LAW AND SOCIAL NORMS:  
THE CASE OF TAX COMPLIANCE

Eric A. Posner*

Corporate tax shelters are our No. 1 problem [in enforcing the tax laws], not just because they cost money but because they breed disrespect for the tax system.

Lawrence H. Summers¹

INTRODUCTION

SCHOLARSHIP on the relationship between law and social norms, between legal and nonlegal sanctions, is flourishing, and there is no sign that it will abate any time soon. It has produced new insights, suggested new approaches, and led scholars down unfamiliar paths, and yet there is reason for dissatisfaction. The main problem is that there has been no convergence on methodology, and the result of this is, on the one hand, a large number of ideas that do not cohere and are thus difficult to evaluate, and, on the other hand, too much scholarship that is abstract and methodological rather than devoted to understanding particular problems of law and social behavior. Fortunately, this seems to be changing. Over the last few years there have appeared a number of applications on topics as diverse as corporate law, criminal punishment, and divorce.² This Essay is intended to contribute to the debate by adding one more application; its topic is the law of tax compliance.

*Professor of Law, University of Chicago. Thanks to Beth Garrett, Dan Kahan, Doug Lichtman, Richard Posner, Julie Roin, and David Weisbach; to conference participants, especially Robert Ellickson, Russell Hardin, Saul Levmore, and Richard McAdams; and to the Sarah Seacole Foundation Fund and the Lynde and Harry Bradley Fund for generous financial support. Scott Hessell provided valuable research assistance.


²Scholarship that focuses on specific problems includes Lisa Bernstein, Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms, 144 U. Pa. L. Rev. 1765 (1996) (contract and commercial law); Robert D. Cooter, Punitive Damages, Social Norms, and Economic Analysis, 60 Law & Contemp. Probs. 73 (1997) [hereinafter Cooter, Punitive Damages] (punitive damages); Robert D. Cooter, Structural Adjudication and the New Law Merchant: A Model of
Why tax compliance? A widespread view among tax scholars holds that law enforcement does not explain why people pay taxes. The penalty for ordinary tax convictions is small; the probability of detection is trivial; so the expected sanction is small. Yet large numbers of Americans pay their taxes. This pattern contradicts the standard economic model of law enforcement, which holds that people violate a law if the benefit exceeds the expected sanction. Some scholars therefore conclude that the explanation for the tendency to pay taxes must be that people are obeying a norm—presumably a norm of tax payment or a more general norm of law-abiding behavior.

A little reflection shows why this is not a complete argument. Americans are more likely to pay their taxes than Italians and Russians. If the reason is that Americans are more likely to obey纳税 norms, why is this so? Why are Americans more likely to


4 There are alternatives that I will not discuss, such as endogenizing the audit rate in a game theoretic model. See, e.g., Michael J. Graetz et al., The Tax Compliance Game: Toward an Interactive Theory of Law Enforcement, 2 J.L. Econ. & Org. 1 (1986).
pay some taxes (income tax) than others (nanny tax or sales tax on
mail order goods)? If the reason is that there is a norm of paying
income taxes but not of paying nanny taxes, where does this norm
come from? And if there is a norm, why do many people nonethe-
less refuse to pay taxes, or underreport income, or cheat in other
ways? The argument does not explain where norms come from,
how they can be enhanced or weakened or exploited, why they in-
fluence some people but not others, and so on. Yet these questions
need to be answered before a norm-centered theory of tax compli-
ance can be considered adequate.

I. THE PROBLEM OF TAX COMPLIANCE

A simple approach to the problem of tax compliance holds that
when people decide whether to pay their taxes, they take account
only of the cost of the tax and of the expected legal sanction from
noncompliance. If the expected sanction exceeds the tax payment,
the person will pay; otherwise, he will not. As an example, suppose
that a person, P, has earned $1000 in income that has not been re-
ported to the Internal Revenue Service ("IRS") and has not been
subjected to withholding. At a marginal rate of 30%, it costs him
$300 to report the income to the IRS and pay the appropriate tax.
If P does not report the income, and there is a 1% chance that he
will be audited and his deception detected, then the proper san-
cion is a fine of $30,000 (or an equivalent imprisonment).
Considered ex ante, P would comply with the tax law only if he an-
ticipated a sanction of this amount or higher, given the 1% pro-
probability of detection.5

Taken as a prediction of how governments enforce tax com-
pliance, the model does a poor job.6 In the United States, civil
penalties for tax evasion may be as high as 75% of underpayment
(in case of fraud) but are generally closer to 20%. Criminal penal-
ties are more severe but are rare. The audit rate is currently under
2%, and of those audited only a small fraction (4.1% in 1995) are

5This model was created by Michael G. Allingham & Agnar Sandmo, Income Tax
Evasion: A Theoretical Analysis, 1 J. Pub. Econ. 323 (1972); it was derived from Gary
6For a useful though dated survey of empirical research, see Taxpayer Compliance: Volume I: An Agenda for Research 92–112 (Jeffrey A. Roth et al. eds., 1989).
penalized.\textsuperscript{7} The most obvious explanation for compliance—mandatory employer reporting of information—also has only limited value.\textsuperscript{8} Given the low penalty for tax evasion and the audit rate, tax evasion should be widespread. Yet the IRS estimates that 83\% of taxes are collected.\textsuperscript{9}

The model also fails to explain, or assumes away, many facts about people'staxpaying behavior:

- People are more likely to pay taxes if they believe that their friends and other citizens pay taxes.\textsuperscript{10}
- Social sanctions affect compliance rates.\textsuperscript{11}
- People are more likely to pay taxes if tax authorities seem fair and have fair procedures.\textsuperscript{12}
- People are less likely to pay nanny taxes than income taxes.\textsuperscript{13}
- W-2 withholding makes people look at reporting of other income as, in effect, supererogatory.\textsuperscript{14}
- People are more likely to pay taxes if they think the government isn't wasting tax revenues.\textsuperscript{15}

\begin{footnotes}
\footnote{See Andreoni et al., supra note 3, at 820–21.}
\footnote{See id. at 821–22.}
\footnote{See id. at 822.}
\footnote{Yankelovich, Skelly, & White, Inc., Internal Revenue Serv., Taxpayer Attitudes Study: Final Report 61 (1984).}
\footnote{See David Cay Johnston, Despite an Easing of Rules, Millions Evade “Nanny Tax,” N.Y. Times, Apr. 5, 1998, at A1 (noting that fewer than 1 in 13 comply with nanny tax). As noted above, more than 80\% of income taxes are paid. See also David Cay Johnston, The Old Tax Dodge: While the Affluent May Lead the Way, Others Eagerly Follow, N.Y. Times, Apr. 15, 1998, at D1, D5 (describing the increase in various forms of tax evasion).}
\footnote{See Steven M. Sheffrin & Robert K. Triest, Can Brute Deterrence Backfire? Perceptions and Attitudes in Taxpayer Compliance, in Why People Pay Taxes, supra note 12, at 193, 203 tbl.2.}
\end{footnotes}
People don’t think of tax cheating as being as serious as embezzlement.\textsuperscript{16}

People may be more willing to pay taxes after being reminded of their moral obligations as citizens.\textsuperscript{17}

Social norms of tax compliance differ across countries. For example, in the United States, there appear to be strong norms; in Spain, the norms are weaker.\textsuperscript{18}

We will discuss these stylized facts in greater detail below.\textsuperscript{19} For now, observe that a few of them can be absorbed into the basic model with little strain. One might argue, for example, that it is natural for people whose friends pay taxes to think that the probability of audit is high, and people whose friends do not pay taxes to think (or realize) that the probability of audit is low. But most of these facts are not so easily absorbed by the model. A person who likes government policy faces the same expected sanction for tax evasion as a person who does not like government policy. Because the first person benefits from the policy regardless of whether he pays taxes, he should be no more likely than the second person to comply with tax law. A person who is reminded of his moral obligation to pay taxes should not, under the basic model, change his behavior. If we acknowledge that the basic model cannot address some of these facts, we should reconsider our assumption that it can deal with the others.

What is needed is a more capacious model. I will supply such a model in the next Part.

