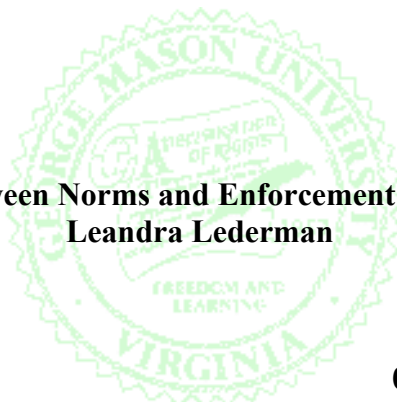


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**The Interplay Between Norms and Enforcement in Tax Compliance
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*The Interplay Between Norms and Enforcement in Tax Compliance**

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Abstract

What will increase individuals' compliance with the federal income tax? There are rich legal, economic, and sociological literatures examining this question. The traditional answer that increased enforcement will increase compliance is supported by both economic modeling and a number of experiments. However, studies show that appeals to normative beliefs about honesty in taxpaying play an important role as well.

A number of scholars have suggested that vigorous enforcement of the tax laws may be counterproductive because it may suggest that *noncompliance* is the norm. This article argues, in part, that enforcement and a compliance norm are not inconsistent but rather are complementary. In other words, enforcement can buttress norms-based appeals for compliance. To support this argument, the article draws on an array of empirical evidence from both experimental "games" conducted in the laboratory and field experiments involving taxpayers.

The interplay of enforcement and taxpaying norms manifests itself somewhat differently in different contexts. Studies suggest that there is a societal norm of compliance with tax obligations but that there may be a norm of noncompliance among certain groups. The IRS may therefore be best served by targeted compliance strategies. With respect to mainstream, generally compliant taxpayers, the IRS can rely on broad-based matching of information returns with taxpayer returns, low levels of audits, and norms-based appeals. With respect to groups with norms of noncompliance, the IRS can use enforcement not only for detection and deterrence but also to try to build a critical mass of compliant taxpayers and thereby influence the group norm.

* Comments are welcome: llederma@gmu.edu. Note that a related paper discusses the effects of a "friendlier," service-oriented IRS on compliance.

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Introduction

Any system of taxation will likely experience some evasion given the financial and other incentives not to comply.¹ That is, services provided by government, particularly the federal government, are generally so removed from the payment of taxes that it is hard for individual citizens to see the benefits they receive.² In addition, because most taxes have a redistributive function, many citizens will receive less in benefits than they pay in.³ Even those who receive net benefits from the payment of taxes might prefer reduced or less costly benefits in exchange for lower taxes. Moreover, given the vast masses who contribute to the federal fisc, any one individual reasonably can conclude that his or her benefits would not decrease if he or she were not to contribute⁴ – a classic free-rider problem.⁵

¹ See John S. Carroll, “How Taxpayers Think About Their Taxes: Frames and Values,” 43 in *WHY PEOPLE PAY TAXES* (Joel Slemrod ed., 1992) (“Personal income taxes are a considerable burden, in terms of money, time, and aggravation.”). Fifty-seven percent of the people in Carroll’s study, who were middle- to upper-income taxpayers, reported understating income and/or overstating deductions within the prior three years. *Id.* at 50.

This article focuses on tax evasion rather than legal tax avoidance and unintentional errors. Not all noncompliance is intentional, particularly given the complexity of the tax system. See Susan B. Long, Commentary on Brian Erard, “The Influence of Tax Audits on Reporting Behavior,” 115 in *WHY PEOPLE PAY TAXES*, *supra*. Long argues that tax evasion may be a “minor source” of noncompliance. *Id.*; see also Susan B. Long & Judyth A. Swingen, “Taxpayer Compliance: Setting New Agendas for Research,” 25 *Law & Soc. Rev.* 637, 649 (1991). However, studies reporting taxpayers’ assertions of intentional cheating (admittedly anecdotal), see notes 80-82, *infra*, as well as data that present a stark contrast between the extraordinarily high percentage of income subject to information reporting correctly reported and the relatively low percentage of income from self-employment reported, see note 30, *infra*, suggest that intentional evasion is an important component of tax underpayment. Of course, the line between illegal tax evasion and legal tax avoidance is sometimes blurry. See Michael W. Spicer, “Civilization at a Discount: The Problem of Tax Evasion,” 39 *Nat’l Tax J.* 13, 13 (1986) (“the term ‘aversion’ on occasion has been used to refer to tax avoidance activity of questionable legality.”).

² See Joshua D. Rosenberg, “The Psychology of Taxes: Why They Drive Us Crazy, and How We Can Make Them Sane,” 16 *Va. Tax Rev.* 155, 171, 181-82 (1996).

³ Extreme examples involve very wealthy individuals. Consider Ross Perot:

[D]uring one of the televised U.S. presidential debates in October, 1992, [he] announced that he has paid more than \$ 1 billion in taxes over the years. . . . One must wonder how the federal government could possibly provide him with \$ 1 billion in services. It seems unlikely that he could get his money’s worth even if the government provided him with a large home, free clothing and ten meals a day. . . .

Robert W. McGee, “Is Tax Evasion Unethical?,” 42 *Kan. L. Rev.* 411, 432-33 (1994) (footnotes omitted).

⁴ See Rosenberg, *supra* note 2, at 179.

⁵ In the context of public goods, a “free rider” is someone who enjoys the benefits without sharing in the costs. See Russell B. Korobkin & Thomas S. Ulen, “Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics,” 88 *Calif. L. Rev.* 1051, 1139 (2000).

The United States' federal income tax system depends to a large degree on "voluntary compliance."⁶ It may therefore not be surprising that the federal income "tax gap"—the portion of federal income taxes due but not paid each year⁷-- is estimated to exceed \$150 billion.⁸ The noncompliance this reflects stems from a variety of sources, including innocent mistakes, which are not the focus of this article, as well as intentional evasion.⁹

How can that gap be narrowed?¹⁰ A standard answer to any law-enforcement problem is to

⁶ Of course, for many taxpayers, compliance is not truly voluntary. According to Jerome Kurtz, a former Commissioner of the Internal Revenue Service (IRS), a more appropriate term is "voluntary compulsion." George Guttman, "The Interplay of Enforcement and Voluntary Compliance," 83 Tax Notes 1683, 1685 (1999).

IRS compliance strategies may be viewed as falling into three categories: "constraining," which reduce the opportunity to evade and are highly effective; "adversarial," which rest on enforcement and are in line with economic modeling of tax compliance, discussed below, *see* text accompanying notes 41-70, *infra*; and "cooperative," which may include such things as the provision of service to taxpayers and normative appeals. Leandra Lederman, "Tax Compliance and the Reformed IRS," 51 Kansas L. Rev. __ (2003) (forthcoming).

⁷ Graeme S. Cooper, "Analyzing Corporate Tax Evasion," 50 Tax L. Rev. 33, 35 (1994).

⁸ The IRS estimated that in 1998 noncompliance with the individual federal income tax amounted to \$166.4 billion, based on the assumption of constant compliance rates since 1988 (the last year for which Taxpayer Compliance Measurement Program (TCMP) data was available). *See* "Report of the Joint Committee on Taxation Relating to the Internal Revenue Service as Required by the IRS Reform and Restructuring Act of 1998," JCX-38-02 (May 10, 2002), available at 2002 TNT 93-18 (hereinafter, Joint Committee Report). The estimate may not be very accurate, considering the age of the data and the difficulty to account for nonfiling in extrapolating from a program that uses only filed returns. *Cf.* Michael J. Graetz & Louis L. Wilde, "The Economics of Tax Compliance: Fact and Fantasy," 38 Nat'l Tax J. 355, 356 (1985) ("measuring noncompliance is but a secondary use of TCMP.").

⁹ Graeme Cooper lists the following components of noncompliance: "(1) the tax on income from lawful activities that is deliberately not reported to revenue authorities - tax evasion; (2) the tax on income from lawful activities where the income is unintentionally omitted - taxpayer error; (3) the tax on income from illegal activities - the underground economy; (4) amounts of tax due but not paid to the revenue authority on reported income - administrative failure; (5) occasionally, tax not paid because the taxpayer relies upon the effectiveness of an artificial tax shelter - tax avoidance; and (6) the tax not paid because, according to the law as stated, the liability of the taxpayer to pay tax on the income is unclear - ambiguity." Cooper, *supra* note 7, at 35-36. This article focuses on individuals' intentional evasion of the federal income tax, which may involve categories (1), (3), and (4).

¹⁰ Some evasion may be efficient because it relates to productive activity that the taxpayer would not have undertaken if he had to pay tax on it. *See* Spicer, *supra* note 1, at 14. For example, a taxpayer might perform odd jobs only if he can keep the full return on his labor from that "moonlighting" but might otherwise choose unproductive leisure activities. *See* Jonathan Skinner & Joel Slemrod, "An Economic Perspective on Tax Evasion," 38 Nat'l Tax J. 345, 346 (1985). In addition, a tax evader may be driven to self-insure the risk of detection by working more. James Andreoni, Brian Erard & Jonathan Feinstein, "Tax Compliance," 36 J. Econ. Lit. 818, 824 (1998). This, in turn, would increase the amount evaded. *Id.*

provide incentives for compliance, typically by punishing noncompliance.¹¹ Accordingly, the Internal Revenue Code (Code) provides for a variety of civil penalties, including a penalty for underpayment of tax.¹² In addition, both the Code and other statutes provide criminal sanctions for tax evasion and other tax crimes.¹³ The Internal Revenue Service (IRS) traditionally has relied on audits and the threat of sanctions to collect taxes.¹⁴

However, some have argued that a softer approach might increase tax collection.¹⁵ Since the late 1990s, the political climate for the IRS generally has been one in which hard enforcement is disfavored. With the Internal Revenue Service Restructuring and Reform Act of 1998 (RRA '98),¹⁶ Congress tried to remake the IRS to render it more service-oriented. RRA '98 brought about wholesale reform of the IRS, ranging from restructuring the IRS to reflect taxpayer segments, not geography,¹⁷ and a new taxpayer-focused mission statement,¹⁸ to major procedural reform, including a third Taxpayer Bill of Rights.¹⁹ Many of the provisions of RRA '98 imposed restrictions on the IRS that reduce the enforced collection of taxes.²⁰

¹¹ See Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 *J. Pol. Econ.* 169, 183-84 (1968) (economic model of crime); Michael G. Allingham & Agnar Sandmo, "Income Tax Evasion: A Theoretical Analysis," 1 *J. Pub. Econ.* 323 (1972) (applying similar economic model to tax evasion); see also Dan M. Kahan, "Signaling or Reciprocating? A Response to Eric Posner's *LAW AND SOCIAL NORMS*," 36 *U. Rich. L. Rev.* 367, 369 (2002) ("The only way to overcome this [collective action] dilemma is to furnish external incentives - either subsidies or penalties - that bring the interests of individuals into alignment with those of the groups to which they belong. From criminal law to environmental law, from tax fraud to business fraud, from regulation of the professions to regulation of the Internet, this is the story that animates American policymaking.").

¹² See I.R.C. § 6662 (penalty for, among other things, substantial underpayment of tax and negligence or disregard of rules or regulations).

¹³ See, e.g., I.R.C. §§ 7201-7207, 7212; 18 U.S.C. §§ 287, 371, 1001.

¹⁴ See "Modernizing America's Tax Agency," 83 *Tax Notes* 1191, 1195 (1999) ("Historically, the IRS placed great emphasis on direct enforcement revenue, in part because it is precisely measurable and in part because it showed an indirect deterrent effect that increases compliance.").

¹⁵ See Lederman, *supra* note 6, at __ (citing authorities).

¹⁶ Pub. L. No. 105-206, 112 Stat. 685 §§ 1001-9016 (1998).

¹⁷ *Id.* § 1001(a).

¹⁸ See IRM § 1.1.1.1(1) (2/26/99) (IRS mission is to ". . . provide America's taxpayers top quality service by helping them understand and meet their tax responsibilities by applying the tax law with integrity and fairness to all.").

¹⁹ See Pub. L. No. 105-206, 112 Stat. 685 §§ 3001 et. seq. (1998).

²⁰ See Internal Revenue Service Restructuring and Reform Act of 1998, Pub. L. No. 105-206 § 3421, 112 Stat. 685 (requiring that all liens, levies, and seizures have supervisor approval, effective on July 28, 1998, except that, for

The enforcement-focused approach to tax compliance finds support in economic modeling of compliance, which focuses on audits and sanctions.²¹ On the other hand, it is often stated in the tax compliance literature that deterrence does not explain voluntary compliance levels in the United States or elsewhere.²² That is because only a small percentage of taxpayers is audited,²³ not every evader

collection actions under the automated collection system, effective for collection actions initiated after December 31, 2000); I.R.C. § 6334(e)(1); RRA '98 § 3445(a)-(b) (prohibiting IRS seizure of a taxpayer's home without judicial approval); I.R.C. §§ 6320, 6330; RRA '98 § 3401 ("collection due process" procedures).

Other provisions assisted taxpayers in contesting asserted liabilities. Those include a section providing for the possibility of a shift of the burden of proof to the IRS in litigated tax cases, I.R.C. § 7491; RRA '98 § 3001(a); a more widely applicable set of rules for "innocent spouse" relief from joint and several liability, I.R.C. § 6015; RRA '98 § 3201; an authorization of \$6 million of matching funds for low-income taxpayer clinics (since increased to \$7 million), I.R.C. § 7526; RRA '98 § 3103; and cessation of both interest and certain time-sensitive penalties in cases in which the IRS does not send notice of the proposed liability within 12 or 18 months, I.R.C. § 6404(g); RRA '98 § 3305, despite the periods of three years and longer contained in the statute of limitations on assessment, I.R.C. § 6501.

RRA '98 also enacted the so-called "ten deadly sins," which have been credited with reducing IRS employee willingness to collect taxes. *See* Ann Murphy and David Higer, "The 10 Deadly Sins: A Law With Unintended Consequences," 96 Tax Notes 871, 873 (2001); Barton Massey, "Uncertainty, 'Deadly Sins Sink Morale at IRS, Ex-Official Claims,'" 85 Tax Notes 1364 (1999).

²¹ *See* text accompanying notes 41-70, *infra*.

²² *See* Eric Posner, "Law and Social Norms: The Case of Tax Compliance," 86 Va. L. Rev. 1781, 1782 (2000) ("A widespread view among tax scholars holds that law enforcement does not explain why people pay taxes."); Kahan, *supra* note 11, at 377 ("Tax compliance rates - which vary dramatically across nations - seem to bear no connection to enforcement levels. For example, tax cheats face a much higher expected penalty in many European nations than they do in the United States, yet the United States enjoys a higher compliance rate."); Robert Cooter & Melvin A. Eisenberg, "Norms & Corporate Law: Fairness, Character, and Efficiency in Firms," 149 U. Pa. L. Rev. 1717, 1725 (2001) ("the punishment for tax evasion in most countries, discounted by the probability of prosecution and conviction, is small relative to the gain. Whereas economic models of self-interest predict low rates of tax compliance, some countries, like the U.S. and Switzerland, enjoy high rates of tax compliance."); note 29, *infra*.

²³ In fiscal year 2000, the overall audit rate for individuals was .49 percent. "IRS Releases Audit and Collection Activity Statistics for FY 2000," 2001 TNT 33-11. For individuals with \$100,000 or more of income it was .96%. *Id.* Each of these audit rates declined every year between 1996 and 2000. *See id.* The IRS did not report similar information in its 2001 collection activity statistics. *See* "IRS Releases Audit and Collection Activity Statistics for FY 2001," 2002 TNT 41-10. If a wider variety of IRS contacts with taxpayers were counted as audits, the numbers would increase substantially but would remain low. For example, the overall audit rate for 1999 would increase from .89% to 3.8%. *See* George Guttman, "Current Audit Statistics Make IRS Look Less Effective Than It Is," 90 Tax Notes 1593, 1597 Table 4 (2001); *see also* "United States General Accounting Office Report to the Chairman, Subcommittee on Oversight, Committee on Ways and Means, House of Representatives," *reprinted at* 2001 TNT 105-31 ("Since the math error and under reporter checks can be similar to correspondence audits, growth in these programs may offset to some degree the decline in the audit rate.").

who is audited will be caught,²⁴ some evasion detected will not be pursued by the government (particularly criminally),²⁵ and some penalties will not be upheld.²⁶ From this perspective, the expected sanction of any particular tax evader is tiny, yet voluntary compliance with the federal income tax generally is estimated to be around 83 percent.²⁷ This apparent discrepancy has suggested to a number of scholars that other factors are at play in determining tax compliance, including social norms²⁸ of

²⁴ See Rosenberg, *supra* note 2, at 189 (“Even if the Service does audit the taxpayer, it may not notice whatever tax evasion the taxpayer may have engaged in. To the extent that it must rely on the taxpayer’s own records to incriminate the taxpayer, the Service is in a difficult position.”).

²⁵ For example, in 1981, fewer than .1 percent of IRS investigations and audits were prosecuted criminally. Skinner & Slemrod, *supra* note 10, at 348. With respect to both tax and other financial crimes, in the aggregate, The IRS initiated a total of 3372 investigations in fiscal year 2000, 3284 in fiscal year 2001, and 3906 in fiscal year 2002. The total number of convictions for those years was 2249, 2251, and 1926, respectively, though, because prosecutions span multiple years, those figures do not necessarily reflect the same pool of taxpayers. See Criminal Investigation Program, by Status or Disposition, FY 2002, *available at* <http://www.irs.gov/irs/article/0,,id=107483,00.html>; 2001 Internal Revenue Service Data Book, Table 18 & n.4, *available at* <http://www.irs.gov/pub/irs-soi/01databk.pdf>; 2000 Internal Revenue Service Data Book, Table 18 & n.4, *available at* <http://www.irs.gov/pub/irs-soi/00databk.pdf>. Prosecutions for legal-source tax crimes were a fraction of the total, amounting to 1,554 investigations initiated in fiscal year 2002 and a total of 522 convictions in that year, for example. See Criminal Investigation Program, by Status or Disposition, FY 2002, *supra*.

These figures pale in comparison to individual income tax returns filed, which amounted to approximately 127.6 million for fiscal year 2000, 129.8 million for fiscal year 2001, and were estimated by the IRS to be 132.7 million for calendar year 2002. See “Summary of Number of Returns, by Type of Return, Fiscal Years 2000 and 2001” (2002), *available at* <http://www.irs.gov/pub/irs-soi/01db02nr.xls>; “Projections of Returns to be Filed in Calendar Years 2001-2008” (2002), *available at* <http://www.irs.gov/pub/irs-soi/08rs01pr.pdf>.

A criminal tax case, like other criminal prosecutions, requires proof of intent (in tax cases, “willfulness”) at a “beyond a reasonable doubt” standard of proof. This is particularly difficult in tax cases, given the nature of the behavior involved. See Graetz & Wilde, *supra* note 8, at 358. That is, it is difficult for authorities to distinguish tax evasion from honest error. Skinner & Slemrod, *supra* note 10, at 349. This renders the application of criminal laws to tax evasion very difficult. *Id.*

²⁶ Andreoni, Erard & Feinstein, *supra* note 10, at 821 (in 1995, only 4.1 percent of those audited were penalized).

²⁷ See *id.* at 819.

²⁸ “[S]ocial norms. . . [are] social attitudes that specify what behaviors an actor ought to exhibit.” Korobkin & Ulen, *supra* note 5, at 1127. “Scholars generally define social norms as nonlegal rules or obligations that certain individuals feel compelled to follow despite the lack of formal legal sanctions, whether because defiance would subject them to sanctions from others (typically in the form of disapproval, lowered esteem, or even ostracism) or because they would feel guilty for failing to conform to the norm (a so-called internalized norm). Put more positively, norms are nonlegal rules that certain individuals follow because they gain from doing so, either through increased inner satisfaction from doing the right thing or through approval they garner from others.” Ann E. Carlson, “Recycling Norms,” 89 Calif. L. Rev. 1231, 1238-39 (2001) (footnotes omitted).

compliance.²⁹

In fact, the 83 percent figure is misleading because it is an aggregate comprised of very varied levels of compliance that correspond to differences in opportunity to evade tax.³⁰ Economic modeling of tax compliance, which focuses on deterrence, has more explanatory power when it is applied more precisely to the probability of detection of evasion with respect to a particular source of income, for example, which needs to account for more IRS contacts than those formally denominated “audits,” and compared to the voluntary reporting percentage for that type of income.³¹ However, deterrence does not seem to explain all tax compliance³² and there is empirical evidence that compliance norms play a

²⁹ See Richard C. Stark, “A Principled Approach to Collection and Accuracy-Related Penalties,” 91 Tax Notes 115, 121-22 (2001) (taxpayers’ feelings that they ‘should’ comply with the tax law because it is ‘right.’ . . . doubtless have many sources, including generalized support for our system of government, agreement with the way in which federal revenues are spent, general feelings of moral responsibility, positive feelings regarding the legitimacy of the IRS, and positive feelings regarding the fairness of the way in which the federal government in general and the IRS in particular treat taxpayers. The existence and imposition of both criminal and civil sanctions probably also contribute to feelings regarding the ‘rightness’ of compliance.”) (footnotes omitted); note 22, *supra*; see also Joseph Bankman & Thomas Griffith, “Social Welfare and the Rate Structure: A New Look At Progressive Taxation,” 75 Calif. L. Rev. 1905, 1942 & n.169 (1987) (asserting that “[i]t seems reasonable” to attribute some compliance unexplained by the economic model to such things as the “moral and social costs of dishonesty and the transaction costs of enduring an audit”); James Alm, Betty Jackson & Michael McKee, “Deterrence and Beyond: Toward a Kinder, Gentler IRS,” 313 in WHY PEOPLE PAY TAXES, *supra* note 1 (“It is important to recognize that detection and punishment cannot explain the compliance behavior of all individuals. The percentage of tax returns that are subject to detailed audit is quite small in most countries, and penalties are seldom more than a fraction of unpaid taxes. . . . However, compliance in many countries remains relatively high. Additional factors must play a role— perhaps a dominant one— in tax compliance.”) .

³⁰ See Lederman, *supra* note 6, at __; TAXING OURSELVES (Slemrod & Bakija ed. 1996), at 150 (“As you would expect, the less chance of getting caught, the more likely people are to try to get away with tax evasion. This is borne out by the data in Table 5.1, which presents information from the 1987 tax gap study about what percentage of several types of income are actually reported by individuals. It ranges from 99.5 percent for wages and salaries, taxes on which are difficult to evade successfully, down to 41.4 percent for self-employment income.”).

³¹ See note 23, *supra* (discussing non-audit IRS contacts); note 30, *supra* (contrasting compliance levels with respect to applicability of information reporting).

