Kumler et al., *Enlisting Employees in Improving Payroll-Tax Compliance: Evidence from Mexico* 16 (NBER Working Paper Series, Paper No. 19385, 2013), <http://www.nber.org/papers/w19385.pdf> ("A key empirical implication of our model . . . is that there is less evasion in larger firms."); *id.* at 18 ("[I]t appears robust that evasion is lower in 11–50 employee firms than in 1–10 employee firms (the omitted category), and lower still in 250+ employee firms.").

Some studies find the opposite. In a study of 30,000 corporations with assets under \$10 million, Eric Rice found that greater "value added" (defined as "taxable income plus salaries, wages, and officers' remuneration") correlated with increased underreporting. Rice, *supra* note 270, at 143, 152; see also Noor Sharoja Sapiei et al., *Determinants of Tax Compliance Behaviour of Corporate Taxpayers in Malaysia*, 12 EJOURNAL TAX RSCH. 383, 403 (2014) ("Business size . . . is a significant determinant of the under-reporting of income and overall non-compliance. Medium-sized [publicly listed companies] PLCs with annual sales turnover of between MYR100 and MYR500 million were observed to be more non-compliant than small-sized PLCs. To a lesser extent, larger PLCs were more non-compliant than the smaller PLCs.").

firms are more compliant.”²⁷⁶ KKS’s study found that, in Denmark, estimated tax evasion by firms decreases as the number of employees increases.²⁷⁷ These studies and several others²⁷⁸ suggest that larger firm size (measured in various ways) positively correlates with tax compliance. The evidence that compliance level varies with firm size suggests that it is not the firm itself that promotes honesty.

Cui states that “in economists’ use of the term, a ‘firm’ could be a sole business proprietor. A small firm’s behavior would not be distinguishable from the behavior of its few individual owners or employees”²⁷⁹ However, the studies do not find a cliff effect dividing individual-like or very small firms from all other firms. Instead, they generally find progressively increasing tax compliance with increases in firm size.²⁸⁰

In addition, IRS data suggest that the average small firm’s voluntary compliance rate is likely much lower than that of the average individual.²⁸¹ Recall that the IRS estimates the voluntary tax compliance rate with respect to income not subject to information reporting at only 45 percent.²⁸² This figure includes sole proprietor and farm income and thus reflects at least certain types of small businesses.²⁸³ By contrast, the average individual receives most of his or her income from wages and salaries.²⁸⁴

276. James Alm & Chandler McClellan, *Tax Morale and Tax Compliance from the Firm’s Perspective*, 65 KYKLOS 1, 4, 12 (2012).

277. See Kleven et al., *supra* note 6, at 225–26 & fig.3 (panel B).

278. See *supra* note 275.

279. Cui, *supra* note 6, at 134.

280. See *supra* note 275; *supra* text accompanying notes 276–77.

281. In 2001, the IRS’s Small Business and Self-Employed Division, which includes individuals with business income and partnerships, S corporations, and C corporations with assets up to \$10 million, “acknowledge[d] that the largest part of the tax gap can be attributed to the taxpayers it serves.” Management Advisory Report: Comparing the Internal Revenue Service’s Verification of Income for Wage Earners and Business Taxpayers, Ref. No. 2001-30-166 at 4, Sept. 2001 (footnote omitted).

282. See text accompanying *supra* note 2. The low estimated compliance rate is likely largely attributable to the lack of information reporting for self-employment income. See Kleven et al., *supra* note 1, at 670–71.

283. This category also includes rents and royalties, income from the sale of business property on Form 4797, and “other income.” TAX GAP ESTIMATES FOR TAX YEARS 2011–2013, *supra* note 2, at 14 fig.3 & n.6.

284. See U.S. Dep’t of Labor, Bureau of Lab. Stat., *Wages and Salaries Were 92 Percent of Income Before Taxes for Consumers Ages 25 to 34 in 2014*, TED: THE ECON. DAILY,

The IRS estimates the voluntary compliance rate with respect to wage and salary income at a much higher 99 percent.²⁸⁵ The IRS estimates the overall voluntary tax compliance rate at 83.6 percent, which is thus something of an average figure²⁸⁶—and still much higher than the IRS’s estimated 45 percent voluntary compliance rate on sole proprietor and farm income.

One reason small firms are less compliant may be that they may more easily engage in cash transactions.²⁸⁷ Entrepreneurs may also have an above-average taste for risk,²⁸⁸ including for questionable tax reporting.²⁸⁹ In his book on corporate fraud, John O’Gara describes a case study that “illustrates what could be called *entrepreneurial risk*: Privately held smaller companies, particularly those operated by more entrepreneurially inclined executives, have a tendency to play fast and loose.”²⁹⁰

Perhaps most importantly, large firms possess characteristics, such as increased transparency, that make them easier to regulate²⁹¹ and reduce the practicability of tax evasion.²⁹² Scholars point to

<https://www.bls.gov/opub/ted/2016/wages-and-salaries-were-92-percent-of-income-before-taxes-for-consumers-ages-25-to-34-in-2014.htm> (“On average, wages and salaries were 77.6 percent of U.S. household income before taxes in 2014.”).

285. See TAX GAP ESTIMATES FOR TAX YEARS 2011–2013, *supra* note 2, at 14 fig.3.

286. See *id.* at 8 fig.1. It is not a true average. The overall rate includes some amounts not directly attributable to individuals, such as corporate taxes. See *id.*

287. Cf. Morse et al., *supra* note 88, at 37 (“Underpayment of tax on business income is commonly attributed to the receipt of cash.”).

288. See Richard E. Kihlstrom & Jean-Jacques Laffont, *A General Equilibrium Entrepreneurial Theory of Firm Formation Based on Risk Aversion*, 87 J. POL. ECON. 719, 720 (1979) (finding in a model with a risky firm and a riskless wage that “less risk averse individuals become entrepreneurs, while the more risk averse work as laborers”); Galina Vereshchagina & Hugo A. Hopenhayn, *Risk Taking by Entrepreneurs*, 99 AM. ECON. REV. 1808, 1810 (2009) (“[A] number of explanations have been offered to justify why entrepreneurs might be willing to undertake relatively risky activity: they might be overoptimistic, derive utility from being their own boss, or be less risk averse than the rest of the population.”).

289. See Lederman, *supra* note 72, at 1506 (“It is also possible that those inclined to cheat on their taxes opt disproportionately to start businesses, at least at the margin.”).

290. O’GARA, *supra* note 263, at 31.

291. See Chang-Tai Hsieh & Benjamin A. Olken, *The Missing “Missing Middle”*, 28 J. ECON. PERSP. 89, 107 (2014) (positing that “a confluence of factors make[s] enforcement of such [tax or regulatory] rules easier in larger firms so that costs from regulation are rising smoothly in firm size”); see also *infra* Section III.B.1.

292. Harris and Todaro (1970) was the first to model the dual economy view that large firms are subject to constraints and regulations that small firms are able to evade. Their model posits a “modern” sector that pays above-market wages and a “traditional” sector that pays market wages. Rauch (1991) formally shows how

such factors as the greater difficulty large firms would face in keeping transactions off the books;²⁹³ the higher likelihood of audit;²⁹⁴ the increased reputational risk cheating poses;²⁹⁵ and, for publicly traded firms, the opposing financial accounting incentives.²⁹⁶ An empirical study using IRS Taxpayer Compliance Measurement Program data found that “characteristics that assure public disclosure of information about a corporation’s operations,” such as “being publicly traded” or “belonging to a highly regulated industry,”²⁹⁷ “tend to assure better tax compliance.”²⁹⁸

b. Tax noncompliance by large firms. As in the non-tax context, noncompliance is not solely the province of small firms. Numerous large corporations have been investigated regarding abusive tax-shelter schemes. Examples include Colgate-Palmolive,²⁹⁹ Dun & Bradstreet,³⁰⁰ Dow Chemical,³⁰¹ Goldman Sachs,³⁰²

this mechanism can generate a “missing middle” by assuming a fixed threshold due to minimum wage laws or labor unions above which firms have to pay above-market wages.