\textsuperscript{16} See Ekstrand, supra note 14, at 255.
\textsuperscript{18} In an experimental setting that attempted to replicate taxpaying incentives, the average compliance rate for Americans was 27% and for Spaniards 7%, holding all parameters (audit rate, fines, etc.) constant. See James Alm et al., Economic and Noneconomic Factors in Tax Compliance, 48 Kyklos 3, 13 (1995). It is conventional wisdom that tax compliance rates vary widely across countries.
\textsuperscript{19} I should mention that some or many of them may be false; some of the studies do not inspire confidence. But enough of them have both empirical support and intuitive plausibility.
II. A MODEL OF TAX COMPLIANCE

A. The Setup

Imagine a society consisting of some number of people with fairly uniform endowments but with varying preferences. Every individual's preferences are private information. Each individual periodically matches up with some other individual in order to engage in a "cooperative relationship." A cooperative relationship, which may be commercial, social, or intimate, has the structure of a repeated prisoner's dilemma ("PD"). Each relationship lasts at least one round, and thereafter ends in any given round with some small probability. From the individual's perspective, then, the relationships have an indefinite length; they may end soon or last for a very long time. We might imagine that each person enjoys multiple relationships at any given time, but for simplicity, we will suppose that a player has no more than one relationship during any round of play.

During a cooperative relationship, a player chooses to cooperate or cheat. The PD structure means that if players know that the current round, \( t \), is the last round, they will cheat. However, because the players know that they may meet again in a later round, they have an incentive not to cheat. If one player cheats in round \( t \), then the other player might retaliate by refusing to cooperate in round \( t+1 \) and future rounds as well, and the first player will lose the possibility of obtaining returns from future cooperation with the second player. In addition, we will suppose that future partners know (or have some information about) whether a player has cheated in past relationships. Thus, players may refrain from cheating in the hope that they will develop a reputation for not cheating—both within an existing relationship and generally among others in the society.

We assume that players have different time preferences. "Bad types" have high discount rates, meaning that they value future payoffs relatively little compared to current payoffs. "Good types"

---

20 For a more detailed description of this model, with citations, see generally Eric A. Posner, Law and Social Norms 13–35 (2000) (describing a signaling model of social norms). The central concept—that of signaling—is due to A. Michael Spence, Market Signaling: Informational Transfer in Hiring and Related Screening Processes (1974), and is discussed in standard economics and game theory textbooks, for example, David M. Kreps, A Course in Microeconomic Theory 629–50 (1990).
have low discount rates. The standard result in the repeated PD model is that a necessary condition of cooperation is that both players have a sufficiently low discount rate. Thus, those who consistently cooperate are more likely to develop reputations for being good types, and those who cheat are more likely to develop reputations for being bad types. To see why, suppose that observers start with the belief that everyone has the same discount rate. When observers see that some players cheat, they will assume that those players have above-average discount rates, and thus are more likely to be bad types. It follows that those who do not cheat have below-average discount rates, and thus are more likely to be good types. (Although it is possible that even good types will adopt strategies of noncooperation, it seems plausible that they will cooperate.)

The setup has one more piece. As noted above, individuals have private information about their preferences, including their discount rates. Everyone wants others to believe that he has a low discount rate, because people prefer to cooperate with those who have low discount rates, knowing that the latter are least likely to cheat. A good type wants partners because he values the long-term payoff from cooperation over many rounds. A bad type wants partners because he values the high first round payoff from cheating someone who attempts to cooperate. Everyone will therefore spend resources trying to persuade others that he belongs to the good type. This activity involves sending “signals.”

Signals are costly actions that are recognized as such by those who observe them, and they have the function of disclosing information about the person who sends the signal. An action is not a signal if the actor intrinsically enjoys the action (like eating ice cream) or obtains some benefit from it (like selling goods) independent of the information benefit. When a good type sends a signal to potential cooperative partners, he is, in effect, saying:

I can afford to send this signal only because I expect to receive a high discounted payoff from cooperating with you, but I can receive a high discounted payoff only if I have a low discount rate; therefore, you should match up with me and expect me to cooperate every round (unless you cheat me).
If the signal is properly chosen, a bad type will not be able to mimic the good type, and in the resulting equilibrium (known as a “separating equilibrium”), only good types send the signal, and only good types match up with other good types. Bad types do not send the signal, and they do not match up with anyone, or at best match up with each other. Of course, in the real world, good types often send signals that are too cheap, so bad types can mimic them, sowing confusion about who belongs to which type. In the resulting equilibrium (a “pooling” or “semi-pooling” equilibrium), people may match up with good and bad types; they are cheated by the bad types, but the loss is offset by the gains when they match up with good types. Alternatively, everyone avoids everyone else. Whether the equilibrium will involve everyone matching up, no one matching up, or something in between depends on the proportion of good and bad types in the population and the various payoffs from cooperation, cheating, and being cheated.

A “social norm” is defined as equilibrium-signaling behavior. When people shake hands, wear ties or high heels, eat with forks, give money to charities, exchange gifts with family members, and engage in similar ritualized activities, they are sending signals. Signals, once started, tend to repeat themselves. The first signals will generally establish separating equilibriums that benefit the good types who invented them. These good types attract all the best partners. In order to compete for these partners, other good types mimic the signal. If technologies change over time and the cost of the signal declines, bad types may be able to mimic the good types, converting a separating equilibrium into a pooling equilibrium. At this point, all types may become stuck in a costly equilibrium. No one wants to be the first to deviate, because he fears that others might infer that he belongs to the bad type and can no longer afford the signal. Over time, deviation may occur as a result of experiment or mistake, and the norm may crumble, but many norms persist long after they stop distinguishing people by type.

Again, social norms describe equilibrium signaling. What distinguishes this view from the view of many other writers in this area is the idea that social norms are endogenous. They are labels we attach to behavior in which people engage as they attempt to maximize the satisfaction of their preferences, broadly defined. Norms do not cause anything. Men do not, for example, wear ties
because they have internalized a norm of tie-wearing. Men wear ties because they fear that they will lose potential cooperative partners if they fail to wear ties.\textsuperscript{21} Calling this behavior “conformity to a social norm” comes after the fact.

This view should also be distinguished from the theory, held by Robert Ellickson among others, that social norms are those patterns of behavior that emerge when people cooperate in an \(n\)-player PD.\textsuperscript{22} If Ellickson’s view were correct, social norms would exist even if everyone had complete information about everyone else. Under my view, social norms exist only because of the existence of private information.

The particular signal that is relevant in the present context is that of compliance with the law. In a given community, it may be the case that compliance with the law, or with some laws but not others, serves as a signal of one’s type.\textsuperscript{23} For this to be true, it is not necessary that everyone observe whether a particular person actually complies with the tax law at any given time. Such observation can come about indirectly. If a person does not comply with the tax laws, and he is subsequently detected and prosecuted, his failure to follow the tax laws becomes known. Tax compliance, then, is observable in a stochastic sense. The person who fails to comply is revealed (by the state) to be a bad type, and he is accordingly stigmatized.

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. People know that many other people might be bad types and that they cannot avoid dealing with them sometimes even though they prefer not to, because the identities of the bad

\textsuperscript{21} I should stress that this view is a methodological commitment. It is possible that psychological processes are at work as well: For example, wearing a tie becomes a habit so that one feels uncomfortable, physically or psychologically, if one fails to wear a tie even in a setting where no one else is wearing a tie. But I do not think that habit explains very much. People acquire habits easily and drop them when they are no longer useful. Habituation may make behavior slightly insensitive to underlying payoffs, but it drops out of descriptions of aggregate or long-term behavior.

\textsuperscript{22} See generally Robert C. Ellickson, Order Without Law: How Neighbors Settle Disputes 123–35 (1991) (describing a model where social control is achieved through social norms in a prisoner’s dilemma situation).

\textsuperscript{23} See Posner, supra note 20, at 88–90.
types are unknown. Once a person has been identified as a bad type, however, others have every reason to confine their dealings to those who remain in the (large) pool of the unstigmatized. If 50% of the population violated tax laws and were detected and punished, then employers (for example) would not avoid, by firing or refusing to hire, these people, because their criminality would not reveal much information about them and the population of nonviolators would be so small that a policy of hiring only nonviolators would be very expensive. This policy would be like firing or refusing to hire people who have received speeding tickets. If 1% of the population is caught, then employers do gain by firing or refusing to hire these people; in this case, their criminality is good evidence that they belong to the bad type, and it is not costly for the employer to seek other employees from the remaining 99%.24 Stigma arises only when a behavior or its detection is rare. The fear of such stigma is the source of compliance.