Information reporting alone does not explain all tax compliance. See Andreoni, Erard & Feinstein, *supra* note 10, at 822 (for 1992, 91.7 percent of all reportable income was reported although only three-fourths of income was subject to information reporting).

³² See, e.g., Kristina Murphy & Karen Byng, “Preliminary Findings from the Australian Tax System Survey of Scheme Investors,” 24, available at <http://ctsi.anu.edu.au/UP.Murphy.surveyfindings.pdf> (“When taken together, the findings from Section 6 of the *Investors’ Survey* suggest that a regulatory strategy based purely on deterrence (monetary fines or probability of detection) may go some way to preventing tax avoidance but it is unlikely to be the most effective strategy for general compliance among *all* taxpayers. Instead, the findings suggest that taxpayers’ attitudes and reactions to their wrong-doing (i.e., their shame responses), in addition to economic calculations or fear of punishment, need to be considered when designing an effective regulatory strategy) (emphasis in original).

role.³³

The evidence that norms affect tax compliance is supported by research that has demonstrated that individuals tend to reciprocate or cooperate³⁴ with others even under circumstances in which narrow self-interest would suggest that they would not. For example, people tend to contribute to public goods when they perceive that others contribute, even though they would maximize their own return by not contributing.³⁵ In laboratory experiments, this phenomenon holds even in anonymous play where the opportunity to signal does not exist.³⁶

The cooperation phenomenon has suggested to some commentators that sanctions may actually be counterproductive—they may undermine compliance.³⁷ They argue that sanctions may decrease

³³ See Stephen Coleman, “The Minnesota Income Tax Compliance Experiment: State Tax Results,” (Apr. 1996), available at <http://www.taxes.state.mn.us/reports/complnce.pdf>; Michael Wenzel, “Misperceptions of Social Norms about Tax Compliance (2): A Field-Experiment,” Australian National University, Australian Taxation Office, Centre for Tax System Integrity, Working Paper No. 8 (June, 2001), available at <http://ctsi.anu.edu.au/WP8.pdf>; notes 87-112 and accompanying text, *infra*.

³⁴ Much of the literature uses the term “reciprocation” to refer to both cooperative behavior between two individuals and collaboration in a group endeavor. These are not exactly the same thing. Cf. Robert B. Cialdini, “Social Motivations to Comply: Norms, Values, and Principles,” in TAXPAYER COMPLIANCE Vol. 2 at 211-14 (Roth & Scholz, eds. 1989) (separately discussing reciprocation and social validation). This article will refer to the former as “reciprocation” and the latter as “cooperation.”

³⁵ See generally Dan M. Kahan, “Trust, Collective Action, and Law,” 81 B.U. L. Rev. 333 (2001) (citing and discussing some of this research).

³⁶ See note 123 and accompanying text, *infra*.

³⁷ See, e.g., Ernst Fehr & Simon Gächter, “Fairness and Retaliation: The Economics of Reciprocity,” 14 J. Econ. Perspectives 159-181 (2000).

A study of Israeli daycare centers arguably supports this hypothesis. That study found that introducing a small, flat, per-child fine for parent lateness in picking up children increased the instances of lateness. See Uri Gneezy and Aldo Rustichini, “A Fine is a Price,” 29 J. Legal Stud. 1 (2000). However, the context of that study differs from that of tax compliance in important ways. As the authors posit, the imposition of a fine by the daycare centers suggested that a fine is the worst consequence for lateness. See *id.* at 10. The fine was also relatively low (a flat 10 New Israeli Shekels (NIS) per child for each day on which the parent arrived 10 minutes or more late). *Id.* at 5. For purposes of comparison, the authors noted that a babysitter earned between NIS 15 and NIS 20 per hour and the average monthly salary in Israel at the time was NIS 5,595. *Id.* The monthly daycare fee per child was NIS 1,400 (approximately \$380). *Id.* at 4.

A study of high occupancy vehicle (HOV) lanes provides contrary evidence. It found that allowing solo drivers to use the HOV lanes for a fee (that is, by paying a toll electronically via an “ExpressPass”) both decreased unauthorized use of the HOV lanes and increased carpooling. See Lior Jacob Strahilevitz, “How Changes in Property Regimes Influence Social Norms: Commodifying California’s Carpool Lanes,” 75 Ind. L.J. 1231, 1234 (2000). Based on data that showed that “the new carpools consisted mostly of drivers who had neither used an ExpressPass nor participated in a carpool during the previous year,” he hypothesizes that “[b]y supplementing the time savings that

cooperation because the incentives provide less opportunity for individuals to engage in (or observe others engaging in) voluntary cooperation³⁸ or because punishments suggest that others do not cooperate,³⁹ thereby undermining any cooperation norm.

This is an important question because the direct revenue from enforcement is a tiny fraction of the revenue from voluntary compliance.⁴⁰ Key to increasing compliance therefore is the question of whether increased enforcement increases voluntary compliance or decreases it. This article argues enforcement not only does not undermine a compliance norm but in fact may help foster and maintain such a norm. The article also evaluates IRS reform in this light and suggests strategies that the restructured IRS can use to increase compliance.

The article has three principal parts. Part I focuses on the traditional adversarial approach to tax collection, which rests on an economic model of law enforcement. Under economic modeling of tax compliance, audit rates and sanctions are critical to compliance.

Part II of the article considers the role of norms in tax compliance. First, it discusses the empirical evidence that norms-based appeals influence taxpayer compliance. Next, this Part considers possible sources of compliance norms. Section A discusses experimental evidence about cooperation and reciprocity. Section B links Parts I and II by considering the interaction of enforcement and norms. That Section argues that enforcement can help sustain norms of compliance.

Part III considers the application of the interaction of enforcement and norms to taxpayer segments. Section A argues that a norms-based appeal might be cost-effective with respect to taxpayers with primarily wage and investment income. Section B analyzes the difficult problem of

HOV users obtain by riding in HOV lanes with a quantifiable monetary saving that they get relative to solo drivers, carpooling became a more attractive option.” *Id.* at 1256.

³⁸ See Kahan, *supra* note 35, at 338 (“Material incentives can . . . mask reciprocal cooperation.”). In other words, rewards or punishments may crowd out a moral compunction to pay taxes. See Bruno S. Frey & Lars P. Feld, “Deterrence and Morale in Taxation: An Empirical Analysis,” CESIFO Working Paper No. 760 at 7, 8 (2002), available at http://ssrn.com/abstract_id=341380; Kahan, *supra* note 35, at 338.

³⁹ See, e.g., Kahan, *supra* note 35, at 338 (“The simple existence of an incentive scheme can signal that other individuals are not inclined to cooperate voluntarily: if they were, incentives would be unnecessary. This inference can in turn trigger a reciprocal disposition to withhold voluntary cooperation, thereby undercutting, if not wholly displacing, the force of the incentive.); see also Dan M. Kahan, “Reciprocity, Collective Action, and Community Policing,” 90 Calif. L. Rev. 1513, 1519 (2002) (making the same argument in another context); cf. Cialdini, *supra* note 36, at 215 (“if taxpayers believe there is a significant minority of tax cheaters, they may be inclined to cheat as well because the act would have acquired some social validation.”).

⁴⁰ Enforcement revenue as a percentage of total revenue after refunds was 2.47 percent in fiscal year 1997, 2.14 percent in 1998, 1.88 percent in 1999 and 1.78 in both 2000 and 2001. See Delinquent Collection Activities Reports at <http://www.irs.gov/taxstats/article/0,,id=97168,00.html> (percentages calculated by the author).

evasion by owners of cash-based businesses, which includes a competitiveness aspect that can be analyzed as a prisoner's dilemma. Section B argues that additional enforcement with respect to groups of self-employed taxpayers might succeed in tipping the norm in from noncompliance to compliance.

The article concludes that the threat of enforcement can work hand in hand with the fostering of compliance norms, by assuring compliant taxpayers that others are likely to comply. In fact, because different types of taxpayers are differently situated with respect to compliance, some may be more responsive to the deterrent threat of audits while others may be more responsive to normative appeals.

I. The Economics of Tax Compliance

Economic models of tax compliance essentially consider tax evasion "a special form of gambling."⁴¹ The basic model of tax compliance is based on an economic model of crime advanced by Gary Becker.⁴² In the model, developed by Michael Allingham and Agnar Sandmo, tax compliance depends on the probability of detection and the punishment if cheating is detected.⁴³ In other words, the model predicts that a rational taxpayer will evade taxes if the expected value of the punishment is lower than the gains from evasion.⁴⁴

⁴¹ Spicer, *supra* note 1, at 14.

⁴² See Frey & Feld, *supra* note 378 at 2 (citing Gary S. Becker, "Crime and Punishment: An Economic Approach," 76 J. Political Econ. 169 (1968)).

⁴³ See Michael Allingham and Agnar Sandmo, "Income Tax Evasion: A Theoretical Analysis," 1 J. Public Econ. 323 (1972). The model treats income as exogenous. See Andreoni, Erard & Feinstein, *supra* note 10, at 823. Articles subsequent to Allingham and Sandmo have made income endogenous by adding labor supply. See *id.* at 824 (citing articles). The predictions of this model are ambiguous because they depend on the shape of the labor supply curve. *Id.*

In the model, if the taxpayer avoids an audit, he will retain the undeclared taxes. If he is audited and sanctioned, he will lose a multiple that is greater than 1 of the undeclared taxes (such as 120% of the undeclared taxes if the fine is 20% of those taxes).

⁴⁴ The model can be written as $EU = (1 - p) u(y + x) + pu(y - Fx)$ where EU is the expected utility, u is the utility function, p is the probability of audit (with assumed detection and sanction), y is the legal after-tax income, x is the amount of undeclared taxes, and F is the penalty applicable to the unpaid taxes. If expected utility is positive, a rational utility maximizer should cheat. This is the version of the model used in other articles, see Bankman & Griffith, *supra* note 29, at 1942 n.169 (citation omitted); Skinner & Slemrod, *supra* note 10, at 347, except that F is simply the penalty, not the penalty plus one. See Andreoni, Erard & Feinstein, *supra* note 10, at 823 (using similar model, with θz as the term, where θ is the penalty rate and z is the amount of income understated). Of course, if caught, the taxpayer has to pay the unpaid tax as well as the penalty. However, the equation already captures the unpaid tax because it considers its retention as an increase in wealth; counting its payment (if caught) as a decrease in wealth would be double counting. Therefore, Professors Bankman and Griffith's statement that "[a]t a detection rate equal to the 2% average audit rate, and a constant marginal utility of money, the model predicts evasion whenever the penalty rate is less than 5000% of the tax due" is misleading; in fact, the penalty rate would have to be 4900% of the tax due so that the total amount paid would be 5000% of the tax due.

As a simplified example,⁴⁵ assume that a taxpayer is facing a decision whether or not to report \$3,000 of income received in cash. Assume that the applicable tax rate is 33 1/3 percent so that the tax at stake is \$1,000. Also assume that if the taxpayer is caught, the taxpayer will owe a penalty of \$3,000, plus the tax. (Assume for simplicity that all amounts are adjusted to current dollars.) If there is a 2 percent chance that a taxpayer will be audited⁴⁶ and a 100 percent chance that, if audited, the taxpayer will owe the \$3,000⁴⁷ the expected penalty for noncompliance is only \$60,⁴⁸ while the expected benefit of noncompliance is \$980 (reflecting a 98 percent chance of retaining the unpaid

The model has many simplifying assumptions. It involves a single decision in one time period to report or evade with respect to a particular amount of income. The audit rate is exogenous and greater than zero but less than one. See Andreoni, Erard & Feinstein, *supra* note 10, at 823. The amount of income is exogenous, as well, and is known to the taxpayer but not the government. *Id.* The model also assumes that the taxpayer is risk-averse. *Id.* That is, marginal utility is positive and decreasing. Allingham & Sandmo, *supra* note 11, at 324. Of course, the model implicitly assumes that the taxpayer is a rational wealth-maximizer. See Kahan, *supra* note 35, at 369. The model also implicitly assumes that the audit rate is known to the taxpayer. The model is easily adapted, however, by using the audit rate perceived by the taxpayer (which may differ from the actual rate). Taxpayers' overestimation of the probability of detection and sanction may explain some compliance. See Andreoni, Erard & Feinstein, *supra* note 10, at 846. In addition, "people consistently overestimate the probability of an outcome which can occur only as the result of a particular series of events" (the so-called "conjunction effect"). Jeff T. Casey & John T. Scholz, "Beyond Deterrence: Behavioral Decision Theory and Tax Compliance," 25 Law & Soc'y Rev. 821, 833 (1991).

⁴⁵ The more sophisticated economic model considers the level of legal after-tax income and the utility function. See note 44, *supra*. The use of expected utility allows for, among other things, the declining marginal utility of money. See Casey & Scholz, *supra* note 44, at 823-24.

⁴⁶ In fact, the average audit rate for individuals is now around half of one percent. See "IRS Releases Audit and Collection Activity Statistics for FY 2000," *supra* note 23 (overall audit rate for individuals was .49 percent in fiscal year 2000). However, that is a blend of audit rates that differ among taxpayer groups sorted by such things as amount of income. See note 30, *supra*.

⁴⁷ This assumption is unrealistic because audits cannot detect all evasion, and penalties are not asserted in all cases. See Stark, *supra* note 29, at 119 ("in 1998 the IRS made a total of perhaps 5.4 million contacts regarding whether information reported on returns was correct. During the same period, the total number of negligence and fraud penalties actually assessed by the IRS was only 7,343, or a little less than 0.15 percent of this total, and of these, a substantial number were abated. . . . Put another way, in 1998 the IRS proposed a nonfraud accuracy penalty once for every 100,000 returns filed and about once for every 1,000 returns examined. At the same time, it abated about 7 previously assessed accuracy-related penalties for every 100,000 returns filed and about 8 such penalties for every 1,000 returns audited.") (footnotes omitted).

⁴⁸ The actual payment would be \$4,000 (\$3,000 penalty plus the \$1,000 tax) but the \$1,000 tax cannot be reflected in the equation because the baseline is compliance. That is, if the taxpayer does not comply, the taxpayer faces a 98 percent chance of increasing his wealth from the compliance baseline by \$1,000 and a 2 percent chance of decreasing his wealth from the compliance baseline (which already reflects payment of the \$1,000) by an additional \$3,000. See note 44, *supra*; but cf. Casey & Scholz, *supra* note 44, at 823 (including payment of the tax itself in the calculation of expected value and therefore finding that, at a 33.3 percent rate of audit and sanction, the penalty need only be 100 percent of the tax, not 200 percent).

\$1,000).⁴⁹ In other words, the expected value of cheating is \$920,⁵⁰ and rationally the taxpayer should cheat whenever the expected value is positive.

As this example suggests, economic models of tax compliance counsel that increased audit rates and/or sanctions will increase compliance and in fact counsel extremely high sanctions at low rates of audit. For example, with a 2 percent rate of audit for individuals (which is unrealistically high at present),⁵¹ for compliance to be rational, the penalty that an individual taxpayer would owe if caught would have to be at least \$49,000 (2 percent of \$49,000 is \$980). That is, if the taxpayer would owe a \$49,000 penalty if caught, the expected value of failing to report and pay the \$1,000 tax would be zero.⁵² In other words, at a 2 percent audit rate, a \$49,000 penalty equalizes the cost of compliance (\$1,000) and the expected cost of failing to comply (2 percent of \$50,000, that is, of \$49,000 plus \$1,000).⁵³ Similarly, an audit rate of 1 percent would require a \$99,000 penalty in this example.⁵⁴

Under the economic model, the most efficient action by the government is to set penalties for tax evasion extremely high.⁵⁵ The model suggests that the government could achieve the same result by increasing the audit rate or thoroughness of audit. However, that is more costly than increasing the magnitude of the penalty.⁵⁶

In fact, increased audits and increased sanctions probably are not substitutes in the linear way

⁴⁹ That is, compliance is treated as the baseline. See Casey & Scholz, *supra* note 44, at 823. In other words, the expected value of cheating accounts both for the probability that the taxpayer will experience an increase in wealth if he does not get caught and the probability he will experience a decrease in wealth if he does get caught.

⁵⁰ \$980-\$60.

⁵¹ See note 49, *supra*.

⁵² $.98 (\$1,000) - .02 (\$49,000) = 0$.

⁵³ What if there were only a 70 percent chance that if audited, the evasion will be caught? In that case, the expected cost of noncompliance is only \$42. If the likelihood that a penalty will be imposed is less than 100 percent or the likelihood that the tax and penalty will actually be collected is less than 100 percent, the \$42 expected cost of noncompliance would be even less.

⁵⁴ That is, if caught evading \$1,000 of taxes, the taxpayer would owe the \$1,000 of unpaid taxes plus a \$99,000 penalty. One percent of \$100,000 is \$1,000.

⁵⁵ See Andreoni, Erard & Feinstein, *supra* note 10, at 823-24.

⁵⁶ See Skinner & Slemrod, *supra* note 10, at 346; C. Eugene Stuerle, WHO SHOULD PAY FOR COLLECTING TAXES?: FINANCING THE IRS 52-53 (1986).

implied by the model.⁵⁷ That is, people may be disproportionately deterred by high sanctions.⁵⁸ For example, a government policy of hanging tax evaders might be the most effective deterrent, at least initially, even if the audit rate were minuscule.⁵⁹ However, the government probably would not enforce such an extreme penalty,⁶⁰ for many reasons, including equity between evaders caught and those not caught.⁶¹ A draconian penalty also would likely deter some legal, productive activity that is close to the line between legal avoidance and illegal evasion.⁶²

It is not politically realistic for the government to impose extremely high penalties for tax evasion⁶³ and the government does not do so.⁶⁴ Although the amount due the IRS, given penalties and interest, can be daunting for many taxpayers, the amounts in question are far less than the amounts that the economic model suggests would be needed to make tax evasion irrational.⁶⁵ Thus, in the real world, the economic model counsels enforcement at a level high enough to deter cheating, even if it would theoretically be cheaper simply to raise penalties substantially.

⁵⁷ See A. Mitchell Polinsky & Steven Shavell, "The Optimal Tradeoff Between the Probability and Magnitude of Fines," 69 Am. Econ. Rev. 880, 880-81 (1979).

⁵⁸ See Cooper, *supra* note 7, at 56 & n.82 (citing studies).

⁵⁹ See *id.* at 57. In China, for example, tax evasion is a capital offense. See "Tax Fraud? Execute Them, Says China," Australian Financial Review (January 7, 2002).

⁶⁰ See *id.*; Richard D. Schwartz & Sonya Orleans, "On Legal Sanctions," 34 U. Chi. L. Rev. 274, 277-78 (1966-67) (providing examples).

⁶¹ See Skinner & Slemrod, *supra* note 10, at 349; see also Stuerle, *supra* note 56, at 53 (pointing out that equity requires that the "punishment fit the crime" and that many taxpayers believe that minor noncompliance is widespread and not particularly serious).

⁶² Cf. Anne Marie Herron, "The Antitrust Sentencing Guideline: Deterring Crime by Clarifying the Volume of Commerce Muddle," 51 Emory L.J. 929, 959 (2002) ("Looking at deterrence more generally, in the case of antitrust violations, the risks of overdeterrence relate to the types of legal, efficient conduct that might be precluded by imposing excessive sanctions.").

⁶³ See Graetz & Wilde, *supra* note 8, at 358 ("That an economic model of analyzing the expected utility calculation of a would-be tax evader recommends large increases in the applicable sanction in light of the very low probability of its application quickly becomes irrelevant as a policy matter. In this country, at least, legal, moral, and political constraints make this necessarily so.").

⁶⁴ See Andreoni, Erard & Feinstein, *supra* note 10, at 824; Arindam Das-Gupta & Dilip Mookherjee, "Tax Amnesties as Asset-Laundering Devices," 12 J.L. Econ. & Org. 408, 408 (1996) ("In practice, penalties for most [tax] offenses tend to be nonmaximal.").

⁶⁵ See "IRS Releases Audit and Collection Activity Statistics for FY 2001," *supra* note 23 ("The risk of not paying taxes carries tremendous risks. Penalties and interest -- especially when compounded over several years -- pile up quickly and create a devastating bill for families. In 1999, the average tax and penalty for the simplest kind of Service Center audit was \$ 2,602.").

The basic tax compliance model has been refined in various ways. For example, individual taxpayers may not be certain of the audit rate or even of the amount of taxes they will owe on a particular amount of income.⁶⁶ In the face of uncertainty, individuals tend to rely on heuristics that may result in non-maximizing strategies.⁶⁷ Thus, a lack of precise information about the likelihood of audit may increase compliance when audit rates and penalties are low.⁶⁸

Perhaps more important, the basic model treats the audit rate as exogenously determined, but in fact a taxpayer's likelihood of audit varies depending on what the taxpayer reports. Among other techniques, the IRS uses a secret formula with a multitude of variables that is designed to optimize the selection of returns for audit.⁶⁹ Some models treat the audit rate as endogenous.⁷⁰

Although these models can be used to examine the effects of a variety of variables on evasion,⁷¹ a consistent theme is that, economic modeling counsels increasing audit rates and/or sanctions to increase tax compliance. A number of studies have found higher levels of compliance at higher audit rates or sanction levels.⁷² Nonetheless, it is clear that economic modeling does not capture all of the

⁶⁶ See Robert M. Melia, "Is the Pen Mightier than the Audit?" 34 Tax Notes 1309, 1310 (1987).

⁶⁷ See Spicer, *supra* note 1, at 15.

⁶⁸ Nehemiah Friedland, "A Note on Tax Evasion as a Function of the Quality of Information About the Magnitude and Credibility of Threatened Fines: Some Preliminary Research" 12 J. of Applied Social Psych. 55 (1982).

⁶⁹ See "Tax Administration: IRS' Return Selection Process," GAO/GGD-99-30 (Feb 22, 1999), *reprinted at* 1999 TNT 36-14; *see also* James Alm & Michael McKee, "Tax Compliance as a Coordination Game," at 2 (working paper, July 2000); Andreoni, Erard & Feinstein, *supra* note 10, at 825.

⁷⁰ See Andreoni, Erard & Feinstein, *supra* note 10, at 824-31 (discussing two variations on the model, one in which the tax authority pre-commits to an audit rule and one in which it does not). That discussion focuses on the implications for optimal audit strategy. *See id.* The effect of audits and penalties in these game-theoretic models is difficult to determine because of the endogeneity of risk of audit. *See id.* at 841. Experiments that have addressed that issue by using simulations have found that increased penalties and increased audits each have a positive impact on compliance. *Id.*

⁷¹ For example, Allingham and Sandmo developed their model, which includes a term for the tax rate, in order to consider the effects of tax rates on compliance. *See* Allingham & Sandmo, *supra* note 11; *see also* Andreoni, Erard & Feinstein, *supra* note 10, at 823.