Hsieh & Olken, *supra* note 291, at 107.

293. Kleven et al., *supra* note 6, at 227.

294. See Kumler et al., *supra* note 275, at 11 (arguing that it may be that “auditors are more likely to audit larger firms because their operations are more visible, as suggested by Besley and Persson . . . —a conjecture that appears anecdotally to be relevant in Mexico” (citing Timothy Besley & Torsten Persson, *Taxation and Development*, in 5 HANDBOOK OF PUB. ECON. 66 (2013))).

295. Alm & McClellan, *supra* note 276, at 12.

296. Alessandro Santoro, *Do Small Businesses Respond to a Change in Tax Audit Rules? Evidence from Italy*, 45 PUB. FIN. REV. 792, 793 (2017) (citing Michelle Hanlon & Shane Heitzman, *A Review of Tax Research*, 50 J. ACCT. & ECON. 127 (2010)). Eric Rice pointed out several reasons for hypothesizing that publicly traded companies will be more tax compliant. See Rice, *supra* note 270, at 138–39. These include SEC disclosure requirements and the incentives of managers and other stakeholders. *Id.* at 139.

297. Rice, *supra* note 270, at 151. The highly regulated industries were banking, real estate, investment holding, communications, insurance, securities brokerage, and utilities. *Id.* at 135 tbl.3.

298. *Id.* at 151.

299. See *IRS and Merrill Lynch Settle on Tax Shelter Dispute*, CFO (Aug. 29, 2001), <http://ww2.cfo.com/accounting-tax/2001/08/irs-and-merrill-lynch-settle-on-tax-shelter-dispute/>.

300. See *id.*

301. See Robert W. Wood, *Dow Chemical’s \$1 Billion Tax Shelter Stinks, Says Court*, FORBES (Feb. 27, 2013), <https://www.forbes.com/sites/robertwood/2013/02/27/dow-chemicals-1-billion-tax-shelter-stinks-says-court/#258679937530>.

302. See *id.*

Santander Holdings,³⁰³ Hewlett-Packard,³⁰⁴ Kroger,³⁰⁵ and many others.³⁰⁶

The corporate tax shelter abuses exposed in the early 2000s provide an example of the breadth of the problem. For example, the U.S. Senate held hearings on abusive tax shelters in 2003³⁰⁷ and found:

During the period 1998 to 2003, KPMG devoted substantial resources and maintained an extensive infrastructure to produce a continuing supply of generic tax products to sell to clients, using a process which pressured its tax professionals to generate new ideas, move them quickly through the development process, and approve, at times, illegal or potentially abusive tax shelters.³⁰⁸

The hearings further revealed that (1) “[d]uring the period 1998 to 2002, Ernst & Young sold generic tax products to multiple clients despite evidence that some, such as CDS and COBRA, were potentially abusive or illegal tax shelters”,³⁰⁹ and (2) “[d]uring the period 1997 to 1999, PricewaterhouseCoopers sold generic tax products to multiple clients, despite evidence that some, such as FLIP, CDS, and BOSS, were potentially abusive or illegal tax shelters.”³¹⁰

Thus, three of the largest and most prominent accounting firms in the world were actively engaged for a period of years in the development and marketing of abusive tax schemes. In addition, the Senate Report included findings regarding other entities

303. Vidya Kauri, *1st Circ. Reverses Santander's \$234M Foreign Tax Refund Win*, LAW360 (Dec. 16, 2016, 9:54 PM), <https://www.law360.com/articles/874096>.

304. Dave Simpson, *HP 'Equity' Was Actually Debt and a Tax Shelter: 9th Circ.*, LAW360 (Nov. 9, 2017, 10:07 PM), <https://www.law360.com/articles/983976>.

305. Jon Newberry, *Kroger Part of Tax Shelter Probe*, CINCINNATI BUS. COURIER (Dec. 2, 2009, 12:06 PM), <https://www.bizjournals.com/cincinnati/stories/2009/11/30/daily27.html>.

306. See Ryan J. Wilson, *An Examination of Corporate Tax Shelter Participants*, 84 ACCT. REV. 969 (2009).

307. TANINA ROSTAIN & MILTON C. REGAN, *CONFIDENCE GAMES: LAWYERS, ACCOUNTANTS, AND THE TAX SHELTER INDUSTRY* 303 (2014).

308. U.S. Senate, *The Role of Professional Firms in the U.S. Tax Shelter Industry*, Report Prepared by the Permanent Subcommittee on Investigations of the Committee on Homeland Security and Governmental Affairs (Feb. 8, 2005), at 6, http://www.quatloos.com/Tax_Shelter_Industry_Firms.pdf.

309. *Id.* CDS stands for Contingent Deferred Swap. *Id.* at 10. COBRA stands for Currency Options Bring Reward Alternatives. *Id.* at 82.

310. *Id.* at 7. FLIP stands for Foreign Leveraged Investment Program. BOSS stands for Bond and Option Sales Strategy. *Id.* at 10.

involved in these tax shelters, including law firms Sidley Austin Brown & Wood and Sutherland Asbill & Brennan; banks Deutsche Bank, HVB Bank, UBS Bank, and First Union National Bank; and investment advisors Presidio Advisory Services and the Quellos Group.³¹¹

More recently, information leaks have provided a window into tax malfeasance by large firms.³¹² For example, some large banks have helped wealthy individuals commit offshore tax evasion.³¹³ Following the scandal involving the European banks UBS and LGT, the U.S. Senate conducted hearings and issued a report.³¹⁴ The report found in part that

[f]rom at least 2000 to 2007, LGT and UBS employed banking practices that could facilitate, and have resulted in, tax evasion by their U.S. clients, including assisting clients to open accounts in the names of offshore entities; advising clients on complex offshore structures to hide ownership of assets; using client code names; and disguising asset transfers into and from accounts.³¹⁵

Thus, history shows that large firms, including some that are household names, may fail to comply with their own tax obligations and/or assist other taxpayers in noncompliance.

B. *Theorizing Tax and Reporting Compliance by Firms*

The previous section established that firms, including large ones, are not reliably pro-social. Yet, although third-party reporters typically are firms, Part II of this Article showed that third-party reporting increases tax compliance in many contexts. In Cui's view, the existing literature does not adequately explain the "puzzle of payor compliance."³¹⁶ Why might firms often choose

311. *Id.* at 7. For example, the Senate found, "Deutsche Bank, HVB Bank, and UBS Bank provided billions of dollars in lending critical to transactions which the banks knew were tax motivated, involved little or no credit risk, and facilitated potentially abusive or illegal tax shelters known as FLIP, OPIS, and BLIPS." *Id.* at 111.

312. See Shu-Yi Oei & Diane Ring, *Leak-Driven Law*, 65 UCLA L. REV. 532, 545 (2018).

313. *Id.* at 545–48 (discussing the actions of banks UBS and LGT).

314. *Id.* at 547.

315. STAFF OF PERMANENT SUBCOMM. ON INVESTIGATIONS, 110TH CONG., REP. ON TAX HAVEN BANKS AND U.S. TAX COMPLIANCE 16 (Comm. Print 2008). The report further found that "[b]ank secrecy laws and practices are serving as a cloak . . . for misconduct by banks colluding with clients to evade taxes, dodge creditors, and defy court orders." *Id.* at 15.