Because there is sometimes confusion about this, I should emphasize that stigmatizing or ostracizing does not necessarily come about through coordinated collective action. A person avoids a tax cheat because the tax cheat has shown that he has a high discount rate and is therefore a bad cooperative partner. It is not necessary that observers cooperate in order to stigmatize the tax cheat, because no observer has an incentive to deal with someone whom he cannot trust. To be sure, stigmatizing behavior itself may become a signal, and so people may signal by punishing those who violate norms, but this behavior is not necessary to explain the existence of norms, and indeed might be pathological.25 This is an important distinction between the signaling model and other models of social norms.26

If this theory is true, it turns the basic model on its head. Suppose that at a given time a law is underenforced. Some people violate the law because the benefits of the illegal activity exceed

25 See Posner, supra note 20, at 92–94 (discussing witch hunts, charivari, and other enforcement pathologies).
26 In Ellickson’s model, for example, order is maintained because individuals retaliate when others deviate. See Ellickson, supra note 22, at 124. As he realizes, this is not realistic for large groups, and that is why he confines his welfare maximization thesis to small, closely-knit groups. See infra Conclusion.
the expected sanction. Other people, however, do not violate the law, and the reason is that by incurring the cost of not violating the law (which equals the benefit minus the expected sanction), they reveal that they belong to the good type—or, what is the same thing, they avoid the risk of being identified as a bad type. Now the government increases the expected sanction. Marginal members of the first group start obeying the law because the expected sanction rises above the benefit of the illegal activity. But marginal members of the second group start violating the law because the signal (compliance with the law) becomes weaker, so it becomes less effective at revealing type, and these people substitute to some other signal, such as wearing expensive clothes or making philanthropic gifts.

This modification of the basic model might seem perverse, because it converts a simple model with nice predictions into a messy model with ambiguous predictions. But recall that the basic model’s nice predictions are wrong. And observe that the modification of the model was slight. All we did was add the realistic assumption that people have private information about their time preferences. And we did this as a way of capturing a very important part of social life—the fact that people care about their reputations, and will take steps to protect them.

B. The Role of the Government

One of the interesting questions raised by articles on law and norms is whether the government can exploit social norms in a useful way. The motivation for this inquiry is compelling: If people can be made to act properly because of social norms, rather than because of fear of legal sanction, then the desired behavior can be obtained at less cost. Judges, lawyers, courthouses, and the rest of the apparatus of the legal system are expensive. If people conformed to desirable social norms, then these costs could be avoided.

But a policy of strengthening desirable social norms faces complex problems. It is difficult to predict the effect of laws on social norms. Self-conscious attempts by government officials to manipulate social norms may backfire. And, though often overlooked, the system of norm-driven or nonlegal coordination may be as expensive as the legal system. Conformity to social norms means not
satisfying norm-inconsistent preferences—that is a cost. And conformity to social norms means spending valuable time sanctioning or avoiding violators of norms—that is a cost, too. Finally, social norms may simply be undesirable. Conformity to them may harm third parties, such as minorities picked out by the norm for exclusion—that is a big cost.  

These questions and problems have not been ignored by the tax compliance literature. But the literature has not made them its focus, either. Our inquiry is whether the model of social norms discussed above can provide the basis of a systematic analysis.

Government action, and law generally, can be understood in two ways. First, as noted above, compliance with the law, including tax laws, might emerge as a signal that one belongs to the good type in some communities, though in other communities it might not serve as such a signal. This raises the question whether the government can, by modifying tax law and enforcement, enhance desirable signals or weaken undesirable signals. The government may manipulate social norms, but from the outside, so to speak.

Second, if people regard themselves as playing the signaling game with the government, then the government might enhance or weaken tax compliance by playing in the right way, which means sending appropriate signals. Under this approach, people care about the government's discount rate. The government cannot manipulate social norms; it can decide only whether to raise levels of trust by complying with existing social norms. It cannot manipulate the social norms, because it is an insider.

1. Government as Outsider

Many signals have no relation to the law. People exchange gifts, wear formal dress, and use terms of respect in order to signal their type. But other signals appear to be related to, and even driven by, the law or other government action. Commonly discussed examples include declining to smoke after the law prohibits smoking and recycling after the law compels recycling. In these cases, it is plausible to suppose that the legal penalties for violation are known to be small or nonexistent, and the behavior is norm-driven rather

---

27 See Russell Hardin, One for All: The Logic of Group Conflict ch. 4 (1995); Posner, supra note 20, at 175.
than law-driven. In our terms, not smoking and recycling become signals. In these cases, it is possible, although by no means clear, that the signal is a reaction to government action, rather than independent of it. It may be the case that the government forbids smoking only after not smoking has become a signal that one belongs to the good type; but it may also be the case that the causation is in the reverse direction.

There is no doubt that compliance with some laws is an important signal of type. The stigma of the ex-convict is severe, and it is no exaggeration that many fear that stigma as much as, or more than, fines or imprisonment. Empirical studies indicate that people who commit crimes lose significant expected income, which is not surprising, because employers do not trust people who have been convicted of crimes.28

But there are important exceptions to this generalization. The violation of some laws, including parking laws and traffic laws, carries little stigma.29 Businesses do not seem to be stigmatized by customers or other agents when they violate a range of regulations, including occupational safety, food and drug, and antitrust regulations. The violation of other laws results in harsh stigma in some communities but not others, and the stigma can vary over time. Drug users are not stigmatized by large segments of the population; this was even truer in the past than today. Drunken drivers are stigmatized more today than in the past. Men who beat their wives or harass women are stigmatized more today than in the past. White collar criminals are not stigmatized as much as violent criminals, but the stigma rose during the 1980s, as a result of the vast sums acquired and squandered during the savings and loan and insider trading scandals. Some criminals are romanticized rather than despised (such as robbers who give money to the poor, revolutionaries, and hackers).30 Violators of Prohibition-era laws

---

28 For a discussion and citations to the empirical literature, see Posner, supra note 20, at 95 n.4.
29 There are many laws on the books that are no longer enforced, such as laws against swearing or sexual misbehavior of various sorts. If these laws were enforced, it is doubtful that convictions would stigmatize. See, e.g., Keith Bradsher, Canoeist Goes to Court, Fighting for Right to Curse, N.Y. Times, June 3, 1999, at A18.
30 See generally Pfaff, supra note 2 (discussing the limited applicability of social sanctions for different types of crimes). It may be no coincidence that romanticized criminals are admired because they do not seek money, but seek fame, revolutionary change, or thrills—in other words, these are criminals who may have very low dis-
were often not stigmatized. People convicted of homosexual sodomy are stigmatized less today than they were in the past, but people convicted of child molestation are probably stigmatized more, as are people convicted of what are now called hate crimes. Corporations that violate environmental protection laws are probably stigmatized more than those that violate zoning laws, but even then stigma seems likely only when the violation is egregious.

Where does tax evasion fall in the range of nonlegal responses to illegal behavior? Among the upper middle class, evasion of the nanny tax and taxes on mail-order goods carries less stigma than underreporting of income. Aggressive use of tax shelters is not stigmatizing until the shelters are definitely forbidden. One study suggests that tax evasion in general is less stigmatizing than a similar crime like embezzlement. Still, intuition and anecdote suggest that the stigma remains quite severe. Recently, a tax professor convicted of civil (not criminal) tax fraud was reportedly stripped of his tenure and fired.

These observations raise several questions: (1) Does the stigma against tax evasion, such as it is, explain the stylized facts discussed at the outset, including the high level of tax compliance? (2) Can the government enhance the stigma against tax evasion, so that it is as harsh as, say, the stigma imposed on the convicted embezzler or even thief? (3) If the government can enhance the stigma, should it?

To answer these questions, let us consider three groups separately: mainstream taxpayers, deviants, and marginal taxpayers.

Mainstream taxpayers pay taxes even when the expected sanction is less than the size of the tax. They do so because tax payment is a signal. To the extent that payment of taxes is directly visible to others (such as spouses), the actual payment is a signal that one belongs to the good type. But probably more important, the signal consists of the payment of taxes even when nonpayment carries count rates (they are patient and disciplined) but idiosyncratic preferences along other dimensions.