⁷² *See, e.g.,* Friedland, *supra* note 68, at 55-59; Nehemiah Friedland, Schlomo Maital & Aryeh Rutenberg, "A Simulation Study of Income Tax Evasion," 10 J. Public Econ. 107, 113 (1978) ("large fines are more effective deterrents than small ones, even when audit frequencies are reduced proportionately."); Alm, Jackson & McKee, *supra* note 29, at 321 (making both findings, in an experimental setting). A meta-analysis of numerous studies found that higher audit rates increase compliance, as does higher penalty rates. Calvin Blackwell, "A Meta-Analysis of Tax Compliance Experiments," working paper (March 2002).

many factors that affect tax compliance⁷³ or explain all compliance.⁷⁴ The role of norms of compliance or noncompliance is discussed in the next Part.

II. The Role of Norms in Tax Compliance

Laws and law-enforcement certainly are not the only determinants of behavior.⁷⁵ With respect to tax compliance, empirical evidence supports the role of other factors, particularly the influence that other members of society have. For example, a study of the Tax Reform Act of 1986, found that “those who encountered others who expressed positive attitudes toward the Tax Reform Act displayed greater commitment to complying with it themselves, whereas those who encountered others who expressed negative attitudes displayed less commitment.”⁷⁶ Similarly, “[o]ne of the most consistent

⁷³ See generally Andreoni, Erard & Feinstein, *supra* note 10 (discussing importance of such factors as taxpayer’s age and marital status and influence of tax practitioners).

⁷⁴ See notes 32-33 and accompanying text, *supra*. Fairness of procedures used by the tax collector also seem to impact compliance. See Lederman, *supra* note 6, at ___ (discussing literature); Kristina Murphy, “Procedural Justice and the Australian Taxation Office: A study of tax scheme investors,” 21-22 available at <http://ctsi.anu.edu.au/UP.Murphy.procedural.doc> (stating, with respect to survey study of small group of “tax scheme” investors, “Thus, the reaction of so many investors to defy the ATO’s [Australian Taxation Office’s] request that they pay back taxes appears, in part, to be one of protest at being branded a tax cheat.”).

⁷⁵ See Richard H. McAdams, “The Origin, Development, and Regulation of Norms,” 96 Mich. L. Rev. 338, 391-408 (1997) (discussing the interaction of law and norms).

As a starting point for other explanations of tax compliance, such as taxpayer morale, trust in government, and the role of norms, a number of scholars have stated that the standard economic model does not explain the estimated overall level of compliance with the federal income tax. See note 22, *supra*; see also Bankman & Griffith, *supra* note 29, at 1942 & n.169 (asserting that “[i]t seems reasonable” to attribute some compliance unexplained by the economic model to such things as the “moral and social costs of dishonesty and the transaction costs of enduring an audit”). That is, the audit rate is currently under 1 percent for individuals, and has been under 2 percent for a number of years. The audit rate for individuals was 1.67 percent in 1995, 1.67 percent in 1996, 1.28 percent in 1997, .99 percent in 1998, .90 percent in 1999, .49 percent in 2000, and .58 percent in 2001. “Internal Revenue Service Progress Report from the Commissioner of Internal Revenue,” http://www.irs.gov/pub/irs-utl/pub3970_2-2002.pdf at 43 (Dec. 2001) [hereinafter, “IRS Progress Report”]. Under the economic model discussed above, a 1 percent audit rate calls for penalties of 99 times the tax. Yet, the sanction for most underpayments of tax is a 20 percent penalty for negligence or substantial understatement of tax, plus payment of the tax itself and interest. See I.R.C. § 6662. The penalty for fraud is 75 percent of the tax, I.R.C. § 6663(a), but that requires the IRS to prove fraud by clear and convincing evidence, see I.R.C. § 7454; *Smith v. Commissioner*, 926 F.2d 1470 (6th Cir. 1991); Tax Court Rule 142(b), whereas normally the taxpayer bears the burden of persuasion, see *Welch v. Helvering*, 290 U.S. 111, 115 (1933); Tax Court Rule 142(a). Criminal sanctions are imposed only extremely rarely. For example, in 1981, fewer than .1 percent of IRS investigations and audits were pursued criminally. Skinner & Slemrod, *supra* note 10, at 348. In addition, it is unlikely that audits detect all underpayments of tax, and penalties are not asserted in every case. See note 26, *supra*. This analysis is misleading because it ignores the role of information reporting and withholding in constraining taxpayer compliance behavior. See Lederman, *supra* note 6, at ___.

⁷⁶ Kahan, *supra* note 11, at 341 (citing Marco R. Steenberg et al., “Taxpayer Adaptation to the 1986 Tax Reform Act: Do New Tax Laws Affect the Way Taxpayers Think About Taxes?,” 29-30 in WHY PEOPLE PAY TAXES,

findings in survey research about taxpayer attitudes and behaviors is that those who report compliance believe that their friends (and taxpayers in general) comply, whereas those who report cheating believe that others cheat.⁷⁷

Of course, that insight does not reveal whether taxpayers who report that they do not cheat do so because they believe others do not cheat, or the reverse,⁷⁸ and even whether taxpayers who state that they do or do not cheat are honest in those assertions.⁷⁹ However, there are psychological explanations for why the perception that others do not comply would lessen one's own inclination to comply.⁸⁰ For example, observing others' noncompliance might change the observer's moral standard

supra note 1); *see also* Schwartz & Orleans, *supra* note 60, at 296-99 (discussing their survey that focused on moral reasons to pay taxes).

People also may be more compliant with a tax system that they believe is fair. *See* Carroll, *supra* note 1, at 47; Andreoni, Erard & Feinstein, *supra* note 10, at 851 (discussing literature); Kent W. Smith, "Reciprocity and Fairness: Positive Incentives for Tax Compliance," 244 Fig. 2, 245 in WHY PEOPLE PAY TAXES, *supra* note 1; *but cf.* Robert Mason & Lyle D. Calvin, "Public Confidence and Admitted Tax Evasion," 37 Nat'l Tax J. 489, 493 (2001) (finding no support, in results of a survey of Oregon taxpayers, "for the contention that a loss in opinion fairness from 1975 to 1980 is related to an increase in admitted income tax evasion," with respect to state taxes); *id.* at 489 & n.3 (citing studies with conflicting results).

⁷⁷ Carroll, *supra* note 1, at 47 (citing literature); *see also* Jon S. Davis, Gary Hecht & Jon D. Perkins, "Social Behaviors, Enforcement, and Tax Compliance Dynamics," 78 Accounting Rev. ___ (2003) (forthcoming) (citing literature) [hereinafter, pinpoint cites to this source are to the working paper].

⁷⁸ A recent model assumes three classes of taxpayers: honest ones, those susceptible to evasion, and evaders. *See* Davis, Hecht & Perkins, *supra* note 77, at 1. It assumes that honest taxpayers may be influenced by evaders and vice versa, so that as the mixture in the population changes, the equilibrium can change. *See id.* at 2.

⁷⁹ *See* Mason & Calvin, *supra* note 76, at 490 ("Sociologists have argued that survey self-reports of deviance are useful and produce sufficiently accurate data for addressing deterrence issues. One can never be certain, however, and caution in interpreting self-report data is recommended until better measures of validity are forthcoming.") (footnote omitted); *see also* Alan H. Plumley, Commentary on Karyl A. Kinsey, "Deterrence and Alienation Effects of IRS Enforcement: An Analysis of Survey Data," 286 in WHY PEOPLE PAY TAXES, *supra* note 1 ("I do not put much stock in opinion surveys, especially ones that try to get honest answers from people about their behavior, especially about their future behavior, especially when the questions ask about possible illegal behavior, especially when the respondents could reasonably believe that their participation is not anonymous . . .") (emphasis in original); *cf.* Rosenberg, *supra* note 2, at 189 ("Much of the noncompliance that accompanies self-reports is attributable to outright deception or misrepresentation. Tax planning and preparation generally take place at private meetings between the taxpayer and tax advisors (and, at times, those with whom the taxpayer does business). Often, the Service depends on the taxpayer and its advisors to report honestly the results of those meetings, and bases tax liability exclusively on those reports. Unfortunately, taxpayers have strong financial incentives to understate their own income and overstate deductions."). Of course, taxpayers lack financial incentive to lie to someone taking a survey and may be much more honest in reporting their cheating than they are in refraining from cheating in the first place.

⁸⁰ *See* Davis, Hecht & Perkins, *supra* note 77, at 4-5. The theory of cognitive dissonance provides an explanation for this phenomenon. That is, "[w]hen we sense something in the world that is inconsistent with the

so that he or she might feel less guilt in failing to comply.⁸¹

Even more relevant is empirical studies of taxpayer behavior have shown that at least some taxpayers respond with increased compliance to appeals suggesting that tax compliance is the norm.⁸² Yet, norms-based appeals cannot simply be contrasted with increased enforcement because taxpayers are the heterogeneous. That is, there are some taxpayers for whom even the most robust societal norm of compliance likely has no influence.⁸³ For example, tax protestors, who generally assert that the federal income tax is unconstitutional or does not apply to them,⁸⁴ probably are not influenced by general norms of compliance.⁸⁵ Taxpayers with illegal income also are unlikely to be motivated to report that income by exposure to the norms of mainstream taxpayers. In fact, they have stronger incentives than most not to report the income because reporting it might expose the underlying illegal activity.⁸⁶

cognitive frame through which we see the world, we initially (unconsciously) ignore or distort our perception. If that becomes impossible, we eventually amend our cognitive frame (i.e., the way we see and understand the world) to incorporate our new perception.” Rosenberg, *supra* note 2, at 200 n.113.

⁸¹ Davis, Hecht & Perkins, *supra* note 77, at 5.

⁸² See text accompanying notes 87-120, *infra*.

Laws and norms may interact in a variety of ways. See McAdams, *supra* note 75, at 340 (“Norms turn out to matter in legal analysis for many reasons. Sometimes norms govern behavior irrespective of the legal rule, making the choice of a formal rule surprisingly unimportant. Sometimes legal rules facilitate or impede the enforcement of a norm, and the selection of the formal rule matters in entirely new ways, the exact consequence depending on whether the formal rule strengthens or weakens a desirable or undesirable norm. Indeed, in some cases, new norms arise in the presence of different legal rules, making the relevant policy choice one between two or more law-norm combinations.” (footnotes omitted). With respect to tax compliance, laws requiring compliance and societal norms of compliance are mutually reinforcing. See *id.* at 347-48 (citing Peter H. Huang & Ho-Mou Wu, “More Order Without More Law: A Theory of Social Norms and Organizational Cultures,” 10 J.L. Econ. & Org. 390, 401-02 (1994)).

⁸³ Richard McAdams proposed that the term “societal norms” be used in contradistinction to the term “group norms.” See McAdams, *supra* note 75, at 386 n.164.

⁸⁴ As an example of this phenomenon, see David Cay Johnston, “Defying the I.R.S., Anti-Tax Businesses Refuse to Withhold,” New York Times (Nov. 19, 2000).

⁸⁵ These taxpayers may belong to groups that have an opposing norm regarding tax compliance. Cf. McAdams, *supra* note 75, at 386-88.

⁸⁶ It can be particularly difficult to enforce the tax laws against taxpayers involved in illegal activities because they frequently may fail to keep accurate records. See *United States v. Abodeely*, 801 F.2d 1020, 1023 (8th Cir. 1986) (stating, “by the very fact that taxpayer has failed to report the income, it behooves him to obscure any trace of its existence”). Prosecution of taxpayers with illegal income also probably has less deterrent effect on taxpayers with legal-source income than would criminal prosecution of other taxpayers with legal-source income. Taxpayers engaged in illegal activity also are unlikely to be deterred by the threat of having a charge for tax evasion added to the charge for the underlying crime.

Nonetheless, a substantial portion of taxpayers likely do respond to exposure to a compliance norm. An experiment conducted by the Australian Centre for Tax System Integrity— a joint venture between Australian National University and the Australian Taxation Office⁸⁷-- found apparent increased compliance after taxpayers were informed that others report more honesty in tax compliance than people tend to think.⁸⁸ That study was done in two parts, with the first part a “prestudy” involving a simulation using psychology students.⁸⁹ The students were first given an anonymous survey asking about their honesty in paying taxes and their beliefs about others’ honesty in paying taxes.⁹⁰ A week later, they were told the findings of the survey.⁹¹ The feedback given to students in the experimental group, which was accurate, was that on average the surveyed students “held the strong personal view that one should be honest in one’s tax matters” but that they thought that “most students would hold these same views to a lesser degree.”⁹² This was explained as an “interesting paradox” with a contrast between what most students “actually think” and “what they think most students think.”⁹³ The feedback given to students in the control group related to beliefs about the extent of feeling informed about tax issues, reporting a similar “paradox,” but presumably unrelated to the normative issue the study was testing.⁹⁴

The students were then given another anonymous survey that, embedded in other questions, contained questions addressing the same information about compliance honesty asked for in the week one survey.⁹⁵ The students who had been given feedback that others’ honesty was higher than they thought increased their perception of others’ honesty, while the control group did not.⁹⁶

⁸⁷ See Wenzel, *supra* note 33.

⁸⁸ *Id.*; see also “Misperceptions of Social Norms about Tax Compliance (1): A Prestudy, Australian National University, Australian Taxation Office, Centre for Tax System Integrity, Working Paper No. 7 (June, 2001), available at <http://ctsi.anu.edu.au/WP7.pdf>.

⁸⁹ 64 first-year psychology students participated in the study. 44 were female and 20 were male. They ranged in age from 17 to 42 years old, with a mean of 22. Wenzel, *supra* note 36.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.* The intervention focused only on prescriptive norms, though the first survey asked questions related to both prescriptive and descriptive norms. *Id.* Prescriptive and descriptive norms are discussed further below, in the context of the follow-up field experiment. See text accompanying note 100, *infra*.

⁹³ Wenzel, *supra* note 36 (emphasis omitted).

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.*

After receiving the feedback, students were given two taxpaying scenarios, one as part of the second survey and one purportedly part of a different study, and asked to specify the degree to which they would report honestly (in the first scenario) or defy the Australian Taxation Office (in the second scenario).⁹⁷ Students in the experimental group indicated significantly more compliance with respect to the first scenario and somewhat less defiance of the Australian Taxation Office in the second scenario than students in the control group.⁹⁸

Following the prestudy, with the support of the Australian Taxation Office, randomly selected taxpayers were sent a survey on their views and their beliefs about others' views, particularly with respect to honesty in claimed tax deductions, including deductions for work-related expenses.⁹⁹ Two groups of taxpayers received feedback on the findings, one relating to beliefs about "injunctive" (or "prescriptive") norms of compliance (what people should do) and the other regarding "descriptive" norms of compliance (what people actually do).¹⁰⁰ As in the prestudy, both of these groups were told that there was an "interesting paradox" relating to a gap in taxpayers' own views and their views of others.¹⁰¹ A third group did not receive feedback, and a fourth group (the control group) received neither a survey nor any feedback.¹⁰²

The study found that the feedback intervention had no significant effect on deductions for work-

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ Wenzel, *supra* note 33. The study included a total of 1,999 Australian individual taxpayers, all of whom were not registered with a tax preparer, had reported wage or salary income greater than 0 in 1999, had not been audited in 1998 or 1999, had not yet filed their 2000 return, and had filed their previous return after September 15. *Id.* (The filing period apparently begins July 1 and the deadline for those who are not registered with a tax agent is October 31. *Id.*)

¹⁰⁰ *Id.*

¹⁰¹ *Id.* Because responding to the survey was voluntary, the results, which did show a discrepancy between taxpayers' own views and their beliefs about others' views might have resulted from self-selection or misrepresentation about their own views because of fear of sanction for reporting acceptance of dishonesty in tax compliance. *See id.*

The prescriptive norm feedback letter stated in part, "[t]hese results indicate that we tend to think most people accept tax cheating and exaggerations in deductions. However, the truth is that most people think we should be honest with our tax statements and claim only those deductions that are allowable." *Id.* The descriptive norm feedback letter stated in part, "[t]hese results indicate that we tend to think most people falsely overstate tax deductions. However, the truth is that most people say they are honest in their tax statements and claim only those deductions that are allowable." *Id.*

¹⁰² *Id.*

related expenses, but did for other deductions.¹⁰³ When both feedback groups were grouped together, taxpayers in those groups claimed significantly fewer non-work-related deductions than did the group that received no feedback and the control group.¹⁰⁴ This was due primarily to strongly significant results of the prescriptive norm group.¹⁰⁵ That group claimed \$151 on average of “other” deductions, compared to \$286 by the control group.¹⁰⁶ The study calculated that an intervention of this type conducted with respect to 100,000 Australian individual taxpayers would result in a revenue gain of over \$2 million.¹⁰⁷

The results of this study are in line with the results of an experiment conducted by the Minnesota Department of Revenue, which also found that a norms-based appeal had a positive effect on tax compliance.¹⁰⁸ In that study, the Minnesota Department of Revenue sent a random sample of taxpayers a letter that stated, in part:

According to a recent public opinion survey, many Minnesotans believe other people routinely cheat on their taxes. This is not true, however. Audits by the Internal Revenue Service show that people who file tax returns report correctly and pay voluntarily 93 percent of the income taxes they owe. Most taxpayers file their returns accurately and on time. Although some taxpayers owe money because of minor errors, a small number of taxpayers who deliberately cheat owe the bulk of unpaid taxes.¹⁰⁹

Comparison of the group that received the letter with the control group suggested that the letter made a modest difference in reported income and taxes paid.¹¹⁰ For a sub-group of taxpayers with a

¹⁰³ *Id.* The experimenters were unable to explain the lack of any effect on work-related deductions. *See id.*

¹⁰⁴ *Id.* Claims for non-work-related deductions did not differ significantly between the group that was surveyed but received no feedback and the group that received no survey. *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* The results for the control group were very similar for the survey-only group. *Id.*

¹⁰⁷ *Id.* That assumes an average tax rate of 16 percent. *Id.*

¹⁰⁸ *See* text accompanying notes 109-112, *infra.*

¹⁰⁹ *Id.* at 5-6.

¹¹⁰ Coleman, *supra* note 33, at 18. Results of a nonparametric test suggested that Letter 2 (the norms letter) was associated with increased compliance. *Id.* at 18-19. That test could not quantify the difference. *Id.* at 10. However, the average Minnesota tax balance of the compliance norm group was \$12 higher than that of the control group. *Id.* at 19.

Another study using the same data found no effect of the compliance norm letter. *See* Marsha Blumenthal, Charles Christian & Joel Slemrod, “Do Normative Appeals Affect Tax Compliance: Evidence from a Controlled

1993 state tax balance falling between a refund of \$90 and taxes owed of \$1,066,¹¹¹ which represented about 36 percent of all taxpayers, average taxes increased by \$48 more than those of the controls.¹¹²

Experiment in Minnesota,” 54 Nat’l Tax J. 125, 131 & Table 2 (2001). That study used multiple regression analysis. *Id.* at 130. The Coleman study used a variety of statistical techniques: analysis of variance, linear regression, recursive modeling, and a Wilcoxon nonparametric statistical test. *See* Coleman, *supra* note 33, at 9-10.

The study by Blumenthal, Christian, and Slemrod also used fewer data points. In the study conducted by the Minnesota Department of Revenue, the initial sample sizes for Letter 1 (a letter making a services-based appeal), Letter 2, and the control group were 19,885, 19,892, and 19,901, respectively, for a total of 59,678. Coleman, *supra* note 33, at 44 Fig. A3. The sample sizes used in the final analyses totaled 53,149 for Letter 1, Letter 2, and the control group. *See id.* at 13, Exhibit 1; e-mail correspondence with Dr. Coleman, on file with the author. The sample size for each group before statistical analyses was 17,783 for Letter 1; 17,679 for Letter 2; and 17,702 for the control group. E-mail correspondence with Dr. Coleman, on file with the author. The reason that the aggregate total of 53,164 differs from the 53,149 total reported may be that a few cases had missing data and therefore were dropped. E-mail correspondence with Dr. Coleman, on file with the author.

In the Blumenthal, Christian, and Slemrod article, the sample sizes initially for Letter 1, Letter 2, and the control group were 20,013, 20,009, and 20,039, respectively. Blumenthal, Christian & Slemrod, *supra*, at 130 Table 1. They eliminated cases for a variety of reasons specified in their article, resulting in yields of 15,615 for Letter 1; 15,536 for Letter 2; and 15,624 for the control group. *See id.* Among other things, Blumenthal, Christian, and Slemrod eliminated data points reflecting zero 1993 positive income, in an effort to exclude taxpayers whose tax situations changed significantly between 1993 and 1994. E-mail correspondence with Dr. Blumenthal, on file with the author; Blumenthal, Christian & Slemrod, *supra*, at 130 & Table 1 (referring to elimination of cases with “[z]ero MN tax liability”). The Coleman study did not eliminate these cases. E-mail correspondence with Dr. Coleman, on file with the author.

In listing their subtractions, Blumenthal, Christian, and Slemrod provide the number of cases eliminated in order to account for duplicate 1994 returns. *See* Blumenthal, Christian & Slemrod, *supra*, at 130 Table 1. They explain that “[b]ecause taxpaying entities with duplicate 1994 returns appear twice in the data set, we subtracted half of them in order to arrive at the number of unique 1993 filers.” *Id.* at 130 n.15. The subtractions in this category for Letter 1, Letter 2, and the control group are 256, 234, and 276, respectively. *Id.* at 130 Table 1. Interestingly, the difference between each initial sample size reported by Blumenthal, Christian, and Slemrod and those reported by Coleman (128 for Letter 1, 117 for Letter 2, and 138 for the control group) is each exactly half of the 256, 234, and 276 cases that Blumenthal, Christian, and Slemrod report eliminating because of duplicate 1994 returns. In other words, it seems possible that with respect to entities filing duplicate 1994 returns, Blumenthal, Christian, and Slemrod eliminated two returns for each one return eliminated by Coleman.

¹¹¹ This and other subgroups in the experiment were selected using “the statistical method of decision tree analysis or recursive modeling, as implemented in the FIRM computer program by Professor Douglas Hawkins The FIRM computer program partitioned the sample into a large number of possible subgroups based on a list of variables that we tried as potential predictors of changes in taxes or income. . . . The program then automatically found the subgroups that had the most significant differences (if any) in the change in taxes or income in relation to the predictor variables or the experimental treatment.” Coleman, *supra* note 33, at 9-10. The study created subgroups based on 1993 data, to protect the randomization. *Id.*

¹¹² *Id.* at 19. This subgroup was selected by computer as having the most pronounced effect, so there is no similar subgroup for the audit letter.