316. Cui, *supra* note 6, at 93 (Abstract); *id.* at 111.

to accurately report their employees' wages instead of "regularly colluding with employees in under-reporting wages, and bargaining with employees for the benefit of the tax savings from such underreporting?"³¹⁷

Cui offers and rules out as an explanation the fact that firms can deduct wages to reduce business income (and thus tax liability).³¹⁸ He also notes and rules out the fact that "[p]ayors are also subject to penalties for failing to withhold or report to the government."³¹⁹ However, as discussed below, both of these factors likely do contribute to payor compliance, along with other internal and external pressures.³²⁰

With respect to the firms' deduction for wages paid, Cui correctly observes that no net revenue will ultimately flow to the government where employer and employee are subject to the same tax rate, because the tax on the employee's income would be fully offset by the tax savings to the employer from deducting those wages.³²¹ Cui thus argues:

It is when parties are not subject to the same tax rates that the government can collect net revenue from a transaction, but then, putting aside transaction costs and the failure to reach and maintain collusive bargains, the potential will always exist for the

317. *Id.* at 111. Cui cites an article by Gideon Yaniv for the proposition that "[u]nder a tax withholding system, an employer and his employees may find it mutually beneficial to strike a bargain under which the former withholds less than the taxes due . . . while the latter accepts less than the free market wage rate." Gideon Yaniv, *Collaborated Employee-Employer Tax Evasion*, 47 PUB. FIN. 312, 312 (1992). Yaniv's paper develops an economic model based on several assumptions and finds that withholding taxes will actually increase collusion. *Id.* at 320. One of Yaniv's assumptions is that the tax system does not require the employee to file a tax return (that is, the tax system is a final-withholding system). *Id.* at 314 n.2. That assumption does not hold in the United States. "The filing requirement contained in U.S. law, see I.R.C. § 6012 . . . , has an enforcement advantage in that the employee, in effect, has an incentive to report on the employer." Lederman, *Statutory Speed Bumps*, *supra* note 75, at 733 n.209. While some employers and employees may still collude, such transparency provides a deterrent to doing so.

318. See I.R.C. § 162(a)(1) (2018) (allowing a business deduction for "a reasonable allowance for salaries or other compensation for personal services actually rendered"); Cui, *supra* note 6, at 112.

319. Cui, *supra* note 6, at 112 n.89.

320. Both of these factors may reduce a firm's perceived opportunity for noncompliance. See *supra* text accompanying notes 97-98.

321. Cui, *supra* note 6, at 113.

parties to collude and lower the net payment to the government.³²²

That is true, but the availability of a deduction for the employer reduces the employer's financial benefit from collusion.³²³ This should reduce the likelihood the employer will take the risk of cheating.

With respect to payor penalties, Cui argues:

Payors are also subject to penalties for failing to withhold or report to the government. *See* INTERNAL REVENUE SERVICE PUB. 55B, DATABOOK 21 (2016) (Rev. 3-2017) (noting that "[t]he IRS audited 0.7% of all individual income tax returns filed in CY 2015, and 1.1% of corporation income tax returns (excluding S corporation returns)"). However, with low audit rates, the expected value of such penalties may be very low. While there are far fewer employers than employees in any economy, the number of employers is generally still too great for tax authorities realistically to maintain a high rate of audit coverage. Indeed, the audit rate for parties required to perform information reporting is not known to be higher than in other areas of tax administration. Therefore, a high probability of detection through audits cannot be what explains payor compliance.³²⁴

However, the penalty to which Cui refers is not typical, nor is it administered like other penalties. Cui's article does not explain that willful failure to collect or pay over withheld taxes is subject to a stiff 100% penalty that is applicable to any person responsible for collecting or withholding these taxes.³²⁵ The 100% penalty is a

322. *Id.*

323. Lederman, *Statutory Speed Bumps*, *supra* note 75, at 729. For example, if an employer pays a nondeductible \$100,000 to an employee who has a 25% applicable tax rate, \$25,000 of tax could theoretically be saved if the employer paid the employee off the books. If the employer instead benefitted from a deduction and had a 21% marginal rate (the corporate tax rate as of 2020, I.R.C. § 11(b)), reporting the payment would save the employer \$21,000 in tax, while the employee would owe \$25,000. That would leave only \$4,000 as the possible gains from collusion (rather than \$25,000). In the extreme case in which the employer and employee's marginal rates are the same, "the inclusion by the payee is cancelled by the deduction by the payor." Cui, *supra* note 6, at 113. In other words, if the employer's tax savings exactly equals the employee's tax liability (when considering all applicable taxes), there is no financial incentive to collude.

324. Cui, *supra* note 6, at 112 n.89.

325. *See* I.R.C. § 6672(a) (2018). The Code provides a right of contribution for a party who pays more than his or her share of the penalty. *See id.* § 6672(d). The 100% penalty is five

collection tool that is used to try to protect the very significant dollar amounts³²⁶ that are required by statute to be “held to be a special fund in trust for the United States.”³²⁷ Rather than being imposed by revenue agents within the Examination function following an audit, the 100% penalty may be imposed by revenue officers within the Collection function after a business stops paying over employment taxes.³²⁸ This reduces the opportunity to evade taxes, at least for businesses that have paid employment taxes in the past.

Thus, each of these structural aspects of the tax system provides a partial explanation for why more firms do not collude with their employees. But these are not the only factors that constrain firms’ opportunity to commit tax fraud, whether in their payor capacity or otherwise. This section discusses additional external and internal pressures that may motivate corporate decisionmakers to comply, focusing first on the external pressures caused by information flows in large firms and then on other pressures, particularly internal ones.

times as high as the general 20% penalty that applies to such things as negligence or substantial understatement of tax. *See id.* § 6662. However, the IRS “typically uses this penalty . . . as a last resort to collect taxes that it has been unable to collect from the employer or other payor,” rather than imposing it as an additional penalty. Mary B. Hevener, *More Carrots, Fewer Sticks: Why Employers Should Be Offered in Payroll Tax and Executive Compensation Audits All the Protections of Rev. Proc. 64-22*, 29 VA. TAX REV. 187, 198-99 (2009). Failure to provide a required information report is subject to a penalty of \$250 for each delinquent or incorrect information return, up to \$3 million per calendar year. I.R.C. § 6721(a) (2018).

326. TREASURY INSPECTOR GEN. FOR TAX ADMIN., A MORE FOCUSED STRATEGY IS NEEDED TO EFFECTIVELY ADDRESS EGREGIOUS EMPLOYMENT TAX CRIMES 1 (Mar. 21, 2017) (“In Fiscal Year (FY) 2015, . . . [e]mployment taxes amounted to almost \$2.3 trillion (69 percent) of the \$3.3 trillion collected by the IRS.”).

327. I.R.C. § 7501(a) (2018).

328. *See* IRM § 8.25.1.4(1) (Dec. 7, 2012) (“The Collection function has sole responsibility for recommending assertion of the TFRP. Examination function personnel may refer potential TFRP cases to Collection for investigation.”); *see also* Keith Fogg, *Leaving Money on the Table and Providing an Incentive Not to Pay—The Story of a Flawed Collection Device*, 5 HASTINGS BUS. L.J. 1, 5 (2009) (“If a company files a [quarterly employment] tax return and on that return it lists a liability for which it does not remit payment, the IRS will assess the liability reported on the return and initiate the collection process. If a company fails to file a return, the IRS will usually notice that failure within a few months and initiate the collection process.”).

1. *The information transparency of large firms*

Transparency reduces the opportunity for firms to commit fraud, just as it does for individuals: anyone being watched is much less likely to cheat.³²⁹ In addition, large and publicly traded firms typically must release significant amounts of information about their activities, and government regulators can parse this data to assess corporate regulatory compliance.³³⁰ For example, the United Kingdom has developed a big-data system called CONNECT that combines data from more than 30 databases for tax enforcement purposes.³³¹ In the United States, publicly traded firms are subject to oversight by the Securities and Exchange Commission (SEC) and are generally required to submit detailed financial performance reports, including the annual Form 10-K, the quarterly Form 10-Q, and the periodic Form 8-K.³³² Under the Sarbanes-Oxley Act of 2002, corporate officers must personally certify the contents of these reports.³³³ Other countries also have provisions for data sharing.³³⁴

329. See Leandra Lederman, *The Fraud Triangle and Tax Evasion*, 106 *Iowa L. Rev.* — (forthcoming 2021) (manuscript at 29–30), <https://ssrn.com/abstract=3339558>.