31 See Ekstran, supra note 14, at 255 (analyzing the empirical evidence that suggests an increase in the overstatement of deductions and the understatement of income); supra text accompanying note 16.
32 This has been reported to me by several colleagues. However, I have not found an authoritative citation.
33 Mainstream groups might loosely make up the formal sector of the economy; deviant groups, the informal sector.
only a small risk of detection and prosecution. Exposure at this point means that everyone knows that the person did not send the signal, and the failure to signal results in stigmatization (in the narrow sense of being avoided by people seeking cooperative partners, including employers seeking trustworthy employees). This outcome is what the mainstream taxpayer fears most. Put differently, the effective sanction is not just the tax penalty, but the sum of the tax penalty and lost opportunities resulting from observers revising downward their beliefs about the violator's type and, as a consequence, refusing to deal with him.

For people in deviant communities, tax payment is not a signal. If a person's failure to pay taxes is detected and exposed, others will not revise their beliefs about that person's type. This may be because people already have a low opinion about that person as a consequence of his prior actions, such as other forms of criminal activity. It may also be because tax payment is not salient in the way that other costly actions are. In a community beset by crime or other dangers, people might signal each other by participating in mutual security rather than by paying taxes to a remote and ineffective government. These people will pay taxes only if the expected sanction exceeds the tax payment.34

For people in marginal communities, tax payment is a weak signal. If a person is detected and exposed, people will revise downward their beliefs about his type, but only slightly. One reason this might be so is that in equilibrium no one (or few people) pays his taxes. But if more people paid their taxes, then tax payment could become a signal that produces a separating equilibrium.

Lest these distinctions seem fanciful, consider this passage from a recent article in the New York Times, quoting Larry Langdon, commissioner of the Internal Revenue Service large and midsize business division.

"You can divide the corporate world into white hats, gray hats and black hats," Mr. Langdon said.

He said the black hats had long taken aggressive postures on tax matters, pursuing schemes that white-hat companies would reject.

---

34 Also note tax protest groups—groups whose members believe that government is evil, so violation of tax law confers status.
What alarms IRS and Treasury officials is the willingness of the white hat companies to match this conduct "because the payoff to shareholders is sufficient to make the risk to their public image worth it or because their shareholders will say, hey, everybody else is doing it, you should do it, too."\(^{35}\)

The white hats belong to the mainstream community, the gray hats to the marginal community, and the black hats to the deviant community. Treasury officials worry that, if enough white hats adopt aggressive tax strategies, the value of tax compliance as a signal will disappear. The separating equilibrium will collapse as trustworthy firms adopt other, less socially desirable strategies, like advertising, to distinguish themselves from the black hats.

The government might approach each community in a different way. For the mainstream community, the government should not increase the penalty for failure to pay taxes. It might even make sense to reduce the penalty (in order to make the signal stronger), as long as the penalty is not reduced to such an extent that the sum of legal penalty and reputational losses from publicized noncompliance are no longer sufficient to deter tax evasion, and the separating equilibrium collapses. Alternatively, the government might increase publicity of the names of those who fail to pay taxes, in order to strengthen the nonlegal sanction. Currently, if the IRS discovers that a taxpayer has failed to report income, it cannot threaten to reveal his name to the public; if the person pays the back taxes plus penalties, his identity will remain hidden from the public. If this law were changed, and if more people knew that the person was a tax violator, more people would avoid the person, so the effective sanction would rise.

For the deviant community, the government might simply increase tax penalties. Indeed, the government might shift resources from enforcement in the mainstream community to enforcement in the deviant community. This shift might drive deviants into the mainstream community, although, if the deviants simply evade the law and do not report income, the additional investment of resources may not yield commensurate returns.

For the marginal community, the government's problem is that raising tax penalties might reduce tax compliance by reducing the

\(^{35}\) Johnston, supra note 1, at A36 (emphasis added).
signaling value of tax compliance, but lowering tax penalties might reduce tax compliance by reducing the legal deterrent. Because the effective deterrent is the result of both forms of sanction, and because raising the legal deterrent may reduce the nonlegal deterrent and vice versa, the effect of changes in policies may be indeterminate. The dilemma presented by the increasing use of aggressive tax shelters by white-hat firms is that increasing the penalty might salvage the signaling value of compliance by driving down the number of violators (so that the "everyone else does it" phenomenon disappears), but increasing the penalty also might destroy the signal by eliminating the plausibility of the claim that one complies because one is a good type (rather than because of the legal penalty).

One interesting alternative—one that distinguishes the tax system from the criminal law system—is to modify the amount of tax liability, rather than the sanction. In criminal law, the social cost of the crime puts a constraint on the freedom to choose a sanction. In tax law, if one class of people pays taxes freely and another class of people is reluctant, the government is not constrained from taxing the first class more and the second class less. The government might want to raise the taxes of mainstream taxpayers while lowering the taxes of marginal taxpayers. Keeping sanctions constant, such a policy might strengthen signals for both classes: for the first, by increasing the cost of compliance; for the second, by reducing the cost of compliance. The government exploits social norms in the first case, while nurturing them in the second.

The attraction of this proposal is that it raises tax revenues without increasing the cost of tax collection or producing distortions in the tax system, and it does so by exploiting information asymmetries. When the law is well designed, the best possible outcome for society is that law-compliance becomes a signal, or—what is exactly the same thing—that there is a social norm that requires compliance with the law. People obey the law in order to maintain their reputation for being a good type, so legal enforcement can be minimal. By contrast, many other signals—including gift-giving,
clothing fashion, and conspicuous consumption—can be pathological.36

But these proposals have many problems. One problem is the difficulty of determining the level of sanction that would be necessary to create a tax compliance signal. If the expected sanction is too low, the benefit from evasion will exceed even the reputational sanction, and then if everyone (as a consequence) violates the law, even the reputational sanction will disappear. If the expected sanction is too high, conformity to the law cannot be a signal. It may be that the government can hit on the right level of enforcement by experimenting, but it is hard to know whether experimentation would have other undesirable effects.

In addition, it may be impossible to treat mainstream, deviant, and marginal taxpayers differently, or to treat different communities of taxpayers differently, and there may be constraints on the determination of tax liability. We discuss these and other problems in the next section.

2. Government as Insider

We now turn to a still more serious difficulty, which is that the government must be considered a player in the game. By the "government" I mean a corporate entity represented by its agents, which include political officials and civil servants such as revenue agents.37 The government is a player in the game in the sense that people will adjust their behavior in response to its behavior, and the government should anticipate these adjustments when setting its policies.38

36 See generally Posner, supra note 20, at 170–75 (arguing that many social norms that are not welfare-maximizing persist).
37 Cf. David M. Kreps, Corporate Culture and Economic Theory, in Perspectives on Positive Political Economy 90 (James E. Alt & Kenneth A. Shepsle eds., 1990) (describing some basic ideas about corporate culture). For a recent survey, see Benjamin E. Hermalin, Economics and Corporate Culture (1999) (unpublished manuscript, on file with author). For the moment, I will ignore the important distinction between the "government" and the Internal Revenue Service: Each could, of course, have a different reputation.
38 Cf. Smith, supra note 12, at 227 (relying on the assumption that there is a norm of reciprocity and arguing that people are more likely to cooperate with authorities if authorities are "responsive, respectful, and fair"). Smith assumes the existence of a norm rather than relying on the game theory approach; in addition, he focuses on procedures rather than substantive tax treatment. See also Massimo Bordignon, A Fairness Approach to Income Tax Evasion, 52 J. Pub. Econ. 345 (1993) (arguing that
The "government"—really, the current administration or the officials who make up that administration—must send signals because citizens are never sure whether to trust political officials. They will trust officials more if they believe that the officials have a low discount rate and have interests or values that are similar to those of the citizens. If citizens trust officials, they are likely to vote for them, and they are likely to cooperate with them when governance requires popular participation. Because the officials' discount rates and other preferences are private information, they have a strong incentive to issue signals.

What are these signals? One way to think of them is to imagine how government officials would behave if they did not have to send signals. They would presumably raise revenues using the most efficient tax system available. Such a system might not resemble the one we have today, for tax collectors probably would dispense with due process, politeness, and evenhandedness. More generally, "good tax-collecting behavior" is maintaining confidential information, refraining from threats and intimidation, keeping the tax payment process as simple as possible, and avoiding intrusion as much as possible. It might also mean implementing policies that taxpayers support, rather than funding the private interests of government officials, but for now we ignore this possibility.

