Concentrated Enforcement

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CONCENTRATED ENFORCEMENT

by

Leigh Osofsky*

Abstract

When enforcement resources are limited, how should the scarce enforcement resources be allocated to increase compliance with the law? The answer to this question can determine to what extent the law on the books translates to the law in practice. A dominant school of thought in the tax literature suggests that they should be allocated based on a "worst-first" method, whereby the individuals likely to be most noncompliant are targeted. However, while "worst-first" methods can encourage all individuals to increase compliance so as not to be deemed the "worst," they can also provide cover to engage in noncompliance that is perceived moderate for the relevant population. This dynamic can become most problematic in highly noncompliant populations. In such populations, existing, high levels of noncompliance, and underlying, structural causes of the high noncompliance can serve as coordinating mechanisms, providing mutual assurance of low compliance. Moreover, "worst-first" theories do not provide a comprehensive explanation for the group and project-based enforcement practices that are found in a number of actual enforcement settings. In response to these deficits, this Article draws on work from across different disciplines to develop a new theory for the allocation of scarce tax enforcement resources. This Article suggests that, under certain conditions,

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deterrence can be enhanced by allocating scarce enforcement resources among a low-compliance population of taxpayers through a process called concentrated enforcement. After setting forth the theoretical case for concentrated enforcement, this Article examines how it might apply in the cash business tax sector, a highly noncompliant sector that presents particular challenges for “worst-first” methods. This Article concludes that concentrated enforcement may increase compliance, meriting its application and empirical evaluation.

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I. INTRODUCTION

Classic deterrence theory, the foundational economic theory frequently relied upon by legal scholars to describe how to use enforcement to increase deterrence and therefore compliance with the law, offers two basic prescriptions for increasing legal compliance: increasing the likelihood of detection and increasing the penalty for noncompliance.1 Guided by this theory, law and economics scholars have focused for decades on setting the optimal likelihood of detection and penalties for noncompliance.2 However, when practical constraints limit both the likelihood of detection and penalties

1. See infra text accompanying notes 14–16.
2. See infra note 34 and accompanying text.
to suboptimal levels, these two levers offer little by way of useful prescriptions for increasing compliance in practice.

Focusing on the practical constraints on enforcement, a strain of thought in the tax literature and other enforcement contexts suggests that scarce enforcement resources should be allocated based on a “worst-first” method, which targets enforcement toward individuals likely to be most noncompliant. Indeed, this “worst-first” method seems to underlie the well-known Discriminant Index Function score, or “DIF” score, which many think is the principal means of determining which taxpayers to audit.

However, this “worst-first” theory does not provide a comprehensive approach to the allocation of scarce enforcement resources. While “worst-first” approaches may be a good way to select the most noncompliant individuals, using only a “worst-first” approach may not be the best means of incentivizing voluntary compliance. Indeed, “worst-first” methods are least likely to work well as a means of incentivizing voluntary compliance when noncompliance in a given population is particularly high—the very situations in which allocation of scarce enforcement resources are most important. Moreover “worst-first” theories do not provide an explanation for the project-based enforcement that often exists in practice.

In response to these deficits in existing theory, this Article sets forth a theory for the allocation of scarce tax enforcement resources, which this Article calls concentrated enforcement. Concentrated enforcement is an initial process for allocating scarce enforcement resources among a highly noncompliant population. It is a method of segmentation and rotation. It breaks a highly noncompliant population into subsectors and addresses the population’s compliance problem through strategic, concentrated “enforcement projects” in the subsectors. Enforcement projects in particular subsectors are necessarily matched by decreases in enforcement in others. The enforcement projects rotate through the subsectors, with their initiation announced, but their withdrawals unannounced. If particularly high noncompliance nodes can be identified, they receive heightened attention. Concentrated enforcement is different than a purely “worst-first” approach because concentrated enforcement segments an overall population and focuses on enforcement projects within the population, even if individuals outside of the enforcement project might exhibit higher noncompliance. The intuition behind concentrated enforcement is that, under certain circumstances, concentrated enforcement can increase compliance as a result

3. See infra text accompanying notes 38–40.
5. See infra text accompanying notes 41–45.
7. See infra text following note 55.
8. See infra Part III.
of (1) increasing marginal returns to enforcement and (2) psychological factors that can support concentrated enforcement.

This Article develops the theoretical case for concentrated enforcement by drawing on, and integrating research from, a number of different disciplines. First, by drawing on and amplifying recent economic theory, this Article argues that if compliance incentives are inadequate if enforcement is spread uniformly, a base case for concentrated enforcement can apply.9 Informed by criminology, behavioral economics, and psychology, this Article then argues that, under a number of different circumstances, the case for concentrated enforcement grows. The case for concentrated enforcement grows when there are feedback loops between noncompliance and enforcement, when norms can yield and sustain compliance but themselves depend on rates of compliance, and when the regulated parties exhibit the availability bias or uncertainty aversion.10 Finally, when particular nodes of noncompliance exist, concentrated enforcement works best by focusing on such nodes.11

After setting forth the theory behind concentrated enforcement, this Article examines how it might apply to the cash business tax sector. The cash business tax sector is an important sector for innovation, because cash business taxpayers engage in extensive violations of the tax law, which are difficult to address with classic deterrence theory or "worst-first" methods. This Article concludes that, for a number of reasons, concentrated enforcement may increase the total amount of compliance in the cash business tax sector.12

On the other hand, there are some potential problems with the application of concentrated enforcement to the cash business tax sector. These include: fundamental difficulties with auditing cash business taxpayers, potential compliance decay, potential taxpayer entrenchment to tax evasion positions, and possible backlash as a result of perceived targeting of taxpayers.13 Despite these potential problems, this Article suggests that the case for concentrated enforcement in the cash business tax sector is strong enough to merit experimental application and evaluation.

The claim of this Article is not that concentrated enforcement would work best in the cash business tax sector, as compared to alternative sectors. Rather, this Article seeks to set forth the conditions under which concentrated enforcement may increase compliance and examine how it might apply in a particularly difficult compliance environment: the cash business tax sector. Whether the conditions necessary for the success of

9. See infra text accompanying notes 96–117.
10. See infra text accompanying notes 133–46.
11. See infra page Part IV.G.
13. See infra text accompanying notes 225–68.
concentrated enforcement in fact exist in any particular sector, including in the cash business tax sector, is ultimately an empirical question. However, understanding which conditions would make concentrated enforcement successful and whether the available evidence suggests the existence of such conditions is the first, necessary step in making informed decisions about when to test concentrated enforcement in an experimental application. Moreover, the question addressed in this Article of when concentrated enforcement will work is not merely theoretical. As explored in this Article, project-based enforcement already exists in practice. Better understanding of when and why such enforcement might work is essential in order to guide and improve the existing project-based tax enforcement.

This Article proceeds as follows: Part II examines the existing tax scholarship regarding deterrence and "worst-first" methods for the allocation of scarce enforcement resources. Part III illustrates how, in practice, recent criminal and tax enforcement has relied on project-based enforcement. Part IV explores the conditions under which concentrated enforcement can increase compliance. Part V examines how concentrated enforcement would apply to the cash business tax sector and concludes.

II. CLASSIC DETERRENCE THEORY AND "WORST-FIRST" METHODS

This Article builds upon existing theories of deterrence, including classic deterrence theory and "worst-first" methods for allocating scarce enforcement resources. As a result, this Part provides background regarding classic deterrence theory and "worst-first" methods. This Part also illustrates how neither of these theories provide a comprehensive approach to the allocation of scarce tax enforcement resources.

A. Classic Deterrence Theory

Legal scholars have traditionally relied upon classic deterrence theory to explain how to use enforcement to increase compliance with the law. In modern legal scholarship, classic deterrence theory dates back to the work of Gary Becker. Becker described that deterrence is a function of two factors: the likelihood that a violation of the law is detected, and the penalties if the violation is detected. As a result, Becker’s work dictates that the two


principal means of increasing deterrence are: increasing the likelihood of detection (principally through greater enforcement resources) and increasing the severity of penalties for violating the law. This basic theory ("classic deterrence theory") and the two factors at the heart of it have spawned decades of scholarship.16 Tax compliance scholarship reflects the heavy influence of classic deterrence theory, with numerous articles written on how to increase the likelihood of detection for tax noncompliance,17 and what the penalties should be for noncompliance.18

To be sure, an important line of tax scholarship (and compliance scholarship generally) has argued that deterrence and its accompanying facilitator, enforcement, are not the only means of increasing compliance with the law. In vast literature, scholars have suggested that a variety of non-deterrence based theories are important in understanding and engendering compliance.19 For example, scholars have suggested that norms,20 morale,21


19. For good summaries of this literature, see Michael Doran, Tax Penalties and Tax Compliance, 46 Harv. J. Legis. 111, 131–38 (2009); Alex Raskolnikov, Revealing Choices: Using Taxpayer Choice to Target Tax Enforcement, 109 Colum. L. Rev. 689, 697–701 (2009) [hereinafter Raskolnikov, Revealing Choices].


reciprocity,\textsuperscript{22} signaling,\textsuperscript{23} and a variety of other mechanisms are important. However, the non-deterrence theories have, if anything, complemented, but not supplanted, the importance of deterrence as a principal means of ensuring compliance with the law.\textsuperscript{24}

The problem is that classic deterrence theory's traditional, and hugely influential, formulation of deterrence often does not work well in practice.\textsuperscript{25} While increasing the likelihood of detection or the size of penalties may be very sensible theoretical means of increasing compliance, practical limitations often seriously constrain the ability to do so. Increasing the likelihood of detection can sometimes be done through clever enforcement innovations, such as information reporting regimes. Indeed, for the many taxpayers who only have income that is subject to information reporting and withholding, or both, these mechanisms can ensure extremely high levels of compliance.\textsuperscript{26} But, for the remaining taxpayers, such as cash business taxpayers, who cannot be reached by these information reporting regimes, increasing the likelihood of detection often requires the allocation of additional enforcement resources.\textsuperscript{27} Yet, like many enforcement agencies,
the Internal Revenue Service ("IRS") is perpetually underfunded. The staggeringly low individual audit rate of approximately one percent is a symptom of these enforcement limitations. Indeed, Becker himself anticipated such problems, prescribing that raising penalties can be a substitute for increasing the likelihood of detection. However, in many situations, noncompliance penalties in practice are quite low, and certainly too low to make up for the low probability of detection. For example, the size of tax penalties is far too low to make up for the low likelihood of detection, and political unease with substantially higher penalties suggests that they are likely to remain inadequate. Moreover, while tax scholars have engaged in extensive discussions of whether tax penalties should be strict liability or fault-based, the history of tax penalties and strong adherence to a fault-based system suggest that a wholesale move to strict

may increase compliance. Itai Grinberg, Where Credit Is Due: Advantages of the Credit-Invoice Method for a Partial Replacement VAT, 63 TAX L. REV. 309, 314 (2010) (discussing how "VAT invoices create a paper trail that gives tax authorities an independent source of information . . . [that] can help the tax authorities enforce the VAT"). This Article operates within existing political constraints which, at least at present, have not been consistent with the creation of a VAT in the United States. Additionally, the VAT is not a compliance panacea. Rather, enforcement problems remain, which have to be policed. Graeme Cooper, The Discrete Charm of the VAT 14–16, Social Science Research Network, Nov. 27, 2007, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1027512. The allocation of scarce enforcement resources discussed in this Article is an issue that would apply regardless of the underlying tax base.


31. See, e.g., Logue, Optimal Tax Compliance, supra note 18, at 292 ("Although it is an interesting theoretical possibility, Congress will never in fact adopt a tax penalty regime that would impose a $9900 penalty for a tax underpayment of $100. Given this fact, we are probably limited to tax penalties that are far lower than the Bentham-Becker ideal, though it is difficult to deny that the normal penalty should be greater than the current 20 percent of the tax underpayments."). This penalty dynamic applies in situations in which there is not adequate information reporting, as is the case in the cash business tax sector.

32. See, e.g., sources cited supra note 18.
liability penalties is unlikely.\textsuperscript{33} As a result, classic deterrence theory's persistent focus on determining optimal enforcement levels and penalties, rather than contemplating deterrence in light of suboptimal enforcement parameters,\textsuperscript{34} leaves unanswered the crucial question of how to allocate scarce, and suboptimal, enforcement resources.

Tax scholars have suggested a number of innovative means of optimizing the use of constrained enforcement resources. For instance, Leandra Lederman has suggested allocating low levels of enforcement, potentially combined with norms-based appeals, to Wage and Investment Income taxpayers, but high levels of enforcement to cash businesses, because of the two groups' observable and significantly different levels of compliance.\textsuperscript{35} Joshua Blank has explored the potential gains from publicizing successful enforcement efforts against celebrities and other prominent taxpayers in order to capitalize on salience and anchoring effects.\textsuperscript{36} Alex Raskolnikov has advocated creating different taxpayer regimes because of different taxpayers presumably being motivated by different compliance incentives.\textsuperscript{37} However, all of these ideas depend, to some extent, on differences between taxpayers, and they suggest allocating enforcement resources (or publicity, or incentives) based on such differences. They leave open the question of how resources should be allocated among the remaining population of highly noncompliant, not necessarily distinguishable taxpayers, such as cash business taxpayers who do not opt into a cooperative regime.

B. "Worst-First" Theories

In answering this question, the tax compliance literature (as well as scholars in other, similar enforcement contexts)\textsuperscript{38} has focused on a "worst-
first" method. "Worst-first" methods seek to target the individuals who are likely to be most noncompliant. These methods can take a number of different forms, such as focusing on taxpayers who fail to report at least some threshold of tax liability, focusing greater retroactive or future audit attention on taxpayers found to have evaded, or focusing on taxpayers whose tax profiles are sufficiently outside of expectations. Indeed, the last

Harmon, Promoting Civil Rights Through Proactive Policing Reform, 62 STAN. L. REV. 1 (2009) (advocating a "worst-first" policy of suing the worst, large police departments). Lemos and Stein even explicitly describe how the use of a DIF score to "red flag" taxpayers is a prime example of strategic enforcement. Lemos & Stein, Strategic Enforcement, supra, at 28–29. Scholars often apply "worst-first" analysis in related contexts, such as environmental regulation. See, e.g., Winston Harrington, Enforcement Leverage When Penalties Are Restricted, 37 J. PUB. ECON. 29 (1988).

39. It is possible to characterize the threshold approach as "worst-first" or not as "worst-first," depending on the outcome. If all taxpayers who have tax liability in excess of the threshold report tax liability that exceeds the threshold, then the IRS would only be auditing taxpayers who truly have tax liability below the threshold, arguably not a "worst-first" approach. But see Michael J. Graetz et al., The Tax Compliance Game: Toward An Interactive Theory of Law Enforcement, 2 J.L. ECON. & ORG. 1, 6 (1986) [Graetz et al., The Tax Compliance Game] for a discussion of problems with the IRS's ability to commit to an audit rule. However, if some taxpayers with tax liability in excess of the threshold nonetheless report tax liability below the threshold, then the IRS would only be auditing (and assessing additional tax and penalties owed for) taxpayers who did not at least report the threshold and who could be considered the "worst" underreporters.

40. A wide array of literature has examined variations of these tactics. For instance, an early line of literature focused on interactions between taxpayer reporting decisions and IRS auditing decisions and modeled various "worst-first" strategies. See, e.g., James Alm et al., Tax Compliance with Endogenous Audit Selection Rules, 46 KYKLOS 27 (1993) (comparing conditional audit rules and random audit rules); Graetz et al., The Tax Compliance Game, supra note 39 (introducing game-theoretic approach whereby the IRS, as a strategic actor, conditions its audit rules on taxpayer reports); Joseph Greenberg, Avoiding Tax Avoidance: A (Repeated) Game-Theoretic Approach, 32 J. ECON. THEORY 1 (1984) (applying game-theoretic approach whereby taxpayers are placed in one of three audit groups, based on audit status); Michael Landsberger & Isaac Meilijson, Incentive Generating State Dependent Penalty System, 19 J. PUB. ECON. 333 (1982) (analyzing audit results determining probability of future audits); Jennifer F. Reinganum & Louis L. Wilde, Income Tax Compliance in a Principal-Agent Framework, 26 J. PUB. ECON. 1 (1985) (setting forth cutoff method); J.A. Rickard et al., A Tax Evasion Model With Allowance for Retroactive Penalties, 58 ECON. REC. 379 (1982) (examining a system whereby audit results determine whether back audits occur). More recent literature has also focused on "worst-first" methods. See, e.g., James Alm & Michael McKee, Tax Compliance as a Coordination Game, 54 J. ECON. BEHAV. & ORG. 297, 298 (2004) [hereinafter Alm & McKee, Tax Compliance as a Coordination Game] (examining audit policy when returns are selected based on deviation from average and exploring impact of taxpayer communication); Kim
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mentioned iteration of this method (auditing those whose tax profiles are sufficiently outside of expectations) is often cited as the IRS’s principal means of choosing which taxpayers to audit through the DIF score.