Why are taxpayers affected by others' behavior with respect to and attitudes about tax compliance? One possible explanation is that the expressed views and actions of others provides information about how likely the government is to detect and punish tax evaders.¹¹³ Another possibility is "social validation."¹¹⁴ That is, people frequently decide how to behave by looking to the actions of other similarly situated people.¹¹⁵ This principle is used commercially by salespeople and by charities to encourage contributions.¹¹⁶

Still another possibility, which may co-exist with the others, is that societies may have norms of compliance or noncompliance with tax obligations. There is evidence that, in the United States, tax evasion carries a stigma.¹¹⁷ For example, some states have increased their collection of delinquent taxes by posting the names of tax delinquents on the internet.¹¹⁸

What might explain a societal norm of tax compliance in the United States?¹¹⁹ There is a

¹¹³ Cf. Michael P. Vandenbergh, "Beyond Elegance: A Testable Typology of Social Norms in Corporate Environmental Compliance," 22 Stan. Envtl. L.J. 55, 113 (2003) ("The effect of perceptions of widespread [tax] noncompliance on intentions to comply in the future may result from the norm of conformity, or may simply be the product of a perceived reduction in the risk of formal or informal sanctions.").

¹¹⁴ See Cialdini, *supra* note 34, at 213; see also Bruno S. Frey & Stephen Meier, "Pro-Social Behavior, Reciprocity, or Both?" Institute for Empirical Research in Economics, University of Zurich Working Paper No. 107 3 (2002) (arguing that "there is very important *pro-social behavior that goes beyond reciprocity.*") (emphasis in original), available at <http://www.iew.unizh.ch/wp/iewwp107.pdf>.

¹¹⁵ Cialdini, *supra* note 34, at 213-14 (citing and discussing literature).

¹¹⁶ *Id.* at 214.

¹¹⁷ See Davis, Hecht & Perkins, *supra* note 77, at 7 (citing Wilbur J. Scott & Harold S. Grasmick, "Deterrence and Income Tax Cheating," 17 J. Applied Behav. Sci. 395 (1981)). Davis, Hecht, and Perkins point out that the stigma varies among countries. See *id.*

¹¹⁸ See, e.g., "Department of Revenue Adds More Delinquent Taxpayers' Names to Website," <http://www.dor.state.nc.us/press/jan02/addsnames.html> (February 11, 2002) (discussing North Carolina's success with this tactic); see also note 29, *supra* (listing more states using this approach).

¹¹⁹ Professor Eric Posner has argued that tax compliance is a way in which taxpayers "signal" that they belong to a "good type" with a low "discount rate" and therefore will cooperate in exchanges with other members of society rather than taking advantage of them. See generally Posner, *supra* note 22. (A person with a high discount rate disproportionately values current payoffs, while a person with a low discount rate does not. See Posner, *supra* note 22, at 1786.) Under Posner's model, each individual in the society has private information about his or her own discount rate, so they need a way to convince others that they have a low discount rate. "Talk is cheap"--and therefore unreliable-- but "signals" are costly, observable behaviors that provide no benefit to the signaler other than providing information. *Id.* at 1787. The best signals are those that only "good types" can afford to send-- that is, the investment can only be recovered over the long term. *Id.* at 1788.

Posner's general signaling theory has been criticized by many scholars as inaccurate and unconvincing.

widely studied human tendency to reciprocate and cooperate with others that provides a convincing theoretical base for such a norm.¹²⁰ That is, because people are more likely to contribute to public goods when others do, the development of a sense that others are contributing likely is an important factor in tax compliance. Therefore, the reciprocation impulse may stem from a fairness norm.¹²¹ If that is the case, it is important to determine the effect on perceived fairness of sanctions imposed on those who do not cooperate. These issues are discussed in turn below.

See, e.g., Kahan, *supra* note 11; *see also* Richard H. McAdams, “Signaling Discount Rates: Law, Norms, and Economic Methodology,” 110 *Yale L.J.* 625 (2001) (review of *LAW AND SOCIAL NORMS*); “Commentaries on Eric Posner’s *LAW AND SOCIAL NORMS*,” 36 *U. Rich. L. Rev.* 327-463 (May, 2002) (symposium issue). In addition, as an explanation of taxpayer compliance, the signaling theory has fundamental problems. By definition, signals must be observable by others in the society. Tax compliance generally is not readily observable because the government is required to keep tax return information confidential. *See* I.R.C. §§ 6103, 7431. Taxpayers do not generally disclose their returns to the public for examination. *See* Kahan, *supra* note 11, at 378-79 (“anyone who showed up at a commercial negotiation eager to display his or her latest tax returns would probably be regarded not as a trustworthy business partner but as some kind of freak.”).

However, as Posner points out, there is one extreme at which noncompliance may be observable by others: those who are punished criminally for tax evasion. Posner, *supra* note 22, at 1789 (“It is because detection of violation is so infrequent—it must involve a public prosecution following an audit, which, as we have already noted, is rare—that the response of potential cooperative partners is so severe. In mainstream society, the ex-convict is meticulously avoided.”). Because the punishment is so rare, the argument goes, the stigma is particularly strong, and fear of the stigma prompts others to comply with the law. Posner, *supra* note 22, at 1790. As indicated above, there is evidence that tax evasion in the United States may be stigmatized (even without a criminal conviction), *see* note 117 and accompanying text, *supra*, which supports the force of a compliance norm.

However, the stigma attached to criminal conviction for tax evasion does not support a signaling argument. It may be that many people treat convicted criminals, including those convicted of tax evasion—a tiny minority of the population—as belonging to a “bad type.” However, this does not mean that failure to be convicted of (or even indicted for) tax evasion signals belonging to a good type, it simply means that a particular red flag is absent. In effect, Posner’s argument suggests not that people send signals by paying taxes but rather, that in an economic calculus of whether to evade tax, individuals must factor in not only the nominal sanction but also the stigma or shunning they would experience if caught. *See id.* (“it is no exaggeration that many fear . . . stigma as much as, or more than, fines or imprisonment.”); *see also* Spicer, *supra* note 1, at 16 (“survey research . . . indicates that informal sanctions such as low social standing may be as, if not more important than formal sanctions in motivating compliance.”).

¹²⁰ *See* text accompanying notes 122-169, *infra*; *see also* Smith, *supra* note 76, at 225 (“One of the strongest sociological reasons for expecting that positive behaviors by administrators toward taxpayers will increase the likelihood of compliance is the strong tendency for humans to try to reciprocate, in kind, behaviors directed toward them . . .”) (citations omitted). Professor Dan Kahan has proposed this explanation as a more persuasive alternative to Eric Posner’s signaling explanation of tax compliance. *See* Kahan, *supra* note 11, at 380; *see also* Kahan, *supra* note 35, at 335-344.

¹²¹ *See* Korobkin & Ulen, *supra* note 5, at 1135.

A. Cooperation in Group Effort

Economic models suggest that rational wealth maximizers will not reciprocate with strangers or contribute to public goods in the absence of repeat player interactions where non-contributors can be detected and punished.¹²² Yet, people do cooperate in laboratory experiments, even when play is anonymous and the game does not involve repeated interactions of unknown duration.¹²³

For example, in the “gift exchange game,” which involves setting of a “wage” and “effort levels,” players act to reward fair or generous behavior.¹²⁴ The reciprocation phenomenon also seems to hold true in real world settings, such as the labor market.¹²⁵ Reciprocation in these contexts appears to hinge on contributors’ perception that they are not being taken advantage of. That is, people will contribute when they perceive others doing so but withhold contributions when they perceive defection by others.

Another set of experiments involves what is termed the “ultimatum game,” in which randomly

¹²² See John O. Ledyard, Public Goods: A Survey of Experimental Research, in *THE HANDBOOK OF EXPERIMENTAL ECONOMICS* 111, 112 (John H. Kagel & Alvin E. Roth eds., 1995) (discussing the “economic/game-theoretic” prediction of free riding); cf. Cass R. Sunstein, Social Norms and Social Roles, 96 *Colum. L. Rev.* 903, 909 (1996) (“There is no simple contrast between ‘rationality’ or ‘rational self-interest’ and social norms. Individual rationality is a function of social norms.”) (footnote omitted).

¹²³ See Ernst Fehr & Simon Gächter, “Do Incentive Contracts Crowd Out Voluntary Cooperation?” USC Center for Law, Economics & Organization Research Paper No. C01-3 (2001), available at http://papers.ssrn.com/abstract_id=229047; Ernst Fehr & Urs Fischbacher, “Why Social Preferences Matter— The Impact of Non-Selfish Motives on Competition, Cooperation, and Incentives,” Inst. for Empirical Econ. Working Paper No. 84, ISSN 1424-0459 at 5-6 (2002) (discussing “Dictator Games” and “Ultimatum Games”); Kahan, *supra* note 35, at 335-36 (discussing this literature).

A useful list of the games typically used in these types of experiments, findings, and real life analogies is contained in Colin F. Camerer & Ernst Fehr, “Measuring Social Norms and Preferences using Experimental Games: A Guide for Social Scientists,” Inst. for Empirical Econ. Working Paper No. 97, ISSN 1424-0459 at 7-8 Table 1 (2002) (forthcoming in *FOUNDATIONS OF HUMAN SOCIALITY— EXPERIMENTAL AND ETHNOGRAPHIC EVIDENCE FROM 15 SMALL-SCALE SOCIETIES*, Henrich, Boyd, Bowles, Camerer, Fehr, Gintis & McElreath, eds.)

¹²⁴ This game was developed by Fehr, Kirschsteiger and Riedl. See Ernst Fehr, Georg Kirschsteiger and Arno Riedl, “Does Fairness Prevent Market Clearing: An Empirical Investigation,” 108 *Quarterly J. of Econ.* 437 (1983).

¹²⁵ Kahan, *supra* note 35, at 337 (discussing phenomenon that employees at firms perceived to pay better than average compensation work harder and phenomenon of firms’ avoidance of pay cuts during recessions); see also Daniel Roth, “How to Cut Pay, Lay Off 8,000 People, and Still Have Workers Who Love You,” *Fortune* (Feb. 4, 2002) (“[In Fortune’s interviews] a host of . . . actions were raised: the Hail Mary steps the company took to avoid downsizing; the barrage of e-mails and face-to-face meetings with top management down; even the tired sound in the CEO’s voice as he delivered news of mass layoffs. Together, these created an atmosphere in which people like [Cheryl] Ways—three months after being axed—could say of her bosses, ‘I felt horrible they had to do this,’ and of her former co-workers, ‘This was my gift to them: to leave my job in the best way possible.’”).

paired subjects must divide up an amount of money.¹²⁶ The rules require the subject designated as the proposer making an offer to the other subject, the responder.¹²⁷ The responder is entitled to accept the proposal (and keep that amount) or reject it, in which case both proposer and responder receive nothing.¹²⁸ The game is not repeated between the same players, and they act anonymously.¹²⁹ Economic analysis suggests that the responder will accept any positive amount because that is better than nothing.¹³⁰ However, responders often reject sums offered that were less than 20 percent of the pot, and the probability of rejection increases as the size of the offered amount decreases.¹³¹ Other experiments produce similar results.¹³²

These results suggests that players do not act out of pure self-interest; rational responders should always accept the proposed division. The proposer's actions depend on his or her prediction of the responder's behavior; if the responder rejects the offer, the proposer receives nothing.¹³³ The "dictator" game removes that link, facilitating analysis of the proposer's behavior.¹³⁴ In the dictator game, the proposer is given a fixed sum of money and given the opportunity to divide it with an anonymous second player who has no opportunity to reject the division.¹³⁵ The dictator therefore has no financial incentive to make a positive offer; he keeps whatever he does not give away.

The initial study of the dictator game found that the average offer, though lower than in the

¹²⁶ This game was developed by Guth, Schmittberger, and Schwarze. See Werner Guth, Rolf Schmittberger, and Bernd Schwarze, An Experimental Analysis of Ultimatum Bargaining, 3 J Econ. Beh. & Org. 367 (1982).

¹²⁷ See Fehr & Fischbacher, *supra* note 123, at 5.

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² For example, in the "investment game," an initial player is given a sum of money and given the option of keeping it or transferring some amount, which will be multiplied and given to a second player, who can either keep the amount received or transfer some portion back to the initial player. The second player has every incentive to keep all that he receives. However, typically transfer some of the surplus to the first player. The first player, anticipating that, generally transfer some amount to the second player rather than keeping it all. Kahan, *supra* note 35, at 336-37; see Fehr & Gächter, *supra* note 37, at 162.

¹³³ Theodore C. Bergstrom, "Vernon Smith's Insomnia and the Dawn of Economics as Experimental Science" 21 (working paper, 2002), available at <http://econwpa.wustl.edu:8089/eps/mic/papers/0212/0212001.pdf>.

¹³⁴ See *id.*; Robert Forsythe, Joel L. Horowitz, N.E. Savin & Martin Sefton, "Replicability, Fairness, and Pay in Experiments with Simple Bargaining Games," 6 Games and Economic Behavior 347, 362-63 (1994).

¹³⁵ See Bergstrom, *supra* note 133, at 21.

ultimatum game, was positive, and that many proposers gave away 30 to 50 percent of the stake.¹³⁶ Those results may seem to suggest a taste for equity. However, when the dictator game was redesigned so as to be double blind, providing assurances to the players that even the experimenters did not know which proposer was sharing what amount,¹³⁷ over 60 percent of the proposers transferred nothing and approximately 80 percent transferred 10 percent or less of the stake.¹³⁸ This result suggests the possibility that many players were concerned not with “equity” or “fairness” but instead with the esteem afforded them by the experimenters.¹³⁹

Nonetheless, in the double blind version of the game, which has been replicated in a number of studies, about a third of dictators do share, and on average, they share 8 to 16 percent of the stake.¹⁴⁰ What explains that result? In order to test if reciprocity between dictators and recipient was not completely removed even in the double blind study, one study compared the effect on donations where recipients randomly selected from the general population who were mailed any money that was donated.¹⁴¹ In the first part of the study, a traditional double blind study, 33.34 percent of the dictators donated some money and the average amount shared was 13.33 percent of the initial stake.¹⁴² In the second part, involving randomly selected recipients, 31.48 percent of the dictators donated some money and the average amount shared was 8.89 percent of the initial stake.¹⁴³ The difference in results between the two procedures was not statistically significant.¹⁴⁴

These results suggest that eliminating otherwise consistent behavior of seemingly irrational generosity or reciprocation requires a context in which people are assured of permanent and complete anonymity. And even in that context, approximately one-third of players shared some amount. Human

¹³⁶ *Id.*

¹³⁷ That is, the transfers were made with anonymous envelopes placed in a box. See Magnus Johannesson & Bjorn Persson, “Non-Reciprocal Altruism in Dictator Games,” 69 *Econ. Letters* 138 (2000).

¹³⁸ See Elizabeth Hoffman, Kevin McCabe, Keith Shachat & Vernon L. Smith, “Preferences, Property Rights, and Anonymity in Bargaining Games,” 111 in Vernon L. Smith, ed., *BARGAINING AND MARKET BEHAVIOR* (2000).

¹³⁹ See Bergstrom, *supra* note 133, at 21.

¹⁴⁰ See Johannesson & Persson, *supra* note 137, at 137-38.

¹⁴¹ *Id.* at 138.

¹⁴² *Id.* at 139 (the initial stake was 100 Swedish crowns, approximately \$11.76, *id.* at 138).

¹⁴³ *Id.* at 140.

¹⁴⁴ *Id.* at 141.

behavior may reflect an internalized norm¹⁴⁵ of reciprocation¹⁴⁶ in less artificial contexts; that is, “[w]hat may be wrong is the very idea that human decision interaction can be construed as without a history or a future.”¹⁴⁷

An example of a more realistic context for generosity is provided by a study of University of Zurich student contributions to two University-administered “social funds,” one providing low-cost loans to students in need, and the other supporting foreign students.¹⁴⁸ The study found that, over a period of several years, approximately 68 percent of students at the University of Zurich contributed to at least one of the two funds under what the study authors term “anonymous” conditions.¹⁴⁹ That is, students could decide whether or not to contribute in the privacy of their own homes.¹⁵⁰ However, student contributions were not anonymous to the University because they were made with the tuition payment.¹⁵¹

¹⁴⁵ See Carlson, *supra* note 28, at 1238 (nonlegal rules that people feel compelled to follow because they would feel guilty otherwise are internalized norms). Richard McAdams has persuasively argued that more abstract norms may be internalized, while more concrete ones may not be but may be enforced through the mechanism of esteem. See McAdams, *supra* note 75, at 383. He critiques Robert Cooter’s argument that “a social norm is ineffective in a community and does not exist unless people internalize it.” See *id.* at 377 (quoting Robert D. Cooter, “Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant,” 144 U. Pa. L. Rev. 1665 (1996)).

¹⁴⁶ See Kahan, *supra* note 11, at 368-69. Reciprocity is probably an internalized norm that results from socialization in childhood. See Cialdini, *supra* note 36, at 211. The reciprocity norm spans human societies. *Id.* (citing Alvin Gouldner, “The Norm of Reciprocity,” 25 Amer. Soc. Rev. 161 (1960)). The systems of exchange it allows provide “immense benefit” to the societies that develop them. *Id.*

¹⁴⁷ Vernon L. Smith, ed., BARGAINING AND MARKET BEHAVIOR, *supra* note 138. However, players in the games do seem to be able to distinguish one-shot interactions from repeat play. See Ernst Fehr & Klaus Schmidt, “Theories of Fairness and Reciprocity—Evidence and Economic Application,” CESifo Working Paper No. 403 at 11 (2000), available at <http://www.cesifo.de/pls/guestci/download/F4785/403.PDF>.

¹⁴⁸ See Frey & Meier, *supra* note 117.

¹⁴⁹ *Id.* at 3, 7. The amount of the contribution requested for the low-cost loan fund was CHF 7 (approximately US \$4.20) and the requested contribution to the foreigners’ fund was CHF 5 (about US \$3). *Id.* at 7. These amounts were requested of every student every semester. *Id.* From 1998 to 2001, on average approximately 61 percent of students contributed to both funds and 68 percent contributed to at least one. *Id.* at 8. The manner of requesting contributions changed in 1998. See note 168, *infra*. Before the change, the only option was to contribute to both funds or to neither fund. Frey & Meier, *supra* note 117, at 11. From 1993 through 1997, on average, 44 percent of students contributed to both funds. *Id.* at 11, 28 Figure 3.

¹⁵⁰ *Id.* at 8.

¹⁵¹ See *id.* at 11. Until the winter 1998 term, students received two tuition invoices, one with no contribution to the social funds and one with contributions to both social funds. *Id.* After that term, the University began registering students electronically. During the registration process, students were allowed to opt to tick off boxes if they wished to contribute to either or both funds. *Id.* The University sends an invoice approximately a month later

The games described above involve two-party exchanges, but contribution games that attempt to replicate the public goods context also find that players cooperate despite economic incentives to free ride.¹⁵² For example, in the “group exchange” game, a group of strangers is given an initial sum and then given the opportunity, in secret, to retain it or invest some or all of it in a group fund.¹⁵³ The players are told that the amount in the fund will be doubled (or multiplied by some number greater than one and less than the total number of players) and then will be redistributed equally to all players regardless of whether a player has contributed or not.¹⁵⁴ The game is played for a finite number of rounds stated in advance (usually 10 rounds).¹⁵⁵

Each player’s maximizing strategy is to free ride on the contributions of the others, although that will not maximize the overall return to the group.¹⁵⁶ However, experiments have shown that many participants do contribute, and, on average, players start out by contributing 40 to 60 percent of the initial sum they received.¹⁵⁷ In subsequent rounds, players’ contributions reflect the contributions of others, so that, in the typical situation in which a few players free ride,¹⁵⁸ other players gradually reduce

that includes the requested contribution amount. *Id.* In neither scenario is the amount of any particular student’s contribution anonymous to the University.

The study found a lower probability of contribution (by 2.3 percentage points) by students about to begin the first semester of study and an even lower probability of contribution (by 6.6 percentage points) by students about to begin the final semester of study, where students no longer attend classes. *Id.* at 13. The authors find this consistent with the hypothesis of pro-social behavior in terms of attachment to the University as an organization. *Id.* at 12-13. However, it also seems consistent with consideration for the esteem of University administrators. Arguably, students may be most concerned about esteem of administrators while they are physically on campus attending classes than before or after that period of study.

¹⁵² See Ledyard, *supra* note 122, at 112-13 (discussing public goods games); see also Kahan, *supra* note 35, at 335-36 (discussing these games).

¹⁵³ See Ledyard, *supra* note 122, at 112-13.

¹⁵⁴ Korobkin & Ulen, *supra* note 5, at 1140; see also Ledyard, *supra* note 122, at 112.

¹⁵⁵ See Kahan, *supra* note 35, at 335; Fehr & Schmidt, *supra* note 1447, at 7 (10 periods).

¹⁵⁶ That is, each player rationally should contribute zero in the last round. Elinor Ostrom, “Collective Action and the Evolution of Social Norms,” 14 J. Econ. Perspectives 137, 139 (2000). Therefore, each player should contribute zero in the penultimate round, and so on. *Id.*

¹⁵⁷ See *id.* at 140. The same level of contribution also holds for a one-round public goods game. *Id.*

¹⁵⁸ As discussed below, the availability of punishments limits free riding. See text accompanying notes 228-236, *infra*. Even the addition of “cheap talk”—where players can assure each other that they will contribute—decreases free riding. See Kahan, *supra* note 35, at 336 (citing Ledyard, *supra* note 122, at 156-58; Ostrom, *supra* note 156, at 140-41).

their own contributions,¹⁵⁹ so that the average contribution is very low in the last round.¹⁶⁰

An experiment that included a surprise “restart” after ten rounds ruled out learning as an explanation for the decline in contributions.¹⁶¹ Further experiments suggest that the explanation is that many players are “conditional cooperators” who begin with cautious cooperation and then respond to others’ actions.¹⁶² For example, one study found that approximately one third of players in a public good experiments free ride.¹⁶³ That study also found that approximately 50 percent of the players were conditional cooperators so that their contributions increased in response to increases in others’ contributions.¹⁶⁴ An additional 14 percent were conditionally cooperative up to certain contribution levels and then decreased their contributions.¹⁶⁵ In other words, a majority of players will begin a repeat play game by cooperating and in subsequent rounds will respond to others’ contributions.¹⁶⁶

The tax context is somewhat more complicated because it involves a much more indirect the

¹⁵⁹ In the round that was specified in advance to be the last round, typically 70 percent of players contribute nothing. Ostrom, *supra* note 156, at 140.

¹⁶⁰ See Kahan, *supra* note 35, at 335-36; Claudia Keser & Frans van Winden, “Conditional Cooperation and Voluntary Contribution to Public Goods,” 102 Scandinavian Journal of Economics __ (2000) (working paper available at <http://www.tinbergen.nl/discussionpapers/00011.pdf>).

¹⁶¹ See James Andreoni, “Why Free Ride? Strategies and Learning in Public Goods Experiments,” 37 J Public Econ 291 (1988). This result has been found in subsequent studies. See Rachel T.A. Croson, “Partners and Strangers Revisited,” 53 Econ. Letters 25 (1996).