Government signaling matters, not only because government officials want citizens to trust them, but also because government behavior may serve as a focal point around which private signaling occurs. Government behavior draws special attention because everyone cares about what the government does. When the government is democratic, people will often infer that the government behavior reflects the interests of the general population. An environmentalist government, no doubt, has many environmentalist constituents. So, a person in a society governed by environmentalists is likely to conclude that environmentalism is a standard signal of the good type among fellow citizens. To establish that he is a good type, he will sensibly imitate this signal. But this can be true only as long as everyone believes that government officials do in fact behave responsibly.

tax compliance is a function of perception of fairness of government spending and of compliance of other taxpayers).
An example of government signaling is the recent restriction on the IRS's ability to audit taxpayers. Most observers agree that the horror stories that motivated the change in the law are rare, and that the effect of the law is simply to hamper the IRS's ability to enforce the tax laws. One interpretation of the reform is that the law is a signal (or, if you want, it forces the IRS to send a signal), namely, that government officials are not desperate for short-term revenues, that is, that they have a low discount rate. By sending this signal, the government informs people that it has little incentive to engage in bad tax-collaborating activities. As a result, people might infer that government officials can be trusted: They have low discount rates—they plan to stay around for the long term.

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. These procedures show straightforwardly that the government is willing to sacrifice short-term gains, which can only be true of a government with a low discount rate.

Another example of such signaling is refraining from engaging in tax amnesties. Although there is much disagreement on the effects of tax amnesties, the most plausible view is that they result in a short-term increase in revenue, which is offset over the long term by a decline in compliance caused by the reduction in the expected

---

48 When I discuss amnesties, I assume that once a government issues an amnesty, the public will assume that amnesties become more likely in the future; I do not deal with one-time, unpredictable amnesties, which, like lump-sum transfers, may be efficient.
49 For contributions to the (inconclusive) empirical literature on the effects of amnesties, see, for example, James Alm & William Beck, Tax Amnesties and Compliance in the Long Run: A Time Series Analysis, 46 Nat'l Tax J. 53 (1993); Arindam Das-Gupta & Dilip Mookherjee, Tax Amnesties as Asset-Laundering Devices, 12 J.L. Econ. & Org. 408 (1996); Ronald C. Fisher et al., Participation in Tax Amnesties: The Individual Income Tax, 42 Nat'l Tax J. 15 (1989); and John L. Mikesell, Amnesties for State Tax Evaders: The Nature of and Response to Recent Programs, 39 Nat'l Tax J. 507 (1986). It must be emphasized that the literature is inconclusive; indeed, the Alm & Beck article finds that revenues did not even increase (over expected receipts) in the short term!
sanction. There may be a net gain, especially if tax cheating already occurs at a very high rate, but under ordinary circumstances an amnesty, like debasement of the currency, simply transfers revenue from future governments to the current government. Thus, tax amnesties will be considered a signal that a government has a high discount rate, which may be the result of political instability. Political officials do not expect to remain in office for long, so they enact policies that transfer resources from the future to the present. But then mainstream taxpayers will believe that the officials are untrustworthy and withdraw support. (This argument produces the testable hypothesis that tax amnesties are associated with relatively unstable governments, a prediction that we test below.)

It was mentioned above that taxpayers might extend the concept of "good tax-collecting behavior" to include broader government activities, including the setting of tax rates, and even spending. Government failures to signal, then, might mean funding undesirable programs; but this failure might also mean putting money in the pockets of corrupt government officials, forcing one taxpayer to pay too much tax relative to other taxpayers, and putting money in the pockets of other taxpayers. If this is so, the government’s tax enforcement policy will be even more heavily constrained.

If the government had infinite resources, it could negotiate separately with each taxpayer and take just those actions that the taxpayer considers to be correct in order to induce the trust and support of the taxpayer. But if the government had infinite resources, it would not need to tax people, and the problem of tax compliance would be solved. In the real world, the government cannot negotiate individually (though in the past, it may have, with very rich people), and it must adopt general policies that enough people consider the "correct" signal.

---

44 This is a problem with drug forfeiture laws, which give police officers the incentive to target people on the basis of the value of their assets rather than the seriousness of their law-breaking, and creates the perception of the same. See Posner, supra note 20, at 108–10.
This "generality constraint" limits the range of enforcement options that the government can use. To illustrate, imagine that the population consists of two people, rich person $R$ and poor person $P$. $R$ has an income of $100,000 and $P$ has an income of $20,000. The government seeks to collect $1000 at minimum cost. It faces a tradeoff. Taxing $R$ $1000 might distort work incentives more than taxing $P$ $1000, but also would hurt $P$ more than it benefits $R$ (assuming a utilitarian social welfare function and declining marginal utility of income). The optimal tradeoff would depend on the social welfare function; one that heavily weights the utility of poor people would require $R$ to pay a higher tax rate.

With enforcement costs greater than zero, the story changes. Suppose that because $R$'s finances are more complex, it would cost the tax agency much more to take $1000 from $R$ than from $P$. Maximizing social welfare, including enforcement costs, might then require a tax of $1000 on $P$.

With the generality constraint, the story becomes even more complicated. Government officials must be concerned about the attitudes of $P$ and $R$. If the government depends on the support of $P$ and $R$, rather than just $R$, and $P$ would consider a $1000 tax on $P$, even if motivated by the desire to minimize enforcement costs, to be the wrong signal, then the government could not use this approach. If only a flat tax rate seemed "fair" to both $P$ and $R$, in the sense that each would be willing to pay that amount for the government services received, then the government could do no better, but it would have to collect more than $1000 in order to offset the costs of dealing with $R$'s more complex finances.\textsuperscript{45}

Moreover, if $P$ and $R$ do not agree on what is "fair" (in the sense mentioned above), the generality constraint will prevent the government from maintaining the support of both. $R$ might believe the flat rate is unfair because he must pay a much larger sum than $P$; $P$
might believe that the flat rate is unfair because he needs cash much more than R. Their views about tax fairness are incompatible. Generalizing, as the preferences of the population become more heterogeneous, and/or as the distribution of wealth becomes more unequal, it will become more difficult for the government to maintain legitimacy by implementing tax rates that seem fair. At best, it can maximize cooperation by implementing tax rates that seem fair to the largest (or wealthiest) group of people, subject to the further constraints that sufficient revenue is produced, behavior distortions are minimized, and social goals are maximized.

With these considerations as background, let us reevaluate the proposals considered above, proposals that assumed the government is an outsider. All of these proposals involved discrimination among taxpayers on the basis of whether they belong to mainstream, marginal, or deviant communities. Consider the proposal of raising tax rates for mainstream people and lowering tax rates for deviants. People in the mainstream would likely regard this behavior as inconsistent with the interests of the group, and thus the behavior of a government that does not value the future much, or at least does not value the interests or the support of the mainstream group. Under such circumstances, it seems plausible that people would no longer regard tax compliance as a signal that an individual belongs to the good type. The person who is caught cheating might be regarded as a hero who rejects an unjust system, rather than an undisciplined bad type who cannot defer gratification.46

There is pressure in the other direction, however. Given that tax compliance is a signal in the community, mainstream taxpayers may not be able to withdraw cooperation from the government, at least not if such withdrawal of cooperation is considered a failure to send the right signal to other members of the community. The pressure to continue to comply may be quite strong; no one, no matter how irritated he is with the government, wants to be first to deviate from the equilibrium, lest others not follow him. Individuals in the mainstream do not want to be lumped together with members of tax protest groups. Only if the tax authority engaged in

46 Again, think of tax protesters. See, e.g., Dennis Wagner, Tax Rebels Fight the IRS "Beast": U.S. Loses $130 Billion a Year, Ariz. Republic, Apr. 15, 1996, at A1. The nightmare for the IRS is that the tax protest movement becomes mainstream.
outrageous behavior would tax compliance cease to be a signal, with the result that people in mainstream communities would become tax cheats, as has happened in other countries but not in the United States since the Whiskey Rebellion.

Another proposal is to devote greater enforcement resources to, and to increase penalties against, people in marginal and deviant communities. This proposal is also likely to be regarded as "unfair," at least by the marginal and deviant people. Now, government officials might not care that the deviant people consider this strategy unfair, especially if the deviants are not politically active. The reaction of the marginal types is more important. Higher expected sanctions might create an intra-group signal, but the unfairness of these sanctions might also deter the people within the group from cooperating with the government. It also seems unlikely that tax compliance will become a signal within a group when the members regard the tax system as unfair. In this case, the unfair use of enforcement resources would be self-defeating.