While the IRS’s auditing strategies are shrouded in secrecy, various government authorities have indicated that the IRS uses the DIF score as a primary method to determine which taxpayers to audit. The DIF score employs a “worst-first” approach by focusing on taxpayers who are likely to be the most noncompliant, as determined by deviation from others. The IRS has described that the DIF score rates tax returns based on their “potential for [tax] change, based on past IRS experience with similar returns.” The General Accounting Office, now the Government Accountability Office (“GAO”), has explained that DIF scores “are automatically calculated for all filed individual returns” and that this “calculation is based on a series of formulas developed by the IRS that are designed to indicate the returns that have the highest probability of a tax change if audited.”


41. See I.R.M. § 4.19.11.1.5.1(8)-(9) (2007) (describing that “DIF mathematical formulas are confidential in nature and are distributed to IRS personnel only on a need-to-know basis” and that “DIF formulas are for official use only and will not be discussed with unauthorized personnel”).


43. Bloomquist, Tax Compliance, supra note 40, at 40 (“The goal of IRS DIF methodology is the same—to identify the least compliant taxpayers for audit.”).

44. THE EXAMINATION (AUDIT) PROCESS, supra note 42; see also I.R.M. § 4.19.11.1.5.1 (2007) (describing how DIF score works).

45. IRS’ RETURN SELECTION PROCESS, supra note 42, at 2.
As implied from the above description, the DIF score focuses on the direct revenue yield from audit, allocating resources based on the tax liability that would be paid as a result of audit.\textsuperscript{46} Evidence suggests that the DIF score is likely a cost effective way to allocate audit resources toward taxpayers likely to owe the most on audit. Prior to the DIF score, the IRS had no systematic way to determine which returns were likely to produce the highest yield on audit, and the IRS used significant time and resources to make these determinations.\textsuperscript{47} Early evaluations of the DIF score revealed that it significantly raised the average yield per return audited.\textsuperscript{48} The same research showed the DIF score vastly superior to random selection, again as measured in terms of average tax yield per return audited.\textsuperscript{49}

However, the more important (and unanswered) question is whether the DIF score maximizes overall compliance (inclusive of individuals not actually audited).\textsuperscript{50} Researchers have concluded that the indirect yield from audit (from taxpayers who are not audited increasing their tax liability) is

\textsuperscript{46} COMPTROLLER GENERAL OF THE UNITED STATES, GGD-76-55, HOW THE INTERNAL REVENUE SERVICE SELECTS INDIVIDUAL INCOME TAX RETURNS FOR AUDIT 28 (Nov. 5, 1976) [hereinafter HOW THE IRS SELECTS]; IRS' RETURN SELECTION PROCESS, supra note 42, at 2; THE EXAMINATION (AUDIT) PROCESS, supra note 42 (indicating that "IRS personnel screen the highest-scoring returns, selecting some for audit and identifying the items on these returns that are most likely to need review"); James Andreoni et al., TAX COMPLIANCE, 36 J. ECON. LIT. 818, 826 (1998) [hereinafter Andreoni et al., Tax Compliance] (explaining that "the IRS develops its infamous DIF score for the explicit purpose of identifying those returns within a given audit class with the highest potential audit yield").

\textsuperscript{47} IRS' RETURN SELECTION PROCESS, supra note 42, at 3–4 (describing how, before the advent of the DIF score, the "IRS had no systematic way to evaluate which among all filed returns had the greatest potential for changes to the reported tax if audited," and instead had to rely "on its auditors across the country to identify which returns to audit by using their experience and judgment in reviewing returns" which was a time consuming and resources intensive process).

\textsuperscript{48} HOW THE IRS SELECTS, supra note 46, at 29, 34.

\textsuperscript{49} Id. at 31, 34.

\textsuperscript{50} This Article is focused on the compliance within a particular tax sector, such as, for example, cash business taxpayers. This Article does not address allocations of resources between different sectors of taxpayers. As a result, when discussing maximizing overall compliance, this Article is focused on maximizing the overall compliance of taxpayers within the particular tax sector. The assumption is that there is a fixed amount of enforcement resources that can be applied to the given tax sector, and the question is how to allocate the enforcement resources within that tax sector so as to maximize the compliance of taxpayers within that tax sector. For reasons that will be fleshed out in footnote 107 and the accompanying text, maximizing overall compliance is also assumed to maximize revenue from that particular tax sector.
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many times the direct yield from audit. Additionally, the total amount of revenue collected from all taxpayers dwarfs the amount collected as a result of enforcement. As a result, determining that the DIF score does a good job of maximizing direct yield from audit does not necessarily establish that the DIF score is the best tool to allocate scarce enforcement resources, because it does not address the other, more significant question of voluntary compliance. Focusing on maximizing direct revenue from audit, to the exclusion of voluntary compliance, may be quite counterproductive.

"Worst-first" methods do not necessarily maximize overall compliance. While "worst-first" methods (such as the DIF score) can, under certain circumstances, incentivize all regulated individuals to increase their compliance, so as not to be the "worst," they can also convey the relative safety of engaging in moderate levels of evasion with little likelihood of


52. For instance, in 2012, gross collection of tax, net of refunds, was approximately $2.15 trillion. IRS DATA BOOK 2012, supra note 29, at 3 tbl.1. The total recommended additional tax after examination for returns examined in 2012 was approximately $38.7 billion. Id. at 23 tbl. 9a.

53. See, e.g., Janet G. McCubbin, Optimal Tax Enforcement: A Review of the Literature and Practical Implications 20–21 (OTA Working Paper No. 90, 2004), http://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/ota90.pdf [hereinafter McCubbin, Optimal Tax Enforcement] (discussing how IRS enforcement policies are designed to minimize the number of audits that produce no change in tax liability, but how such a policy might be misguided because an enforcement policy that increased total compliance may also increase the no change rate); see also Norman Gemmell & Marisa Ratto, Behavioral Responses to Taxpayer Audits: Evidence from Random Taxpayer Inquiries, 65 NAT’L TAX J. 33, 34 (2012) [hereinafter Gemmell & Ratto, Behavioral Responses] ("Despite an extensive literature on tax evasion in general, the literature on how taxpayers’ compliance behavior responds to auditing is more limited.").

54. Lemos & Stein, Strategic Enforcement, supra note 38. This has roots in the economics of tournaments literature. See, e.g., Edward P. Lazear & Sherwin Rosen, Rank-Order Tournaments as Optimum Labor Contracts, 89 J. POL. ECON. 841 (1981).
getting caught.\textsuperscript{55} This dynamic can be particularly problematic when compliance is very low, because, in such cases, regulated individuals can safely engage in high noncompliance, without attracting attention. Additionally, if the regulated individuals can coordinate on noncompliance, they can defeat the effectiveness of “worst-first” methods. Indeed, James Alm and Michael McKee examined experimentally how regulated individuals may communicate with each other to keep compliance low, thereby disabling the power of a “worst-first” method to produce compliance.\textsuperscript{56} One (unexplored) implication of this finding is that when certain underlying features of a compliance landscape (such as high difficulty in detecting noncompliance) make enforcement difficult, the regulated individuals may be able to rely on each other not to comply, or to comply at low levels, without having to directly coordinate their noncompliance. In other words, these features may serve as a substitute for direct communication regarding noncompliance. As a result, somewhat paradoxically, compliance landscapes most in need of enforcement innovations may be least affected by “worst-first” strategies.

\textbf{III. PROJECT-BASED ENFORCEMENT IN PRACTICE}

Notwithstanding the extensive focus on “worst-first” methods in the tax literature, actual enforcement practices both in and outside of the tax context rely not only on “worst-first” methods, but also on group or project-based enforcement. This Part explores examples of group or project-based enforcement found in a number of different contexts.

Perhaps the most empirically tested, recent example of group or project-based enforcement comes from the criminology context, in the form of “hot spots policing.” As defined by criminologists Anthony Braga and David Weisburd, hot spots policing “is the application of police interventions at very small geographic units of analysis.”\textsuperscript{57} Braga and Weisburd explain that “[i]t does not sound like a very radical innovation, but indeed it represents a major reform not only in how the police organize to do something about crime, but also in how scholars define and understand the crime problem.”\textsuperscript{58} Hot spots policing arose out of empirical evidence that crimes tend to concentrate in particular places. Based on this insight,

\textsuperscript{55} Gemmell & Ratto, \textit{Behavioral Responses}, \textit{supra} note 53, at 53–54 (exploring based on UK data how eliminating random audits, in favor of risk-based audits, could substantially reduce revenue as a result of essentially immunizing low-risk taxpayers).

\textsuperscript{56} Alm & McKee, \textit{Tax Compliance as a Coordination Game}, \textit{supra} note 40.

\textsuperscript{57} \textsc{Anthony A. Braga & David L. Weisburd}, \textsc{Policing Problem Places} 9 (2010) [hereinafter \textsc{Braga & Weisburd, Policing Problem Places}].

\textsuperscript{58} Id. at 9–10.
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criminologists have shown that concentrating police patrol on small crime hot spots can significantly decrease crime.\textsuperscript{59} Indeed, in addition to finding that hot spots policing can prevent crime in the hot spots,\textsuperscript{60} studies have found that hot spots policing can also decrease crime in surrounding areas.\textsuperscript{61} These findings have been particularly encouraging, in contrast to an early policing study in Kansas City. The Kansas City study found that increasing


\textsuperscript{60} See, e.g., BRAGA & WEISBURD, \textit{POLICING PROBLEM PLACES}, supra note 57, at 100 (2010) ("Using scientific evaluation evidence as a criterion, we find substantial support for the crime prevention effectiveness of hot spots policing."); Robert Apel & Daniel S. Nagin, \textit{General Deterrence: A Review of Recent Evidence} [hereinafter Apel & Nagin, \textit{General Deterrence}], in CRIME AND PUBLIC POLICY 411, 421 (James Q. Wilson & Joan Petersilia eds., 2011) [hereinafter CRIME AND PUBLIC POLICY] (citing hot spots policing as a method that has been shown to be effective at preventing crime); Bernard E. Harcourt & Jens Ludwig, \textit{Broken Windows: New Evidence from New York City and a Five-City Social Experiment}, 73 U. CHI. L. REV. 271, 314 (2006) ("[T]argeting police resources against the highest-crime 'hot spots' can also help prevent criminal activity.").

police patrol across large patrol beats did not have a substantial, preventative effect on crime.\textsuperscript{62} The combination of the hot spots policing research and the Kansas City study suggests that concentration, and not just the level, of enforcement can be critical in producing deterrence.

A separate line of criminological work has developed more anecdotal evidence that focusing enforcement resources on particular problems at particular times can be an effective allocation of enforcement resources. Criminologist Mark Kleiman has described a number of such examples. For instance, in the early 1990s, the illegal practice of “squeegeeing,” or cleaning windshields and then asking to be paid, plagued New York City. The problem seemed both too rampant and, at the same time, insignificant, to be controlled by the use of normal enforcement resources.\textsuperscript{63} However, New York City announced a highly publicized zero-tolerance policy for squeegeeing, in which the police would use all enforcement resources necessary to stop the squeegeeing.\textsuperscript{64} As Kleiman describes it, the heightened enforcement pressure stopped the squeegeeing, not only on a short-term basis, but over the long term as well.\textsuperscript{65} Drastically reducing the amount of squeegeeing allowed the police to maintain compliance through the use of normal, low-enforcement resources.\textsuperscript{66}

Kleiman has described similar successes in other contexts, including, for example, with H.O.P.E., or Hawaii’s Opportunity Probation with Enforcement.\textsuperscript{67} Facing a constrained probation system that lacked the capacity to punish and therefore deter drug use by probationers, one judge created H.O.P.E. The program notified chronic parole violators that they would be punished for all of their probation infractions, in contrast to the prior practice of punishing only persistent and severe violations, or both.\textsuperscript{68}

\begin{thebibliography}{99}
\bibitem{63} MARK A.R. KLEIMAN, WHEN BRUTE FORCE FAILS 41–42 (2009) [hereinafter KLEIMAN, WHEN BRUTE FORCE FAILS].
\bibitem{64} Id. This policy is different than the well-known “broken windows” policy that the New York City Police Department put in place in the 1980s. Broken windows policing is based on the notion that stopping minor offenses could discourage more serious offenses. James Q. Wilson and George L. Kelling, Broken Windows: The Police and Neighborhood Safety, ATLANTIC MONTHLY, Mar. 1982, at 29. The zero-tolerance policing with squeegeeing, on the other hand, was based on the notion that promising to stop squeegeeing on a short-term basis would ensure that it would be stopped on a longer-term basis. KLEIMAN, WHEN BRUTE FORCE FAILS, supra note 63, at 43.
\bibitem{65} KLEIMAN, WHEN BRUTE FORCE FAILS, supra note 63, at 43.
\bibitem{66} Id.
\bibitem{67} HOPE PROBATION, HAWAII STATE JUDICIARY, http://www.courts.state.hi.us/special_projects/hope/about_hope_probation.html (last visited May 1, 2013).
\bibitem{68} KLEIMAN, WHEN BRUTE FORCE FAILS, supra note 63, at 34–39.
\end{thebibliography}
The warnings alone did much of the work for the program, which resulted in more than a 90 percent reduction in violation rate among H.O.P.E parolees, as compared to an increase in violations for probationers not in the program. 69

Stories like these also helped inspire the work of David Kennedy. Kennedy instituted programs to stop gang violence in cities around the United States. Begun as Operation Ceasefire in Boston, Kennedy's program relied on heavy, focused concentrations of enforcement resources, combined with advance announcements to stop gang violence. While it has been hard to develop strong empirical evidence regarding Kennedy's work,70 it again highlights the use and potential benefits of strategies that rely on groups or projects, rather than a purely individual, "worst-first" method. To be clear, instead of focusing on the "worst" offenders (i.e., the biggest drug dealers, the most frequent squeegeers, the most severe parole violators), these efforts focused on particular groups or projects.