330. See Peter V. Letsou, *The Changing Face of Corporate Governance Regulation in the United States: The Evolving Roles of the Federal and State Governments*, 46 *WILLAMETTE L. REV.* 149, 149 (2009) (“Since the 1930s, the United States federal government and the individual states have shared the responsibility for regulating the governance of public corporations.”); Hillary A. Sale, *Public Governance*, 81 *GEO. WASH. L. REV.* 1012, 1019 (2013) (“The . . . [SEC] has long promulgated regulations that say how much and what type of information corporations must disclose.”); cf. Edward K. Cheng, *Structural Laws and the Puzzle of Regulating Behavior*, 100 *NW. U. L. REV.* 655, 666 (2006) (“Institutions, usually in the form of corporations, are easier to regulate because they are smaller in number, have known locations, and have significant economic incentives to comply with government mandates.”).

331. Paul Rigney, *The All Seeing Eye – An HMRC Success Story?*, HMRC ADMIN., Nov.–Dec. 2016, at 8, <https://www.ifa.org.uk/media/653935/Tax-HMRC-Connect-system.pdf>.

332. See *Form 10-K*, U.S. SEC. & EXCH. COMM’N, <https://www.sec.gov/fast-answers/answers-form10khtml.html> (last updated June 26, 2009). These financial statements require firms to list certain tax attributes. For instance, firms include a tax footnote to disclose material differences between book income and taxable income. See Jana S. Raedy et al., *Is There Information in the Tax Footnote?* 1 (Dec. 17, 2011) (unpublished manuscript), <https://ssrn.com/abstract=1686036>.

333. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 302, 116 Stat. 745, 777 (codified at 15 U.S.C. § 7241 (2012)).

334. The Austrian tax administration has access to “several databases including the land register . . . [and] the central register for associations,” and “[a]ll authorities of the federal state, the provinces, the municipalities and the municipality associations and the other self-administering entities are obliged to provide mutual assistance within the scope of their competences.” TINA EHRKE-RABEL & CHRISTINA SCHWARZENBACHER,

This information may increase tax enforcement both directly and indirectly. For example, the IRS's Large and Mid-Size Business division uses the reports required of publicly traded companies in preparing for audit.³³⁵ Professor Susan Morse has argued that "enforcement efforts wholly unrelated to tax have had a positive impact on tax compliance because they produce general liability concerns within organizations"³³⁶ And, in fact, an SEC investigation may trigger a parallel IRS investigation.³³⁷

In addition to this general regulatory transparency, large U.S. firms have to be fairly transparent to the IRS. First, there are disclosure rules. It has long been the case that adequate disclosure may protect a taxpayer taking reporting positions having merely a "reasonable basis" from accuracy-related penalties.³³⁸ In recent years, however, the IRS has also imposed affirmative disclosure requirements first on corporations with assets of \$100 million or more and then on corporations with assets of \$10 million. If such corporations set aside a reserve in their financial statements for an uncertain tax position, they must then file Schedule UTP.³³⁹ "Schedule UTP is intended to capture the information that business taxpayers reported to their financial auditors for the purpose of establishing reserves for uncertain tax positions under the financial

TAX TRANSPARENCY—NATIONAL REPORT AUSTRIA § 2.2.2.2 (2018), http://www.eatlp.org/uploads/public/2018/National%20Report_Austria.pdf. Similarly, in Hungary, the tax agency can access all public records databases free of charge, and generally "is entitled to receive information on request from the database of any other branches of state and local administration and state registries." ISTVÁN SIMON, TAX TRANSPARENCY: NATIONAL REPORT—HUNGARY § 2.2.2(b) (2018), http://www.eatlp.org/uploads/public/2018/National%20Report_Hungary.pdf.

335. Thomas C. Pearson & Gideon Mark, *Investigations, Inspections, and Audits in the Post-SOX Environment*, 86 NEB. L. REV. 43, 89 (2007).

336. Susan Cleary Morse, *The How and Why of the New Public Corporation Tax Shelter Compliance Norm*, 75 FORDHAM L. REV. 961, 964 (2006).

337. Pearson & Mark, *supra* note 335, at 88 ("Most commonly, SEC investigations have their counterparts in tax audits by the IRS or investigations by the DOJ. Parallel investigations are often initiated when one government agency provides information to another agency.").

338. See Treas. Reg. § 1.6662-3(c)(1) (as amended in 2003).

339. Cherie J. Hennig & Blaise M. Sonnier, *Schedule UTP: IRS Mandates Disclosure of Uncertain Tax Positions*, TAX ADVISER (May 1, 2011), <https://www.thetaxadviser.com/issues/2011/may/hennig-may2011.html>.

reporting process required by [GAAP].”³⁴⁰ The Schedule UTP requirement may deter firms from taking aggressive tax positions because they may be reluctant to provide the IRS with an audit roadmap.³⁴¹

Second, there are audits. In the U.S. federal income tax system, many large corporations are under continuous audit. The IRS assigns large firms to its “Coordinated Industry Case” program using a system that takes into account such factors as gross assets, gross receipts, and foreign tax liabilities.³⁴² Empirical studies find that an increased audit rate corresponds with greater tax compliance, including for corporations.³⁴³

340. Anson H. Asbury, *Schedule UTP: The Early Returns Are In*, J. ACCT. (Nov. 1, 2012), <https://www.journalofaccountancy.com/issues/2012/nov/20126022.html>. Although to date neither Congress nor the IRS has imposed a specific penalty for firms that fail to file a required Schedule UTP or that fail to submit an accurate schedule, the ordinary accuracy-related penalty under Internal Revenue Code (Code) section 6662 or the failure-to-file penalty under Code section 6651 could potentially apply to firms that fail to disclose transactions reportable on Schedule UTP. See, e.g., Kevin Johnson, *Don't Be So Certain: IRS Appears to Be Disappointed in Corporate Schedule UTP Filings*, FORBES (Mar. 27, 2012, 4:57 PM), <https://www.forbes.com/sites/irswatch/2012/03/27/dont-be-so-certain-irs-appears-to-be-disappointed-in-corporate-schedule-utp-filings/#2cb90fab1cdb>; Robert A. Mathers & Mark Kmiecik, *Tax Practice Responsibilities Involved in Schedule UTP*, J. ACCT. (Apr. 13, 2015), <https://www.journalofaccountancy.com/issues/2015/apr/irs-schedule-utp.html>. But cf. Michael J. Desmond & Ronald L. Buch, Jr., *Practical Considerations for Schedule UTP . . . an Addendum*, TAX EXECUTIVE, Sept.–Oct. 2010, at 265, 269, https://www.morganlewis.com/-/media/files/docs/archive/utp-addendum_6220pdf.ashx (“In the short term, we expect penalties will not be an issue, though this could change if the IRS perceives a problem. In that case, given the hurdles that would have to be overcome in order to impose a failure to file penalty, it would likely be incumbent on the IRS to pursue targeted penalty legislation.”).

341. See, e.g., Jeremiah Coder, *Lower Tax Reserves Hint at Possible Effects of UTP Reporting*, 136 TAX NOTES 1371 (2012) (exploring the possibility that firms have reduced their tax reserves, despite higher profits, either because Schedule UTP motivated firms to work with the IRS to address uncertainty or because they simply took less aggressive positions).

342. See IRM § 4.46.2.5 (Mar. 1, 2006).

343. See, e.g., James Alm, *Tax Compliance and Administration*, in HANDBOOK ON TAXATION 741, 756 (W. Bartley Hildreth & James A. Richardson eds., 1999) (“Nearly all studies have found that a higher (random) audit rate leads to more compliance [T]his impact appears to be small and nonlinear, so that the deterrent effect of a higher audit rate eventually diminishes.”); Nipoli Kamdar, *Corporate Income Tax Compliance: A Time Series Analysis*, 25 ATLANTIC ECON. J. 37, 46 (1997) (finding in a study of corporate income tax compliance using IRS data that “the fraction of true tax liability reported increases by 0.336 of a percentage point when the audit rate increases by a percentage point”).