Another possible reform—publication of the names of violators—has a superficial attractiveness. One might argue that the names of all people who are found to engage in any kind of violation ought to be publicized. Publication would have no effect on deviants, but it might enhance the incentives of mainstream and marginal people to comply with the tax law by raising the nonlegal cost of failing to comply. It becomes more expensive not to send the right signal. But there is a serious problem. One of the ways that the government cooperates is by keeping tax information confidential. People might believe that the government should keep secret the names of tax violators, or at least the names of tax violators who do not engage in egregious violations. Enhanced signaling within the group might occur with publication of names, but the signaling might also be undermined—tax compliance would come to be associated with sycophancy toward the government—or at least offset by losses resulting from reduced cooperation with the schoolmarmish tax agency.

The problem highlighted by the government-as-insider perspective is that government officials are themselves subject to social norms, and this puts constraints on their ability to manipulate those norms. To change social norms, one must often violate them, but a government official who violates social norms risks being perceived
as a bad type. The government loses legitimacy, and the officials are thrown out of office. In addition, when the government exploits existing social norms in a way that seems underhanded, those norms—especially norms of law-abidingness, including tax compliance—may lose their power. Signals can change meanings, but not always in a predictable way.

C. Positive Hypotheses and Evidence

We have made several arguments about the relationship between tax enforcement instruments and individual or government behavior. Summarizing:

1. Tax compliance exceeds the level implied by expected legal sanctions, and is positively related to the discount rate of the taxpayer, at least in mainstream communities.

2. If the government can engage in differential enforcement on the basis of a community’s propensity to pay taxes, it will set tax penalties (and enforcement resources) lower for mainstream communities than for deviant communities.

3. If the government can set different levels of tax liability on the basis of a community’s propensity to pay taxes, it will set tax rates higher for mainstream communities than for deviant communities.

4. As populations become more homogenous, taxes will become more progressive.

5. Tax compliance will increase with a measure of “good government,” in the sense of the government being sensitive to the interests of the population.

6. Tax amnesties are associated with unstable governments (that is, governments with high discount rates).

7. Tax compliance does not have a direct, monotonic relationship with the expected sanction, but instead tips in the direction of most people complying or few people complying.47

---

47 On tipping and discontinuity, see infra note 65 and accompanying text.
8. The propensity to pay taxes is positively related to perceptions of fairness about tax enforcement procedures, tax rates, and/or fiscal policy.

Some of these hypotheses are consistent with casual evidence and intuition, including the stylized facts described at the outset. Others (for example, the third) need further investigation. In general, more careful attention to the model is necessary before these propositions can be established, and more than mere casual evidence would be needed before one could have much confidence in the model. I introduce the model in order to show how one might move away from the basic model in a way that both preserves the advantages of methodological individualism and captures the intuition that tax compliance is related in some way to social norms.

Rather than say something superficial about the evidence for each proposition, I will instead focus on two of them. The first proposition implies that the basic economic model is incomplete. Tax compliance is not a function only of the expected legal sanction, but of reputation, and reputation can be understood in terms of signaling of discount rates. To test this idea, one would need data that are difficult to acquire, including data about tax compliance and data about discount rates, which can only be represented using observable proxies. For example, one might predict that younger people, less educated people, smokers, and people who do not use contraception are less likely to comply with the tax laws than people who do not have these characteristics. The test would focus on mainstream communities; in communities where, for historical or other reasons, tax compliance never emerged as a signal, there would be no relationship between discount rate and tax compliance. In general, increased enforcement can result in greater compliance in some communities, and less compliance in other

---


communities, depending on the extent to which tax compliance is a signal.\textsuperscript{50}

There is good reason for thinking that even if the model can explain some tax compliance beyond the amount predicted by the basic economic model, it cannot explain all of it.\textsuperscript{51} Under current law, audits are conducted in secret. If a taxpayer is found to violate the civil tax laws, he can avoid trial and the publication of his infraction by paying back taxes, interest, and a (usually small) penalty. Thus, even if the tax violation stigma is harsh, a taxpayer can avoid the stigma easily by paying a relatively small amount of money. It would be different if the IRS had the power to publicize the infraction even if the taxpayer sought to settle; then the IRS could extract the monetary equivalent of the reputational sanction. But because the IRS cannot, its bargaining power is limited. One would predict that people would underpay their taxes, then settle when the IRS audits them. Thus the high level of tax compliance is not explained.

One response to this point is that people obviously believe that the right to dispute an IRS audit at trial is valuable, just as the right to a civil or criminal trial is valuable. Presumably, people believe that a trial is valuable because it can result in the correction of errors in the government’s favor. Thus, if the reputation sanction is high, and people settle with the IRS rather than go to trial, they give up something of great value to them—the chance to avoid paying the alleged tax liability plus interest and penalties. The result is that tax compliance will be higher, because of the indirect effect of the nonlegal sanction, than it would be under the basic economic model; this is consistent with the observed level of tax compliance.

Nonetheless, this response has limited persuasiveness. Suppose a person is planning to underreport $1000 of income (in a way that would not produce criminal liability). The person is audited with a probability of 1%, and during the audit there is a 25% chance that the IRS will make an error in its own favor, doubling the liability

\textsuperscript{50} For evidence that increasing sanctions can have the double effect, see Karyl A. Kinsey, Deterrence and Alienation Effects of IRS Enforcement: An Analysis of Survey Data, American Bar Foundation Working Paper No. 9102 (1990) (on file with author).

\textsuperscript{51} I owe this point to David Weisbach.
(and 0% that it makes an error in favor of the taxpayer). The error would be corrected costlessly by trial. The penalty is 20%. Then the expected sanction in a world without reputation is $(0.01) \times (\$1200) = \$12$. With reputation, the expected sanction is $(0.01) \times [(0.75(\$1200) + 0.25(\$2400))] = \$15$. The sanction is higher, but not much higher, and it does not explain the high level of tax compliance, which should require a joint legal and informal sanction closer to $\$100,000$!

Of course, much more is going on. Criminal penalties, though rare, must be taken into account. People might fear that if they deliberately underreport, they could be sent to jail. People are apparently quite ignorant about the probability that they will be audited and about the sanctions that are available, and indeed probably about their ability to protect their reputations by settling. It may be that uncertainty about the IRS's ability to publicize information has a greater impact on compliance behavior in the signaling model than uncertainty about the legal penalty in the basic model. Finally, federal enforcement and state enforcement are intertwined in complex ways, with sharing of information between the two, so a person who fears being caught by a state must comply with federal tax laws as well as state tax laws, and vice versa. And states, unlike the federal government, may reveal information about tax delinquency.\(^{52}\) To compare the basic economic model and the signaling model, and to evaluate other models as well, one must take all of these factors into account.

The seventh proposition holds that tax amnesties are associated with unstable governments. In order to test this proposition, I gathered data on state tax amnesties and state governments for the years 1983 through 1997. During this period, forty-one amnesties were declared; a few states declared an amnesty more than once, but most only once.\(^{53}\) The figure below illustrates the distribution.

---

\(^{52}\) See, e.g., State of Illinois, Department of Revenue, Public List of Delinquent Taxpayers (2000), available at http://www.revenue.state.il.us/IDT/IDTReport.html (containing an admirably clear, easy to use, and searchable list of delinquent taxpayers, both individuals and businesses, along with the type of delinquency and the delinquent amount).

\(^{53}\) For a detailed description of the amnesties, see Mikesell, supra note 41, at 509–11. I exclude the District of Columbia, which issued two tax amnesties during this period, because of ambiguities about how to characterize its government.
As proxies for instability, I used a dummy variable for whether the governor changed in a given year, and I used percentage of turnover in the house and senate of each state government during an election year. All of these independent variables are lagged. The dependent variable is 1 if an amnesty was declared in a particular state in a particular year; 0 otherwise. The hypothesis, then, is that the likelihood of an amnesty in a particular state in a particular year increases when the governor has changed in the past year, and it increases with the amount of turnover in the senate and the house in the past year. The results are in Table 1.
Table 1

|                           | Odds Ratio | Std. Err. | z    | P>|z| |
|---------------------------|------------|-----------|------|------|
| Senate turnover           | 1.069613   | 0.035867  | 2.007| 0.045|
| House turnover            | 0.950030   | 0.035711  | -1.364| 0.173|
| Governor change           | 4.709405   | 2.570342  | 2.839| 0.005|
| Gross state product       | 1.000003   | 1.75e-06  | 1.476| 0.140|

Number of observations = 215
Pseudo R$^2$ = 0.1346

The results are consistent with the hypothesis: Senate turnover and governor change are significant and in the correct direction; house turnover, while in the wrong direction, is not statistically significant. The regression shows that it is 4.7 times more likely that an amnesty will occur a year after the governor changes than a year after no such change occurs; and it tells us that it is 1.06 times more likely that an amnesty will occur a year after turnover in the senate for each 1% of turnover. (A more useful figure might be that for every 1% of senate turnover, the likelihood of amnesty increases by 0.1%.) Both of these results seem reasonable. (Gross state product is thrown in as a control.)