69. Id. at 39–41.
70. For extensive description of this work, see DAVID M. KENNEDY, DON'T SHOOT 44–75 (2011) [hereinafter KENNEDY, DON'T SHOOT]. While Operation Ceasefire, and various iterations of it in other cities, were often accompanied by a decline in the crime at issue, the large number of variables has made it difficult to say, with certainty, whether Operation Ceasefire and its progeny actually caused the declines in crime. Id. at 80 (explaining some of the academic skepticism about the program); Anthony A. Braga & Christopher Winship, Partnership, Accountability, and Innovation: Clarifying Boston's Experience with Pulling Levers, in POLICE INNOVATION, 171, 174–78 (David Weisburd & Anthony A. Braga eds., 2006) (discussing doubts about empirical proof for Kennedy's pulling levers strategy); Apel & Nagin, General Deterrence, supra note 60, at 422 (discussing some of the ambiguity about whether Operation Ceasefire caused a decline in crime but coming to the conclusion that it played a role, and also suggesting that Operation Ceasefire "illustrates the potential for combining elements of both certainty and severity enhancement to generate a targeted deterrent effect"). Similarly, a line of work regarding drug market enforcement projects has claimed some success, though not without question regarding the empirics of the successes. Mark A.R. Kleiman, Crackdowns: The Effects of Intensive Enforcement on Retail Heroin Dealing, in STREET-LEVEL DRUG ENFORCEMENT: EXAMINING THE ISSUES 3, 4–17 (Marcia R. Chaiken, U.S. Department of Justice ed., 1988) [hereinafter STREET-LEVEL DRUG ENFORCEMENT] (discussing apparent successes of drug market enforcement projects in Lynn, Massachusetts and Alphabet City, New York City, but also apparent failure in Lawrence, Massachusetts); Arnold Barnett, Drug Crackdowns and Crime Rates: A Comment on the Kleiman Report, in STREET-LEVEL DRUG ENFORCEMENT, supra, at 35 (questioning apparent success in Lynn, Massachusetts); Anthony V. Bouza, Evaluating Street-Level Drug Enforcement, in STREET-LEVEL DRUG ENFORCEMENT, supra, at 43 (offering a much more pessimistic account); see also Lawrence W. Sherman, Police Crackdowns: Initial and Residual Deterrence, 12 CRIME & JUST. 1, 19–34 (1990) [hereinafter Sherman, Police Crackdowns] (providing mixed empirical evidence).
Even in the tax enforcement context, individual “worst-first” methods do not comprehensively explain auditing practices, which include an element of project-based approaches, in addition to use of the DIF score. Indeed, as this Article will discuss in more detail later, the IRS has engaged in enforcement projects directed at various groups of taxpayers and at specific tax issues.\(^\text{71}\) In accordance with this practice, the IRS has publicly indicated that it “may identify returns for examination in connection with local compliance projects.”\(^\text{72}\) Other countries, such as the United Kingdom, have been engaging in tax enforcement projects that are perhaps most consistent with concentrated enforcement.\(^\text{73}\) For instance, in 2007, the United Kingdom’s tax authority, Her Majesty’s Revenue and Customs (“HMRC”), began a series of highly publicized tax campaigns, which focused the tax authority’s resources on specific populations.\(^\text{74}\) The campaigns give members of the population subject to focused enforcement a chance to come forward and declare noncompliance.\(^\text{75}\) While the possibility of reduced penalties exists, the campaigns do not guarantee such an outcome, and ultimate penalty application depends on the circumstances.\(^\text{76}\) HMRC uses the information gathered from the campaigns to conduct focused investigations and, in some cases, prosecutions.\(^\text{77}\) Many campaigns have been narrow, focused on particular subsectors in particular locations. For instance, to name just a few, campaigns have included: a taskforce focused on security guards, bouncers, and their employees in London and the South East;\(^\text{78}\) a taskforce focused on construction workers in London;\(^\text{79}\) a taskforce focused on hauliers in the Midlands;\(^\text{80}\) a taskforce focused on the holiday industry in the Lake

\(^{71}\) See infra text accompanying notes 208–13.

\(^{72}\) THE EXAMINATION (AUDIT) PROCESS, supra note 42.

\(^{73}\) I thank Caroline Bradley for bringing this example to my attention.


\(^{75}\) Id.


\(^{77}\) HM Revenue and Customs, et al., Reducing Tax Evasion and Avoidance, supra note 74.


\(^{79}\) Id.

District, North Wales, Devon and Cornwall;\textsuperscript{81} a taskforce focused on restaurants in Yorkshire and Humber;\textsuperscript{82} and a taskforce focused on the fishing industry in Scotland.\textsuperscript{83} HMRC has indicated that “[t]askforces are specialist teams that undertake intensive bursts of activity in specific high-risk trade sectors and locations in the UK.”\textsuperscript{84}

Government officials in the UK have actively publicized the campaigns and emphasized their importance for a fair tax system. For instance, David Gauke, Exchequer Secretary to the Treasury indicated, “[w]e are determined to support hardworking people who want to get on, but the people being targeted by these taskforces have no intention of playing by the rules . . . . [W]e will not tolerate tax evasion and we have provided HMRC with the resources to crack down on those who break the rules.”\textsuperscript{85} HMRC’s Jennie Granger, Director General of Enforcement and Compliance, has said, “[i]f you have declared all your income, you have nothing to worry about. But, if you haven’t, we will find you, investigate you and not only could you face a heavy fine, but a criminal prosecution as well.”\textsuperscript{86} Media and tax preparer coverage of HMRC’s use of such campaigns has been widespread.\textsuperscript{87}

In sum, the uses in practice of group and project-based approaches to enforcement suggest that “worst-first” theories, particularly popular in the scholarly tax literature, may be leaving something important out of the analysis. While the mere existence of project-based approaches does not prove they work, their existence should at the least trigger an examination of why and when such approaches may increase compliance. Moreover, as discussed previously, the combination of the hot spots policing research and the Kansas City policing study suggests that the concentration, and not merely the level, of enforcement can be essential. The relatively unexplored question is: What circumstances might justify the use of enforcement crackdown-on-hauliers-in-the-midlands [hereinafter HMRC & Gauke, Crackdown on Hauliers].

\textsuperscript{81} Id.
\textsuperscript{82} Id.
\textsuperscript{83} Id.
\textsuperscript{84} Id.
\textsuperscript{85} Id.
\textsuperscript{86} HMRC & Gauke, Crackdown on Hauliers, supra note 80.
projects in the tax context? In the next Part, this Article examines this question by setting forth a theory of concentrated enforcement.

IV. CONCENTRATED ENFORCEMENT

In this Part, a number of different disciplines are drawn from to set forth concentrated enforcement, which can serve as a first cut for allocating scarce enforcement resources across a large, highly noncompliant population of taxpayers. This Article suggests that a base case for concentrated enforcement may apply when enforcement is costly and limited and the level of violations is high. This Article then suggests that the case for concentrated enforcement can increase under a number of circumstances: when there are feedback loops between noncompliance and enforcement, when norms or other non-economic mechanisms can increase compliance but themselves depend on rates of compliance, and when regulated parties exhibit uncertainty aversion or the availability bias. Finally, this Article argues that, to the extent that particular nodes of noncompliance can be identified, concentrated enforcement works best by focusing resources on such nodes.

A. Description of Concentrated Enforcement

As used in this Article, concentrated enforcement means breaking apart a large, low-compliance population into smaller subsectors and applying substantially intensified application of enforcement resources to at least one subsector. The subsector subject to the substantially intensified application of enforcement resources can be said to be subject to an "enforcement project." Implicit in concentrated enforcement theory is the assumption that total enforcement resources are limited. As a result, the application of substantially intensified enforcement resources (i.e., an enforcement project) in one subsector must be offset by reduced enforcement resources in another. The enforcement projects are applied on a rotating basis throughout the population, with enforcement project applications announced, but enforcement project withdrawals unannounced. To the extent that particular nodes of noncompliance can be identified, such nodes receive particular enforcement attention.

88. Of course, "substantially" is a vague term that does not indicate precisely how great the increase of enforcement resources is. At this point, the use of the term "substantially" is meant to distinguish enforcement projects from small increases in enforcement resources, which are not part of a plan to shock compliance by reallocating resources. See Sherman, Police Crackdowns, supra note 70, at 8 (distinguishing reallocations “focused on specific target problems . . . outside the usual formula” from “normal police personnel allocation decisions”).

89. For discussion of announcement of enforcement projects and quiet withdrawals, see infra text accompanying notes 91–94.
By way of example, imagine that there are 100,000 cash business taxpayers and there are 30 tax auditors. Assume that, in any given year, one tax auditor can audit 100 cash business taxpayers. If the enforcement resources (the 30 tax auditors) were spread evenly across all cash business taxpayers, then each cash business taxpayer would have a three percent chance of being audited a year. Under concentrated enforcement, the 100,000 cash business taxpayers would be split into different groups, with at least one group receiving substantially intensified enforcement resources. This group would be subject to the “enforcement project.” The remaining taxpayers would face a correspondingly lower percentage chance of being audited in that year. Imagine, for example, that 10,000 of the cash business taxpayers, who sell dry cleaning services, make up a dry cleaning subsector of cash business taxpayers. Under concentrated enforcement, the dry cleaning subsector may be subject to an enforcement project. Instead of three auditors being allocated to the dry cleaning subsector in a given year (as would occur if enforcement resources were spread evenly among all cash business taxpayers), perhaps 12 auditors are allocated to the dry cleaning subsector. This allocation means that the taxpayers in the dry cleaning subsector now face a 12 percent chance of being audited. The cash business taxpayers outside the dry cleaning subsector face a concomitantly lower percentage chance of being audited. If the remaining auditor resources are spread evenly among these remaining taxpayers, then each cash business taxpayer outside the dry cleaning subsector would face a two percent chance of being audited.

Concentrated enforcement involves announcement of particular enforcement projects. The announcement occurs so that the members of any given enforcement project know they are subject to the enforcement project and can quickly change their behavior accordingly. Additionally,
announcement serves as a means of assuring the subjects of the enforcement projects of each others’ likely compliance. For reasons fleshed out in more detail below, coordinating their expectations about each others’ likely compliance can help trigger higher compliance. Taking the dry cleaning example, prior to the start of tax reporting season, the IRS announces (on its website and directly to affected taxpayers) that the dry cleaning subsector will be subject to the enforcement project. The IRS may also alert tax advisors who have historically served the affected taxpayers.

However, the IRS does not make any official announcement that it is withdrawing, or concluding, an enforcement project. The quiet withdrawal may allow the IRS to free ride for some time off of the perceived increased enforcement, even after the enforcement project resources have been withdrawn. While fully informed taxpayers may surmise that the announced initiation of a new enforcement project means that the dry cleaning enforcement project has subsided, taxpayers are not likely to be fully informed. For instance, dry cleaners may not be searching the IRS website to determine when the IRS initiates new enforcement projects. Additionally, even if taxpayers knew when all enforcement projects were starting, they likely would not have enough information about the IRS’s total enforcement budget (or perhaps even the calculation abilities) to be able to determine that a given number of enforcement projects at a given time meant that their enforcement project was over. As a result, quiet withdrawals may extend the compliance benefits of enforcement projects.

As a result, quiet withdrawals may extend the compliance benefits of enforcement projects, and thereby garnering their compliance quickly.

92. A countervailing consideration is that announcement reduces uncertainty and therefore the compliance that may flow from uncertainty aversion. Notwithstanding this result, announcement is still important to communicate the high likelihood of detection (and thereby the sufficient economic incentive to comply) and to coordinate expectations of compliance among the subjects of the enforcement project. Moreover, announcement may decrease, but should not eliminate uncertainty from concentrated enforcement. See infra text accompanying note 140.

93. See Sherman, Police Crackdowns, supra note 70, at 3 (suggesting potential “free bonus’ residue of deterrence” from enforcement crackdowns but pointing out empirical ambiguity).

94. See Andreoni et al., Tax Compliance, supra note 46, at 844-46 (providing some evidence of taxpayers overestimating likelihood of audit and discussing explanations).

95. But see James Alm & Michael McKee, Audit Certainty, Audit Productivity, and Taxpayer Compliance, 59 NAT’L TAX J. 801 (2006) [hereinafter Alm & McKee, Audit Certainty]. This experiment found that informing some individuals that they would be audited increased their compliance, but informing others that they would not be audited reduced the latter group’s compliance, resulting in a net reduction in compliance. However, in contrast, concentrated
B. Economic Base Case

Why and when might concentrated enforcement increase compliance? As an initial matter, a base case for concentrated enforcement can exist when uniform enforcement would result in inadequate compliance incentives across the population.\(^9\) In such circumstances, compliance may increase by concentrating resources in a subset of the population, even if this leaves part of the population with very low incentives to comply.\(^{97}\)

For example, imagine that 10,000 manufacturing businesses exist in a given city. Assume that every business in the city will violate local rules regarding disposal of contaminants, as long as the expected benefit (measured by the probability of not getting caught, multiplied by the monetary gains from violating) from doing so exceeds the expected cost (measured by the probability of being caught, multiplied by the penalty the individual has to pay if caught).\(^{98}\) The benefit from violating the rules is enforcement would not provide direct information to individuals that they would not be subject to an enforcement project. Additionally, even those not subject to an enforcement project would face some chance of enforcement. Finally, the experiment did not explore the potential gains from concentrated enforcement (as opposed to an individual approach) or flesh out the potential implications of existing levels of enforcement being insufficient. For further discussion of this experiment, see infra note 112.

96. It is not necessary for the yield (i.e. tax dollars) from audit to be high. Concentrated enforcement allocates scarce enforcement resources within a given sector and does not change the total amount of enforcement resources applied to the sector.

97. Jan Eeckhout et al., *A Theory of Optimal Random Enforcement Projects*, 100 AMER. ECON. REV. 1104, 1104 (2010) [hereinafter Eeckhout et al., *A Theory of Optimal Random Enforcement*]; Mark A.R. Kleiman & J.P. Caulkins, *Heroin Policy for the Next Decade*, ANNALS AM. ACAD. POL. & SOC. SCI., at 163, 167 (1992) ("And as the market grows, the ratio of enforcement to market size decreases, so enforcement-imposed costs shrink, making the market all the more appealing."); Mark A.R. Kleiman & Kerry D. Smith, *State and Local Drug Enforcement: In Search of a Strategy*, 13 CRIME & JUST. 69, 88 (1990); Lando & Shavell, *The Advantage*, supra note 91; Lazear, *Speeding*, supra note 91. For less formal support for this theory, see, for example, *Kennedy, Don't Shoot*, supra note 70, at 95 (discussing the utility of picking off "a bite-size piece, something you can handle"). But see *Alm & McKee, Audit Certainty*, supra note 95, at 814 (concluding that, under certain parameters, pre-announcing the subjects of audit is bound to result in a "fall in overall compliance").

98. Of course, some regulated parties will take into account more than just expected monetary benefits and costs in determining whether to comply. Nonetheless, an economic case for concentration applies, even when the parties in the population have different inclinations toward compliance. See Eeckhout et al., *A Theory of Optimal Random Enforcement*, supra note 97, at 1105 (setting forth an example in which half of the population will never violate a law and half of the
$1,250. The city has $100,000 to spend on catching violators. It costs the city $50 to catch a violator. Based on these constraints, the police force has enough resources to be able to catch 2,000 violators. Any given business's probability of being caught violating is therefore 20 percent. If a violator is caught, the violator will have to pay back the $1,250 benefit, plus a fine of $250. Each business's expected benefit from violating is $1,000, and each business's expected cost from violating is $50 (relative, in each case, to the amount that the business would have paid without violating). The expected cost from violating is less than the expected benefit. As a result, assuming that the businesses take into account solely expected monetary benefits and costs, every business will violate. Given the benefits and costs of violating, a prospective violator must have a greater than 83.3 percent chance of being caught in order to choose not to violate. When the city's resources are spread across the entire population uniformly, the city cannot create an 83.3 percent chance of being caught.

This problem can be solved by concentrating the city's resources on a smaller subset of the population, so that at least that subset has sufficient disincentives to violate. For example, the city could announce that it is going to use all of its resources on 2,399 businesses in the population. The businesses that the city concentrates all its resources on can be called the "enforcement project." If the city uses all of its $100,000 of resources on this enforcement project, then each business in the enforcement project will have a just greater than 83.3 percent chance of getting caught. As a result, none of the 2,399 businesses in the enforcement project will violate! Of course, assuming that they are solely motivated by the expected benefits and costs of violating, the remaining businesses in the population will violate. Since they face no chance of being caught, they have no expected monetary cost from population will violate a law unless certain to be caught). Additionally, the regulated parties clearly may face variable, rather than the same, expected monetary benefits and costs from violating the rules. This example is meant to illustrate the basic economic base case for concentration. Discussion in the text will generalize the point.