¹⁶² See Spicer, *supra* note 1, at 16 (“Public choice theory suggests that the free-rider problem can be reduced if individuals pursue a strategy of conditional cooperation”); see also Kahan, *supra* note 11, at 375 (“Such studies [of collective action dynamics] consistently show that most individuals in collective action settings tend to adopt a conditionally cooperative stance, contributing to collective goods if and to the extent that they perceive the others are inclined to do the same.”); Ostrom, *supra* note 156, at 142 (“Conditional cooperators are the source of the relatively high levels of contributions in one-shot or initial rounds of prisoner’s dilemma and public goods games.”); see also James Andreoni, “Cooperation in Public Goods Experiments: Kindness or Confusion?,” 85 Amer. Econ. Rev. 891 (1995); Keser & van Winden, *supra* note 160 (finding support for conditional cooperation in 25-round comparison of partner and stranger conditions in game with 6 stranger sessions).

¹⁶³ Urs Fischbacher, Simon Gächter & Ernst Fehr “Are People Conditionally Cooperative? Evidence from a Public Goods Experiment,” Inst. for Empirical Econ. Working Paper No. 16, ISSN 1424-0459 at 3 (2000), available at <http://www.iew.unizh.ch/wp/iewwp016.pdf>.

¹⁶⁴ *Id.* at 3.

¹⁶⁵ *Id.* at 8.

¹⁶⁶ A study carefully designed to distinguish conditional cooperators from other players found evidence of conditional cooperators. See Joep Sonnemans, Arthur Schram & Theo Offerman, “Strategic Behavior in Public Goods Games: When Partners Really Become Strangers,” Working Paper at 9, available at <http://www1.fee.uva.nl/creed/pdf/strat.pdf>.

return of goods and services in kind than public goods experiments do. Taxpayers may therefore factor in not only the compliance behavior of others but also the government's compliance with the contract to provide public goods.¹⁶⁷ Professor John Scholz has advanced this "contractarian" theory of tax compliance.¹⁶⁸ Currently available evidence on the question of whether taxpayers take account of services provided by the government in determining their level of compliance is inconclusive.¹⁶⁹ One possibility is that, at least if the government provides some minimum level of service to the society, the perception that others are contributing may be more important than the perception that one's own contributions are returned in kind by the government, particularly given the redistributive nature of taxes.

C. The Effect of Enforcement on Compliance Norms

When people are inclined to contribute voluntarily, will the addition of incentives to contribute or sanctions for noncontribution backfire? Professor Kahan has stated that "far from promoting compliance, simply increasing the penalties for evasion has been shown to undermine it, at least in societies that otherwise enjoy relatively compliant norms."¹⁷⁰ He supports this assertion in the next two

¹⁶⁷ See Andreoni, Erard & Feinstein, *supra* note 10, at 851 (discussing literature).

¹⁶⁸ See generally John T. Scholz, "Contractual Compliance and the Federal Income Tax System," 13 Wash. U. J. L. & Pol'y __ (2003) (forthcoming); cf. Lee Anne Fennell & Christopher C. Fennell, "Fear and Greed in Tax Policy: A Qualitative Research Agenda," 13 Wash. U. J. L. & Pol'y __ (2003) (forthcoming). Scholz's theory draws on Yoram Barzel's model of the state, which contemplates a give-and-take between governor and governed. See Yoram Barzel, *A THEORY OF THE STATE: ECONOMIC RIGHTS, LEGAL RIGHTS, AND THE SCOPE OF THE STATE* (2002).

¹⁶⁹ A letter sent as part of the compliance experiment conducted by the Minnesota Department of Revenue making an appeal based on the valuable services provided by the state, see Coleman, *supra* note 33, at 5, found no statistically significant effect. See *id.* at 16, 18; see also Blumenthal, Christian & Slemrod, *supra* note 110, at 130-32 (also reporting results from the Minnesota study). A laboratory experiment found that compliance is greater when the majority vote of players determines the use of their contributions to a public good and higher when the vote is decisive, not close. See James Alm, Betty R. Jackson & Michael McKee, "Fiscal Exchange, Collective Decision Institutions, and Tax Compliance," 22 J. Econ. Behav. & Org. 285 (1993), cited in Alm, Jackson & McKee, *supra* note 29, at 324-25.

An older study found positive effects of an appeal to conscience. See Schwartz & Orleans, *supra* note 60, at 295-96. In that study, taxpayers who were interviewed using a survey containing questions focusing on conscience-based reasons to pay tax, including the activities funded by taxes, increased their income tax after credits from one year to the next by a mean of \$243 compared to \$11 for those responding to survey focusing on sanctions for tax evasion, and a mean decrease of \$40 for a treated control and \$57 for an untreated control. Unfortunately, the study did not isolate a services-based rationale for contribution from one that might appeals to a norm of reciprocal cooperation. See *id.* at 287 n.46 ("The set of questions intended to induce a conscience effect were designed to arouse motives for paying taxes ranging from guilt at violation to a patriotic desire to support the government in its most valued activities."). One question in the "conscience" survey focused on people "putting their own self interest above the interest of others," for example. See *id.* at 288 n.46. That may raise notions if the esteem-worthiness of the behavior.

¹⁷⁰ Kahan, *supra* note 11, at 377. He does not provide a citation in support of this proposition but in the next two sentences refers to two studies, as discussed in the text. See text accompanying notes 171-184, *infra*.

sentences with reference to two studies, one by Schwartz and Orleans, which involved surveys emphasizing either the severity of sanctions for tax evasion or moral reasons to pay taxes¹⁷¹ and one by Sheffrin and Triest involving students shown statements about IRS plans to increase audits.¹⁷² However, these studies do not provide convincing support for the proposition.

Professor Kahan asserts that the Schwartz and Orleans study “found that taxpayers who were exposed to information emphasizing the severity of tax-evasion penalties claimed more deductions than did similarly situated taxpayers exposed either to a moral appeal or to no information at all.”¹⁷³ That study did find a greater effect of the conscience-based appeal than the sanctions threat.¹⁷⁴ However, it did not find that the sanction treated taxpayers claimed more deductions than those exposed to no information; rather, “the untreated control shows even higher deductions than the sanction treated group.”¹⁷⁵ In addition, income tax after credits (a more accurate measure of taxes paid than claimed

¹⁷¹ Kahan, *supra* note 11, at 377 (citing Schwartz & Orleans, *supra* note 60, at 298-99).

¹⁷² *Id.* (citing Steven M. Sheffrin & Robert K. Triest, “Can Brute Deterrence Backfire? Perceptions and Attitudes in Taxpayer Compliance,” 212-13 in WHY PEOPLE PAY TAXES, *supra* note 1).

¹⁷³ *Id.* (citing Schwartz & Orleans, *supra* note 60, at 298-99).

¹⁷⁴ Schwartz & Orleans, *supra* note 60, at 295 (mean increase in AGI of \$804 for the moral appeal group and \$181 for the sanction group).

It would be interesting to try to replicate this result now, approximately 40 years after that survey was done. (The survey must have been conducted in the spring of 1963, *see* Schwartz & Orleans, *supra* note 60, at 285-86 (taxpayers “were interviewed during the month before filing their returns”); *id.* at 294 (returns for fiscal year 1961 were filed before the interview and for fiscal year 1962 were filed after the interview)).

¹⁷⁵ *Id.* at 298. The “placebo control” which is the group of taxpayers that was interviewed with a survey that did not contain questions focused on either sanctions or moral reasons to pay taxes, *id.* at 288, did have a lower increase in claimed deductions than the conscience group, *id.* at 298.

The untreated control had the highest average increase in deductions between 1961 and 1962 (\$320). The sanction threat group had the next highest (\$273). The conscience appeal had the next highest (\$177) and the placebo control had the lowest (\$132). *Id.* at 296 Table V. One issue in this study may be the small number of taxpayers in each group. The sanction group had 87 taxpayers, the conscience appeal and placebo groups each contained 88, and the untreated control had 111. *Id.* Schwartz and Orleans state, in part:

those threatened with sanction had a mean increase in deductions [between 1961 and 1962] of \$273 compared with \$177 for the normative group. It is tempting to interpret this difference as meaning that the threatened group said: “You may beat me into admitting higher income, but I’ll find a way of getting it back.” One might also infer that the conscience-appeal group kept its deductions low in the recognition of the importance of tax payments for the welfare of the country.

These interpretations lose force, however, from the position of the two control groups on deductions. . . .

deductions) *increased*, on average, by \$11 for those responding to the survey focused on sanctions for tax evasion, compared to an average *decrease* of \$40 for the treated control and \$57 for the untreated control.¹⁷⁶

The Sheffrin and Triest study also does not support Professor Kahan's assertion that "increasing the penalties for evasion has been shown to undermine it"¹⁷⁷ The Sheffrin and Triest study had nothing to do with increased penalties for evasion but rather was designed to test their view that (1) "'tax gap' stories tend to be alarmist and defeatist and can breed public skepticism. . ."¹⁷⁸ and (2) "specific and detailed stories about compliance problems are less likely to have deleterious effects on overall perceptions."¹⁷⁹

The study posed questions to economics students after they read one of two statements.¹⁸⁰ One group of students read the following statement:

The Internal Revenue Service is increasing the resources it is devoting to auditing tax returns and improving tax compliance. New computer systems are being installed and the IRS is improving its ability to use these computers to check for completeness and accuracy of returns. The goal of the IRS is to make sure that all taxpayers, corporations as well as individuals, are paying their fair share of taxes.¹⁸¹

The other group read the following statement before they answered the questions:

Id. at 298 (footnote omitted).

¹⁷⁶ *Id.* at 296 Table V. The conscience appeal had the strongest effect, with a mean \$243 increase in income tax after credits. *Id.*

¹⁷⁷ Kahan, *supra* note 11, at 377.

The Sheffrin and Triest study has also been cited for the proposition that an increase in audit rates will increase noncompliance. *See* Vandenberg, *supra* note 113, at 113 & n.202. The logic seems to be that an increase in audit rates signals taxpayer dishonesty, which in turn will lower compliance. *See id.* at 113 & n.201. However, Sheffrin and Triest did not study whether an increase in audit rates lowered compliance or even whether such an increase would affect the perceived dishonesty of others. *See generally* Sheffrin & Triest, *supra* note 172. Other studies have found that higher audit rates correlate with higher compliance rates. *See* note 72 and accompanying text, *supra*.

¹⁷⁸ Sheffrin & Triest, *supra* note 172, at 211.

¹⁷⁹ *Id.*

¹⁸⁰ The Sheffrin & Triest article does not state that these are actual press accounts. *See id.*

¹⁸¹ *Id.*

The Internal Revenue Service announced today that the “tax gap” or the total of taxes which are due to the IRS but have not been collected have reached over \$100 billion. The director of the IRS testified to Congress that the IRS was stepping up its efforts to collect these unpaid taxes. New computer systems were being installed, the director noted, to aid in collecting these funds.¹⁸²

Kahan states that the “study found that individuals who were shown actual press accounts of an IRS plan to attack the ‘tax gap’ with stepped-up auditing displayed a weaker commitment to paying their own taxes.”¹⁸³ In fact, the economics students in the study who were exposed to the “tax gap” statement showed a more negative attitude toward the tax system and tax compliance than the students who read the other statement, but the effect was small and statistically insignificant.¹⁸⁴ The study made no comparison with any other students or taxpayers.

These results are not surprising. However, they do not show that the threat of audit (much less increased penalties) decreases compliance; the study was not designed to test that. Rather, the study shows that publicity of large tax gap figures tend to increase others’ perceived dishonesty.¹⁸⁵ If auditing will remain low even after the increase,¹⁸⁶ the increase may not be sufficient to convince conditionally cooperative taxpayers that they will not be “chumps” if they pay all of their taxes.¹⁸⁷

¹⁸² *Id.* at 211-12.

¹⁸³ Kahan, *supra* note 11, at 377.

¹⁸⁴ Sheffrin & Triest, *supra* note 172, at 212; *see id.* at 213 Table 6, Questions 1 and 2. Sheffrin and Triest referred to this as the “attitude toward government” variable. *Id.* at 212.

Reading the “tax gap” statement was associated with statistically significant decreases in others’ perceived honesty and the perceived probability of being caught when cheating by a small amount. *Id.* at 213.

¹⁸⁵ *See* Sheffrin & Triest, *supra* note 172, at 213.

¹⁸⁶ The “tax gap” statement in Sheffrin and Triest provides, in part, “The director of the IRS testified to Congress that the IRS was stepping up its efforts to collect these unpaid taxes. New computer systems were being installed, the director noted, to aid in collecting these funds.” *Id.* at 212. This does not necessarily imply a substantial increase in audits.

¹⁸⁷ *Cf.* Janet Novack, “Are You a Chump?” *Forbes* 122, 125 (March 5, 2001) (“how can the IRS assure folks who are paying their fair share that they’re not chumps?”) (*quoting* former Commissioner Lawrence B. Gibbs); Frey & Meier, *supra* note 117, at 9 (“Individuals dislike being a so-called ‘sucker,’ i.e., being the only one who contributes to a public good while the others free ride.”); *see also* Dan M. Kahan, “What Do Alternative Sanctions Mean?,” 63 *U. Chi. L. Rev.* 591, 604 (1996) (“Even a strong propensity to obey the law . . . can be undercut by a person’s ‘desire not to be suckered.’”); Stark, *supra* note 29, at 123 (“The compliant taxpayer does not want to be the chump for someone who does not pay his taxes but nevertheless shares in the collective benefit defrayed by the taxes collected. Thus, a sense of satisfaction must arise when the noncompliant taxpayer is found out and made to pay the piper.”).

In fact, Kent Smith’s analysis of a survey performed for the IRS showed that a higher belief in the perceived likelihood that small tax cheaters would be caught *decreased* the normative acceptability of underreporting.¹⁸⁸ This was consistent with his hypothesis that “[c]itizens . . . are more likely to take their taxpaying obligations seriously if they perceive that the state does also. A primary indicator of the state’s interest is its concern with detecting and punishing noncompliance.”¹⁸⁹

The trick may be to portray enforcement as a means to bring into compliance what amounts to a small minority of taxpayers, rather than implying that noncompliance is the norm. See Vandenberg, *supra* note 113, at 115 (“To avoid sending the message that noncompliance is widespread among similar others, enforcement announcements may achieve greater success if they focus less on large, high-profile announcements than on broad, low-profile actions. If high-profile announcements are necessary for reasons unrelated to informal social regulation (e.g., to maintain congressional or public support for enforcement), the message may need careful scripting to convey the notion that compliance is widespread, that the rare instances of noncompliance occur among dissimilar others, and that the noncompliance will likely lead to detection and large formal and informal sanctions.”) (footnote omitted); cf. Coleman, *supra* note 33, at 5-6 (stating, in norms letter mailed to randomly selected taxpayers, “[m]ost taxpayers file their returns accurately and on time. Although some taxpayers owe money because of minor errors, a small number of taxpayers who deliberately cheat owe the bulk of unpaid taxes.”).

Arguably, the offer-in-compromise program may undermine taxpayer assurance that others are paying their tax obligations, by letting taxpayers who legally owe taxes compromise those obligations for a small fraction of the liability. The following table provides a time trend of the offer-in-compromise program:

Fiscal Year	Amount Accepted in Compromise (Millions of Dollars)	Total Tax Liability Compromised (Millions of Dollars)	Amount Accepted as Percentage of Total Tax Liability
1997	295.0	1986.8	15
1998	290.1	1971.2	15
1999	311.6	2355.6	13
2000	316.2	2586.9	12
2001	340.8	2688.7	13

See “IRS Should Evaluate the Changes to its Offer in Compromise Program,” GAO-02-31 (2002), Appendix I Table 5, reprinted at 2002 TNT 60-22.

¹⁸⁸ Smith, *supra* note 76, at 244 Fig. 2, 245.

¹⁸⁹ *Id.* at 240 Fig. 1, 241.

In an oft-cited observation, Chester Bowles, the Administrator of the Office of Price Administration during the Second World War, asserted that twenty percent of the regulated community will automatically comply with any regulation just because it is the law, five percent will seek to evade the regulation, and the remaining seventy-five percent will comply as long as they believe that the evading five percent will be caught and punished.

Empirical evidence more generally does not support Professor Kahan's assertion that increased penalties undermine compliance.¹⁹⁰ Studies have found that the fear of sanctions increases tax compliance.¹⁹¹ An IRS study found that audits increase reporting compliance; "the average indirect effect of . . . audits started in 1991 was about 11.7 times as large as the average adjustment directly proposed by audits closed that year."¹⁹²

Vandenbergh, *supra* note 113, at 129 (citing Eugene Bardach & Robert A. Kagan, GOING BY THE BOOK: THE PROBLEM OF REGULATORY UNREASONABLENESS 65 (1982) (citing Chester Bowles, PROMISES TO KEEP: MY YEARS IN PUBLIC LIFE, 1941-1969 25 (1971))).

¹⁹⁰ See Blackwell, *supra* note 72, at 14 (meta-analysis of available studies finds positive effect of sanction rate on compliance); Andreoni, Erard & Feinstein, *supra* note 10, at 841 ("Experimental studies consistently show that both the penalty rate and probability of audit have a positive influence on compliance, in accordance with theory. However, Alm, Jackson, and McKee . . . find that when these variables are set at levels consistent with those observed in practice their deterrent effect is quite small.") (footnote omitted) (citations omitted); see also note 77, *supra*.

¹⁹¹ See Spicer, *supra* note 1, at 15 (citing studies); Mason & Calvin, *supra* note 76, at 493 (analysis of results of survey of Oregon taxpayers found that "[s]anction fear . . . is strongly related to compliance . . .").

An older study involved surveys on political and civic issues, emphasizing tax policy questions and conducted during tax filing season. See Schwartz & Orleans, *supra* note 60, at 285-86. One group was asked a series of questions focusing on possible sanctions for tax evasion, another group was asked a series of questions focusing on conscience-based reasons for tax compliance, and a third group was asked only the basic interview questions, not the tax compliance questions. A fourth group was not interviewed. *Id.* Among other things, the study looked at the first response to an open-ended question about reasons for paying taxes. The taxpayers with the highest socio-economic status (by occupation and education) was quite responsive to the threat of sanction but not to the moral appeal. *Id.* at 290-91. The group with the lowest socio-economic status showed the opposite trend, responding positively to the moral appeal and slightly negatively to the sanction interview. *Id.* The study also considered the taxpayers' difference in federal income tax after credits reported for 1961 and 1962. See *id.* at 296. The sanction threat increased income tax after credits by \$11, which compared favorably to decreases in the two control groups but was substantially lower than the \$243 for the group exposed to the conscience appeal. See *id.*

¹⁹² Alan H. Plumley, "The Impact of the IRS on Voluntary Tax Compliance: Preliminary Empirical Results," (2002), reprinted at 2002 TNT 224-22 [hereinafter, Plumley, Impact of the IRS]. Plumley found that "if the AuditRate had been one percentage point higher in 1991, the general population would have reported an additional \$ 56 billion of additional tax voluntarily." *Id.* The "AuditRate" variable was defined as the number of district audits started in the fiscal year in question divided by the number of returns filed in the prior tax year. *Id.* The AuditRate for 1991 in the Plumley study was .65 percent. Alan H. Plumley, "The Determinants of Individual Income Tax Compliance: Estimating the Impacts of Tax Policy, Enforcement, and IRS Responsiveness," Internal Revenue Service Publication 1916 (November 1996) at 36 [hereinafter, Plumley, Determinants of Compliance].

An earlier study that used different methodology found that the indirect effect of audits was responsible for six out of every seven dollars of revenue. See Jeffrey A. Dubin, Michael A. Graetz & Louis L. Wilde, "The Effect of Audit Rate on the Federal Individual Income Tax, 1977-1986," 43 Nat'l Tax J. 395, 405 (1990). However, that study did not directly measure noncompliance. See Marsha Blumenthal, Charles Christian & Joel Slemrod, "The Determinants of Income Tax Compliance: Evidence from a Controlled Experiment in Minnesota," NBER Working Paper 6575 at 11, available at <http://www.nber.org/papers/w6575>. It could not distinguish changes in IRS collections due to the audit

The intuitive notion that the threat of audit increases compliance for most taxpayers is also supported by the results of the study conducted by the Minnesota Department of Revenue.¹⁹³ That study tested five compliance strategies, including audits with prior notice to taxpayers that their returns would be “closely examined.”¹⁹⁴ Taxpayers were randomly selected for inclusion in the five experimental groups and parallel control groups.¹⁹⁵ The study measured the impact of the compliance strategies tested by comparing 1993 and 1994 reported income and taxes paid by each taxpayer in the study.¹⁹⁶

Taxpayers in the “audit group” of the Minnesota study were sent a letter stating that they had been selected to participate in a study that would “increase the number of taxpayers whose 1994 individual returns are closely examined,” that their 1994 state and federal returns would be examined by the Minnesota Department of Revenue, that they would be contacted about any discrepancies, and that discovery of “irregularities” might lead to examination of their prior years’ returns, as well.¹⁹⁷

rate from those due to changes in the economy or in the tax law. *Id.* The Dubin, Graetz and Wilde study found that by 1986, if the audit rate had stayed at the level it was at in 1977, total reported tax would have increased by 15.6 billion 1986 dollars. Dubin, Graetz & Wilde, *supra*, at 404. Of course, these studies do not show whether the indirect effect of audits was due to deterrence, securing a compliance norm, or some combination of the two.

¹⁹³ This does not necessarily mean that the threat of audit buttressed compliance norms, however.

To determine the effect of an audit on subsequent compliance, one study used a data set consisting of taxpayers subject to a non-random audit in 1980 or 1981 and a TCMP audit in 1982; taxpayers subject to a non-random audit in 1983 or 1984 and a TCMP audit in 1985; and taxpayers subject to a TCMP audit in 1982 or 1985 but no audit in 1980, 1981, 1983, or 1984. *See* Brian Erard, “The Influence of Tax Audits on Reporting Behavior,” 98-99 in WHY PEOPLE PAY TAXES, *supra* note 1. First, the study considered whether taxpayers with tax changes in a prior audit had lower tax changes upon TCMP audit than other taxpayers. It found that a “substantial proportion of taxpayers demonstrate improvements in compliance following a large audit assessment.” *Id.* at 113. However, this result did not establish whether the prior audit was a positive influence because it is consistent with regression to the mean. *Id.* The study then compared compliance of taxpayers who had experienced a prior audit with taxpayers who had not, controlling for a variety of factors. *Id.* at 101. This method did not find a positive relationship between a prior audit and compliance without adding the assumption that taxpayers audited in one year are more likely to be noncompliant in future years than taxpayers who were not audited. *Id.* at 113.