Relatedly, many large firms have voluntarily submitted to examination.³⁴⁴ Under the Compliance Assurance Process (CAP),

the IRS and taxpayer work together to achieve tax compliance by resolving issues prior to the filing of the tax return. Successful conclusion of CAP allows the IRS to achieve an acceptable level of assurance regarding the accuracy of the taxpayer's filed tax return and to substantially shorten the length of the post filing examination.³⁴⁵

The IRS is not alone in its cooperative approach to business-firm compliance; similar systems are in place in many other countries.³⁴⁶

2. *Other pressures*

The information flows required or driven by tax and non-tax regulation, discussed in the previous section, help to explain the

344. The IRS announced in 2011 that it was expanding its prefiling examination program known as the Compliance Assurance Process (CAP), which it had previously run as a pilot program. I.R.S. News Release IR-2011-32, *IRS Expands and Makes Permanent Its Compliance Assurance Process (CAP) for Large Corporate Taxpayers* (Mar. 31, 2011), <https://www.irs.gov/pub/irs-news/ir-11-032.pdf>. The IRS stated that “in FY 2011 there [were] 140 taxpayers participating. Only taxpayers with assets of \$10 million or more [were] eligible to participate.” *Id.* In 2012, Professor Leigh Osofsky wrote: “The list of CAP users is becoming a veritable who’s who of major corporations. Companies such as General Motors, Pfizer, Wendy’s, Prudential, Estee Lauder, J.C. Penny, and Intel have participated in CAP.” Leigh Osofsky, *Some Realism About Responsive Tax Administration*, 66 TAX L. REV. 121, 123 (2012). In addition, “[m]any other prominent companies including, in particular, technology companies, have indicated informally their participation in CAP without formally indicating their participation in CAP in SEC filings or otherwise.” *Id.* at 123 n.18.

345. *Compliance Assurance Process*, IRS, <https://www.irs.gov/businesses/corporations/compliance-assurance-process> (last updated Feb. 27, 2020). In September 2019, the IRS announced that it would begin accepting new applications from corporations that desire to participate in CAP, after having suspended new applications for several years. *Id.*; see also *IRS Reopens CAP Applications in Expansion of Program*, WINSTON & STRAWN (Nov. 20, 2019), <https://www.winston.com/en/thought-leadership/irs-reopens-cap-applications-in-expansion-of-program.html> (“It is expected that the IRS could admit an additional 50 to 100 participants to the CAP program According to the [Internal Revenue] Service, the CAP program is still a work in progress and does not have a predetermined number of taxpayers who will be admitted.”).

346. See OECD, CO-OPERATIVE COMPLIANCE: A FRAMEWORK—FROM ENHANCED RELATIONSHIP TO CO-OPERATIVE COMPLIANCE 22–24 tbl.2.1 (2013), https://www.oecd-ilibrary.org/taxation/co-operative-compliance-a-framework_9789264200852-en (listing 24 countries, including the United States, that responded to a survey saying “that they have developed and/or implemented a co-operative compliance model” and providing a description for each listed country); Osofsky, *supra* note 344, at 314 n.82 (stating that “[o]ther countries around the world have also begun to embrace the CAP model,” and mentioning Australia, the Netherlands, and South Korea).

relatively high degree of business-firm compliance, at least in the U.S. tax system. Beyond those regulatory pressures, firms are subject to additional external and internal pressures that help drive the firm's decisionmakers to comply. Some external pressures vary by type of firm: for example, family firms may face distinct pressures.³⁴⁷

There are also pressures from within a firm. Any stakeholder who learns of a collusive strategy could undermine it. It only takes one employee or self-interested accountant to place a phone call to the taxing authority,³⁴⁸ and the possibility of whistleblower compensation, which exists in the federal tax law,³⁴⁹ only increases

347. A 2010 study of a sample of S&P Composite 1500 firms found that family firms – i.e., those for which “members of the founding family continue to hold positions in top management, are on the board, or are blockholders of the company” – tend to take less aggressive tax positions than non-family firms. Shuping Chen et al., *Are Family Firms More Tax Aggressive Than Non-Family Firms?*, 95 J. FIN. ECON. 41, 42, 44–45 (2010). From a sample of firm activity between 1996 and 2000, the authors concluded that “family firms exhibit lower tax aggressiveness than their non-family counterparts, as demonstrated by their higher effective tax rates and lower book-tax differences.” *Id.* at 42–43. The authors point out that the cost of maintaining tax aggressiveness is high for a family firm because (1) outside investors and minority shareholders may perceive that the family is using their aggressive position to extract rents and may price-protect and bid the firm's overall price down, and (2) family owners who aim to retain their ownership stake for the long term are more likely to appear on the taxing authority's radar, sooner or later, than are shareholders who invest in a non-family firm for a finite period of time. *Id.* at 44–45. The authors further argue that the characteristic under-diversification of family firm owners' investment portfolios and the desire to maintain the family's good name in the industry may tip the balance away from aggressiveness and toward compliance. *Id.* at 45.

348. See Lederman, *Statutory Speed Bumps*, *supra* note 75, at 729 n.196 (“[T]here is always the risk of defection, both on the part of employees not participating in the collusion, and on the part of those who participate but, for example, decide that they want more money to keep their end of the bargain.”); see also Geoffrey Christopher Rapp, *Beyond Protection: Invigorating Incentives for Sarbanes-Oxley Corporate and Securities Fraud Whistleblowers*, 87 B.U. L. REV. 91, 123 n.212 (2007) (“The Internal Revenue Service has found that many tax fraud whistleblowers target ex-spouses.”).

349. See I.R.C. § 7623(b) (2018) (granting authority to the Whistleblower Office to award whistleblowers 15–30% of the proceeds of any administrative or judicial action brought as the result of information provided by an individual, and no more than 10% if the information the individual provided was principally based on publicly available information).

this risk.³⁵⁰ And “tips are by far the most common initial detection method” for fraud in general.³⁵¹

Cui argues that “the basic reason that large firms are more likely to be compliant is not that the probability of motivated whistleblowers is higher in them.”³⁵² However, the prospect of whistleblowing helps deter fraud because it increases the likelihood of detection.³⁵³ Moreover, the larger the firm, the greater the risk that some participant in the scheme or other insider might defeat or expose it.³⁵⁴ Thus, the large firms that Cui contemplates as participants in a cooperative exchange with the government are particularly unlikely to facilitate tax evasion, not because of their inherent goodness but because it is extremely difficult to operate a conspiracy indefinitely on a large scale.³⁵⁵

At a large firm, typically even the tax group is large. “At a typical public corporation, the tax director has responsibility for making or recommending tax decisions. . . . Depending on the size of the corporation, the tax director’s staff can vary from two or three

350. See Kleven et al., *supra* note 6, at 220 (“Breakdowns can also occur as a result of rational whistleblowing if the government provides rewards to whistleblowers and firms cannot make employees commit not to whistleblow *ex ante*.”); Geoffrey Christopher Rapp, *False Claims, Not Securities Fraud: Towards Corporate Governance by Whistleblowers*, 15 NEXUS 55, 61 (2009–10) (“[E]mployees account for 46% of fraud detection where a *qui tam* bounty is available, and just 16.3% of fraud detection elsewhere.”).

In some instances, whistleblowers could recover awards from multiple agencies. For example, a whistleblower who first reports corporate misconduct to another government agency may submit that same information to the SEC within 120 days, in which case the SEC will treat the information as though it had been submitted to the SEC in the first instance. Press Release, SEC, SEC Awards More Than \$2.2 Million to Whistleblower Who First Reported Information to Another Federal Agency Before SEC (Apr. 5, 2018), <https://www.sec.gov/news/press-release/2018-58>.