99. $100,000 / $50 = 2,000.
100. 2,000 / 10,000 = 20 percent.
101. This fine is not meant to capture the social cost from violating. Rather, by assumption, the fine is limited to a suboptimal amount.
102. 80 percent x $1,250 = $1,000.
103. 20 percent x $250 = $50.
104. This assumption will be complicated further in other parts of this Article.
105. To reach this conclusion, solve for P in the equation: ($1,250 x (1-P)) < (P x $250).
106. To reach this number, solve for N in the equation 2,000 / N > 83.3 percent.
violating. However, by assumption, they were already violating because, without the concentration of the city's resources, no business in the population had sufficient disincentive to violate. As a result, even though the concentration of resources on the enforcement project gives the businesses outside the enforcement project free license to violate, the concentration nonetheless caused 2,399 fewer businesses to violate.¹⁰⁷

¹⁰⁷. Readers might notice that translating this example into the tax context presents some issues. If the example in the text were applied in the tax context, the concentrated enforcement would maximize compliance (by causing 2,399 fewer businesses to violate). However, strictly speaking, the concentration would actually produce slightly less revenue. Without concentration, all businesses would violate. However, 2,000 businesses would still get caught violating, and such businesses would have to pay back the $1,250 tax liability avoided plus the $250 fine. The no concentration scenario would thereby produce revenue of $3.00 million for the government (2,000 x $1,500). When enforcement resources are concentrated, all the businesses in the enforcement project comply, which means they pay their tax liability and no fine. As a result, their compliance produces revenue of $2,998,750 (2,399 x $1,250).

However, there are a number of reasons to believe that this complication does not actually undermine the economic base case for concentrated enforcement in the tax context. First, the IRS and Treasury Department have made clear on numerous occasions that the tax penalties should be used as a means of ensuring compliance and that penalties should not be viewed as a direct means of raising revenue. See, e.g., COMMISSIONER'S EXECUTIVE TASK FORCE ON CIVIL PENALTIES, INTERNAL REVENUE SERV., REPORT ON CIVIL TAX PENALTIES 1 (FEBRUARY 21, 1989), 89 TNT 45-36, Doc 89-1586; OFFICE OF TAX POLICY, DEP'T OF THE TREASURY, REPORT TO CONG. ON PENALTY AND INTEREST PROVISIONS OF THE INTERNAL REVENUE CODE 36, 1999, http://www.treasury.gov/resource-center/tax-policy/Documents/intpenal.pdf [hereinafter PENALTY AND INTEREST PROVISIONS]. For instance, the Treasury Department indicated in a report to Congress that:

In general . . . penalties should not be created or designed for revenue raising purposes. Penalties may raise revenue collaterally but this should not be a deliberate objective of penalty design and doing so can create perverse incentives. Rather, the penalty regime should raise revenue by encouraging taxpayers to remit the appropriate amount of tax in the proper fashion. Thus, although it is appropriate to consider the cost to the government associated with noncompliance in designing penalties, fostering compliance and deterring noncompliance should be the overriding goals.

PENALTY AND INTEREST PROVISIONS, supra, at 36.

Translating this philosophy into the example in the text, the $250 penalty should not be taken into account in determining how much revenue the government receives in each scenario. Absent the concentrated enforcement, then, the government would collect $2,500,000 (2,000 x $1,250) of revenue. With concentrated enforcement, the government would collect $2,998,750 (2,399 x $1,250) of revenue. As a result, by not taking into account penalties in calculating revenue raised, the concentrated enforcement would raise more revenue.
Abstracting a bit from this clearly simplified example (in which all potential violators faced the same expected costs and benefits of violating and therefore the same on–off switch), the lesson is that when enforcement resources are inadequate to yield a substantial level of compliance across the population, concentrated enforcement can increase overall compliance. Steven Shavell and Henrik Lando have recently offered a more generalized economic model to explain this phenomenon. Based on the notion that there is an optimal social return per policeperson, they showed that when the optimal level of policing resources exceeds the resources that are available, the policing resources should be concentrated so that the largest possible group of regulated parties in the population face the optimal level of enforcement, leaving no enforcement in the rest of the population.\footnote{Lando \& Shavell, The Advantage, supra note 91, at 214 ("[S]o long as $p^*$ is positive, it is always desirable to focus enforcement effort in one region of}

This approach is consistent with the IRS’s and Treasury Department’s stated goal of using penalties to maximize compliance, not as an independent means of revenue collection.

Moreover, even putting aside the choice to disregard penalties as a source of revenue, the extent to which voluntary compliance dwarfs direct revenue raised from audit in the real tax compliance world, sources cited supra notes 51–52, suggests that the oversimplified example in the text leaves something important out of the analysis. Namely, the oversimplified example in the text assumes that an extremely high rate of detection (83.3 percent) is needed to ensure compliance in the enforcement project. The extent by which voluntary compliance dwarfs direct revenue raised from audit in the real tax compliance world suggests that taxpayers comply in response to a much lower rate of detection. As a result, in the real world, the enforcement project very likely could be significantly bigger than that in the example. By focusing on a larger group, concentration could thereby yield substantially more revenue. This is all to say that while the example, on its own terms, suggests that concentration may maximize voluntary compliance but not revenue, in the real world it remains fair to assume that maximizing voluntary compliance of taxpayers will also maximize revenue.

A countervailing consideration is that the IRS is often judged based on its direct enforcement yield per cost ratios. See, e.g., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-13-151, TAX GAP: IRS COULD SIGNIFICANTLY INCREASE REVENUES BY BETTER TARGETING ENFORCEMENT RESOURCES (2012) [hereinafter TAX GAP]. As a result, the IRS might be criticized if it were actually to put in place a method of enforcement that reduced direct revenue from enforcement to zero (as a result of 100 percent voluntary compliance). This practical consideration makes it reasonable to assume that the IRS cares about both voluntary compliance and direct revenue. This Article does not seek to resolve the tension between direct revenue and voluntary compliance in terms of the IRS’s mission. Rather, the Article focuses on the benefits of concentrated enforcement, primarily in terms of voluntary compliance. As will be discussed later in the text, by focusing on low compliance nodes (to the extent they can be identified), concentrated enforcement may also take into account direct revenue.

\footnote{Lando \& Shavell, The Advantage, supra note 91, at 214 ("[S]o long as $p^*$ is positive, it is always desirable to focus enforcement effort in one region of}
Spreading enforcement resources across the population in such situations would not maximize the return per policeperson.109

Moving away from a binary violate or comply choice, one could also model a situation in which individuals in a given population can exhibit varying levels of compliance (i.e., they can report a range of the tax liability they owe). If there is a nonlinear response with multiple equilibria, then, under certain circumstances, concentrating enforcement resources may increase overall compliance.110 For instance, imagine that when enforcement is low, individuals exhibit low compliance, but when enforcement reaches some level, individuals exhibit high compliance.111 Prior to concentrated enforcement, compliance across the population may be uniformly low. In such a situation, the compliance gains from concentration on an enforcement project in an announced fashion may be high (because they were previously complying at low rates), and the losses from the individuals no longer subject to enforcement may be low (because only their prior, low levels of compliance could be lost). As a result, the compliance gains from the enforcement project may outweigh the losses by the remainder of the population.112

Indeed, when the probability of getting caught is otherwise quite low (for example, the general audit rate of one percent faced by individual

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109. Id.

110. On the other hand, overall compliance should not increase if there is a linear response (i.e., if an increase in compliance in one group is offset exactly by a decrease in compliance by the same amount in another group).

111. Various factors explored in other parts of this Article may help explain why such a situation would exist. For instance, feedback loops between noncompliance and enforcement norms may help explain such a phenomenon. It is useful to illustrate how these explanations can be integrated into an economic model or case for concentrated enforcement. For some evidence of potential equilibriums of compliance within the cash business tax sector, in the form of nodes of low compliance, see research cited infra note 224.

112. On the other hand, if rates of compliance are high across the population, the compliance gains from the enforcement project could be relatively low (because the enforcement project was already complying at a high rate), but the losses from the individuals now no longer subject to enforcement could be high (because the individuals no longer subject to enforcement were previously complying at a high rate). See Alm & McKee, Audit Certainty, supra note 95, for a model (and accompanying set of circumstances) in which concentration reduces net compliance. Relevant factors would be the differing rates of compliance that would be exhibited by the enforcement project versus the rest of the population and the sizes of the two groups. The point here is not to suggest that concentration always increases compliance, but rather to examine the circumstances under which concentration increases compliance.
Probability neglect may minimize compliance losses in the part of the population outside of the enforcement project. Probability neglect is characterized in part by a lack of responsiveness to variations in small probabilities. Many studies have shown evidence of relative irresponsiveness to variations in probability when determining willingness to pay to protect against low probability hazards. As a result, whereas the enforcement project may be very responsive to an increase in the probability of getting caught from a very low amount (say one percent) to a significantly higher probability, the remainder of the population may have a lower, relative responsiveness to a reduction in probability of getting caught from a very low amount (say one percent) to a slightly lower, very low amount (say 0.9 percent). This phenomenon would support the potential benefits of concentrated enforcement. The bottom line is that a number of different economic models (perhaps combined with probability neglect) can support an economic base case for concentrated enforcement when compliance incentives are inadequate if spread throughout the population.

113. IRS DATA BOOK 2012, supra note 29.
114. I thank Andres Sawicki for pointing out the potential role of probability neglect.
116. E.g., Young Sook Eom, Pesticide Residue Risk and Food Safety Valuation: A Random Utility Approach, 76 AM. J. AGRIC. ECON. 760, 769 (1994) (finding insignificant variation in willingness to pay for reductions of risk from pesticides on food when variation in relative risk was substantial but total risk was low); Howard Kunreuther et al., Making Low Probabilities Useful, 23 J. RISK & UNCERTAINTY 103 (2001) (finding relative insensitivity in willingness to pay insurance premiums with respect to low risk hazards, at least when the risks were not highly contextualized).
117. Cf. Sunstein, Probability Neglect, supra note 115, at 75 (“When a risk probability is below a certain threshold, people treat the risk as essentially zero and are willing to pay little or nothing for insurance in the event of loss. But when the risk probability is above a certain level, people are willing to pay a significant amount for insurance, indeed an amount that greatly exceeds the expected value of the risk.”); Kevin M. Stack & Michael P. Vandenbergh, The One Percent Problem, 111 COLUM. L. REV. 1385, 1401 (2011) (suggesting that probability neglect might explain appeal of arguments to ignore one percent contributions to environmental problems). It is worth stating explicitly that paying higher taxes in order to avoid the potential consequences of an adverse tax audit can be seen as equivalent to willingness to pay an insurance premium. This is not to say that the reduction in probability of getting caught would have no effect on the remainder of the population. Rather, the claim is that the tendency to ignore very low probabilities may reduce the responsiveness to a 0.1 percent chance in likelihood of getting caught.
Concentrated Enforcement

C. Feedback Loops Between Noncompliance and Enforcement

Layered onto this base case for concentrated enforcement are a number of circumstances that can strengthen the case for concentrated enforcement. First, the case for concentrated enforcement grows when there are feedback loops between noncompliance and enforcement. Feedback loops between noncompliance and enforcement can exist when (1) increasing the overall rate of compliance increases the expected monetary costs of any individual instances of noncompliance, and (2) commonalities in nonenforcement create significant returns from enforcement expertise.

As an initial matter, a feedback loop between noncompliance and enforcement can exist when increasing the overall rate of compliance increases the expected monetary costs of any individual noncompliance. This dynamic can exist when enforcement is costly and limited and it is insufficient to punish the existing noncompliers. As Mark Kleiman has explained, when authorities lack sufficient resources to punish the existing number of noncompliers, widespread noncompliance can “swamp” enforcement resources, making it unlikely that any particular noncomplier will be punished.\(^\text{118}\) Conversely, if the overall rate of compliance is higher, then any isolated noncomplier would face a higher risk of being punished, and would consequently face a higher expected monetary cost of noncompliance.\(^\text{119}\) In such a situation, to the extent that the overall population is severable into subsectors, an enforcement project in a subsector can raise the rates of compliance in such subsector. The increased compliance in that subsector may then increase the expected costs of engaging in the same amount of noncompliance in the subsector. The enforcement project can thereby reduce the likelihood of noncompliance in the subsector, even after that enforcement project concludes.\(^\text{120}\)

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\(^\text{119}\) David A. Boyum et al., Drugs, Crime, and Public Policy, in CRIME AND PUBLIC POLICY, supra note 60, at 393 (“The key observation is that being the only dealer, or one of a few dealers, in a flagrant market is dangerous; the risk of arrest for each remaining seller goes up as the number of other dealers goes down. If it were possible to rapidly shift the expectations of dealers about one another’s behavior, it might be possible to make the market collapse quickly.”).

\(^\text{120}\) KLEIMAN, WHEN BRUTE FORCE FAILS, supra note 63, at 4, 54–55. Of course, some violations will continue. As Kleiman describes: “[I]n a world of uncertainty there will always be some violations and therefore some use of actual
A feedback loop between noncompliance and enforcement also can exist when commonalities in nonenforcement make enforcement expertise valuable. Take, for instance, tax shelters, or abusive tax schemes that produce tax benefits in ways that Congress did not intend. Tax shelters are often (by design) quite difficult to detect, because they are reported in a manner that makes them look much like run of the mill business schemes.\textsuperscript{121} Auditing a particular taxpayer in order to identify a tax shelter not only produces tax liability from that audit, but also allows the IRS to identify the tax shelter on others’ returns and assess resulting tax liability.\textsuperscript{122} For this reason, concentrating enforcement enough to develop expertise about a particular tax shelter can have significant returns to scale. In situations in which compliance problems are common across a subpopulation, concentration can allow the regulator to develop the expertise necessary to produce the returns to scale from enforcement.

D. Norms

The second circumstance that can enhance the case for concentrated enforcement is when norms or other non-economic compliance mechanisms can increase compliance but themselves depend on a minimum, local rate of compliance.\textsuperscript{123} Scholars have discussed how relatively high compliance may be necessary in order to create norms of compliance, which can then foster future compliance.\textsuperscript{124} Relatedly, some scholars have suggested that norms sanctions . . . . [T]here is some maximum number of offenders who can be controlled by a given sanctions capacity. But that number is much larger than the number that can be effectively controlled by the same capacity when sanctions are handed out at random." \textit{Id.} at 65.

121. See Blank, Overcoming Overdisclosure, supra note 17, at 1635–37 (describing difficulty in detecting tax shelters).

122. Indeed, commentators have suggested that one reason to support a regime in which taxpayers have to report certain suspected tax shelters is that the information provides essential intelligence to the IRS, which can be used against other taxpayers. \textit{See, e.g.,} Blank, Overcoming Overdisclosure, supra note 17, at 1637 ("Without help from taxpayers and the individuals who advise them, the IRS would face significant obstacles in detecting tax strategies like the contingent liability transaction discussed above. Current law, consequently, imposes an obligation on taxpayers and their advisors to raise red flags for the IRS when they participate in transactions that bear tax shelter traits.").

123. \textsc{Thomas C. Schelling, Micromotives and Macrobahavior} 101–02 (1978) [hereinafter \textsc{Schelling, Micromotives and Macrobahavior}]; \textsc{Malcolm Gladwell, The Tipping Point} 9, 12 (2000). Though Malcolm Gladwell has popularized the notion of “tipping points,” its intellectual roots are more readily associated with Thomas Schelling (and others, such as Morton Grodzins).

124. \textit{See, e.g.,} Susan C. Morse, Tax Compliance and Norm Formation Under High-Penalty Regimes, 44 \textsc{Conn. L. Rev.} 675, 683 (2012) [hereinafter Morse,
may be subject to tipping points, becoming much more widespread once some threshold is reached. The problem is that reaching the threshold level of compliance may not be possible with limited enforcement resources. Importantly, the relevant rate of compliance for norm activation is often the rate of compliance within small subsectors of an overall population. For instance, as Thomas Schelling describes, whether one wears a turtleneck likely depends on the proportion of the relevant population wearing a turtleneck, with relevant often meaning local.

When local rates of compliance are particularly influential for norm formation, concentrated enforcement can segregate noncompliant populations into local subsectors and apply rotating, enhanced enforcement in the subsectors to help create and sustain compliance norms (and, as a result of such norms, actual compliance) throughout the population. Initially, use of enhanced enforcement resources in a particular subsector can raise the expected monetary costs of noncompliance within that subsector, to generate a higher rate of compliance. Subsequently, this higher rate of compliance may yield a norm of compliance in this subsector, which can help sustain compliance going forward (even absent increased enforcement). Sequential enforcement projects throughout the population may raise compliance substantially across the entire population.