¹⁹⁴ Coleman, *supra* note 33, at 1, 5. A total of 4 different letters were mailed to taxpayers, not including the letter sent with the “test form” booklet. *See id.* at 48-52.

¹⁹⁵ *Id.* at 1, 7. The selected taxpayers were chosen from taxpayers who were full-year Minnesota residents in 1993, filed a 1993 return in 1994 that had been processed by September 1994, and with respect to whom federal income tax data were also available. *Id.* at 1. Amended returns were not included. *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Id.* at 3.

Minnesota did carry through on the threat.¹⁹⁸

The study found that the threat of audit increased reported income and taxes paid for low- and middle-income taxpayers, about 96.7 percent of the population.¹⁹⁹ The study also compared taxpayers in “high-risk” and “low-risk” sub-groups, with the high-risk group designed to be taxpayers with income not subject withholding.²⁰⁰ When low- and middle-income taxpayers were subdivided into low-risk and high-risk groups, the high-risk groups showed a greater increase in reported taxes, averaging \$186 more than the controls, compared to \$36 for the low-risk group.²⁰¹ Overall, once the results were weighted to make the sample proportional to the underlying population, the average tax increase in for low- and middle-income taxpayers in the audit letter group over the controls was \$41,²⁰² which, for the population of Minnesota, would amount to \$73 million.²⁰³

In fact, the results of the Minnesota study suggest that some taxpayers respond more positively to the threat of audit and some respond more positively to normative appeals.²⁰⁴ Overall, the experimenters concluded that “the examination and information strategies motivated

¹⁹⁸ The Minnesota Department of Revenue also audited other taxpayers that year, but not with respect to their 1994 returns. E-mail correspondence with Dr. Stephen Coleman (on file with the author).

¹⁹⁹ *Id.* at 10. This was defined as 1993 federal AGI of below \$10,000 and \$10,000 to \$100,000, respectively. *Id.* at 11.

²⁰⁰ More technically, it was defined as filing of a federal Schedule C (for self-employment income) or Schedule F (for farm income) in 1993 and payment of Minnesota estimated taxes in 1993. *Id.* at 2. Minnesota required taxpayers to make quarterly estimated tax payments if expected income will exceed withholding and tax credits by \$500 or more. *Id.* at 2. The inclusion of this factor was designed to exclude those with a small business or farm with little income from it. *Id.* However, this could result in misclassifying as low-risk taxpayers who evade taxes by not filing a Schedule C or F that they should or by not paying estimated taxes that are actually due.

²⁰¹ *Id.* at 12.

²⁰² *Id.* at 12, 22.

²⁰³ Stephen Coleman, “Income Tax Compliance: A Unique Experiment in Minnesota,” 13 Gov’t Fin. Rev. 11, 14 (1997). The audit letter had mixed results, possibly negative overall, on the high-income group (defined as 1993 federal AGI of over \$100,000). Coleman, *supra* note 33, at 11.

²⁰⁴ Coleman, *supra* note 33, at 25.

The audit letter apparently had an overall negative effect on taxpayers who had paid a penalty with respect to their 1993 federal income taxes, and the higher the penalty, the larger the negative effect. Coleman, *supra* note 33, at 20. It may be that this increases the adversarial nature of the process, encouraging some taxpayers to view their return as the opening move in a game, *see* note 208 and accompanying text, *infra*, or perhaps those taxpayers were trying to recoup the amount of the penalty they paid, *cf.* Andreoni, Erard & Feinstein, *supra* note 10, at 843-44 (discussing study in which the effect of a prior audit was small and statistically insignificant and suggesting, among other possibilities, that taxpayers “want to evade by more in the future in an attempt to ‘get back’ at the tax agency.”).

different segments of the taxpayer population.”²⁰⁵ For example, the audit letter had mixed results, possibly negative overall, on the high-income group²⁰⁶ (defined as 1993 federal adjusted gross income of more than \$100,000²⁰⁷). This may be because sophisticated taxpayers believe that the tax paid on audit depends on a negotiation process so that it is best to begin with a low “opening bid.”²⁰⁸ The experimenters were unable to determine the dollar impact of any negative effect.²⁰⁹

Might the threat of audit undermine a normative appeal? The evidence suggests the contrary. First, the subgroup of Minnesota’s compliance norm group whose returns had been adjusted the prior year reported \$278 more in tax than the controls,²¹⁰ suggesting that enforcement combined with normative appeal can be a particularly potent combination.²¹¹ Second, with respect to taxpayers who had had an adjustment of their prior year’s taxes, both the audit letter and the compliance norm letter increased the amount of income reported and of taxes paid.²¹² This is consistent with a study of 1982 and 1985 IRS data by Brian Erard, which found that there was a strong tendency for taxpayers who had experienced substantial prior year audit assessments to increase compliance.²¹³

Another relevant data point with the respect to the impact of enforcement is the effect on

²⁰⁵ Coleman, *supra* note 203, at 14.

²⁰⁶ Coleman, *supra* note 33, at 12-13.

²⁰⁷ *Id.* at 11.

²⁰⁸ Blumenthal, Christian & Slemrod, *supra* note 192, at 21. The authors reject the possibilities that it was primarily due to differential dropout rates in the experimental and control groups or increased use of tax preparers to find “legal” ways to minimize tax liability. *See id.* at 20-21 & n.15.

²⁰⁹ Coleman, *supra* note 33, at 13.

The effects of the audit letter are inconsistent with the results of a study of TCMP data in the 1980s. *See* Helen V. Tauchen, Ann Dryden Witte & Kurt J. Baron, “Tax Compliance: An Investigation Using Individual TCMP Data,” NBER Working Paper No. 3078, at 17 (1989) (finding small but positive effects of audits on reported income by taxpayers in all of their income groups (which excluded taxpayers reporting significant business income) but statistically significant effects only on high-income taxpayers, defined as those with income over \$50,000).

²¹⁰ *Id.* at 25.

²¹¹ In addition, the audit threat letter was publicized by Minnesota media. *Id.* at 3. The experimenters were uncertain of the effect of the media coverage but argued that it likely increased the credibility of the audit threat. *Id.* However, it is also possible that those who received the norms letter got an impression from media reports that audits were increasing.

²¹² *Id.* at 20.

²¹³ *See* Erard, *supra* note 193, at 105 (using data from the Taxpayer Compliance Measurement Program). In the Minnesota study, the effect for both the audit letter group and the compliance norm letter group was stronger when the adjustment had been in favor of the taxpayer. *See* Coleman, *supra* note 33, at 20.

voluntary compliance of criminal convictions for tax evasion, which the IRS publicizes.²¹⁴ The economic model of tax compliance suggests that the possibility of criminal sanction should increase tax compliance.²¹⁵ However, some have argued that publicizing convictions for tax evasion may have a deleterious effect on compliance.²¹⁶ For example, Professor Joshua Rosenberg has argued:

In our country, the models for tax evasion are often wealthy, important, and successful people. Unfortunately, when we hear about Leona Helmsley evading taxes and going to jail, some of us say to ourselves “we had better pay our taxes,” but many others tend to

²¹⁴ Publicity has the important effect of increasing the perceived risk of tax evasion because individuals tend to use an “availability” heuristic, viewing as more frequent events that are more easily recalled than other events, even if they are in fact less frequent. See Amos Tversky & Daniel Kahneman, “Judgment Under Uncertainty: Heuristics and Biases,” in *JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES* (Daniel Kahneman et al. ed., 1982) 11 (“a class whose instances are easily retrieved will appear more numerous than a class of equal frequency whose instances are less retrievable.”); cf. Melia, *supra* note 66, at 1310-11.

²¹⁵ Shame is also an important factor. In some private extra-legal systems, shame is used as a tool to encourage compliance with group norms. See Lisa Bernstein, “Opting Out Of the Legal System: Extralegal Contractual Relations In the Diamond Industry,” 21 *J. Leg. St.* 115 (1992). Some states publish the names of tax evaders on the internet as a public shaming device. See, e.g., <http://www.taxes.state.mn.us/collect/delinqnet.html> (Minnesota’s public list of delinquent taxpayers); <http://www.rev.state.la.us/htmlfiles/PDL/pdl.asp> (Louisiana’s “cybershame” list); see also <http://www.drs.state.ct.us/news/1996/24jan96.htm> (listed five most wanted tax evaders as a law-enforcement tool). The GAO found that “Revenue office officials from the four states [with public disclosure programs at the time] and the District of Columbia believe that their programs have improved or will improve compliance. However, officials are unable to isolate the gain in revenue collections directly attributable to their programs.” “Few State and Local Governments Publicly Disclose Delinquent Taxpayers,” GAO/GGD-99-165, reprinted at 1999 *TNT* 164-14. For more on public shaming of tax evaders, see Stephen W. Mazza, “Taxpayer Privacy and Compliance,” 51 *Kansas L. Rev.* ___ (2003) (forthcoming).

²¹⁶ Sheffrin and Triest make a more nuanced claim, arguing that publicity of tax cases involving Al Capone, Pete Rose, and Leona Helmsley might have different effects on public attitudes. See Sheffrin & Triest, *supra* note 172, at 210. As another example, Willie Nelson was the object of sympathy for his tax troubles. See Robert Draper, “Poor Willie,” *Texas Monthly Magazine* (May 1991), available at <http://www.texasmonthly.com/archive/irs.php>. H&R Block featured him in an ad for its “Double Check Challenge,” which premiered during the 2003 Superbowl. “Just Sell, Baby; Ad Agencies Take Their Best Shot in 61 Super Bowl Commercials,” *San Francisco Chronicle* (Jan. 19, 2003).

Another article states:

the deterrent effect is open to question. In interviews conducted informally some years ago, a few instances were found in which tax violations *began after* the prosecution of a widely publicized case. The primary reasons given were that the convicted offender had been incredibly stupid and that his evasions had been of major proportions. “If that is the kind of thing the government waits for,” said one informant, “they’ll never come after me.”

Schwartz & Orleans, *supra* note 60, at 276 (footnote omitted) (emphasis in original). The quotation indicates that it involved informal interviews rather than a rigorous study. There is no indication whether the “few instances” were representative or not.

engage in an internal dialogue that sounds more like “this rich woman evaded her taxes; from what I hear, most other rich people do, and probably I should or I’ll be losing out.”²¹⁷

Of course, this is speculation.²¹⁸ Much more helpful is an IRS study of voluntary compliance that found that states with a higher proportion of criminal tax convictions demonstrated higher reporting compliance.²¹⁹ In addition, publicity about specific individuals does not seem to have the same negative effects as publicizing the “tax gap,” which may imply to taxpayers that cheating is rampant.²²⁰ Furthermore, “[t]he IRS . . . found that taxpayers who heard about IRS audit activity via the media [rather than through word of mouth] were less likely to cheat”²²¹ That may be because “word of mouth” reports about tax audits may focus on the taxpayer’s “success” in the audit, while media reports are unlikely to contain indications that audits do not uncover all cheating.²²² Thus, the evidence suggests

²¹⁷ Rosenberg, *supra* note 2, at 199; cf. Wenzel, *supra* note 33 (“Certainly, cases of salient public figures, wealthy individuals and powerful companies who manage to dodge their tax responsibilities can quickly undermine the impact of the public’s tax morality.”).

²¹⁸ It is also possible that it matters whether there is routine publicity of “run of the mill” cases or whether publicity is limited to cases involving famous people, such as Leona Helmsley. Cf. Schwartz & Orleans, *supra* note 60, at 276 (anecdotal evidence of disincentive to comply following publicity where “the convicted offender had been incredibly stupid and . . . his evasions had been of major proportions.”). There are a number of examples of publicity of routine cases in the employment tax area of the IRS’s CID web site. See http://www.treas.gov/irs/ci/tax_fraud/docemploymenttax.htm.

²¹⁹ Plumley, Determinants of Compliance, *supra* note 192, at 36. The variable that Plumley used was number of criminal tax convictions per census population, using data aggregated to the state level. See *id.* at 7, 14. The Plumley study did not control for the effects of possible state-by-state differences in the level of publicity of convictions. The study found that criminal tax convictions were the least cost-effective tool for voluntary compliance of the seven IRS actions studied. *Id.* at 40. However, the study pointed out that “a realistic expansion of CID activities may produce more indirect revenue than the largest realistic expansion of TDI [Taxpayer Delinquency Investigation] Notices [a nonfiler program]— even though TDI Notices are the *most* cost-effective activity in producing indirect revenue. *Id.* (emphasis in original). That is, TDI Notices are already widely used.

²²⁰ See Sheffrin & Triest, *supra* note 172, at 210-11; Leslie Book, “The Poor and Tax Compliance: One Size Does Not Fit All,” 51 Kansas L. Rev. __ n.11 (2003) (forthcoming); text accompanying note 175, *supra*; text accompanying notes 183-185, *supra*.

²²¹ Melia, *supra* note 66, at 1311 n.3.

²²² One study found that “personal knowledge of someone with difficulties with the IRS results in a sizable (and statistically significant) decrease in the perceived probability of detection.” Sheffrin & Triest, *supra* note 172, at 206. They speculate that taxpayers with this knowledge may conclude that it is “relatively easy to successfully ‘hide’ income from the IRS” *Id.* Another study found that people with personal experience with IRS contacts rate the IRS more favorably with respect to procedural fairness and outcome than those who have heard about experiences with the IRS from others. See Karyl A. Kinsey, “Deterrence and Alienation Effects of IRS Enforcement: An Analysis of Survey Data,” 271 in WHY PEOPLE PAY TAXES, *supra* note 1; *id.* at 281 (“the minority of taxpayers who think the IRS treated them unfairly may vent their anger by talking in more detail and to more people than

that sanctions do have a positive effect on tax compliance.²²³

What effect do sanctions have on reciprocal or cooperative behavior? Some have argued that incentives or sanctions may convey the message that others are not inclined to contribute voluntarily.²²⁴ In other words, perhaps punishment will crowd out cooperative behavior.²²⁵ In the tax compliance context, Professor Kahan has argued that:

the reciprocity theory helps to explain why such [audit] threats have sometimes been shown to backfire. When the IRS engages in dramatic gestures to make individuals aware that it is redoubling its efforts to catch and punish tax evaders, it also causes individuals to infer that more taxpayers than they thought are choosing to cheat. This inference in turn triggers a reciprocal motive to evade, which dominates the greater material incentive to comply associated with the higher than expected penalty. Because it misunderstands the contribution that social norms make to tax evasion, the conventional strategy suggests a self-defeating strategy for dealing with it.²²⁶

taxpayers who evaluate the IRS's performance more favorably. In addition, taxpayers who agree with IRS assertions that their tax returns were noncompliant may be reluctant or feel ashamed to talk about the results of their contacts with others. If they do talk about the contact, they may attempt to save face and minimize their own culpability by criticizing the IRS's performance.”).

²²³ In contrast, studies show that service provided to taxpayers by a revenue authority does not seem to have an effect on compliance. *See* Coleman, *supra* note 33, at 4, 16 (Minnesota study); Plumley, Determinants of Compliance, *supra* note 192, at 37-39; Lederman, *supra* note 6, at ___ (discussing this issue in more detail).

²²⁴ *See* note 37 and accompanying text, *supra*.

²²⁵ *See* notes 38-39 and accompanying text, *supra*.

Sheffrin and Triest state, “tax administrators need to worry about any factors that might shift social norms and perceptions regarding evasion. . . . Some types of enforcement, such as audits, may also negatively affect attitudes by creating an adversarial relationship between the taxpayer and the IRS.” Sheffrin & Triest, *supra* note 172, at 214; *see also* Frey & Feld, *supra* note 38, at 6 (“when the tax officials consider taxpayers purely as ‘subjects’ who have to be forced to pay their dues, the taxpayers tend to respond by actively trying to avoid taxation.”).

Professor Posner has argued, based on his signaling model of tax compliance, that

Very generous, even wastefully generous, procedures are signals that IRS officials, or their political superiors, belong to the good type. The more wasteful the procedures are, the better. Face-to-face contact, hand-holding, generous rights to appeal, restrictions on the use of confidential records, and other procedures--even, or especially, if tending only to hamper the IRS without giving the taxpayer concrete benefits--create warm feelings of trust in the heart of the taxpaying citizen.

Posner, *supra* note 22, at 1800. However, empirical evidence suggests that IRS friendliness does not increase tax compliance. *See* Lederman, *supra* note 6, at ___.

²²⁶ Kahan, *supra* note 35, at 380-81 (footnotes omitted) (*citing* Coleman, *supra* note 33, at 25).

The only authority cited in this paragraph is the Minnesota study, which does support the stated proposition.²²⁷

Contrary to the assertion that sanctions may undermine cooperative behavior, sanctioning people who do not contribute to public goods can reassure others that they will not be “chumps” if they contribute.²²⁸ As discussed above, the presence of free riders lowers average contributions in a public

²²⁷ Kahan cites page 25 of the Minnesota study to support the sentence stating “When the IRS engages in dramatic gestures to make individuals aware that it is redoubling its efforts to catch and punish tax evaders, it also causes individuals to infer that more taxpayers than they thought are choosing to cheat.” See Kahan, *supra* note 11, at 380-81 & n.56. Page 25 of the Minnesota study is the conclusion. It states, in part, “The information message strategy of Letter 2 [the norms letter] remains a bargain even if the dollar estimates are too high by a wide margin. This also seems to be a strategy with few if any potential negative effects. It would complement an examination approach, because the analysis of 1993 balances for the experimental groups showed that the examination and information strategies generally motivated different segments of the taxpayer population.” Coleman, *supra* note 33, at 25.

Just before the paragraph quoted in the text, *see* text accompanying note 226, *supra*, Professor Kahan states that “[c]onsistent with the reciprocity theory of collective action-- and at odds with the conventional rational choice one-- the Minnesota study also found that simply advising taxpayers that others were inclined to comply was more cost-effective than the threat of an audit!” Kahan, *supra* note 11, at 380 (*citing* Coleman, *supra* note 33, at 24-25). This is true as far as it goes. However, the audit threat generally did produce a greater return than the norms letter. See Coleman, *supra* note 33, at 11 Table 1, 12 (weighted average increase in taxes for low- and middle-income taxpayers in the audit group-- the vast majority of that group-- was \$41 more per return than the control group but was likely negative for high-income taxpayers in that group), 12 (weighted average difference between 1994 balances of the low- and middle-income taxpayers in audit group and control group was \$51), 19 (“The difference between average 1994 balances of the Letter 2 group and the control group was \$12.”). The greater cost-effectiveness of the norms letter was because the Minnesota Department of Revenue actually followed through on the audit threat, *see id.* at 1 (describing this strategy as “an increased examination and audit rate of tax returns *with prior notice to taxpayers*”) (emphasis in original), , and audits are costly, *see id.* at 3 (“Because an examination was the most costly intervention in the experiment, the sample was limited to the minimum size required.”).

Minnesota did not specify the cost of audit. However, a recent New York Times article reported that a planned increase in audits of individuals who make more than \$100,000 will cost approximately \$3,200 per audit. David Cay Johnston, “Bush Budget Increases Push to Find Tax Cheats,” New York Times (Feb. 5, 2003). In other words, the Minnesota study found that the low cost of sending a letter was justified by a small increase in reported taxes, *see* Coleman, *supra* note 33, at 25 (“Letter 2 also had a modest positive effect on the whole population and a somewhat more concentrated effect on a large subgroup (H) that represented 36 percent of the population. Although the \$48 average gain in taxes in subgroup H is small, the low cost of sending the letters, or perhaps, using advertising methods, combined with the large number of potentially responsive taxpayers makes this a viable option to increase compliance.”), but that given the much higher cost of audits, audits should be targeted to those where there was a likelihood of a relatively high return, *see id.* at 24 (suggesting that an auditing program might be appropriate for the high-risk, mid-income taxpayers, where the average tax increase was \$700).

²²⁸ Cf. Forbes, “Are You a Chump?” 122, 125 (March 5 2001) (“how can the IRS assure folks who are paying their fair share that they’re not chumps?”) (*quoting* former Commissioner Lawrence B. Gibbs); Frey & Meier, *supra* note 41, at 9 (“Individuals dislike being a so-called ‘sucker,’ i.e., being the only one who contributes to a public good while the others free ride.”).

goods game, and in response, conditional cooperators lower their own contributions.²²⁹ This suggests, that contrary to the notion that sanctions crowd out voluntary contributions, the possibility of punishing free riding may help maintain the average contribution level and thereby maintain contributions.²³⁰

In fact, experiments find that when players can punish defectors— at a cost to themselves— that dramatically increases cooperation in a public goods game.²³¹ These experiments suggest that, in addition to players who are conditional cooperators, there are players who are “willing punishers.”²³² In addition, one study found that the players who initially were the least trusting are the most likely to become strong cooperators in the presence of a sanctioning mechanism.²³³ Thus, the awareness of the

Arguably, the offer-in-compromise program may undermine taxpayer assurance that others are paying their tax obligations, by letting taxpayers who legally owe taxes compromise those obligations for a small fraction of the liability. The following table provides a time trend of the offer-in-compromise program:

Fiscal Year	Amount Accepted in Compromise (Millions of Dollars)	Total Tax Liability Compromised (Millions of Dollars)	Amount Accepted as Percentage of Total Tax Liability
1997	295.0	1986.8	15
1998	290.1	1971.2	15
1999	311.6	2355.6	13
2000	316.2	2586.9	12
2001	340.8	2688.7	13

See “IRS Should Evaluate the Changes to its Offer in Compromise Program,” GAO-02-31 (2002), Appendix I Table 5, reprinted at 2002 TNT 60-22.

²²⁹ See Camerer & Fehr, *supra* note 123, at 11; text accompanying notes 158-160, *supra*.

²³⁰ See Camerer & Fehr, *supra* note 123, at 11.

²³¹ See *id.* at 11-13; Ernst Fehr & Simon Gächter, “Cooperation and Punishment in Public Goods Experiments,” 90 *Amer. Econ. Rev.* 980 (2000); see also Martin Sefton, Robert Shupp & James Walker “The Effect of Rewards and Sanctions in the Provision of Public Goods,” Working Paper at 2 (2002), available at <http://www.nottingham.ac.uk/economics/cedex/papers/ssw-5-13-02.pdf> (sanctioning more effective than reward in sustaining contribution levels); cf. James Andreoni, William Harbaugh & Lise Vesterlund, “The Carrot or the Stick: Rewards, Punishments and Cooperation, Working Paper (March 14, 2002), available at http://economics.uoregon.edu/papers/Harbaugh_UO-2002-1_Carrot_Stick.pdf (finding that the availability of both rewards and punishments has a dramatic effect on cooperation in a two-person game but that the availability of either alone has a much smaller effect).

²³² Ostrom, *supra* note 153, at 142.