351. ASS’N OF CERTIFIED FRAUD EXAM’RS, *supra* note 260, at 7.

352. Cui, *supra* note 6, at 138.

353. See Geoffrey Christopher Rapp, *Mutiny by the Bounties? The Attempt to Reform Wall Street by the New Whistleblower Provisions of the Dodd-Frank Act*, 2012 BYU L. REV. 73, 108 (2012) (“[I]ncreased whistleblowing raises the likelihood of detection, thus reducing the opportunity to commit fraud.”); see also *id.* (“Whistleblowing is the single most effective way to detect fraud.”).

354. Cf. Yaniv, *supra* note 317, at 314 (finding this in a model of the evasion decision).

355. See, e.g., Neal Kumar Katyal, *Conspiracy Theory*, 112 YALE L.J. 1307, 1312 (2003) (“The more conspirators, the more witnesses there are to flip and the more ominous the prisoners’ dilemma for a conspirator.”); cf. David Robert Grimes, *On the Viability of Conspiratorial Beliefs*, 11 PLOS ONE 1, 9 (2016) (explaining in the context of alleged scientific conspiracy theories that “[t]his [collapse] problem appears insurmountable for any large conspiracy; if it requires constant upkeep . . . then odds of failure approach unity with time”).

individuals to twenty or more.”³⁵⁶ A 2016 KPMG survey found that “[o]n average, tax functions of respondent organizations have 16 full-time employees (FTE) at their tax department headquarters location, and an average of 27 FTEs at other locations.”³⁵⁷

Moreover, the internal tax staff rarely acts alone; rather, it regularly hires outside advisors, such as law firms and accounting firms.³⁵⁸ Morse explains that after Sarbanes-Oxley, tax directors often have to hire different advisors for different purposes.³⁵⁹ The presence of many people, i.e., “at least four tax or accounting specialists who bridge . . . the audit firm, the tax planning firm, and the corporate tax department,” means that “[e]ach group member’s ability to control information . . . is accordingly more limited.”³⁶⁰ This dispersion of information makes it that much harder to prevent defections from a collusive agreement.³⁶¹

Cui argues that “although whistleblower programs operated by tax and other regulatory agencies have attracted attention in recent years, their role in the history of tax and other areas of regulatory enforcement has been minimal.”³⁶² However, the IRS whistleblower program has become much more important since Congress created the IRS Whistleblower Office and enhanced recoveries under Code section 7623, both of which happened in 2006.³⁶³ In its 2019 annual report, the Whistleblower Office found that the IRS collected approximately \$5.7 billion since 2007 thanks to the whistleblower program, and that it paid out tax whistleblower awards of approximately \$932 million in that time.³⁶⁴ From 2018 through 2019 alone, the IRS collected a total of over \$2 billion thanks to whistleblowers.³⁶⁵

356. Morse, *supra* note 336, at 964–65 (footnotes omitted).

357. KPMG, A LOOK INSIDE TAX DEPARTMENTS WORLDWIDE AND HOW THEY ARE EVOLVING 3 (2016), <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/11/global-tax-benchmarking-survey.pdf>.

358. Morse, *supra* note 336, at 965.

359. *Id.* at 966.

360. *Id.* at 967.

361. *See supra* note 354.

362. Cui, *supra* note 6, at 130.

363. *See* Tax Relief and Health Care Act of 2006, Pub. L. 109-432 § 406(a), 120 Stat. 2922, 2958; I.R.C. § 7623(b) (2018); Dennis J. Ventry, Jr., *Whistleblowers and Qui Tam for Tax*, 61 TAX LAW. 357, 361–62 (2008).

364. IRS, WHISTLEBLOWER PROGRAM: FISCAL YEAR 2019 ANNUAL REPORT TO CONGRESS 8 (2020), https://www.irs.gov/pub/whistleblower/fy19_wo_annual_report_final.pdf.

365. *Id.* tbl.1.

In addition, the amounts the IRS has reported collecting as a result of whistleblower information may be underinclusive. In a 2018 report, the GAO stated:

Prior to February 9, 2018, when Congress enacted a statutory change requiring the Internal Revenue Service (IRS) to include penalties for *Report of Foreign Bank and Financial Accounts* (FBAR) violations in calculating whistleblower awards, IRS interpreted the whistleblower law to exclude these penalties from awards. However, GAO found that some whistleblowers provided information about FBAR noncompliance to IRS. In a sample of 132 whistleblower claims closed between January 2012 and July 2017, GAO found that IRS assessed FBAR penalties in 28 cases. It is unknown whether the whistleblower's information led IRS to take action in all of these cases. These penalties totaled approximately \$10.7 million. Had they been included in whistleblower awards, total awards could have increased up to \$3.2 million.³⁶⁶

The bottom line is that the decision whether to collude with employees is not a simple matter of one or two people weighing the tax gains against the statistical probability of being selected for audit. The decision is far more complex, and the larger the firm, the higher the likelihood that collusion will be detected or exposed one way or another.

This insight is important for a question that Cui does not explicitly raise, as well. As noted in section I.A,³⁶⁷ in criticizing the effectiveness of TPIR, Cui correctly argues that it does not play an obvious role in the administration of the corporate income tax.³⁶⁸ Yet the IRS has estimated voluntary compliance with the corporate tax in recent years at 82 or 83 percent of dollars due.³⁶⁹ If information reporting is not responsible, what is?

366. GAO, WHISTLEBLOWER PROGRAM: IRS NEEDS TO IMPROVE DATA CONTROLS FOR SOME AWARD DETERMINATIONS intro. (2018).

367. See *supra* text accompanying note 42.

368. For example, in the United States corporations typically do not receive information reporting forms from their employees, customers, or suppliers. Cui, *supra* note 6, at 104. Perhaps surprisingly, the corporate income tax generally "is not a major source of revenue in the western world. It provided an average of 8.7 percent of government revenue in the EU in 1998." Paul Webley, *Tax Compliance by Businesses*, in NEW PERSPECTIVES ON ECONOMIC CRIME 96-97 (Hans Sjögren & Göran Skogh, eds., 2004). That figure was similar as recently as 2013, when it was 8.5 percent. See KYLE POMERLEAU & KEVIN ADAMS, SOURCES OF GOVERNMENT REVENUE IN THE OECD, 2016, at 2 chart 1 (2016). In the United States, the corporate income tax provided 8.4 percent of federal tax revenues in 2013. *Id.* at 3 chart 2.

369. See *infra* notes 372-73 and accompanying text.

The information transparency discussed in this section likely explains much of this corporate compliance. Interestingly, the compliance rate of individuals with respect to income amounts subject to partial information reporting is estimated at similar levels: 83 percent of dollars due in the most recent IRS study, and 81 percent in the previous one.³⁷⁰ In other words, corporations' overall tax compliance behavior generally corresponds to that of individuals with respect to income items that are partially transparent.

C. *Putting the Contrarian Theory to the Test: What Happens When Individuals Are the Information Reporters?*

In line with his argument that firms are pro-social and information reporting is relatively unimportant, Cui argues that imposing an excise tax on a firm would be as effective as instead collecting that tax from an individual with withholding required by the firm.³⁷¹ Note that this argument implies that the addition of an individual to the two-party relationship of firm/government would not increase compliance. That is an empirically testable proposition, and the empirical evidence is to the contrary.

First, IRS data are suggestive. They show that corporations' voluntary compliance rate with the federal income tax (a two-party relationship) is eight to ten percentage points *lower* than the voluntary compliance rate of individuals subject to substantial information reporting (a three-party relationship that includes an individual in addition to a firm and the government).³⁷²

370. See *supra* notes 2–3 and accompanying text.

371. See Cui, *supra* note 6, at 114 (“[T]ax can be effectively collected from wages and financial income through withholding or, equivalently administratively, payor excise taxation.”); see also *id.* (“There has been no study to show that TPIR is *more* effective than withholding or excise taxation This implies that no evidence has been produced that ‘but for’ TPIR, the level of compliance could not be as high as is actually observed.”).