It should be noted that the results are highly sensitive to the lag. The independent variables are lagged on the theory that some time will pass before instability in the government leads to amnesties. The results disappear completely if there is no lag or a longer lag, but I take this to be desirable.

These empirical results are no more than suggestive evidence for the proposition that governments send a bad signal when they issue amnesties. The results should not be regarded as anything more than fancy anecdotal evidence, because space constraints have prevented me from controlling for plausible variables other than the business cycle and from dealing with other statistical problems. But the results do suggest that further research is likely to be valuable.

---

54 A check for heteroskedasticity (unequal variance in regression errors) revealed no problems. Senate turnover and house turnover are correlated; rerunning the regressions without one or the other does not change the result. Senate turnover remains positive and significant; house turnover remains negative and insignificant.
III. NORMATIVE IMPLICATIONS

What is the most efficient way to collect a given amount of tax revenue? The standard model implies that the government should minimize enforcement probability and set a maximal sanction. This model does not allow one to evaluate many dimensions of tax enforcement. The signaling model has broader implications.

Good government. Tax compliance is likely to become a signal in mainstream communities only if it is plausible to associate tax compliance with being a good type. This association is most likely to arise if community members believe that the government is doing a good job. Thus, doing a good job may be an effective means of obtaining tax compliance. This conjecture contradicts the standard model, according to which tax compliance is independent of the benefits of government. Of course, the conjecture has limited implications. If a tax agency, such as the IRS, has discretion to choose a tax enforcement method but not to affect government policy, then it cannot enhance tax compliance by improving government in some way. A further constraint is that if the population is heterogeneous, it might not be possible to improve the government in the eyes of one community without making it worse in the eyes of the other, so enhanced tax compliance by the former could be offset by reduced tax compliance by the latter. The significance of the good government view may be negative: In countries, states, or communities where government is bad and compliance is weak, it may be impossible to improve tax compliance at reasonable cost without first (or simultaneously) reforming the government.

The tax base. There are familiar efficiency reasons for making the tax base as wide as possible. As the income tax rate rises, the incentive to work declines at an increasing rate, so the government can obtain more revenues, at a lower deadweight cost, by taxing a large number of people at a low rate than a few people at a high rate. Enforcement considerations, however, complicate the picture. It may be cheaper to force a few people to pay taxes than to force many people to pay taxes; or it may be cheaper to force a few peo-

---

55 If a potential violator would not have sufficient wealth to pay the necessary fine, imprisonment may be the appropriate sanction, although there are some complications. See A. Mitchell Polinsky & Steven Shavell, On the Disutility and Discounting of Imprisonment and the Theory of Deterrence, 28 J. Legal Stud. 1, 7–8 (1999).
people to pay high taxes and many people to pay low taxes than to force everyone to pay moderate taxes. Signaling considerations complicate the picture further. If tax compliance serves as a strong signal in a mainstream community, and as a weak signal in a marginal community, the government might maximize revenues by focusing enforcement on the mainstream community and ignoring or even not taxing marginal or deviant communities. But if the government focuses its efforts on the mainstream community, this might provoke a backlash: Mainstream people might no longer regard tax compliance as a signal that one belongs to the good type.

**Tax equity.** Similar considerations suggest departure from ordinary conceptions of tax equity. A government might maximize revenues at the least social cost by taxing a poorer mainstream community at a higher rate than a wealthier marginal community, especially if the wealthier people, not feeling obligated to pay taxes for reputational reasons, simply move assets to foreign countries. The good government theory suggests that tax compliance will become a weaker signal in a community whose members feel that they are paying too much relative to others, but what counts as “too much” will always be hard to specify, as it will depend on prior conceptions of fairness (which themselves will no doubt depend on historical experiences with taxation).

**Fair procedures.** The signaling theory suggests that costly procedures may serve as a signal sent by the government. The theory suggests that actual fairness is not as important as wasting money. Observers have criticized recent tax reforms that reduce the ability of the IRS to audit and that erect a variety of procedural protections for taxpayers. That these reforms were widely demanded, however, suggests that people do not trust the IRS, and if they do not trust the IRS, they may not comply voluntarily. The optimal system of enforcement and sanctioning in the standard model may be too severe under the signaling model and may result in the self-defeating destruction of norms of tax compliance. Although it is hard to say in general what fair procedure requires, a necessary

---

56 Cf. Shlomo Yitzhaki, A Note on Optimal Taxation and Administrative Costs, 69 Am. Econ. Rev. 475 (1979) (modeling optimal taxation when administrative costs are included).

57 See generally Sheffrin & Triest, supra note 15 (finding that tax compliance is related to perceptions about how tax authorities operate).
condition of fair procedure is unnecessary expense by the tax authorities; no doubt, in addition, past practice establishes a baseline, and significant departure from that baseline will be considered unfair.

Publicity. It has long been believed that by enhancing the publicity of its efforts, the IRS could increase compliance. The IRS can do this by going after wealthy tax cheats, or by engaging in superficial audits of a large number of people rather than deep audits of a few people, and so on. The signaling theory implies that this procedure would most likely be effective when used in a mainstream community, and least likely be effective when used in a deviant community. It might also help strengthen the signal in a marginal community.

An aggressive measure for enhancing publicity is eliminating the taxpayer's right to avoid publicity by settling rather than challenging an audit. The result could be that the expected sanction from tax violation would not be bounded by the error-reduction benefits of going to trial, but would include the harm to reputation. Indeed, one suspects that most people do not know that they have the right to avoid publicity, which may mean that the current high level of tax compliance is precariously based on widespread error. On the other side, if too many people cheat on their taxes, and this is publicized, the stigma of tax violation may disappear. Something that everyone does—like speeding—is not stigmatizing. A publicity measure would have to be carefully circumscribed.

Amnesties. Governments should avoid amnesties. An amnesty is the opposite of a fair procedure: It is a failure to send a signal of the government's discount rate, and it causes taxpayers to believe that the government has a high discount rate. The result is that they are less likely to trust the government, and less likely to comply apart from the incentives created by the amnesty. In other words, the amnesty will not have a neutral effect, as in some economic models, where the greater revenue in the short term offsets the reduced revenue in the long term.\(^5^8\) It will also reduce the incentive for taxpayers to cooperate in both the short and long terms.

\(^{58}\) See the discussion in Adreoni et al., supra note 3, at 853–54.
CONCLUSION: LESSONS FOR LAW AND NORMS

The topic of tax compliance can be used to compare the signaling model with approaches suggested by other academics. Some scholars assume that individuals directly benefit when they conform to social norms. Under what I will call the “intrinsic benefit” approach, the preference for conforming with social norms joins other preferences in the individual’s utility function. A rational individual conforms to social norms to the extent that doing so maximizes utility subject to a budget constraint. Straightforward predictions about norm compliance result, depending on the shape of the person’s indifference curves.

Suppose, for example, that there is a norm of not smoking in crowded rooms. If a person otherwise inclined to smoke has internalized this norm, his behavior will respond in usual ways to changes in prices. In the winter, when the cost of conforming to the norm rises, he may violate the norm more often than in the summer. When social disapproval rises, he will smoke less in crowded rooms. As he becomes wealthier, he might smoke less in crowded rooms (because he can afford to spend time in empty rooms) or might smoke more (because he prefers to invest his money in other goods). A twist for the tax case is that if the social norm is tax compliance, the cost of complying with the norm rises with income, so we might anticipate that wealthier people comply with the tax law less than poorer people do.

These arguments are in principle testable, but they are not very useful. The new literature on social norms is motivated by questions about how norms are created and destroyed by government action. If one community lacks a norm of tax compliance, the intrinsic benefit approach provides no basis for explaining how the

government could create a norm of tax compliance (that is, change preferences). If another community has such a norm, the intrinsic benefit approach cannot evaluate policies on the basis of whether they might enhance or weaken the norm. The approach provides no way for evaluating the popular arguments about the use of publicity, fair procedures, and discrimination in tax base, rate, or enforcement, because all of these arguments assume that tax law can enhance or undermine social norms.