*Tax Compliance and Norm Formation* (explaining that “signaling has a virtuous-circle quality: as more people signal compliance as a positive reputation signal, the positive reputation signal grows in strength”).


126. SCHELLING, *MICROMOTIVES AND MACROBEHAVIOR*, supra note 123, at 109. What “local” means, of course, depends on the context. Local may mean individuals who live or work nearby, or individuals who work in a similar industry or on a similar issue. In any event, whatever local means in a given case should dictate how any authority, or police force, segregates the population for the purposes of concentrated enforcement.

127. Id.

128. See, e.g., Cooter, *Decentralized Law*, supra note 125, at 1675 (discussing situations in which state enforcement of a norm is necessary in order to tip behavior into compliance with the norm); Lederman, *The Interplay*, supra note 24, at 1509–10 (discussing potential use of heavy enforcement in tax evasion context to tip into a norm of compliance). The mechanism can also be a bit more complicated. The existence of a norm may feed into expectations regarding the likelihood of others complying, which may then inform individuals’ beliefs about the
The following example illustrates this possibility. Imagine that 100 employers exist throughout City B. Workplace safety laws apply to these employers and City B needs to determine how best to use its resources so as to encourage the employers to comply with the laws. The employers are concentrated in five different areas of the city. For simplicity’s sake, imagine that the employers are divided equally between these areas, so that there are 20 employers in each area. It is costly to monitor an employer to prevent the employer from violating workplace safety laws and this cost does not decrease as the rate of employers complying increases. City B only has enough resources to monitor (and therefore insure compliance of) ten employers at any given time. However, for a variety of reasons, norms affect compliance. In particular, each employer will comply with the law, as long as the employer perceives that at least 50 percent of other employers comply with the law. Employers tend to focus on the other employers in their geographic area in making this norm determination. As a result, if City B applies all of its enforcement resources to one of the five areas (“Area 1”), all employers within Area 1 will comply. The reason is as follows: by concentrating all of its enforcement resources on Area 1, City B can monitor (and ensure compliance of) ten Area 1 employers. Since, at that point, 50 percent of Area 1 employers will be complying with the workplace safety laws, then, by assumption, the remaining ten employers in Area 1 will also comply with the laws. In other words, by breaking apart City B into smaller subsectors, defined by area, and then using its enforcement resources in a concentrated manner, City B can engender the level of compliance necessary to obtain compliance by all Area 1 employers. If this compliance norm is

likelihood of being punished for not complying. As explained by Schelling (with reference to tax evasion): “[I]f appropriate mutual expectations exist, people will expect evasion to be on a scale small enough not to overwhelm the authorities and may consequently pay up either out of a sense of reciprocated honesty or out of fear of apprehension, thus together justifying their own expectations.” Thomas C. Schelling, The Strategy of Conflict 92 (1980) (emphasis added).

129. These reasons could include relationships with workers, relationships with the public, or personal norms of a variety of sorts.

130. Of course, the idea that all employers have the same threshold for compliance (or that they have the same benefits from noncompliance, for that matter) is a simplification. The same analytical point applies even if the example becomes more complicated. The math and exposition would become more complicated as well.

131. This simplified example can be made much more complex in any number of ways. For instance, it might be the case that 1,000 employers and ten large Areas exist, and that City B can monitor only ten employers at one time. As a result, City B would only be able to monitor ten percent of the employers in any given Area. In such a case, under the parameters of this example, insufficient resources would exist to tip into a norm of compliance. However, a number of options might exist. The Areas might be divisible and, as a result, additional
durable, then City B can remove its enforcement resources from Area 1 and move on to Area 2 to obtain compliance, and on to Area 3, and so on. The bottom line is that, when a norm that exhibits tipping properties exists, concentrated enforcement offers the potential to obtain substantially higher compliance across a population.

E. Uncertainty Aversion

The base case for concentrated enforcement also can be enhanced when the regulated population exhibits uncertainty aversion, and concentrated enforcement makes the population perceive greater uncertainty. The foundation for this argument is the distinction between risk and uncertainty. A risk can be defined as a gamble with known probabilities. For instance, in the contaminant disposal example, above, when enforcement resources were spread uniformly across the population, concentrations of enforcement resources could create compliance norms in Subareas, on a rotating basis. Alternatively, employers in a given Area may relay information to each other about being monitored, which would enhance the effectiveness of monitoring. Media attention (discussed in more detail below) to the monitoring strategy may also make monitoring more effective. In any event, this Article does not suggest that concentrated enforcement can always tip into norms of compliance. When insufficient, total resources exist to tip into a norm of compliance for any divisible subsector (or Subarea) and concentrated enforcement is not more effective for any other reason, tipping into a compliance norm simply may not be possible. However, concentrated enforcement underscores the potential benefits of segregating a large population into small, divisible portions in order to tip into norms of compliance. Moreover, while the IRS resources to audit cash business taxpayers (examined below) may seem highly suboptimal, there is nonetheless a very large, total pool that could be drawn upon in order to address small subsectors of the population.

132. Cf. Dan M. Kahan, Gentle Nudges vs. Hard Shoves: Solving the Sticky Norms Problem, 67 U. CHI. L. REV. 607, 615–16 (2000) (“[W]hen an individual perceives that the group of individuals engaging in a behavior is relatively small, she is likely to cease engaging in the behavior; that reduces the size of the group, thereby inducing even more individuals to refrain from the behavior, and so forth and so on.”).

133. Concentrated enforcement could also increase the perceived (though not actual) risk of enforcement across the population. The actual risk of enforcement would not increase because the total amount of enforcement resources would remain the same. Only its allocation across the population would change. However, to the extent that the strategy of using announced enforcement projects and quiet withdrawals convinces more individuals that they are subject to enhanced enforcement than they actually are at any given time, the total perceived risk of enforcement would be higher. I thank Susie Morse for this point.

134. FRANK H. KNIGHT, RISK, UNCERTAINTY AND PROFIT 214–15 (1921); Lawsky, Probably, supra note 18, at 1026.
each violator faced a two percent chance, or risk, of getting caught. However, not all gambles present known probabilities.\textsuperscript{135} Many times, a regulated party faces uncertainty, or a gamble in which the probabilities are not known. The classic example of such a gamble is the chance of pulling a red ball from an urn when the urn is filled with black and red balls, but in an unknown ratio.\textsuperscript{136} In the compliance context, a regulated party may know there is some chance of getting caught for breaking the law, but not know the percentage chance of getting caught. In such a situation, the regulated party faces uncertainty regarding the likelihood of getting caught or, in other words, the regulated party faces uncertainty regarding the compliance gamble.

Uncertainty is important because research suggests that individuals often exhibit an aversion to uncertainty itself. Daniel Ellsberg famously posited the notion with the urn example, alluded to above. Imagine a gamble in which an individual bets $100 and wins a prize if a red ball is drawn from an urn. Imagine that the individual can make the bet either for an urn that is filled with 50 red balls and 50 black balls, or for an urn that is filled with 100 red and black balls in unknown ratios. If the individual prefers the urn with 50 red balls and 50 black balls, then the individual is uncertainty averse, because the individual has a disinclination toward gambles with unknown probabilities.\textsuperscript{137} Researchers in the compliance context have found evidence that individuals frequently exhibit uncertainty aversion, which can increase compliance. For instance, in an experiment regarding choices between two payouts, one of which was higher but subject to a potential fine (which, if applied, would make the payout lower than the “safe” choice), researchers found that uncertainty regarding the probability of detection (or regarding the size of the fine) decreased the likelihood of choosing the option subject to the fine (the gamble).\textsuperscript{138}

\textsuperscript{135} Indeed, it would be possible to argue that few to no gambles in fact present risk, rather than uncertainty. For example, when tossing a coin, a 50 percent chance of getting heads only applies if the coin is not rigged. Nonetheless, some circumstances (i.e., coin tosses) can be said (and, more importantly, are perceived) to present risk, rather than uncertainty, whereas other can be said (and are perceived) to present uncertainty. Lawsky, \textit{Probably}, supra note 18, at 1026–27.


\textsuperscript{137} Id.

\textsuperscript{138} Tom Baker et al., \textit{The Virtues of Uncertainty in Law: An Experimental Approach}, 89 IOWA L. REV. 443, 457–68 (2004); see also Thomas A. Loughran et al., \textit{On Ambiguity in Perceptions of Risk: Implications for Criminal Decision Making and Deterrence}, 49 CRIMINOLOGY 1029 (2011) (finding that, for no-one-around crimes (hypothized to be more likely motivated by factors such as likelihood of detection), there was evidence of uncertainty aversion for low probabilities of detection and uncertainty seeking for high probabilities of detection, but reaching
Concentrated enforcement offers the possibility of leveraging uncertainty aversion to increase compliance. It can do so by making the enforcement parameters more uncertain. Consider a population of 1,000 largely noncompliant individuals and scarce enforcement resources. Imagine that there are only sufficient enforcement resources to subject one percent of the population to enforcement. Three possibilities exist for allocating the scarce enforcement resources: random allocation across the population, a "worst-first" method, or a concentrated enforcement approach (with decisions about which particular individuals in a given subsector to examine based on a "worst-first" method). The first possibility, random allocation of the scarce enforcement resources, would result in a determinate risk of being subject to enforcement of one percent. The second possibility, a "worst-first" method, would create greater uncertainty. Some individuals would have a higher risk of audit, and some individuals would have a lower risk of audit. Whether the risk of audit was higher or lower would depend on the "worst-first" method used as a trigger to flag individuals, and whether any given individual exhibited that trigger. To the extent that either the triggers were not public knowledge, or individuals could not be sure whether or not they exhibited the triggers, they would face uncertainty regarding their chance of being subject to enforcement.

Introducing concentrated enforcement would arguably enhance this uncertainty. With concentrated enforcement, an individual's likelihood of being subject to enforcement would depend not only on enforcement triggers, but also on whether or not the individual's subsector was subject to an enforcement project. Whether or not an individual's subsector was subject to an enforcement project would be out of the individual's control. As a result, even individuals who could minimize their audit triggers under a "worst-first" method would still face an enhanced chance of audit under concentrated enforcement. Additionally, uncertainty regarding the application of enforcement projects could be layered onto uncertainty flowing from continued, secondary use of the "worst-first" method to allocate resources within an enforcement project. To the extent that the

different results for more emotive, face-to-face crimes). Recently, Gregory DeAngelo and Gary Charness found that uncertainty regarding the enforcement regime significantly reduced speeding violations. Gregory DeAngelo and Gary Charness, Deterrence, Expected Cost, Uncertainty and Voting: Experimental Evidence, 44 J. RISK & UNCERTAINTY 73 (2012). However, they created "uncertainty" through compound lotteries, which they argued induced true uncertainty as a result of bounded rationality. Id. at 77–78. For an interesting discussion of the relationship between cognitive biases and subjective probabilities, see Charles Yablon, The Meaning of Probability Judgment: An Essay on the Use and Misuse of Behavioral Economics, 2004 U. ILL. L. REV. 899 (2004).
individuals in the population are uncertainty averse, concentrated enforcement may increase compliance.  

One counterargument is that announcement of the application of particular enforcement projects would significantly cut down on the uncertainty of the enforcement. While this is certainly the case, there is reason to believe that the concentrated enforcement regime would nonetheless introduce uncertainty, relative to the alternatives. As an initial matter, while, as suggested previously, announcement of an enforcement project’s initiation in a particular subsector would be important in order to garner a rapid compliance response to the enforcement project, the conclusion of the enforcement project (the “withdrawal”) would not be announced. As a result, taxpayers would not have complete certainty that they were done with an enforcement project at any given time. Additionally, in compliance contexts, such as tax, in which compliance is not a one-time event, but rather lack of compliance at one point in time (i.e., in an earlier year) can be detected in a later period of time (i.e., audit of a later year), the possibility of being subject to an enforcement project in the future could give a potential noncomplier pause even if one is not subject to a current enforcement project. As a result, while concentrated enforcement does not present complete detection uncertainty and while announcement of enforcement projects reduces uncertainty, it nonetheless offers a means of injecting greater uncertainty into the compliance system.

F. Availability Bias

The base case for concentrated enforcement similarly may be enhanced when the regulated parties exhibit the availability bias. The availability bias, which is a cognitive bias, is a tendency for individuals to rely more heavily on information that is more readily available, in order to assess the probability, or frequency, of an event. A number of factors influence whether information is readily available, including familiarity with the information, as well as the salience, or prominence, of the information. For instance, as described by Amos Tversky and Daniel Kahneman, seeing a car accident tends to increase the subjective probability of car accidents, and

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139. Cf. Sherman, Police Crackdowns, supra note 70, at 11–23 (discussing uncertainty aversion and enforcement projects).

140. Cf. id. (discussing quiet backoff strategy and some evidence of residual deterrence after crackdowns, although cautioning that more empirical evidence is needed).


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watching a house burn down likely increases the subjective probability of a house burning, relative to reading about a house burning in the newspaper.\(^{143}\) Indeed, in the tax context, researchers have produced evidence of individuals underreacting to taxes when taxes are not included in the stated sales price and not otherwise publicized in a prominent way.\(^{144}\)

By operating through enforcement projects, concentrated enforcement could produce more salient stories of enforcement, because a subsector-wide enforcement project would often yield newsworthy stories of enforcement. Indeed, news stories frequently focus on enforcement projects in a variety of different contexts.\(^{145}\) As alluded to above, HMRC's use of compliance projects has resulted in extensive coverage by media and tax

\(^{143}\) Id.

\(^{144}\) Raj Chetty, Adam Looney & Kory Kroft, *Salience and Taxation: Theory and Evidence*, 99 AM. ECON. REV. 1145 (2009); see also Amy Finkelstein, *EZ-Tax: Tax Salience and Tax Rates*, 124 Q.J. ECON. 969 (2009) (similar findings in context of tolls). But see David Gamage & Darien Shanske, *Three Essays on Tax Salience: Market Salience and Political Salience*, 65 TAX L. REV. 19, 33 (2011) (cautioning that the empirical evidence regarding salience at issue in these studies (referred to by the authors as spotlighting) is in an early stage of development). Somewhat relatedly, in the tax compliance context, researchers have produced some evidence that stories of audit can serve as substitutes for statistical information communicating a threat of audit. Alm et al., *Getting the Word Out*, supra note 51, at 401. However, in the absence of reliable statistical information regarding the probability of audit, individuals might quite rationally try to derive the probability of audit from stories of others being audited. Nonetheless, whether as a result of the availability bias or as a result of some rational updating mechanism, evidence exists of taxpayers increasing compliance in response to stories of audit (at least when reliable audit statistics are not available).

preparers.\textsuperscript{146} To the extent that concentrated enforcement made enforcement more newsworthy, it could increase the perceived costs of noncompliance, without requiring additional enforcement.

G. \textit{Nodes of Noncompliance}

Finally, to the extent that nodes of noncompliance can be identified, concentrated enforcement would be most effective if enforcement concentrated on such nodes in particular. This intuition was central to hot spots policing, discussed in Part II and (at least according to HMRC's own publicity) has motivated the choice of HMRC's particular campaigns. While the general case for concentrated enforcement (as set forth above) does not depend on the regulated parties exhibiting differing, observable levels of compliance, if differing levels of compliance do exist, and they can be detected, then project resources should be concentrated in problem areas. Focusing on nodes of noncompliance can help ensure the greatest voluntary compliance gains from concentrated enforcement, by increasing rates and norms of compliance where such increases are most needed. At the same time, focusing on nodes of noncompliance can help keep direct revenue from audit as high as possible under a concentrated enforcement approach. Additionally, focusing on nodes of noncompliance may help assure the public that enforcement projects are being selected in a sensible and fair fashion. Ideally, enforcement projects would be chosen through a highly automated system designed to focus on nodes of noncompliance.\textsuperscript{147} The result would be a concentrated enforcement system designed to maximize the combination of voluntary compliance and direct revenue.

V. \textbf{APPLICATION TO CASH BUSINESS TAX SECTOR}

This Part applies concentrated enforcement to the cash business tax sector and explores reasons why concentrated enforcement might help stem evasion, as well as potential problems. The cash business tax sector is a particularly apt setting for analysis of concentrated enforcement, because neither classic deterrence theory nor "worst-first" methods (at least on their own) offer much hope of stemming the tide of cash business tax evasion.