372. See TAX GAP ESTIMATES FOR TAX YEARS 2008–2010, *supra* note 3, at 11 tbl.3, 12 chart 1 (reporting estimated voluntary compliance rates of 83% for corporations and 93% for individuals subject to substantial information reporting without withholding); TAX GAP ESTIMATES FOR TAX YEARS 2011–2013, *supra* note 2, at 13 tbl.3, 14 fig.3 (reporting for 2011–13 estimated voluntary compliance rates of 86% and 95%, respectively); see also *id.* at 13 tbl.3 (changing estimate 2008–10 corporate tax voluntary compliance rate from 83% to 85% to reflect a change in methodology).

That difference is consistent over time across IRS studies.³⁷³ This simple comparison supports the intuitive principle that the addition of a third-party reporter adds value beyond what the mere participation of a firm has to offer.³⁷⁴

But those are simply aggregate statistics. If Cui's hypothesis is correct, then firms should be equally compliant regardless of whether they are the subject of TPIR. As it turns out, there are some instances in which firms are subject to third-party reporting by individuals. Empirical studies of such contexts have found that such reporting by individuals results in greater tax compliance by the firms. This evidence supports our argument that it is information reporting, not the presence of a firm, that increases tax compliance.

For instance, Kumler et al. studied a pension reform initiative in Mexico.³⁷⁵ The reform tied younger workers' pensions more closely to reported wages, giving younger workers an incentive to monitor their employers' wage reporting, as well as the information to do so.³⁷⁶ Prior to the reform, workers' pensions

373. See IRS, FEDERAL TAX COMPLIANCE RESEARCH: TAX YEAR 2006 TAX GAP ESTIMATION 3 tbl.2, 4 chart 1 (2012), <https://www.irs.gov/pub/irs-soi/06rastg12workppr.pdf> (reporting 2006 voluntary compliance rates as 82% for corporations and 92% for individuals subject to substantial information reporting without withholding); *id.* at 3 tbl.2 (2001 corporate voluntary compliance rate was 82%); IRS, INCOME TAX COMPLIANCE RESEARCH: NET TAX GAP AND REMITTANCE GAP ESTIMATES (SUPPLEMENT TO PUBLICATION 7285) 2 tbl.1 (1990) (corporate voluntary compliance rate for 1992 was 81.1 to 88.1%); *id.* at 2 ("If we have correctly estimated the extent to which examiners cannot detect all tax deficiencies, then the 'true' tax gaps (or VCRs) lie between these two sets of estimates."); IRS, TAX YEAR 2001 FEDERAL TAX GAP 3 (2006), https://www.irs.gov/pub/irs-news/tax_gap_figures.pdf (2001 voluntary compliance rate for individuals subject to substantial information reporting without withholding was 95.5%); GAO, TAX GAP: MULTIPLE STRATEGIES, BETTER COMPLIANCE DATA, AND LONG-TERM GOALS ARE NEEDED TO IMPROVE TAXPAYER COMPLIANCE 6 fig.1 (2005) (1992 voluntary compliance rate for individuals subject to substantial information reporting without withholding was 95.8%).

374. This accords with the idea that numerosity helps foster tax compliance. That is, generally speaking, the more people who will know about a fraud and will have to be induced to refrain from reporting it, the less likely fraud is to occur. See *supra* text accompanying notes 64–65; *supra* text accompanying notes 354–55.

375. Kumler et al., *supra* note 275, at 4 ("This reform replaced the entire PAYGO pension system with a system of personal retirement accounts . . ."). The reform took place because of concerns that the old pension system was not financially viable. *Id.*

376. *Id.* at 9. The authors explain:

Another aspect of the pension reform . . . is that the law requires AFOREs [Retirement Savings Fund Administrators] to send an account statement to each holder of a personal retirement account every four months. . . . It appears that

generally were not affected by the wages employers reported, as long as the employer reported the minimum permissible wage.³⁷⁷ The result of the reform was that firms reduced underreporting of wages (and thus payroll tax evasion) for younger workers.³⁷⁸

Similarly, Joana Naritomi studied the Nota Fiscal Paulista (NFP) program in São Paulo, Brazil, which was designed to decrease retail firms' VAT evasion. The NFP provided consumers with incentives in the form of tax rebates and lottery participation for requesting receipts, as well as for checking the retailers' reports of their transactions online.³⁷⁹ Naritomi estimated that the NFP increased retailers' reported revenues by at least 21 percent over four years.³⁸⁰

Junmin Wan similarly found that a receipt lottery increased tax payments. He explains that, in China, a 2001 law required retailers in certain provinces to install a machine that printed an official receipt with a lottery number.³⁸¹ The result of the introduction of the receipt lottery was a 21.5% to 24.2% increase by retailers in sales tax payments.³⁸² These results were statistically significant.³⁸³

A number of other countries likewise have used receipt lotteries or tax rebates to increase the incentive for consumers to request an

these account statements made it significantly easier for workers to discover how much employers were contributing on their behalf.

Id.

377. *Id.* at 2, 6, 7 ("[A]pproximately 80 percent of retirees were receiving the minimum pension prior to the reform . . .").

378. *Id.* at 20. ("The key finding is that, across the three measures of evasion, we see little evidence of a differential pre-trend but robust evidence of a relative decrease in evasion for the younger age groups following the passage of the reform. The wage gap (medians) measure takes a bit longer than the wage gap (means) measure to show statistically significant relative decline, but the fact that we see a similar pattern across the three measures is reassuring.").

379. Joana Naritomi, *Consumers as Tax Auditors*, 109 AM. ECON. REV. 3031, 3043–44 (2019).

380. *Id.* at 3052 ("The results suggest that the NFP program induced a positive and significant 21% increase in reported revenue by firms across the 4-year period following implementation. Because I am exploiting differences in the treatment intensity across firms, the estimated effect is likely a lower bound of the program's impact.").

381. Wan, *supra* note 39, at 613 ("[B]y the end of 2002 there were over 80 big-city-level local tax bureaus countrywide (out of approximately 662) where the experiment was under way. In other words, 12% of local tax bureaus [participated].").

382. *Id.* at 617.

383. *Id.* ("For sales tax revenue, the Δ LRE coefficients are significant, ranging from 84.355 to 105.676, and the elasticities of experiment from 0.171 to 0.213.").

invoice.³⁸⁴ For example, “[t]he lottery receipt system appeared and was used by Taiwan in the 1950s to improve tax collection efficiency; it is still operative. The Republic of Korea also ‘imported’ this system from Taiwan in the 1990s, and the new revised system seems to work well.”³⁸⁵ The idea is that when retailers know a transaction is not invisible – because the consumer requests a receipt and might submit it to the government – retailers are more likely to comply with their tax reporting and payment obligations.³⁸⁶

Cui characterizes such lotteries as a “third-party reporting device that has received frequent favorable comments from academics in recent years, but is perceived to deliver only very mixed results in the real world.”³⁸⁷ However, any such “perceived”

384. See, e.g., Berhan & Jenkins, *Economic Cost*, *supra* note 134, at 93–96 (discussing such a program in Northern Cyprus); Dragoș Mihai Ungureanu & Elena-Doina Dascălu, *Tax Lottery Receipts in Romania, a Different Approach to Fight Against Tax Evasion*, 2015 *PROCEDIA ECON. & BUS. ADMIN.* 267, 268–72, http://icesba.eu/RePEc/icb/wpaper/ICESBA2015_33Ungureanu_p267-275.pdf (describing receipt lotteries in Malta, Slovakia, Portugal, and Romania); Junmin Wan, *A Solution to Tax Evasion* (Ctr. for Advanced Econ. Study, Working Paper No. WP-2009-09, 2009) (discussing such a program in Taiwan, which began in 1950).