Robert Ellickson and other authors treat social norms as endogenous. They typically model norm-production as occurring in closely knit groups whose members cooperate in order to produce collective goods. The basic idea is that members can either "cooperate" by contributing to the collective good or defect by free riding. In equilibrium, everyone adopts a strategy like tit-for-tat, where one cooperates with everyone who cooperates and defects against (or punishes) everyone who defects. Social norms describe just those behaviors that count as cooperation: fixing fences rather than letting them disintegrate, returning cattle rather than harming them, and so on.

The main difference between this model and the signaling model is that it skips the first stage—the signaling stage—and models all cooperative activity as a repeated PD. By contrast, I claim that the behavioral regularities that are called norms are different from the cooperative moves in a game. Social norms have a certain rigidity (think of wearing ties, for example) and are often independent of or only loosely connected with the underlying cooperative behavior (like wearing ties while at work). In my model, cooperative actions in a repeated PD are just whatever actions happen to maximize the surplus in a given round of the game. If one fails to take such actions, one’s partner will be unhappy, but not in the same way that he would be discomfited if he observed that you had violated a social norm. Ellickson’s approach ignores the problem of

---

60 See Ellickson, supra note 22, at 123–29.
61 Ellickson’s model also assumes—too casually, in my view—that cooperation will occur in, albeit “close-knit,” relatively large groups. But as the size of the group increases, the incentive to free ride increases rapidly. See Posner, supra note 20, at 13–18. In Ellickson’s book, most of the examples of cooperation among cattle ranchers are bilateral; his main example of mass action against a very disagreeable rancher shows how ineffective such actions can be. See Ellickson, supra note 22, at 33–39.
private information, which is at the heart of the signaling model of social norms.

The difference can be seen clearly in the context of tax compliance. In Ellickson's scheme, there is no reason to believe that individuals would recognize a social norm of tax compliance. His cattle ranchers do not benefit when their neighbors pay taxes to the federal government, and so they would not react negatively if they learned that their neighbors were tax cheats. By contrast, in the signaling model, it is possible that tax compliance and other forms of legal compliance could become a signal in this or any other community. If tax compliance does become a signal, one reacts negatively to a person exposed as a tax cheat for the reason that one no longer can be sure about the person's time preference. And the signaling model shows further why a single type of behavior—payment of taxes—can be a norm in different communities that do not interact with each other.

Richard McAdams argues that social norms reflect competitions for esteem. He makes the interesting argument that taxing wealthy people or luxury goods can enhance welfare, as well as raise revenue, by weakening the incentive to compete for status. While the pursuit of esteem is an important motive in human behavior, it does not in any obvious way generate behavioral regularities as opposed to mere behavior that others approve or condemn. Of course, if there are existing patterns of approval or disapproval, these will be reflected in behavior intended to attract esteem. But norm-driven behavior is more rigid than the underlying distribution of views about what behavior is good or bad. People find themselves trapped by social norms of which they and others do not approve. If McAdams means only that people will do good things in part because they derive utility from others' approval of their good behavior, it is hard to see why the government should get involved except when (as he argues) the desired behav-

---

64 I would argue, however, that it can be derived from standard premises about distributions of preferences under conditions of private information. People do not seek esteem; they seek cooperative partners, and take pleasure in seeing that their publicly observable attributes are superior to those of others, because that means they are more likely to attract the best partners. See Posner, supra note 20, at 23.
ior involves harming people who are outside of the esteem-generating group. The implications for tax enforcement law are thus ambiguous.

Robert Cooter holds that people internalize norms under certain conditions. When mutually beneficial, cooperative patterns of behavior arise among people acting in their own self-interest, participants eventually come to approve those who engage in the value-maximizing behavior and to condemn those who do not. In doing so, they internalize the norm, and become willing to punish deviants when the cost of inflicting punishment is not too high. Cooter’s analysis usefully demonstrates what seem to be two important aspects of norm-related behavior: that (1) people’s propensity to enforce norms is related to the extent to which others enforce the norm, and therefore (2) there is often “tipping” or discontinuous change in patterns of compliance.\(^6\)

Cooter’s argument has some relevance to the tax compliance debate, the most obvious being that tax compliance has something of an all-or-nothing character.\(^6\) But the normative implications of his model are obscure. In his earlier work, his main normative arguments have been that (1) a mere announcement by the government can help tip behavior, and (2) in resolving norm-governed disputes, courts should not do a cost-benefit analysis, but should enforce the norms themselves as long as they appear to have arisen under conditions that create efficient norms. It is hard to translate these proposals into the tax context. The first seems futile,\(^6\) the second is hard to implement because there is no obvious preexisting nonlegal pattern of compliance with tax payment norms, which is not surprising, because tax payment occurs only when a government exists.

---

\(^6\) See Robert D. Cooter, Structural Adjudication and the New Law Merchant: A Model of Decentralized Law, 14 Int'l Rev. L. & Econ. 214 (1994). However, internalization is not a necessary condition for either of these results.


\(^6\) But see Cooter’s interesting discussion of punitive damages in Cooter, Punitive Damages, supra note 2.
Similar comments can be made about some other articles, which are more sociologically, less economically, oriented. Lawrence Lessig, Cass Sunstein, and Dan Kahan have all observed that the government may be able to enhance compliance with the law by changing or exploiting social norms rather than tinkering with sanctions. These authors stress the ability of the government to change the meaning of actions. Paying one’s taxes might mean discharging a civic duty; or it might mean grudging evasion of penalties. Their arguments imply that the government might collect more taxes if it can change the meaning of tax payment, rather than using more conventional enforcement techniques. Further, their arguments suggest that if people tend to conform their behavior to that of others, the government should try to enhance the conditions under which people conform to tax payment. These suggestions are attractive and reasonable. But clearly social meanings are not infinitely manipulable, and just as clearly people do not always conform to what others are doing. In the absence of a theory that explains the conditions under which the manipulation of meanings occurs, and that explains when people conform and when they do not conform, it is impossible to evaluate the various proposals and to make predictions about how they would influence behavior.

The signaling model presented in this Essay is a compromise between the standard model and the approaches that try to make sense of social norms by complicating utility functions. The signaling model differs from the standard model only by introducing the plausible assumption that people have private information about

---


69 Lessig and Sunstein’s papers are probably best interpreted as critical; they want to show that standard economic and mainstream analysis of law overlooks important motives, social phenomena, and legal instruments, and so do not feel compelled to construct alternative theories of human motivation. Kahan more clearly claims that social influence and social meaning are actually explanatory variables, on the basis of which one can make predictions about behavior. See Kahan, supra note 68, at 615–20. I am skeptical about the explanatory power of these phenomena. Kahan himself provides theories for why social influence and social meaning exist, and in doing so he implicitly admits that they are dependent variables rather than explanatory variables. But if so, he does not need to refer to them, but instead can rely on the deeper factors that he identifies—imperfect information, concern with reputation, and so on—which can be understood using economic models of behavior under asymmetric information.
their own tastes, including their discount rates. The signaling model, alone among the models that have been considered, implies that if information were costless, so that individuals knew all the characteristics of potential cooperative partners, social norms would not exist. It thus rejects the claim that social norms are internalized or that people feel guilty when they violate social norms. This is, of course, unrealistic, but it gives the model more structure than the alternatives. At the same time, it must be recognized that the signaling model leaves much unexplained, including the question of why some actions become signals even though they are no more or less costly than other actions that do not become signals. One can discuss sensibly the influence of history and natural symmetries in the environment, both of which create focal points, but this kind of discussion is inevitably impressionistic, and it leaves many of the hard questions to intuition and conjecture.

A final point about the signaling model bears emphasis. Though motivated by a desire to explain social norms, social norms disappear from the final analysis. That is to say, tax compliance is understood in terms of signaling rather than norm-compliance. The reason for this is that the signaling model is meant to be an explanation for social norms; so when it explains norm-driven behavior, it uses the basic assumptions of the model, not norms (which would be circular). On this approach, the term “social norm” is a label that we attach to equilibrium behavior, and it has no independent explanatory power. People comply with the tax laws in order to signal, and they signal in order to attract partners for cooperative relationships.