\footnote{146. See sources cited \textit{supra} note 87.}

\footnote{147. Some might question how well the regulator will be able to identify nodes of noncompliance. Inaccurate information about nodes of noncompliance may weaken concentrated enforcement, but not relative to the alternative, a pure "worst-first" approach, because the latter would similarly suffer from inaccurate information.}
A. The Cash Business Tax Sector

"Cash business" is a common way of referring to small businesses, which receive a large portion of their receipts in the form of cash. Unlike wage and salary income, which is subject to employer information reporting and withholding, the cash revenue received by cash businesses generally is neither reported nor withheld by a third party and is very difficult for auditors to find. While, as a result of a new law, financial intermediaries must report to the IRS various credit card payments made to small businesses, these rules do not yield any reporting of cash receipts. Additionally, while cash payments greater than $600 made from a trade or business to an unincorporated service provider are subject to information reporting, these rules have limited reach and are often violated. For example, service providers can incorporate in order to avoid the reach of the reporting requirement. Complying with the reporting requirements is also arguably quite burdensome, and many service recipients simply do not comply. Crucially, cash payments for goods are not subject to information reporting rules at all.

The cash business tax sector is a striking example of how real-world limitations on probability of detection and penalties can leave classic deterrence theory with few useful prescriptions for addressing the most

151. See I.R.C. § 6041A.
153. Id. at 17 (discussing difficulties in filing information returns and various exemptions, which reduce the compliance with the information reporting requirements).
154. A recent attempt to require businesses to report cash payments for goods in excess of $600 was quite unpopular, and it was quickly repealed. Comprehensive 1099 Taxpayer Protection and Repayment of Exchange Subsidy Overpayments Act of 2011, H.R. 4, 112th Cong. (2011).
pressing compliance problems. The significant limitations on information reporting discussed above make detecting cash income underreporting quite expensive, thereby limiting the likelihood of detection, the first arm of classic deterrence theory. Making the problem worse, the cash business tax sector is quite large, relative to the available IRS enforcement resources. For instance, the GAO reported in 2007 that the IRS’s enforcement programs annually contact less than five percent of estimated noncompliant sole proprietors. A principal explanation for this statistic is that finding cash business evasion requires intensive and expensive audits, which the limited enforcement resources cannot yield in sufficient quantities. Penalties, the second arm of classic deterrence theory, do not nearly make up for this deficiency in the probability of detection. While civil fraud penalties exist for underpayments of tax due to fraud, and criminal penalties for tax evasion are possible, tax penalties are imposed surprisingly rarely. Participants in the cash business tax sector report a correspondingly low fear of penalties.

The result of these practical constraints has been massive tax evasion by cash business taxpayers. In 2006, individual business income tax liability alone was underreported by $122 billion on top of additional payroll, employment, and self-employment tax underreporting. The net misreporting percentage for nonfarm proprietor income (here, referred to as

156. STRATEGY FOR REDUCING THE GAP, supra note 152, at 3.
158. I.R.C. § 6663.
159. I.R.C. § 7201.
161. Morse et al., Cash Businesses, supra note 148, at 64 (describing limited audit threat for cash business taxpayers and relaying experience of cash business tax return preparer who reported: “[I]n a typical year only a handful of his 300 or so clients were audited and while audits produced additional payments they did not lead to civil penalties. He had never had a client threatened with criminal penalties.”).
small business income) was 56 percent, as compared to a net misreporting percentage of one percent for wage and salary income. While the 56 percent net misreporting percentage of course implies a reporting percentage of 44 percent, which is significantly better than nothing, the 44 percent reporting percentage can be explained in large part by structural mechanisms that help ensure reporting. Namely, this 44 percent reporting percentage applies to all nonfarm proprietor income (or small business income), whether the income is actually received in cash or not. As alluded to above, some small business income is received in the form of credit card payments, which are traceable and, more recently, actually reported to the IRS. As a result of the perceived visibility of such payments, small business taxpayers indicate that they report their credit card receipts. The 44 percent reporting percentage, then, likely significantly overstates the rate of compliance with respect to cash income, which is both the root and bulk of the cash business tax compliance problem. As to the cash income, the existing enforcement resources seem woefully inadequate to incentivize compliance.

B. Difficulties for "Worst-First" Approaches

The widespread evasion makes "worst-first" methods, at least by themselves, ill-equipped to substantially increase cash business tax compliance. "Worst-first" methods, such as the DIF score, work best when most individuals are complying, thereby making it easy to spot a noncomplier. For instance, imagine that in a given sector, most taxpayers reported honestly and reported their actual business deductions, which were approximately equal to 30 percent of their gross income. In such a case, if any one taxpayer reported a much higher percentage of business deductions, the IRS could easily spot the taxpayer as suspicious. On the other hand,
higher levels of noncompliance mean that the IRS has a lower ability to spot noncompliers. Using the same example, widespread noncompliance means that the IRS has a much less reliable picture of what percentage of business deductions is standard. As a result of having less reliable information, the IRS is less able to identify anomalies and focus on them as likely noncompliers.170

Complicating the situation, the root causes of the noncompliance can also serve as means of coordinating on noncompliance. The lack of information reporting and withholding in the cash business tax sector, which make noncompliance so difficult to catch, also serve as a signal that taxpayers have strong reasons not to comply. This signal may then mutually assure taxpayers that other taxpayers are likely not to comply with their taxing obligations, even absent any explicit conversations or agreements.171 Coordinated noncompliance lowers the effectiveness of the DIF score, making room for even more noncompliance. Structural enforcement deficiencies can thereby create a noncompliance spiral.172

The importance of coordinating mechanisms comes into sharper focus when contrasting the high level of compliance exhibited by taxpayers who have income subject to third party reporting.173 Third party reporting is not only important because it creates a high likelihood of getting caught, or probability of detection, if a taxpayer fails to report the income but also because the third party reporting serves as a coordinating mechanism, informing taxpayers of the likelihood that other taxpayers with income subject to third party reporting are likely to report their income.174 As a result, the IRS is in a good position to pursue any given taxpayer who does not report income subject to third party reporting. Imagine, instead, that taxpayers with income subject to third party reporting generally did not

170. Lemos & Stein, Strategic Enforcement, supra note 38, at 26 (discussing difficulties with "worst-first" method when "number of violators is extraordinarily high").
171. Indeed, these structural features may be substitutes for actual noncompliance communication.
173. OVERVIEW OF TAX GAP, supra note 26, at 3 (amounts subject to substantial information reporting have an approximately 92 percent compliance rate).
174. Cf. Lederman, Reducing Information Gaps, supra note 150, at 1738–39 ("What likely makes information reporting so successful in spurring compliance in the first instance is that, like "red light cameras" that snap pictures of vehicles failing to stop for a red light, the taxpayer is aware that the government is watching."). The argument being made in the text is a bit different. The argument in the text deals with how information reporting provides information about the likely compliance of others, and therefore serves as a means of coordinating levels of compliance.
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report such income. Despite the third party reporting, the IRS likely would not have the resources to examine and punish a large portion of the taxpayers not reporting such income.175 As a result, taxpayers would face a low likelihood of being punished for not reporting income subject to third party reporting, notwithstanding the high likelihood of detection.176 The cash business tax sector presents this coordinated noncompliance problem.

The heterogeneity of cash business taxpayers makes this problem even worse. "Worst-first" methods work particularly well when differences from an average reflect likely noncompliance.177 For instance, "worst-first" methods can apply particularly well in the context of speeding, because it is easy to identify who is the most noncompliant based on who is going the fastest. But cash business taxpayers are in some ways the quintessential examples of taxpayer heterogeneity. As a result, low reported income by cash business taxpayers is not necessarily a reliable indicator of tax evasion. For instance, a particular taxpayer who reports low income may just be a bad businessperson and, as a result, actually experience business losses, even though all other taxpayers in the subsector are experiencing gains. Alternatively, a very profitable taxpayer in the subsector may be able to report and pay more tax liability than all other taxpayers in the subsector and still greatly underreport actual tax liability owed. This heterogeneity means that the IRS cannot easily rely on straightforward comparisons between taxpayers in order to determine who is likely to be the "worst." This inability severely hampers the power of a "worst-first" method.178

C. The Case for Concentrated Enforcement

175. See supra text accompanying notes 28–29 discussing enforcement resources limitations of IRS. The fact that the tax liability would be clear would not necessarily change this constraint. Cf. David Cay Johnston, I.R.S. Enlists Outside Help in Collecting Delinquent Taxes, Despite the Higher Costs, N.Y. TIMES, Aug. 20, 2006, at A12 (reporting that “[t]he private debt collection program is expected to bring in $1.4 billion over 10 years, with the collection agencies keeping about $330 million of that, or 22 to 24 cents on the dollar,” whereas “[b]y hiring more revenue officers, the I.R.S. could collect more than $9 billion each year and spend only $296 million -- or about three cents on the dollar”).

176. See sources cited supra note 118.

177. Steven Klepper & Daniel Nagin, The Anatomy of Tax Evasion, 5 J.L. ECON. & ORG. 1, 12–13 (1989) ("[T]he smaller the variation in the true amount on a line item within homogeneous classes of taxpayers relative to the mean true amount on the line item, the easier it will be for an auditor to establish a prima facie case of noncompliance.").

178. Lazear, The Advantage, supra note 91, at 1054 ("[I]t is a general principle in incentive theory that when noise is high relative to the signal, incentives are diminished."); Lemos & Stein, Strategic Enforcement, supra note 38, at 26 ("[W]here it is even more difficult to apply a relative performance measure than an absolute one ... a ["worst-first"] approach to enforcement will be inappropriate.").
So, what conditions of the cash business tax sector, if any, suggest that concentrated enforcement might help improve cash business tax compliance? First, as described previously, a base case for concentrated enforcement can apply when compliance incentives are insufficient if enforcement resources are spread uniformly through the population.\textsuperscript{179} The cash business sector is a good example of a situation in which enforcement capacity is very limited and violations are very high. The low rate of compliance reflects the very low expected monetary costs of noncompliance that cash business taxpayers face if enforcement resources are allocated across the entirety of the population. The very limited enforcement resources available for the cash business tax sector and the high levels of violations suggest that insufficient incentives for compliance may exist if enforcement resources are spread throughout the population. These circumstances indicate potential benefits from concentrated enforcement under the economic base case for concentration.

Layered onto this base case for concentrated enforcement are other aspects of the cash business tax sector, which may strengthen the case for concentrated enforcement. The first feature of the cash business tax sector that may bolster the case for concentrated enforcement is the fact that there appear to be feedback loops between noncompliance and enforcement. As discussed above, enforcement resources for the cash business tax sector have historically been quite suboptimal. Moreover, as a result of the DIF score, the IRS analyzes what the tax profiles of particular cash business taxpayers should look like in order to identify taxpayers who have profiles that are sufficiently outside of expectations.\textsuperscript{180} Whether a cash business taxpayer is likely to get audited, and the taxpayer’s resulting, expected monetary costs of noncompliance depend on a comparison between the taxpayer and other relevant taxpayers.\textsuperscript{181} The result is that, if the rate of compliance could be

\textsuperscript{179} See supra text accompanying notes 96–112.  
\textsuperscript{180} See supra text accompanying notes 43–45.  
\textsuperscript{181} The DIF score is a particular manifestation of a more general phenomenon: The more information the IRS has regarding what a taxpayer’s tax profile should look like, the easier it is for the IRS to detect noncompliance, the higher the expected costs to taxpayers of noncompliance, and, therefore, the more likely taxpayers are to comply. For general discussions of the importance of information to rates of tax compliance, see, for example, Ilan Benshalom, \textit{Taxing Cash}, 4 COLUM. J. TAX L. 65, 78 (2012-13) [hereinafter Benshalom, \textit{Taxing Cash}] (discussing importance of information reporting); Dina Pomeranz, \textit{No Taxation Without Information: Deterrence and Self-Enforcement in the Value Added Tax} 5 (Working Paper No 13-057), http://www.hbs.edu/faculty/Publication%20Files/pomeranz_no_taxation_without_information_c2f18227-578f-4259-b75b-f62f2e1132
17.pdf (discussing, in the context of the value added tax, how “it is the interaction of information with deterrence that leads to effective tax enforcement”); Slemrod,
increased, the likelihood of getting punished for a particular instance of noncompliance would increase.

Imagine, for instance, that a cash business taxpayer, A, is considering underreporting tax liability by $5,000. Relative to paying the tax liability, the expected benefit from underreporting this tax liability would be the tax liability evaded, $5,000, multiplied by the probability of not getting caught. The expected cost would be the penalty for evasion, multiplied by the probability of detection. To the extent that all other cash business taxpayers underreport the same amount, the likelihood of that particular cash business taxpayer getting caught and punished is low, because this reporting would not appear out of the ordinary. However, if all other cash business taxpayers are underreporting only $2,000 of tax liability, A faces a higher likelihood of getting caught and punished for underreporting $5,000, because A is now an outlier, more likely to trigger review. As a result of this higher likelihood of detection, A faces a higher expected cost from underreporting $5,000 and a lower expected benefit. In other words, the higher overall rate of compliance would increase the expected monetary costs and lower the expected monetary benefits of A's own noncompliance, thereby increasing the likelihood of A complying. Indeed, in a recent article, Fangfang Tan and Andrew Yim offered evidence of this dynamic from a tax experiment they conducted.\textsuperscript{182} In one treatment in the experiment, experimental taxpayers were told that the tax agency would conduct a set amount of audits.\textsuperscript{183} This auditing rule made any given taxpayer's likelihood of audit depend on other taxpayers' compliance.\textsuperscript{184} When more taxpayers had high incomes, reducing their likelihood of reporting low tax liability, the incidence of noncompliance (through taxpayers with high income reporting low) decreased significantly.\textsuperscript{185}

Importantly for concentrated enforcement, the compliance of other cash business taxpayers in a cash business taxpayer's own subsector is likely to be particularly determinative of a taxpayer's own expected monetary costs of noncompliance.\textsuperscript{186} For instance, in judging the tax report of a dry cleaner in Manhattan, the tax profiles of other dry cleaners in Manhattan are likely to

\textit{Cheating Ourselves, supra} note 24, at 37 (discussing how information reporting relates to compliance).

183. \textit{Id.} at 165.
184. \textit{Id.}
185. \textit{Id.} at 168–69.
186. This is consistent with (early) findings that audits of taxpayers tend to have the highest voluntary compliance impact on taxpayers within the same class. Ann D. Witte & Diane F. Woodbury, \textit{The Effect of Tax Laws and Tax Administration on Tax Compliance: The Case of the U.S. Individual Income Tax}, 38 NAT'L TAX J. 1, 8 (1985).
be more indicative of what the dry cleaner at issue should look like, rather than dry cleaners in Brooklyn, dry cleaners in Miami, or food vendors in Manhattan, Brooklyn, or beyond. As a result, an enforcement project on Manhattan dry cleaners may substantially raise the expected monetary costs of noncompliance, and therefore the compliance, of Manhattan dry cleaners. This raised rate of compliance may help sustain compliance to some extent even after the enforcement project moves on.

Relatedly, focusing on an enforcement project may provide the IRS with a better picture of tax profiles in the enforcement project. This expertise may increase the comparative analysis of the DIF score to better detect noncompliance. This would provide a second feedback loop between noncompliance and enforcement. Some evidence of cash business taxpayers trying to benchmark their noncompliance suggests that concentrated enforcement may allow the IRS to develop expertise regarding noncompliance tactics used in particular cash business tax sectors, which expertise may then produce high returns. For instance, in interviews, some cash business tax return preparers reported stories of taxpayers backing into what they reported earning, based on what they spent. Similarly, cash business tax return preparers were reported to plug in national averages to calculate the deductions that taxpayers claimed and manipulate taxpayer reporting based on industry averages and profit margins. To the extent that there are commonalities in noncompliance in enforcement projects, concentrated enforcement may provide the IRS with enough information to identify such tactics and capitalize on this knowledge.