²³³ *Id.* at 141 (citing Fehr & Gächter, *supra* note 231).

possibility of sanction from evasion does not create a climate in which players free ride— quite the opposite.²³⁴

Of course, those games involved punishment by other players rather than by a third party, such as a tax collector. However, a prisoner’s dilemma game involving punishment by a third party found only slightly weaker effects than where punishment by other players was permitted.²³⁵ The third-party punisher in that experiment was someone who had previously played the game, rather than an “outsider” to the game, but it still suggests that sanctions may have a positive effect.²³⁶

In sum, the speculation that sanctions for tax evasion will tend to undermine compliance does not seem to be supported by the evidence.²³⁷ In the experimental context, the availability of sanctions for failure to cooperate increases cooperation.²³⁸ In the tax compliance context, audits increase even compliance of those not threatened with audit.²³⁹ It is unclear how much of this is due only to deterrence, but a norm cannot be sustained if most people’s behavior does not comport with the norm.²⁴⁰ In other words, there is no stigma for behavior that everyone (or almost everyone engages

²³⁴ Camerer and Fehr point out, “The public goods experiment with a punishment opportunity can be viewed as the paradigmatic example for the enforcement of a social norm. Social norms often demand that people give up private benefits to achieve some other goal. This raises the question of why most people obey the norm. The evidence above suggests an answer: Some players will punish those who do not obey the norm (at a cost to themselves), which enforces the norm.” Camerer & Fehr, *supra* note 123, at 13.

²³⁵ Camerer & Fehr, *supra* note 123, at 21. In the study described, punishment could be administered by a non-player who had played the game in a previous round. *Id.* Retaliatory punishment was precluded by assuring that no player would have the role of punisher for someone who punished them.

²³⁶ An interesting follow-up experiment would be to determine what the effect is of the known availability of punishment by a tribunal consisting of an unchanging person or group of persons that does play the underlying game. It would also be helpful to determine whether the tribunal administers punishment differently if its member(s) are compensated solely for showing up or if they are compensated based on aggregate contributions to a public good, with a partial subtraction for each punishment they administer.

²³⁷ *Cf.* Vandenbergh, *supra* note 113, at 141-42 (“like debates over many other environmental issues, the enforcement debate has swung between two options - deterrence and cooperation - that are unnecessarily and unwisely regarded as mutually exclusive. That dynamic is reflected in and perpetuated by existing research, which often frames the basic decision about enforcement prescriptions as a choice between the approaches supported by either the deterrence model or the cooperation model. . . . Yet research framed by such a bi-polar model may not only be unenlightening, it also may produce misleading results.”) (citations omitted).

²³⁸ *See* text accompanying notes 230-236, *supra*.

²³⁹ *See* Plumley, Impact of the IRS, *supra* note 192.

²⁴⁰ *See* Posner, *supra* note 22, at 1813 (“Something that everyone does--like speeding--is not stigmatizing.”); Robert Cooter, “Expressive Law and Economics,” 27 *J. Legal Stud.* 585, 587 (1998) (“a norm exists when almost everyone in a community agrees that they ought to behave in a particular way in specific circumstances, and this

in).²⁴¹ If enforcement keeps at least some people in line, it may help retain a critical mass²⁴² of compliant taxpayers. Enforcement may therefore have the effect of deterring some people and increasing the robustness of a compliance norm for others by minimizing their exposure to tax evasion.²⁴³

III. Using Enforcement and Norms to Increase Tax Compliance

The discussion above has shown that enforcement of federal tax laws and norms of tax compliance are not inconsistent. In fact, both norms-based appeals and enforcement seem to increase tax compliance, though not necessarily with respect to the same taxpayers.²⁴⁴ There may be three general types of taxpayers, those that are committed to compliance, those that are susceptible to influence, and a few that are committed to noncompliance.²⁴⁵ The last category is probably small. It includes tax protestors, who generally assert that the federal income tax is unconstitutional or does not apply to them,²⁴⁶ and taxpayers with illegal income.²⁴⁷

agreement affects what people actually do.”).

²⁴¹ See Jack P. Gibbs, “Preventive Effects of Capital Punishment Other than Deterrence,” 14 *Crim. Law Bull.* 34, 41 (1978) (“an individual is not likely to persist in the condemnation of some type of act if he or she observes that the act is committed openly and frequently with impunity.”).

²⁴² See Thomas C. Schelling, *MICROMOTIVES AND MACROBEHAVIOR* 91-110 (1978) (explaining critical mass).

²⁴³ Cf. Smith, *supra* note 77, at 247 (arguing that his “findings reinforce . . . that deterrence and normative commitment are, indeed, often symbiotic and complimentary strategies.”).

²⁴⁴ The IRS has recently increased enforcement with respect to corporate tax shelters and offshore trusts, among other things. See Johnston, *supra* note 227; see also <http://www.irs.gov/newsroom/article/0,,id=105689,00.html> (“Offshore Voluntary Compliance Initiative”); “IRS Announces Amnesty Program for Offshore Credit Card Abusers,” 2003 TNT 10-11.

²⁴⁵ Eric Posner refers to these groups of taxpayers as “mainstream,” “marginal,” and “deviant.” See Posner, *supra* note 22, at 1796. Larry Langdon, Commissioner of the Large and Mid-Sized Business Division of the IRS (LMSB) reportedly has referred to “white hats, gray hats and black hats.” See *id.* at 1795 (quoting David Cay Johnston, “Corporations’ Taxes Are Falling Even as Individuals’ Burden Rises,” *N.Y. Times*, Feb. 20, 2000, at A36).

²⁴⁶ As an example of this phenomenon, see Johnston, *supra* note 36.

²⁴⁷ It can be particularly difficult to enforce the tax laws against taxpayers involved in illegal activities because they frequently may fail to keep accurate records. See *United States v. Abodeely*, 801 F.2d 1020, 1023 (8th Cir. 1986) (stating, “by the very fact that taxpayer has failed to report the income, it behooves him to obscure any trace of its existence”). Prosecution of taxpayers with illegal income also probably has less deterrent effect on taxpayers with legal-source income than would criminal prosecution of other taxpayers with legal-source income. Taxpayers engaged in illegal activity also are unlikely to be deterred by the threat of having a charge for tax evasion added to the charge for the underlying crime.

The government can only hope to influence the second category. However, the techniques it uses may need to vary depending on the compliance level of the taxpayer segment in question. This Part discusses the application of enforcement and norms to (1) the generally compliant taxpayers under the jurisdiction of the Wage and Investment Income (W&I) Division and (2) the less compliant taxpayers, under the jurisdiction of the Small Business/Self-Employed Division, who own cash-based businesses.

A. Wage and Investment Income

Taxpayers in the W&I division do not present a major compliance problem.²⁴⁸ This is probably because of lack of opportunity to evade with respect to most of their income.²⁴⁹ However, some W&I taxpayers do have the opportunity to evade with respect to deductions and credits, and even with respect to income received from sources other than those subject to information reporting.²⁵⁰ Based on the results of the experiments in Minnesota and Australia, fostering a compliance norm should increase compliance by these taxpayers. If it can be done at low cost, such an initiative would likely more than pay for itself.

Thus, with respect to these taxpayers, a letter suggesting that taxpayers generally are honest but that the IRS does enforce the law with respect to the minority that is not would likely be a good investment for the IRS. A letter is a relatively low-cost way for the government to reach a large group of taxpayers on an individual basis. The letter could be mailed either on its own or with the booklet containing Form 1040 and the instructions.²⁵¹ The IRS could test a series of letters and then use more

²⁴⁸ See “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) [hereinafter “2001 Management Advisory Report”].

²⁴⁹ See *id.* Interestingly, the IRS’s rate of follow-up on potential discrepancies identified through return matching has declined over time. In 1992 (a high year), IRS personnel physically examined 45.8 percent of potential discrepancies. In 2000, IRS personnel physically examined only 20.6 percent of potential discrepancies. <http://trac.syr.edu/tracirs/findings/national/ComputerMatch.html>.

²⁵⁰ See 2001 Management Advisory Report, *supra* note 248, at 4.

²⁵¹ It could even be printed on the front of the booklet. See Melia, *supra* note 66, at 1313 (“The [Massachusetts Department of Revenue] Commissioner’s letter on the front page of the booklet of tax forms and instructions mailed annually to all taxpayers echoes [the] themes [of enforcement, service, and integrity efforts].” This would decrease any delay between the points in time in which the taxpayer saw the letter and completed a return, possibly increasing the impact of the message. See Joshua D. Rosenberg, “A Helpful and Efficient IRS: Some Simple and Powerful Suggestions,” 88 Ky. L.J. 33, 46-47 (1999/2000). Of course, many taxpayers do not use the booklets because they use tax preparers or tax preparation software.

Professor Rosenberg has suggested that the IRS provide tax preparation software and that such a program contain a “pop-up helper” that explains, among other things, “the kinds of substantiation required by law, explain that taking the deductions without having the required records is fraudulent, and reveal the penalties for fraud at

widely the letter that proves most successful.²⁵²

Supporting the letter campaign, the IRS could continue to publicize tax convictions to show that it does prosecute tax evaders.²⁵³ The overall message should not be that many people cheat, but rather that the IRS is successful at catching the few deliberate cheaters.²⁵⁴ The message could be explicit in that, in the publicity, the IRS could state something along the lines of:

Most people file tax returns and report correctly and pay voluntarily the vast majority of the income taxes they owe. A small number of people who deliberately cheat owe the bulk of unpaid taxes. The IRS aggressively pursues that small group of tax evaders. The conviction of [name of tax evader] is an example of the IRS's success in this effort.

appropriate times during the process.” *Id.* at 42-43. However, at the margin, too much “propaganda” could prompt taxpayers to use privately developed tax preparation products such as the ones that currently exist.

RRA ‘98 required the IRS to “use competitive market forces to increase electronic filing gradually over the next 10 years” and to “convene an electronic commerce advisory group to include representatives from the small business community and from the tax practitioner, preparer, and computerized tax processor communities and other representatives from the electronic filing industry.” See Pub. L. No. 105-206, 1001-9016, 112 Stat. 685 § 2001(b) (1998). On January 16, 2003, the IRS unveiled the “free file” initiative. See “Plan to Offer Free Electronic Tax Filing,” *New York Times* (Jan. 17, 2003). This limits the prospect of the IRS developing tax preparation software. However, were it to develop such software, the message could appear on the first screen.

²⁵² The starting point could be Minnesota’s letter. A letter sent by the Massachusetts Department of Revenue may also be helpful. See Melia, *supra* note 66, at 1313 n.6 (“The letter [on the front page of the book of tax forms and instructions] is a sharp departure from the traditional Commissioner’s letter. Rather than cite minor and obscure changes in the tax laws, the letter develops many of the themes that research suggests are effective in influencing taxpayer behavior. The letter begins by thanking taxpayers and assuring them that taxpayer honesty is increasing. It goes on to say that because of that honesty, ‘more funding is available for vital state programs . . . and the tax burden is being distributed more equitably.’ The letter concludes with a promise to redouble the ‘commitment to service’ and warns that tax evaders will suffer from a ‘visible and vigorous crackdown.’”).

A carefully crafted letter could avoid the threat of audit while not implying lax enforcement. It could be worded in the first person and followed by the Commissioner’s signature. The letter should not mention the “tax gap” so as not to emphasize the magnitude of underpaid taxes. See Sheffrin & Triest, *supra* note 172, at 211 (“on June 11, 1990, an Associated Press story began with a roadside vendor selling a watermelon for cash and a doctor and plumber engaging in a barter transaction. The story then turned to aggregate estimates of the ‘tax gap’ that now hit the \$100 billion mark. The overall impression from the story is that tax evasion is rampant. . . . It is our view that ‘tax gap’ stories tend to be alarmist and defeatist and can breed public skepticism.” Media coverage might heighten public awareness of the letter. See Coleman, *supra* note 33, at 3 (media covered Minnesota’s audit letter).

²⁵³ The Internal Revenue Manual states, in part, “[t]ypically, the U.S. Attorney’s office will issue press releases or hold press conferences at the conclusion of a [criminal] trial.” IRM 9.3.2.7.2(1) (07-16-2002).

²⁵⁴ Publicity about specific individuals does not seem to have the same negative effects as publicizing the “tax gap,” which implies that cheating is rampant. See Sheffrin & Triest, *supra* note 172, at 210-11; Book, *supra* note 237, at __ n.11 (forthcoming); text accompanying notes 220-221, *supra*.

The press release could then proceed to give a skeleton outline of the facts of the conviction.

Tax convictions publicized should not be limited to those involving underlying illegal activity or egregious acts of noncompliance; taxpayers may be more likely to identify with those who sound more like themselves.²⁵⁵ The following is an example from the employment tax area of the IRS's CID web site:

On December 12, 2002, in Pittsburgh, PA, John M. O'Shea, operator of a security company and former police officer, was sentenced to seven months in prison and seven months home detention, ordered to pay a \$5,000 fine, and ordered to continue paying back taxes to the IRS. O'Shea pled guilty on August 20, 2002, to making and subscribing to a false income tax return and failing to file income tax returns. O'Shea hired off-duty police officers and constables as security guards. He paid the majority of the guards with cash "under the table" and did not file Forms W-2 or withhold social security or federal income taxes. Under the plea agreement, O'Shea admitted to evading \$230,000 in employee income tax payments from 1997-1998.²⁵⁶

B. Income from Small Businesses

"Self-employed individuals engaged in business, the professions, and agriculture are sometimes collectively referred to as the 'hard-to-tax.' . . . As in other countries, self-employed individuals in the United States have a tradition of noncompliance, and studies have consistently shown them to be among the worst tax offenders."²⁵⁷ The largest part of the tax gap is attributable to taxpayers under the jurisdiction of the Small Business and Self-Employed Division of the IRS (SB/SE),²⁵⁸ which includes individuals with business income and partnerships, S corporations, and C corporations with assets up to

²⁵⁵ See "American Bar Association Commission on Taxpayer Compliance, Report and Recommendation on Taxpayer Compliance," 41 Tax Law. 329, 371 (1987); cf. Schwartz & Orleans, *supra* note 60, at 276 ("In interviews conducted informally some years ago, a few instances were found in which tax violations *began after* the prosecution of a widely publicized case. The primary reasons given were that the convicted offender had been incredibly stupid and that his evasions had been of major proportions. 'If that is the kind of thing the government waits for,' said one informant, 'they'll never come after me.'") (emphasis in original).

²⁵⁶ See http://www.treas.gov/irs/ci/tax_fraud/docemploymenttax.htm.

²⁵⁷ "Self-employed individuals engaged in business, the professions, and agriculture are sometimes collectively referred to as the 'hard-to-tax.' . . . As in other countries, self-employed individuals in the United States have a tradition of noncompliance, and studies have consistently shown them to be among the worst tax offenders." Pirooska Soos, "Self-Employed Evasion and Tax Withholding: A Comparative Study and Analysis of the Issues," 24 U.C. Davis L. Rev. 107, 114, 116 (1990).

²⁵⁸ 2001 Management Advisory Report, *supra* note 248, at 4.

\$10 million.²⁵⁹ In 1987, unreported self-employment income alone was estimated to constitute 28.7 percent of the tax gap.²⁶⁰ SB/SE also accounts for the largest portion of accounts receivable,²⁶¹ 64 percent (approximately \$168 billion), as of March 2001.²⁶²

There are a number of compliance problems for SB/SE, including the problem of matching of taxpayer returns to information returns from S corporations and partnerships²⁶³ and payment of employment taxes.²⁶⁴ SB/SE taxpayers with cash-based business also pose a reporting noncompliance problem.

Taxpayers who own small businesses, including those who are self-employed, are differently

²⁵⁹ Currently, the complete jurisdiction of SB/SE is

corporations, S corporations, and partnerships with assets less than or equal to \$ 10 million; estates and trusts; individuals filing an individual federal income tax return with an accompanying Schedule C (Profit or Loss from Business (Sole Proprietorship)), Schedule E (Supplemental Income and Loss), or Schedule F (Profit or Loss from Farming), or Form 2106 (Employee Business Expenses) or Form 2106-EZ (Unreimbursed Employee Business Expenses); and individuals with international tax returns

Rev. Proc. 2003-2 § 1, 2003-1 IRB 76.

When the SB/SE and LMSB divisions were established in late 2000, SB/SE taxpayers were defined, in part, to have up to \$5 million in assets. That number was changed to \$10 million as of the beginning of fiscal year 2002. “Management Advisory Report: The Internal Revenue Service’s Response to the Falling Level of Income Tax Examinations and Its Potential Impact on Voluntary Compliance” Ref No. 2002-30-092 at 6 (June 2002) [hereinafter “2002 Management Advisory Report”]. In 2001, SB/SE had jurisdiction over approximately 40 million taxpayers. Approximately 7 million of these were small business corporations and partnerships; the remaining 33 million were “self-employed and supplemental income earners.” *Id.* at 25.

²⁶⁰ “Compliance Estimates for Selected Types of Personal Income,” IRS Research Division (1988), *reprinted in* Slemrod & Bakija, *supra* note 30, at 150. As another data point, in 1982, the proportion of returns understating net profit from business was 71.4 percent. *See* C. Eugene Stuerle, WHO SHOULD PAY FOR COLLECTING TAXES?: FINANCING THE IRS 44 Table 4-2 (1986). Of the 31 items listed, this was the third most frequently underreported item. *See id.* at 44-45 Table 4-2. As Stuerle points out, the data do not necessarily mean that the self-employed are by nature less honest than other taxpayers; the self-employed simply have more opportunity to evade taxes without getting caught. *Id.* at 17.

²⁶¹ This is the terminology used by the 2001 Management Advisory Report. *See* 2001 Management Advisory Report, *supra* note 248, at 7. This appears to be the same thing as delinquent accounts.

²⁶² *Id.* At that time, W&I taxpayers accounted for 28 percent (approximately \$74 billion) and LMSB taxpayers accounted for 8 percent (about \$21 billion). *Id.*

²⁶³ *See* Lederman, *supra* note 6, at __ (discussing this issue).

²⁶⁴ *See id.* at __ (discussing this issue).

situated from other groups because, of those with income from legal sources, they have the greatest opportunity to evade. An important part of this is the prevalence of cash receipts.²⁶⁵ Cash businesses present not only great opportunities for tax evasion but also a strong financial incentive to do so. In fact, in their fascinating article on cash business owners, Professors Joseph Bankman and Stuart Karlinsky report that one of the justifications used by cash business owners for underreporting is the need to do so to remain competitive.²⁶⁶ Because of rampant noncompliance in the cash business sector, “all else being equal, absent policy changes that lead to more accurate reporting (and a different before-tax return to labor and capital), an ‘honest’ taxpayer should do worse in the cash sector than other taxpayers in that sector, and worse than she would do in the non-cash sector.”²⁶⁷

This suggests that noncompliance in the cash business sector may be akin to a prisoner’s dilemma,²⁶⁸ with the dominant strategy being to cheat, assuming that the taxpayer does not simply leave

²⁶⁵ Another way a small business may cheat is by having the company provide personal services or pay for personal expenses. See Robert A. Kagan, “On the Visibility of Income Tax Law Violations” in TAXPAYER COMPLIANCE Vol. 2, *supra* note 35.

The self-employed face greater tax compliance burdens than do W&I taxpayers. “[A]pproximately 32.5 million self-employed taxpayers spend about 1.9 billion hours complying with the federal income tax, or about 57.5 hours per taxpayer. In contrast, approximately 88 million taxpayers whose only income is from wages and investments spend 1.3 billion hours on tax compliance, or 14.5 hours per taxpayer. . . . [T]he 76.7 million wage and investment income earners who incurred out-of-pocket costs on tax compliance spent somewhat more than \$ 6.1 billion annually, or \$ 79.92 per taxpayer, while 30.8 million self-employed individuals incurred costs amounting to \$ 10.2 billion, or \$ 330.21 per taxpayer.” Thomas F. Field, Herman A. Ayayo & Joe Thorndike, “NTA Conferees Mull Future Tax Cuts, IRS Compliance Efforts,” 97 Tax Notes 1012, 1013 (2002).

²⁶⁶ Joseph Bankman & Stuart Karlinsky, “Cash Business Owners and Their Tax Preparers,” 15 (Working Paper for NYU Colloquium on Tax Policy and Public Finance); see also “CID to Employment Tax Evaders: ‘We Will Catch You,’” 2001 TNT 94-9 (with respect to employment taxes, “some employers turn to evading taxes to stay competitive in their industry. It is apparently a serious problem in the construction industry.”).

²⁶⁷ Bankman & Karlinsky, *supra* note 266, at 15.

²⁶⁸ Professor William Eskridge explains the classic “prisoner’s dilemma” as follows:

The prisoner’s dilemma consists of two prisoners, each of whom is offered a bargain: If you betray your colleague and he is loyal to you, you will get a benefit of eight (say a good plea bargain). Each prisoner knows that if he is loyal and his colleague betrays him, he will get no benefit (the other guy gets the plea bargain). Each prisoner also knows that if he is loyal and his colleague is also loyal, they each get a benefit of five (because there is a lower probability of conviction). However, if both prisoners betray one another, they both get a benefit of only two (each gets a bit of a deal). . . .

The best joint strategy would be for both prisoners to be loyal (a joint benefit of ten, as compared to eight and four for other combinations). Yet under the circumstances of the prisoner’s dilemma game, each prisoner acting separately will tend to betray the other.

the sector entirely.²⁶⁹ That is, even if penalties were high enough that cheating would be irrational when considered under the economic model discussed above, which considers the taxpayer in isolation, it might be rational for a taxpayer in a competitive market to evade.

For example, assume, for simplicity, that there are only two businesses in the industry, one owned by Ann and the other owned by Bob, competitors who do not coordinate on prices.²⁷⁰ The baseline is compliance, which provides neither a benefit nor a detriment (thus, a zero payoff). Also assume that the financial benefits of cheating provide a benefit of 5 and that the costs of cheating are negative 6 (due to penalties and psychic costs of evasion, for example).²⁷¹ Assume further that if a particular taxpayer is the only one who cheats, he or she obtains a competitive benefit (by being able to lower prices) of 2 but that if only the taxpayer's competitor cheats, the taxpayer has a detriment of minus 2. (If both cheat or both comply, there is no competitive benefit or disadvantage.) Thus, if Ann cheats and Bob complies, for example, Ann's payoff would be 1 (composed of a benefit of 5 for cheating, a cost of -6 for cheating, and a competitive benefit of 2) while Bob's payoff would be -2 (composed of 0 for compliance and a detriment of -2 for complying while Ann cheats). The matrix facing Ann and Bob would then be as follows:

	Ann Complies	Ann Cheats
Bob Complies	0 (Ann), 0 (Bob)	1 (Ann), -2 (Bob)
Bob Cheats	-2 (Ann), 1 (Bob)	-1 (Ann), -1 (Bob)

This matrix suggests that the best strategy is for both Ann and Bob to comply (for an aggregate benefit of 0, rather than -1 if one of them cheats or -2 if both do) but, from each businessperson's viewpoint, cheating has a higher payoff, no matter what the competitor does. For example, for Ann, if Bob complies, cheating has a higher payoff for her (1 rather than 0) and if Bob cheats, cheating also has

William N. Eskridge, Jr., "The Judicial Review Game," 88 Nw. U.L. Rev. 382, 389 (1993). Professor Eskridge further explains: "Acting rationally but not knowing what B will do, A faces possible benefits of two or eight if he betrays, but only zero or five, respectively, if he does not betray. Given such a choice, A will betray. B will also betray under the same reasoning." *Id.* at 389 n.28. Public goods games can be conceived of as prisoner's dilemma games because each player's rational move is not to contribute but total welfare is maximized if all players contribute. See Camerer & Fehr, *supra* note 123, at 9.