385. Wan, *supra* note 39, at 612–13.

386. See Marco Fabbri & Sigrid Hemels, ‘Do You Want a Receipt?’ *Combating VAT and RST Evasion with Lottery Tickets*, 41 *INTERTAX* 430, 435–36 (2013) (Making receipts into lottery tickets in China reflects “[t]he idea . . . that customers will be incentivized to ask for an invoice and thus oblige the service provider to pay BT [business tax]. . . . Once the receipt is issued, the seller cannot evade BT on that transaction. Thus, the buyer has a direct incentive to ask for the receipt and this indirectly obliges the seller to reveal information to the tax authorities.”); Wan, *supra* note 39, at 613 (“LRE [Lottery Receipt Experiment] can work as an incentive mechanism that can mitigate the information asymmetry between the government and the taxpayer.”).

387. Cui, *supra* note 6, at 119–20. In support of this statement, Cui cites two papers for “critical discussion of real-world experience.” *Id.* at 120 n.124. They are: (1) a report by the International Monetary Fund, *INTERNATIONAL MONETARY FUND, CURRENT CHALLENGES IN REVENUE MOBILIZATION: IMPROVING TAX COMPLIANCE* 29–30 (2015) [hereinafter IMF], <https://www.imf.org/external/np/pp/eng/2015/020215a.pdf>; and (2) a working paper by Fookien et al., Jonas Fookien et al., *Improving VAT Compliance – Random Awards for Tax Compliance* (European Comm’n Taxation Papers, Working Paper No. 51-2014, 2014). Cui states that the International Monetary Fund’s paper “highlight[s] the limits of lottery schemes.” Cui, *supra* note 6, at 120 n.124. That paper states that several countries have used receipt lotteries and cites Naritomi’s positive finding. IMF, *supra*, at 30. Its critique relates to the role of such techniques in the greater enforcement scheme:

There have been very few careful evaluations of these schemes, which should not be regarded—as some [revenue administrations] appear to have done—as alternatives to effective auditing. . . . [A] lottery ticket may have much less value

effect does not accord with the empirical evidence to date. While some tax lotteries have not yet been systematically evaluated,³⁸⁸ the evidence from both São Paulo's and China's receipt lotteries, discussed above,³⁸⁹ supports the notion that the addition of a third-party information reporter increases firms' compliance.

That is not to say that receipt lotteries are a perfect tool, or that they should replace other forms of enforcement.³⁹⁰ And lotteries can be expensive, although generally some prizes go unclaimed, which reduces the cost.³⁹¹ But even if the cost of a receipt lottery in a particular country exceeds the tax revenue produced, that does not in itself mean that third-party reporting is ineffective to increase tax compliance. Rather, it suggests that the total cost of prizes may need to be reduced if the lottery is to be continued to be used as a compliance tool in that country.

Thus, the evidence from São Paulo's and China's receipt lotteries suggests that the addition of a third-party information reporter increases tax compliance by firms. In fact, the studies by

to the consumer than evading VAT on a big ticket purchase. Such schemes clearly cannot be the centerpiece of an effective compliance strategy.

Id.

Cui quotes the Fookien et al. paper as stating, "While there is growing interest in the use of tax lotteries throughout Europe, the understanding of best practises [sic] and success factors is still limited." Cui, *supra* note 6, at 120 n.124 (alteration in original) (quoting Fookien et al., *supra*, at 3). That observation does not appear critical of real-world experience. The Fookien et al. paper discusses a one-day workshop in which "European countries who had already a lottery scheme in place (Malta, Slovakia, Portugal) were invited to present their experiences . . . together with interested countries, to discuss the specificities." Fookien et al., *supra*, at 3. According to the paper, the talks and discussion were generally quite positive. See generally *id.* In fact, as Cui states, a focus of the workshop was "to bring together countries with experience and those interested in running tax lotteries." Cui, *supra* note 6, at 120 n.127.

388. See IMF, *supra* note 387, at 30 ("There have been very few careful evaluations of these schemes . . ."); Ungureanu & Dascălu, *supra* note 384, at 269 ("While no major data analysis takes place in the course of the [Malta receipt] lottery, some figures have been recorded."); *id.* at 272 ("While no evaluation of the lottery scheme [in Portugal] exists, it can be considered a success and further steps are currently in planning . . .").

389. See *supra* text accompanying notes 379–80; *supra* text accompanying notes 381–83.

390. See IMF, *supra* note 387, at 30 ("[T]hese schemes . . . should not be regarded—as some [revenue administrations] appear to have done—as alternatives to effective auditing.").

391. Naritomi stated that in São Paulo, as of 2011, only 50 percent of the prizes had been collected. Naritomi, *supra* note 379, at 3067. Wan reported that the Beijing tax bureau only paid out only 16.7% of the available prize money. Wan, *supra* note 39, at 613. In Puerto Rico, only 7% of winners of the automatic lottery (which did not require the consumer to register receipts) claimed their prizes. Marian Diaz, *El Fin de Sorteo del IVU Loto*, ENDI (Sept. 2, 2015, 12:00 AM), <https://www.elnuevodia.com/negocios/consumo/nota/elfindelsorteodelivuloto-2094062/>.

Kumler et al., Naritomi, and Wan all found, in different contexts, that third-party reporting by individuals improves business firms' compliance. These studies were not designed to test whether large firms are more compliant in the presence of TPIR by individuals, but together they cast significant doubt on Cui's claim that an excise tax on a corporation would work just as well as an income tax on an individual paired with third-party reporting and withholding.³⁹² Instead, these studies support the intuitive notion that having a third party—someone who is not the taxpayer—report the transaction to the government improves tax compliance.

Granted, these studies are not exhaustive, and there plainly is space for additional empirical research. In calling attention to this gap in the literature, Professor Cui's article makes a helpful contribution. But his article fails to introduce evidence contradicting the studies showing that TPIR is an important tool for tax administration.

CONCLUSION

While legal and economics scholars generally recognize that the government needs information about taxpayers' transactions in order to enforce tax laws, Professor Wei Cui's recent article disputes that understanding. It asserts, counterintuitively, that "modern governments can practice 'taxation without information.'"³⁹³ Cui's argument rests on two claims: (1) information sharing does not "explain the success of modern tax administration";³⁹⁴ and (2) the pro-social nature of business firms, particularly large firms, does explain that success. According to Professor Cui, what scholars have observed as the success of information reporting is instead attributable to the inherent honesty of firms.

This Article has shown that both claims are mistaken. Although Professor Cui's assertions are provocative, his article does not provide evidence to support its contrarian thesis. Instead, the empirical evidence, discussed above, demonstrates not only that

392. Cui, *supra* note 6, at 114 ("[T]ax can be effectively collected from wages and financial income through withholding or, equivalently administratively, payor excise taxation.").

393. *Id.* at 146.

394. *Id.* at 99.

information matters in tax enforcement but also that TPIR can be effective even where individuals, not firms, are the information reporters. The studies show that inserting an *individual* into the transaction as a third-party reporter increases compliance by *firms*. Thus, Professor Hemel's agreement with Cui is misplaced, as well. Cui and Hemel also are incorrect in stating that VATs do not rely on third-party reporting of transaction information. On the contrary, modern VATs have moved to real-time reporting of transactions precisely because such information-sharing fosters compliance.

Cui's argument that firms are inherently inclined to comply with the law is also mistaken. While an increase in the number of people who would need to collaborate in fraud does seem to reduce fraud, there is no evidence that it need be in the context of a firm. Instead, the evidence suggests that regulation and monitoring greatly increase firms' compliance, although they have by no means succeeded in eliminating malfeasance even on the part of large firms. In fact, as noted above, IRS data suggest that corporations are *less* compliant (by eight to ten percentage points) with the U.S. federal income tax than are individuals subject to substantial information reporting without withholding, underscoring the pro-compliance effect of the presence of a third party.

Carefully researched contrarian theses can sometimes help push law and policy in new directions. However, in this case, the conventional wisdom holds fast: there can be no taxation without information.