Norms potentially also offer additional, enhanced support for concentrated enforcement. At a very broad level, cross-country attitudes regarding the acceptability of tax evasion vary considerably, and these differing attitudes toward evasion appear to be associated with actual levels of evasion. However, simply appealing to norms of compliance has not


188. *But see* Bloomquist, *supra* 40, at 44 (using results from modeling as “indication that the level of tax reporting compliance by small business owners in the real world does not necessarily result from taxpayers observing and mimicking others’ reporting behavior”). However, this result is, of course, dependent on the auditing method (and whether it makes neighbors’ reporting behavior relevant).


190. *Id.*

been shown to have a significant impact on compliance. Rather, it seems that compliance rates themselves may affect norms, which may then feed back into compliance. For instance, Susan Morse, Stewart Karlinsky, and Joseph Bankman reported on interviews with cash business taxpayers. In these interviews, cash business taxpayers reported learning norms and means of noncompliance from family and friends in the sector, who passed on "shared wisdom" such as never depositing cash and never taking cash in front of employees. Based on this research, a follow-on paper suggested that one plausible hypothesis is that high noncompliance in the cash business sector affects norms, which help sustain and perhaps increase noncompliance. Through survey evidence, Michael Wenzel concluded that perceived norms had a causal effect on tax compliance and affected personal tax ethics for individuals who strongly identified with the group.

Indeed, a number of scholars have discussed how high levels of enforcement may play an important role in activating norms in the tax context. This insight was at the heart of Leandra Lederman’s suggestion that heavy enforcement focused on cash business taxpayers might help tip cash businesses into a norm of compliance. Jon Davis, Gary Hecht, and Jon Perkins had earlier explored how increased enforcement can yield social norms of compliance, which can reduce evasion. The open question is how


193. Morse et al., Cash Businesses, supra note 148, at 65–66.

194. Id.; see also Kagan, Income Tax Violations, supra note 149, at 90 (exploring how cash business taxpayers have often learned from relatives, other business owners, or even accountants how best to evade both taxes and detection).


196. Michael Wenzel, Motivation or Rationalisation? Causal Relations Between Ethics, Norms and Tax Compliance, 26 J. ECON. PSYCHOL. 491, 504 (2005). Wenzel also found some evidence that norms served as rationalizations, because taxpayers’ own compliance also appeared to affect norms. Id.


198. Jon S. Davis et al., Social Behaviors, Enforcement, and Tax Compliance Dynamics, 78 ACCT. REV. 39 (2003). A number of recent articles have begun building on Davis et al. to better understand how multiple agents interact. See, e.g., Bernard Fortin et al., Tax Evasion and Social Interactions, 91 J. PUB. ECON.
to allocate scarce enforcement across a large population of highly noncompliant and not easily distinguishable taxpayers, such as cash business taxpayers, in order to raise compliance and activate norms.

Concentrated enforcement offers a potential answer to this question. While (by assumption) heavy enforcement across the entire cash business tax sector is not possible, given the limited resources available, concentrated enforcement could enable rotating enforcement projects in local subsectors of the cash business sector. If norms are at least in part local, subsector based (such as the norms of dry cleaners in Manhattan, or even all cash business taxpayers in New York City), then an enforcement project in a given subsector may be enough to generate higher compliance and a higher norm of compliance. This norm could then help sustain higher compliance after the enforcement project moves onto the next cash business taxpayer subsector (such as dry cleaners in the next borough, or all cash business taxpayers in the next city, or the like). A variety of research indicates that individuals tend to cooperate with, and enforce norms of cooperation toward, one’s own local group, even when group assignments are random, and that individuals are often influenced by local group norms. To the extent that local norm

2089 (2007) (This was an experiment regarding the effect of social interactions on taxpayer behavior. The experiment had mixed, and some counterintuitive, results including some evidence of an anti-conformity effect. However, the experiment used different audit rates for different participants in each group, and audit rates did not depend on reporting behavior. The knowledge of different audit rates faced by other group members may have affected the response to others' behavior. Additionally, the fact that audit rates did not respond to behavior may have reduced concerns about the potential for one’s relative underreporting to increase the likelihood of getting caught.); Korobow et al., An Agent-Based Model of Tax Compliance with Social Networks, 60 NAT’L TAX J. 589 (2007) (finding, in part, that low levels of enforcement, combined with high weights given to neighbors’ payoffs, result in very high levels of evasion); Georg Zaklan et al., Analysing Tax Evasion Dynamics Via the Ising Model, 4 J. ECON. INTERACTION & COORDINATION 1 (2009) (modeling tax evasion decisions in the presence of various levels of network effects). As acknowledged by scholars in the field, this work is in its infancy. See, e.g., Korobow et al., Tax Compliance with Social Network, supra note 148, at 609 (indicating as much).

199. See, e.g., Lorenz Goette et al., The Impact of Group Membership on Cooperation and Norm Enforcement: Evidence Using Random Assignment to Real Social Groups, 96 AM. ECON. REV. 212, 216 (2006) (finding that individuals cooperate with group members and enforce a norm of cooperation toward group members, even when group assignments are random and short-term).

groups are particularly powerful in the cash business tax sector, concentrated enforcement may provide a realistic means of norm activation.

Taxpayer uncertainty aversion and media attention to tax enforcement projects provide the final, potential support for rotating, subsector enforcement projects as a means of increasing tax compliance across the cash business sector. As indicated in Part III, concentrated enforcement may increase the perceived uncertainty of enforcement, thereby

cfm?abstract_id=2191216 (discussing importance of small group norms to tax compliance); Richard L. Revesz, Environmental Regulation, Ideology, and the D.C. Circuit, 83 VA. L. REV. 1717 (1997) (finding through empirical study that D.C. Circuit Court judges' own votes on cases were greatly influenced by the identity (and party affiliation) of other judges on the panel, and that this influence was even greater than the voting judge's own party affiliation). Other research suggests that compliance may respond to more universal factors, such as perceptions of good governance. See, e.g., Ronald G. Cummings et al., Tax Morale Affects Tax Compliance: Evidence from Surveys and an Artefactual Field Experiment, 70 J. ECON. BEHAV. & ORG. 447 (2009). This research does not necessarily contradict the particular, or additional, importance of local groupings and local group norms. See Wenzel, Multiplicity of Taxpayer Identities, supra, at 36 (discussing multiple, possible levels of identification).

201. Some recent evidence suggests this might be the case. See 2 TAXPAYER ADVOCATE SERVICE, NATIONAL TAXPAYER ADVOCATE, 2012 ANNUAL REPORT TO CONGRESS, FACTORS INFLUENCING VOLUNTARY COMPLIANCE BY SMALL BUSINESSES: PRELIMINARY SURVEY RESULTS 19-20 (2012), http://www.taxpayeradvocate.irs.gov/userfiles/file/Full-Report/Research-Studies-Factors-Influencing-Voluntary-Compliance-by-Small-Businesses-Preliminary-Survey-Results.pdf, [hereinafter FACTORS INFLUENCING VOLUNTARY COMPLIANCE] (reporting that small businesses that were low-compliance (as determined (imperfectly) by the DIF score) "were more likely to participate in local organizations" and "were more likely to report that other members of local organizations view tax laws and the IRS negatively"). While this report did not find differing perceptions of deterrence to be a persuasive explanation for differing levels of compliance (and therefore counseled that increasing deterrence may be counterproductive), it is perhaps more notable for identifying low-compliance groups and observable characteristics of them, such as higher involvement in local organizations and particular geographical concentrations. Indeed, the report explained that it could not make strong conclusions about the impact of deterrence on compliance, because some low-compliance taxpayers may have been motivated by a desire not to implicate their own noncompliance. Id. at 38. Additionally, low-compliance taxpayers had more experience with IRS examination than high-compliance taxpayers, which may have skewed the reported perceptions of deterrence. Id. at 26. Finally, low-compliance taxpayers may have had stronger incentive to provide justifications (i.e., unfairness of IRS) for their low compliance. Id. at 28. As a result, while this report does not support application of enforcement projects, it does provide some evidence of the importance of local groupings of taxpayers, and the potential benefits from allocating resources (whether they are in the form of deterrence, outreach, or something else) in accordance with local groupings.
eliciting greater compliance to the extent that the regulated parties are uncertainty averse. Evidence indeed exists that taxpayers may be averse to uncertainty, particularly when the likelihood of getting detected is otherwise low. Jeff Casey and John Scholz ran an experiment in which subjects had to determine whether or not to take a questionable tax deduction. The subjects received probability estimates that the IRS would spot check their returns and disallow the deduction. These probability estimates were subject to various levels of uncertainty as a result of disclaimers regarding the reliability of the probability estimates. In situations in which the estimated probability of detection was low, the subjects exhibited uncertainty aversion (or a lower likelihood of taking the deduction as the level of uncertainty increased).[^202] In other words, greater uncertainty about the likelihood of detection increased the amount of taxes paid. This research was consistent with an earlier simulation by Nehemia Friedland, in which uncertainty regarding the probability of a tax audit increased the deterrent effect of low rates of audit.[^203] Concentrated enforcement may leverage taxpayer uncertainty aversion to yield higher compliance.

Additionally, media attention to tax enforcement projects may activate taxpayers’ availability bias. A subsector-wide enforcement project will often produce more newsworthy stories of enforcement than a low, and uniform, application of enforcement resources across the population. The DIF score does have some of its own salient benefits. Indeed, news outlets and tax advisors frequently highlight potential audit triggers.[^204] On the other

[^202]: Jeff T. Casey & John T. Scholz, Boundary Effects of Vague Risk Information on Taxpayer Decisions, 50 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 360, 369–75 (1991). On the other hand, Casey and Scholz found that, when the stated probability of detection was high, the subjects exhibited uncertainty seeking (or a higher likelihood of taking the deduction as the level of uncertainty increased). Id. Casey and Scholz’s results also appear consistent with the experimental result obtained by Michael W. Spicer and J. Everett Thomas, that increasing the audit rate is not as strong of a deterrent when greater uncertainty exists around the audit rate. Michael W. Spicer & J. Everett Thomas, Audit Probabilities and the Tax Evasion Decision: An Experimental Approach, 2 J. ECON. PSYCHOL. 241 (1982). James Alm, Betty Jackson, and Michael McKee also found that uncertainty regarding the probability of detection generally increases compliance, but also found that a link between tax payments and government benefits leads to less compliance. James Alm et al., Institutional Uncertainty and Taxpayer Compliance, 82 AM. ECON. REV. 1018, 1024–25 (1992).

[^203]: Nehemia 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. APPLIED SOC. PSYCHOL. 54, 58 (1982).

campaigns has garnered substantial media coverage of its enforcement efforts.\textsuperscript{214} It is difficult to determine the extent to which the media has covered the IRS's projects in the absence of information about how many projects the IRS has engaged in and publicized versus how many projects the IRS has engaged in and not publicized.\textsuperscript{215} Nonetheless, evidence of the media attention to perceived enforcement projects suggests concentrated enforcement is likely to increase the saliency of IRS enforcement.\textsuperscript{216}

One potential, perverse side effect of media attention to IRS enforcement projects could be that taxpayers notice the enforcement projects, but believe that, as long as they are not subject to an enforcement project at any given time, they are less likely to be subject to enforcement. However, when cash business taxpayers underreport their tax liability, they typically are underreporting tax liability clearly owed in a manner that constitutes intentional tax fraud. There is no statute of limitations on such fraud.\textsuperscript{217} If a taxpayer engages in fraud and the IRS can prove the fraud, then a future enforcement project could cover the tax fraud as well. As a result, the general possibility of being subject to an enforcement project would be relevant for cash business taxpayers and not just being subject to an enforcement project at a particular time. By making the possibility of IRS enforcement more salient, cash business taxpayer compliance may increase.

As a final matter, it is worth noting that, to the extent that nodes of particularly high noncompliance can be identified within the cash business tax sector, application of concentrated enforcement should focus on these nodes. Even though a widespread norm of tax noncompliance appears to exist across the cash business sector,\textsuperscript{218} some taxpayers in this sector profess

\textsuperscript{214} See supra text accompanying note 87.

\textsuperscript{215} A useful study of the extent of media coverage of IRS enforcement could examine the percentage of IRS press releases that receive media coverage.

\textsuperscript{216} Indeed, for this reason, the IRS intentionally attempts to obtain media coverage of its enforcement efforts. Jeremiah Coder, \textit{Conversations: Eileen Mayer}, 116 TAX NOTES 738, 740 (2007) (describing concerted efforts to get media coverage of enforcement efforts). Cf. Blank, \textit{In Defense of Individual Tax Privacy}, supra note 36, at 290 ("Cognitive psychology research suggests that individuals are much less likely to be influenced by tax-enforcement statistics than by specific tax-enforcement examples involving real people."); Dubin, \textit{Criminal Investigation}, supra note 51, at 4, 21 (hypothesizing that the media plays "an important role in disseminating information to the public").

\textsuperscript{217} I.R.C. § 6501(c)(1)-(2).

\textsuperscript{218} Morse, \textit{Tax Compliance and Norm Formation}, supra note 124, at 679 (citing tax evasion as the "norm" in the cash business sector).
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(somewhat sheepishly) to report their tax liability honestly,\textsuperscript{219} and government statistics indicate that a small portion of cash business taxpayers is responsible for the majority of the underreporting.\textsuperscript{220} Indeed, the GAO has recently reported that 10 percent of sole proprietors\textsuperscript{221} are responsible for more than 61 percent of all sole proprietor underreporting.\textsuperscript{222} Squaring the above statistic with taxpayer indications that they hew to industry reporting averages\textsuperscript{223} suggests that perhaps there are industries of cash business taxpayers that are particularly noncompliant. Recent research has suggested that there may be nodes of noncompliance based on geography and industry group.\textsuperscript{224} For the reasons suggested previously, being able to focus enforcement projects on noncompliant nodes may maximize the voluntary compliance and direct revenue benefits of concentrated enforcement, while also helping its perceived fairness.

To be sure, not all of the features of the cash tax business sector discussed above suggest that enforcement projects be applied in the same way. For instance, in order to make the DIF score’s comparative analysis stronger, enforcement projects should occur by DIF group. If the DIF score looks at dry cleaners in Manhattan together, then the enforcement project should focus on Manhattan dry cleaners. Doing so may (1) concentrate enforcement resources enough to make them effective (the base case economic argument for concentrated enforcement) and (2) increase compliance among Manhattan dry cleaners (the relevant DIF group), which may create a feedback loop between noncompliance and enforcement. On the other hand, the relevant norm groups may not correspond exactly with the relevant DIF group. In forming norms, taxpayers may pay attention to their neighbors, who may or may not be in their DIF groups. For instance, a dry cleaner in Greenwich Village may adopt a norm of compliance based on the


220. STRATEGY FOR REDUCING THE GAP, supra note 152, at 15 (“[T]he 11.2 million sole proprietors at and below the 90th percentile understated their taxes by a cumulative $14.3 billion. The remaining 10 percent (1.25 million) above the 90th percentile understated a cumulative $22.6 billion in taxes, accounting for 61 percent of the total.”).

221. The GAO defines sole proprietors as individuals who “own unincorporated businesses by themselves.” Id. at 4. While this is a slightly narrower group than cash businesses (which are generally small businesses with large amounts of cash receipts), there is substantial overlap between the two groups.

222. Id. at 15.


224. FACTORS INFLUENCING VOLUNTARY COMPLIANCE, supra note 201, at 10–11 (identifying geographic clusters of low-compliance communities, albeit by using the DIF score as a means of determining low compliance), 23 (identifying low-compliance industries through same methodology).
behavior of all other cash businesses in Greenwich Village, rather than the behavior of Manhattan dry cleaners. Various arguments could be made about which type of enforcement project would be most salient. The Manhattan dry cleaner enforcement project is likely to be more salient for some groups of taxpayers (i.e., Brooklyn dry cleaners) and the Greenwich Village enforcement project for others (i.e., East Village businesses).