²⁶⁹ Of course, taxpayer reports of the reasons for their activity might not be accurate or might not be generalizable. In addition, it is possible that a taxpayer who owns a cash business cheats so as to compete with a larger operation that does not cheat but has economies of scale (such as a national chain). If that is the case, increasing enforcement might drive inefficient cash-based businesses out of the market.

²⁷⁰ The model could be modified to treat the competitor as a group of competitors.

²⁷¹ See Skinner & Slemrod, *supra* note 10, at 345-46.

a higher payoff for her (-1 rather than -2). The competitor (Bob) faces the same payoffs, so that cheating will be the dominant strategy despite its net negative payoff.²⁷²

It is also possible that those inclined to cheat on their taxes opt disproportionately to start businesses, at least at the margin. In other words, sectors of the economy that provide a greater opportunity for tax evasion may draw more investment than they would in the absence of a tax system, potentially resulting in an inefficient allocation of resources.²⁷³ As an anecdotal example, Professors Bankman and Karlinsky quote from an interview with a storekeeper who stated in the context of an interview about underreporting income, “Stockbroker buddy all he talks about is how pissed he is about the taxes, how he wants to go into business. People like him all want to be in business for one reason, the tax.”²⁷⁴

As an illustration, assume that an individual faces a choice of working as an employee for a return of \$100,000 before tax or as the owner of a cash business for a return of \$90,000 before tax. In the absence of a tax system, the greater financial return would result from choosing to work as an employee. However, assuming that the self-employed can evade tax by failing to report half of their income, without detection, and assuming an applicable tax rate of a flat 30%, the after-tax return from self-employment is \$70,000,²⁷⁵ while the after-tax return from self-employment is \$76,500.²⁷⁶ This simple example shows that greater ease of tax evasion in a particular sector of the economy, such as the

²⁷² Of course, if, contrary to the assumptions at the beginning of this example, the benefits of cheating outweighed the costs, the incentive to cheat would be dominant even without factoring in the competitiveness aspects of the decision.

²⁷³ See Andreoni, Erard & Feinstein, *supra* note 10, at 824 (citing Pierre Pestieau & Uri Possen, “Tax Evasion and Occupational Choice,” 45 J. Public Econ. 107 (1991)); cf. Spicer, *supra* note 1, at 13 (“Certain less productive activities may become more attractive simply because they are easy to conceal from tax authorities.”); see also “Tax Administration: IRS Measures Could Provide a More Balanced Picture of Audit Results and Costs,” United States General Accounting Office Report to the Honorable Rob Portman, Committee on Ways and Means, House of Representatives, GAO/GGD-98-128 at n.15, *reprinted at* 98 TNT 122-25 (“Some taxpayers choose investments or occupations that provide opportunities to evade taxes. With fewer evasion opportunities, taxpayers may use their resources more efficiently elsewhere in the economy.”). The reverse is also possible, however; an increased opportunity for evasion may simply increase allocation of resources to that activity to the optimal level.

²⁷⁴ Bankman & Karlinsky, *supra* note 266, at 8. Of course, this interview may be entirely unrepresentative of the general population. See also Jeffrey A. Roth, John T. Scholz & Ann Dryden Witte, “Understanding Taxpayer Compliance: Self-Interest, Social Commitment, and Other Influences” 75 in TAXPAYER COMPLIANCE Vol. 1 (Roth, Scholz & Witte, eds. 1989) (quoting participant in group discussion of tax compliance stating “I switched occupations because in my new work . . . I can take off [personal] car expenses, entertainment expenses, etc., which I couldn’t do before.”) (quoting “Individual Income Tax Compliance Factors Study Qualitative Research Results, Prepared for the Internal Revenue Service, Westat, Inc. (Feb. 4, 1980)).

²⁷⁵ \$100,000 less the \$30,000 tax.

²⁷⁶ \$45,000 (half of the income, untaxed) plus \$31,500 (\$45,000 less \$13,500 in taxes).

cash business sector, can have allocative effects.²⁷⁷

In addition, at the margin, because of the relatively greater ease of tax evasion, self-employment may tend to select for taxpayers predisposed to evasion. In fact, the entrepreneurial activity of starting a business also may select for people who are relatively more willing to bear risk than the general population. This suggests that there may be somewhat more of an evasion norm among the self-employed than among taxpayers generally.²⁷⁸ Furthermore, taxpayers who know non-compliant taxpayers are less likely to be compliant.²⁷⁹ That prospect may be reflected in an interview Professors Bankman and Karlinsky conducted with a self-employed couple who professed that they were compliant and used an accountant who would not cheat; they seemed “almost embarrassed” about their honesty.²⁸⁰

The tendency towards a group norm of evasion among the self-employed, coupled with financial incentives to evade that factor in the behaviors of others in the industry, suggests that a change in that norm may be necessary if the self-employed are to become more compliant. A survey of Minnesota taxpayers found that normative beliefs about tax compliance are related to opportunity to evade.²⁸¹ It may therefore be possible to change normative commitments by reducing the opportunity

²⁷⁷ The lower-taxed sector will attract more capital until the return declines to the point at which the after-tax return is the same as in the other sector. See Skinner & Slemrod, *supra* note 10, at 345.

²⁷⁸ In other words, though the societal norm may be compliance, certain taxpayer segments may have a group norm of noncompliance. See Smith, *supra* note 76, at 236 n.12 (“In a survey of Minnesota taxpayers, we have found that normative commitments concerning noncompliance are related to structural opportunity, suggesting occupationally and financially structured subcultures that are more likely to condone noncompliance . . .”) (citing L.J. Stalans, Kent Smith & K.A. Kinsey, “When Do We Think About Detection? Structural Opportunity and Taxpaying Behavior” 14 *Law & Social Inquiry* 481 (1989); see also Bankman & Karlinsky, *supra* note 266, at 19 (“While misreporting is a norm among cash business, the practice is not uniform.... The fact that the Vs [a couple who run their own business] seemed almost embarrassed about their honest behavior may be taken as evidence of the norm with which they are in conflict.”); Kagan, *supra* note 263, at 90 (stating, in connection with reporting results of informal survey of house painters, “The subculture to which they belong conveys disapproval of painters who ‘go straight’ and file information returns identifying subcontractors or employees to whom they make payments; filing information returns puts pressure on the recipients to file tax returns or report income more fully.”).

²⁷⁹ See Davis, Hecht & Perkins, *supra* note 77, at 1 (citing literature); see also Carroll, *supra* note 1, at 58 (quoting from “diary” kept by subject in tax compliance study who increased charitable deduction amount listed in order to increase refund: “My friends and I talk about this and all agree. We can’t see what the gov’t is doing for us and we have no control over how the money is spent.”).

²⁸⁰ See note 275, *supra*.

²⁸¹ Stalans, Smith & Kinsey, *supra* note 276. Smith did not find that relationship in the results of the national survey conducted for the IRS. See Smith, *supra* note 76, at 236 n.12.

for noncompliance, such as through increased enforcement of the tax laws.²⁸² In fact, a study by Kent Smith found that the effect of deterrence is stronger for individuals who have high opportunities not to comply and view noncompliance as normatively acceptable.²⁸³

One model of tax compliance, consistent with both this theory and the notion of “conditional cooperators” suggests that a norm of compliance can gradually erode as enforcement decreases until the norm “tips”²⁸⁴ to one of noncompliance.²⁸⁵ Once there is a norm of noncompliance, the psychic

²⁸² A compliance initiative could focus on businesses receiving significant cash receipts, such as restaurants and retail stores. Comparison of the reporting of a particular business with the industry as a whole (particularly within that geographic area) can provide some, but limited, information. For example, if a particular restaurant reports only 70 percent of the average income or profit reported in the industry, does that suggest that the restaurant is noncompliant with its tax obligations or just unsuccessful? In industries where noncompliance is very common, industry norms likely will not be helpful to identify noncompliance. However, where possible noncompliance is revealed by an industry comparison, as in the restaurant example just above, the IRS could use sampling techniques to estimate the gross receipts of those businesses or pursue cases in which it has other evidence of noncompliance, such as informant information that the business owner does not report some cash receipts, or evidence that the business owner lives beyond his reported income. *Cf.* I.R.C. § 7602(e) (requiring that the IRS have “a reasonable indication that there is a likelihood of such unreported income” before using “financial status or economic reality examination techniques.”).

Another possibility would be for a compliance initiative to focus on tax preparers used by cash-based businesses. Professors Bankman and Karlinsky found that underreporting is concentrated among a small group of tax preparers. *See id.* at 22-27. They also report that their survey found that dishonest preparers will help their clients falsify records that can withstand an audit. *See* Bankman & Karlinsky, *supra* note 266, at __; *see also* Robert A. Kagan, “On the Visibility of Income Tax Law Violations” 107 in *TAXPAYER COMPLIANCE* Vol. 2 (Roth & Scholz, eds. 1989) (discussing the phenomenon of two sets of books). SB/SE could begin by identifying tax preparers that have cash-based businesses as a significant portion of their clients. It could then investigate those preparers. That investigation might help uncover falsification of books and records that can be used to pursue the businesses that are evading taxes. Pursuing preparers might also help reduce the supply of expertly falsified books and records.

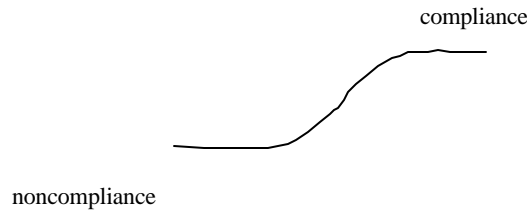
²⁸³ Kent W. Smith, “Integrating Three Perspectives on Compliance: A Sequential Decision Model,” 17 *Crim. Justice & Behav.* 364 Table 1, 365 (1990). The study considered those taxpayers receiving, during the 1986 tax year in question, income that was not subject to information reporting (for reasons other than de minimis thresholds) as having higher opportunity for noncompliance and all others as having lower opportunity. *Id.* at 362.

²⁸⁴ *See* Schelling, *supra* note 242, at 101-02 (explaining “tipping”).

²⁸⁵ *See* Davis, Hecht & Perkins, *supra* note 77, at 18; *see also* Smith, *supra* note 76, at 241 (“Perhaps less common [than a focus on tax complexity, fairness, and trust] is the prediction that the likelihood of catching small cheaters will also decrease the normative acceptability of cheating. . . . Citizens . . . are more likely to take their taxpaying obligations seriously if they perceive that the state does also. A primary indicator of the state’s interest is its concern with detecting and punishing noncompliance.”).

One study involving a prisoner’s dilemma game suggests that the removal of incentives to cooperate after the first game undermines subsequent cooperation, leaving the players worse off in the second game than a control group that had no incentives in the first game. *See* Norman Frohlich & Joe A. Oppenheimer, “Experiencing

costs of evasion are lower, so authorities likely will have to increase enforcement above the previous level to restore the previous level of compliance.²⁸⁶ In other words, the model suggests that it is difficult for the government to disturb an existing equilibrium reflecting a norm of noncompliance but that it can be done with increased enforcement.²⁸⁷ That is, there may be two stable equilibria, as illustrated in the following graphic:



At first blush, it would seem to be efficient for the IRS to increase enforcement so long as the return on that investment is positive. The graphic above suggests that in a case in which the government might be able to tip an industry from generally noncompliant to generally compliant, it might even be efficient to increase enforcement if the direct return on that investment is negative because the overall return on that investment would be positive, at least if the investment continued until the tipping point. However, the question of the efficient level of enforcement is more complicated than that because it does not take into account the total costs to society of enforcement, which may include taxpayer substitution of unproductive activity for productive activity²⁸⁸ and increased taxpayer costs for covering up evasion.²⁸⁹

Assuming that those societal costs of additional audit activity are low, at least for the amount of additional enforcement that it is reasonable for the IRS to consider, the next question is the IRS's return on investment in auditing small businesses. Surprisingly, the IRS apparently does not compile data on

Impartiality to Invoke Fairness in the -PD: Some Experimental Results," 86 Public Choice 117 (1996). However, cooperation was higher in the first game among the group with incentives. The worst approach may therefore be to remove incentives once they are in place.

²⁸⁶ Spicer, *supra* note 1, at 18. This is because of the theory of cognitive dissonance. That is, if a person acts inconsistently with his beliefs, he will be motivated to change either his beliefs or his behavior. *See id.*; *see also* note 83, *supra* (explaining cognitive dissonance). If he changes his beliefs to suit tax evasion behavior, his psychic costs of evasion will have declined. *See* Spicer, *supra* note 1, at 18.

²⁸⁷ *See* Davis, Hecht & Perkins, *supra* note 77, at 26.

²⁸⁸ *See* note 10, *supra*.

²⁸⁹ Skinner & Slemrod, *supra* note 10, at 350. In other words, increasing enforcement to the point that the return on an addition dollar spent on enforcement yielded an additional dollar of revenue might result in an inefficiently large IRS. *See id.*

the return on its investment in enforcement.²⁹⁰ However, in June of 1998, the GAO produced a report that analyzed IRS data to try to obtain a measure this ratio.²⁹¹ The report used 1992 audits because, due to the delay between the start of an audit and actual collection of tax, it was too soon to see how much of the additional tax recommended after 1992 would be collected.²⁹²

The GAO found that the collection to cost ratio counting only certain direct staff costs in the cost was 5 to 1 for individual business and 4 to 1 for small corporations.²⁹³ The GAO emphasized the need to be cautious in considering these ratios because “[i]f costs such as Collection's direct staff costs and IRS' indirect costs could be included, the ratios would be smaller, and the differences by type of audit could change significantly. Direct staff time accounts for about half of all time charged by auditors; much of the remaining time produces indirect costs.”²⁹⁴ If accounting for indirect costs and the direct costs of Collection staff's time doubled costs, that would result in ratio of 5 to 2 for individual business and 4 to 2 for small corporations or, put another way, every dollar the IRS spent on auditing individual business would yield an additional \$2.50 of revenue collected and every dollar the IRS spent on auditing small corporations would result in an additional \$2 of collected revenue.

²⁹⁰ See George Guttman, “Measuring the Effectiveness of the Internal Revenue Service,” 89 Tax Notes 1102, 1103 (2000) (“One of the main tools the IRS uses to assure compliance is the audit. Yet, the IRS does not know what the cost-benefit ratio of its audits are.”). In fact, the General Accounting Office has criticized the IRS for failing to collect this information. See “Tax Administration: IRS Measures Could Provide a More Balanced Picture of Audit Results and Costs,” United States General Accounting Office Report to the Honorable Rob Portman, Committee on Ways and Means, House of Representatives, GAO/GGD-98-128 at n.15 (June 15, 1998), *reprinted at* 98 TNT 122-25 [hereinafter, “GAO Audit Report”] (“IRS does not use its available data to develop and report measures that would provide a fuller, more balanced picture of audit results. For example, data on taxes recommended could be balanced with data on taxes assessed and collected in reporting audit results In developing these measures, such revenue data could be related to information on the costs of audits. In addition, IRS has the capacity to track more data beyond the direct staff costs.”).

²⁹¹ GAO Audit Report, *supra* note 290.

²⁹² *Id.*

²⁹³ *Id.* at Table 3. In contrast, the ration for individual nonbusiness was 8 to 1 and for large corporations was 10 to 1. *Id.* A small corporation was defined as one with less than \$10 million in assets. *Id.* at n.8.

The Plumley study shows that the average direct return on audit for the 1991 period was 6.2 to 1. See Plumley, Determinants of Compliance, *supra* note 192, at 86, Figure H-1. There was variation between business and nonbusiness returns, as well as by income level. See *id.* The Plumley study found that a 23.3 percent increase in audits above the 1991 level would cost \$191.4 million and yield \$10 billion more tax. Plumley, Impact of IRS, at Table 3B. Those are overall figures, not separated out by type of taxpayer.

²⁹⁴ GAO Audit Report, *supra* note 290.

These numbers do not account for the indirect effect of audits on voluntary compliance.²⁹⁵ They also are not current. In particular, they pre-date IRS reform and the accompanying restructuring of the IRS along taxpayer lines. However, more recent numbers do not appear to be available.²⁹⁶

The numbers also do not account for diminishing marginal returns because the IRS attempts to prioritize the returns most likely to produce additional revenue.²⁹⁷ However, the current level of enforcement by SB/SE is quite low. In the 2001 fiscal year, SB/SE's total examination coverage was .7 percent.²⁹⁸ Examination coverage of individuals by SB/SE was .5 percent for fiscal year 2001.²⁹⁹ At the beginning of fiscal year 2002, taxpayers were moved from the Large and Mid-Sized Business Division to SB/SE,³⁰⁰ presumably increasing its workload. These facts, coupled with the reality that the rate of audit of the self-employed has declined over time³⁰¹ suggests that an increase in enforcement would increase compliance.

The IRS might also consider having the SB/SE Division send letters to that segment of taxpayers informing those taxpayers about a compliance initiative focusing on cash-based businesses. The Minnesota Experiment found that "high-risk" taxpayers, which included those who had filed a

²⁹⁵ Studies have estimated the voluntary compliance return on enforcement at approximately 6 to 11 times the direct return on enforcement. See note 192 and accompanying text, *supra*.

²⁹⁶ In fact, numbers relating to audits started after the IRS was restructured probably would not yet be valuable because there would not have been enough time to ascertain what portion of dollars recommended after audit would actually be collected.

²⁹⁷ According to a New York Times article, "Last year, the agency pursued just one in six cases in which it found discrepancies [in information return matching], down from four in six cases in 1997." David Cay Johnston, "A Smaller I.R.S. Gives Up on Billions in Back Taxes," *The New York Times*, Apr. 13, 2001. TRAC IRS reports that "[f]or business returns reporting gross receipts of more than \$100,000 there was a three-fold decline" in the rate of audit between 1992 and 2001. <http://trac.syr.edu/tracirs/findings/aboutIRS/irsTrends.html> The audit rate of businesses with assets under \$10 million was 1.57 percent in the 1995 fiscal year, 1.88 percent in 1996, 2.22 percent in 1997, 1.67 percent in 1998, 1.16 percent in 1999, .77 percent in 2000, and .60 percent in 2001. IRS Progress Report, *supra* note 78, at 43.

²⁹⁸ 2001 Management Advisory Report, *supra* note 248, at 30.

²⁹⁹ *Id.* This compares to examination coverage by the W&I division, where compliance is high, of .4 percent, a negligible difference. See 2001 Management Advisory Report, *supra* note 248, at 5. Examination staffing in SB/SE was down approximately 7 percent in 2001. Treasury Inspector General for Tax Administration Office of Audit Fiscal Year 2003 Annual Audit Plan, Doc. 10932 at 11 (rev. 9-2002).

³⁰⁰ See note 273, *supra*.

³⁰¹ The rate of audits for individual returns filed with a Schedule C was 4.13 percent in fiscal year 1995, 3.60 percent in 1996, 3.15 percent in 1997, 2.35 percent in 1998, 2.02 percent in 1999, 1.55 percent in 2000, and 1.60 percent in 2001. See IRS Data Books, Fiscal Years 1995-2001, Tables 11 and 12 (percentages calculated by the author).

federal schedule C and paid Minnesota estimated taxes, were positively influenced by the audit letter.³⁰² If the IRS succeeded in tipping this segment of taxpayers to a compliance norm, it could follow up with a compliance norm letter at that point.

Conclusion

Tax noncompliance is a complex issue with a multitude of causes. The traditional response to noncompliance is enforcement, and the intuitive prediction provided by economic modeling that increased audit rates and higher sanctions each increase tax compliance has been confirmed by a number of studies. In addition, innovative research by the governments of Minnesota and Australia suggest that compliance can be influenced by reports to taxpayers that compliance is higher than many people think it is.

Although enforcement of the tax laws by the IRS and fostering of a compliance norm are sometimes viewed as inconsistent, the evidence suggests that enforcement does not undermine compliance norms. Enforcement not only produces direct revenue, but also increases revenue from “voluntary” compliance. That means that, even if theoretically, enforcement were to have a positive compliance effect in terms of deterrence and a negative effect with respect to compliance norms, overall enforcement increases voluntary compliance.

Moreover, enforcement does not seem to be inconsistent with efforts to foster a compliance norm. Laboratory experiments suggest that the availability of costly punishments in public goods games increases cooperation. In addition, because taxpayers are heterogeneous, it is likely that some taxpayers respond better to enforcement and some to normative appeals. The Minnesota study found that to be the case.³⁰³ Another study found that those taxpayers who believed that there was a higher likelihood that small tax cheaters would be detected had a lower belief in the normative acceptability of underreporting compared to other taxpayers.³⁰⁴

Taken together, these results support the theory that, because of the presence of taxpayers who are “conditional cooperators,” there may be two stable equilibria for taxpayer communities: compliance and noncompliance. The IRS can tailor appropriate compliance efforts accordingly. Thus, for

³⁰² See text accompanying notes 201-203, *supra*. “High-risk” taxpayers were defined as taxpayers who filed a federal schedule C (for business income) or F (for farm income) in 1993 and who paid Minnesota estimated taxes in 1993. Coleman, *supra* note 33, at 2. Surprisingly, the audit letter seemingly had no effect on taxpayers who reported 1993 rental income, income from farming, income from a partnership, or income from an S corporation. *Id.* at 21. There was minimal overlap in the two groups (with respect to those who received farm income, filed a Schedule F, and paid estimated taxes). E-mail correspondence with Dr. Coleman, on file with the author.

³⁰³ See notes 204-206 and accompanying text, *supra*.

³⁰⁴ See note 188 and accompanying text, *supra*.

example, with respect to the highly compliant taxpayers under the jurisdiction of the W&I Division, the IRS can continue to use high levels of document matching and low levels of audits, perhaps combined with a letter informing taxpayers that compliance is higher than they might think. In contrast, where evasion is a major problem, as it is with respect to the cash-based businesses under the jurisdiction of the SB/SE Division, the IRS can increase enforcement to the tipping point for a compliance equilibrium. At that point, norms-based appeals should have more force.