However, the above discussion does not defeat the argument for concentrated enforcement but rather clarifies when it is strongest. Concentrated enforcement would work best when all of the theories that support concentrated enforcement apply and when they all suggest the same enforcement project groups. For instance, if all of the supports for concentrated enforcement apply and Manhattan dry cleaners are not only the relevant group for the DIF score, but also for norms, and if an enforcement project on this group is likely to be quite salient, and Manhattan dry cleaners are a particularly noncompliant node, then an enforcement project on Manhattan dry cleaners is likely to be very powerful. However, even absent perfect overlap, the group that is relevant for one purpose is likely to have at least some relevance for others. For instance, even if Manhattan dry cleaners look to taxpayers outside their DIF group for the purposes of group norms, the taxpayers in their DIF group (i.e., potentially other Manhattan dry cleaners) are likely to be influential from a norms perspective as well. As a result, if Manhattan dry cleaners are the relevant group for DIF score purposes, then an enforcement project on that group is likely to tap into some form of group norms (as well as salience and uncertainty aversion), even if a Manhattan dry cleaner enforcement project is not the optimal enforcement project to affect group norms. In any event, while concentrated enforcement would be stronger to the extent that all of the factors work together, an enforcement project that meets the base case for concentrated enforcement and activates some of the enhanced factors for microdeterrence may produce deterrence gains.

Moreover, it is worth emphasizing that this Article does not definitively establish that concentrated enforcement will raise compliance in the cash business tax sector. Rather, it fleshes out why concentrated enforcement may increase compliance. Indeed, application of concentrated enforcement would be quite problematic if concentrated enforcement drastically lowered compliance in subsectors not subject to enforcement projects and such decreases were not offset by compliance gains from subsectors subject to enforcement projects. However, the concern that concentrated enforcement could lower overall compliance does not show that the existing allocation of scarce enforcement resources across cash business taxpayers (or any other sector of taxpayers) gets the allocation right. Rather, the concern affirms the need to think deeply about the issues posed in this Article and whether and when concentrated enforcement (or some alternative scheme for allocating scarce enforcement resources) may increase
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Additionally, while any application of concentrated enforcement should be subject to rigorous empirical evaluation to determine its effects (as exemplified by the hot spots policing empirical research, which built upon the theoretical case for hot spots policing), informed intuition can help determine when it makes sense to try concentrated enforcement. Imagining the two ends of an enforcement spectrum can help guide this process. On one end of the spectrum, a uniform allocation of enforcement resources leaves every taxpayer with just enough incentive to comply. As a result, concentrated enforcement may lead to a plunge in compliance in all subsectors not subject to enforcement projects (and a corresponding plunge in expected monetary costs of noncompliance and norms of compliance), which may not be outweighed by increases in compliance in subsectors subject to enforcement projects. At the other end of the spectrum, the enforcement resources are yielding little to no deterrence when applied in a uniform fashion, suggesting large, potential benefits from concentration. Concentrated enforcement may lead to large gains in the enforcement project subsectors and few losses in the other subsectors. The more an enforcement environment resembles the latter, rather than the former end of the spectrum, the more sensible experimental application of concentrated enforcement would be. Additionally, the greater the uncertainty aversion, availability bias, and concentration in nodes of noncompliance, the better advised experimental application of concentrated enforcement would be.

For the reasons outlined above, a number of aspects of the cash business tax sector suggest that the cash business tax sector may be closer to the latter, rather than the former, end of the spectrum. The compliance that does exist in the cash business tax sector can be explained at least in large part by the visibility of credit card receipts. As a result, reporting of credit card receipts may persist even if a particular subsector is not subject to an enforcement project. Indeed, dropping from a one percent chance of audit to a slightly lower chance of audit, combined with probability neglect, may provide a reasonably high incentive to continue to report credit card receipts and some minimal amount of cash income, even for subsectors not subject to enforcement projects. In other words, there may be little compliance to lose in subsectors not subject to enforcement projects. On the other hand, the very low reporting of cash receipts and the very limited enforcement resources suggests that there may be much to gain from concentrated enforcement. A variety of mechanisms, including the role of the DIF score in creating feedback loops between noncompliance and enforcement and the potential role of local norms in making compliance sticky suggest additional reasons why the gains in subsectors subject to enforcement projects may more than outweigh the losses elsewhere. Evidence of taxpayer uncertainty aversion, media attention to tax crackdowns, and seeming nodes of noncompliance enhance the case for concentrated enforcement in the cash business tax sector.
sector. Put simply, this Article suggests that the theoretical case for concentrated enforcement in the cash business tax sector is strong enough to merit empirical testing.

D. Objections and Responses

Aside from this inherent empirical question, a number of potential objections to the application of concentrated enforcement to cash business tax sector also may exist. As an initial matter, in discussing the potential gains from concentrated enforcement, this Article has focused on gains from concentrating audit resources on subsectors of cash business taxpayers. As a result, the first potential objection to concentrated enforcement is that audits of cash business taxpayers are problematic for a number of reasons: they do not detect all evasion, they are expensive and low yield, and even heavy concentrations of resources may not produce high rates of audits for the cash business taxpayers in an enforcement project.

Indeed, the frequent lack of a paper trail associated with cash business tax evasion, combined with these taxpayers’ own evasion sophistication does make cash business tax evasion very difficult for auditors to find. As described by Joseph Bankman, evasion techniques include “special cash registers, ringing up sales as estimates, the use of two sets of books, [and] paying suppliers in cash to avoid paper trails.” Additionally, cash business taxpayers frequently hoard cash business proceeds or reinvest them in the business so as not to create a discrepancy between income and spending. As a result, even after a comprehensive audit, the IRS may fail to detect some (or much) cash business tax evasion.

In terms of expense and yield from audits, the GAO has observed that audits of sole proprietors filing Schedule Cs with their tax returns (which include cash business audits) are quite time consuming relative to other types of audits. Since audits of sole proprietors are often field audits, rather than correspondence audits, they also must be conducted by more experienced

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225. Clotfelter, Individual Returns Analysis, supra note 187, at 366, 367; Joel Slemrod, An Empirical Test for Tax Evasion, 67 Rev. Econ. & Stat. 232, 233 (1985). For a general discussion of the difficulty of determining the amount of noncompliance actually detected by auditors, see Raskolnikov, Crime and Punishment in Taxation, supra note 17, at 584 (discussing the problem and concluding that the rate of detection on audit is probably below (and perhaps well below) 50 percent).

226. Bankman, Eight Truths, supra note 219, at 508; see also Kagan, Income Tax Violations, supra note 149, at 79–80 (making some similar observations in description of informal suppliers).

227. Morse et al., Cash Businesses, supra note 148, at 51–54.

228. STRATEGY FOR REDUCING THE GAP, supra note 152, at 22.
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IRS officials, adding to the expense of the audits.\textsuperscript{229} Compounding these difficulties, cash business tax audits produce relatively low tax revenue yields from audits.\textsuperscript{230}

Perhaps as a result of some of the above factors, heavy concentrations of auditing resources may nonetheless leave even the cash business taxpayers subject to enforcement projects with an unreasonably low likelihood of being audited. Take, for instance, the cash business dry cleaner considering evading tax liability by $5,000. Prior to concentrated enforcement, the dry cleaner would face an approximately one percent chance of being audited,\textsuperscript{231} and evasion of tax liability would be subject to a penalty of 75 percent of the amount of tax evaded.\textsuperscript{232} As a result, relative to paying the tax liability, the dry cleaner would have an expected benefit from evading of $4,950 ($5,000 taxes saved x 99 percent likelihood of not getting caught) and an expected cost of $37.50 (fine of $3,750 x one percent chance of getting caught). The result is that, under an expected benefits and costs analysis, the dry cleaner should evade. Now imagine that, after application of concentrated enforcement, the dry cleaner is subject to an enforcement project. The enforcement project increases the dry cleaner's possibility of being audited to ten times what it was previously, such that the dry cleaner now has a ten percent chance of being audited. The dry cleaner nonetheless still faces an unreasonably low chance of being audited. The expected cost of evading would increase substantially, to $375 ($3,750 x ten percent chance of being audited). However, the expected benefit from evading, now $4,500, ($5,000 taxes saved x 90 percent likelihood of not getting caught) is still many times higher. As a result, an expected benefits and costs analysis suggests that the dry cleaner should still evade. This result might suggest to some that the application of concentrated enforcement is fruitless.\textsuperscript{233}

\textsuperscript{229} Id.
\textsuperscript{231} See supra text accompanying note 29.
\textsuperscript{232} I.R.C. § 6663(a). As discussed previously, criminal sanctions are possible but penalties in general, much less criminal penalties, are imposed surprisingly rarely. See supra text accompanying note 160.
\textsuperscript{233} One response to this problem would be to engage in even more concentration of resources to increase the likelihood of the enforcement project group(s) being audited. While the overall level of enforcement resources, relative to all cash business taxpayers, is quite low if all resources available were concentrated on very few subsets of taxpayers at any given time, the likelihood of being audited could be quite (and prohibitively) high. Indeed, for reasons suggested in this Article, such an approach should be strongly considered. For the sake of argument, though, we can contemplate the situation set forth in the text where audit likelihood remains too low even after concentration.
A number of responses to this line of argument are in order. As an initial matter, while it is true that audits in the cash business tax sector present a number of problems to the extent that concentrated enforcement can nonetheless improve the use of these audits, it is a worthwhile innovation. As the GAO has indicated, the massive underreporting by cash business taxpayers suggests that, notwithstanding the relatively low direct yields from cash business taxpayer audits, these audits may play a crucial role in increasing tax revenues by increasing voluntary compliance. At a broader level, failing to audit cash business taxpayers would sanction the widespread evasion in the cash business tax sector. It would also compound the inefficient flow of even more economic activity to the cash business tax sector, in order to take advantage of the seemingly sanctioned, lower tax liability. Because Congress has not endorsed this outcome, and significant fairness and efficiency reasons counsel against it, auditing cash business taxpayers will remain part of the IRS’s enforcement arsenal. With audits of cash business taxpayers here to stay, the admitted, fundamental problems with auditing these taxpayers are beside the point. If concentrated enforcement can better allocate auditing resources, then it can help improve tax compliance.

Along the same lines, the important question in evaluating concentrated enforcement is not whether concentrated enforcement causes every taxpayer to comply, but rather whether concentrated enforcement can improve compliance, relative to alternative allocations of enforcement resources. Take the dry cleaner example, discussed above. As explained, an expected benefits and costs calculus may suggest that even after application of concentrated enforcement, the dry cleaner may evade the $5,000 of tax liability. However, there is more to the story. Tax scholars have suggested a number of reasons why taxpayers do not engage in a simple comparison of expected benefits and costs in making their compliance decisions. Perhaps most notably, risk aversion causes taxpayers to overweight the expected

234. TAX GAP, supra note 107 (cautioning against drastic decreases of auditing in a particular sector because of unknown effects on voluntary compliance); STRATEGY FOR REDUCING THE GAP, supra note 152, at 22–23.

235. See Bankman, Eight Truths, supra note 219, at 507 (describing how cash economy swells to reflect low effective tax rate).

236. This is not to say that auditing resources should not be lower in the cash business tax sector than in other sectors to take into account the particular costliness of cash business taxpayer audits and relatively low yields from such audits. See, e.g., Slemrod, Cheating Ourselves, supra note 24, at 44 (suggesting that evasion should be higher in the cash business tax sector to account of these features of the sector). Indeed, nothing in this Article suggests that the allocation of enforcement resources between different sectors of taxpayers should be changed. Rather, the Article focuses on the allocation of enforcement resources within the cash business taxpayer sector.
Concentrated Enforcement

Taxpayers may systematically overweigh the likelihood of audit. Taxpayers may also wish to avoid the cost of audit itself and fear criminal penalties, even though the possibility of their application is remote. Additionally, as suggested previously, non-economic reasons, such as norms and the like, may affect the calculation, causing taxpayers to comply even when a standard economic formulation may suggest otherwise.

Finally, as indicated in this Article, the expected benefits and costs calculation does not take into account the fact that, as compliance increases, other mechanisms are likely to kick in to make noncompliance more costly: norms of compliance are likely to become stronger, the likelihood of getting caught for not complying within the particular subsector may increase, and the perception of audit rate may seem even higher than it actually is because of the salience of the enforcement project. Putting these factors together, the expected monetary cost of evading probably significantly understates the perceived cost to the dry cleaner of evading. As a result, if concentrated enforcement can move the compliance calculus in the right direction, then it may increase compliance.

Additionally, while this Article has often discussed concentrating auditing resources, it has done so as an illustration of how concentrated enforcement can concentrate enforcement resources, not as an endorsement of audits in particular. Put another way, concentrated enforcement speaks generally to the allocation of enforcement resources, not necessarily the particular method of enforcement. Tax scholars have suggested a number of innovative means of detecting noncompliance in the cash business tax sector other than relying exclusively on intensive audits. For instance, Joseph Bankman has suggested potentially cross-checking tax returns and real property or transfer tax records and rooting out influential tax preparers who encourage extensive tax evasion. Alternatively, concentrated enforcement could be used to focus attention on tax return preparers aiding cash business tax evasion. This Article stands for the proposition that, whatever form of enforcement the IRS uses, allocation of enforcement resources is crucial, and under certain circumstances, concentrated enforcement may improve this allocation. Put another way, the allocation of enforcement resources at the heart of this Article can extend beyond auditing cash business taxpayers and,  

239. I thank Leandra Lederman for this point.
240. As a result, while alternative tax regimes such as a VAT are outside the scope of this article, the allocation of scarce enforcement resources at the heart of this Article could be applied to alternative regimes, including a VAT.
indeed, beyond the cash sector entirely to many other tax compliance problems.242

Similarly, a number of objections might apply to the application of concentrated enforcement to cash business taxpayers in particular. For instance, cash business taxpayers might not be particularly worried about their compliance reputations and therefore might be less likely to respond to new norms of compliance than more institutional actors.243 Enforcement projects focused on tax return preparers, to name just one example, might be better able to tap into concern about relative reputation in order to increase compliance. Enforcement action directed against tax return preparers may also allow the IRS more leverage to publicize instances of noncompliance, thereby offering the potential for greater signaling and reputational effects flowing from increasing compliance spirals. However, these concerns about application to cash business taxpayers in particular, while helpful in flagging considerations that should be taken into account in choosing the best settings for concentrated enforcement, do not undermine the concept of concentrated enforcement altogether. Moreover, while groups other than cash business taxpayers may be even better suited for concentrated enforcement, cash business taxpayers do have to be subject to some amount of enforcement. To the extent that concentrated enforcement improves cash business tax enforcement, it should be applied. This Article should be understood as making the case for experimental application of concentrated enforcement in the particularly difficult cash business tax sector, not as making the case that this setting is the optimal one for concentrated enforcement. Indeed, a continuing, broader contemplation of when concentrated enforcement works and why would be a positive development.

Another potential, even predictable, problem, with concentrated enforcement is compliance decay. Imagine that the IRS engages in a wildly successful enforcement project on dry cleaners in Manhattan. As a result, all dry cleaners in Manhattan comply fully with their tax obligations. Norms of tax compliance now pervade the subsector. Prices for dry cleaning in New York City rise to reflect tax compliance. The IRS can more easily identify noncompliers. However, after the enforcement project subsides, the

242. An analysis of how concentrated enforcement might extend to other tax compliance contexts (and how, if at all, it might need to be reformed as applied in other contexts) is beyond the scope of this Article. If concentrated enforcement were applied in a situation in which noncompliance was more likely to reflect sincere mistakes or confusion, then greater concern might exist about compliance backlash, discussed in more detail infra text accompanying notes 255–256. In such cases, the concentrated enforcement approach may benefit from being framed more as a compliance, rather than a deterrence, initiative.

243. Cf Morse, Tax Compliance and Norm Formation, supra note 124, at 694–95 (contrasting reputation sensitive and reputation insensitive tax evaders).
Concentrated enforcement incentives to evade tax liability will return predictably.\textsuperscript{244} Although honest taxpayers can now compete in the market and still make a profit, this does not reduce the incentive to evade. As time passes, improved comparative analysis gained from the enforcement project may erode because changed economic conditions and changes in the market will weaken the comparative analysis. As more Manhattan dry cleaners make the decision to evade in response to these conditions, compliance will decrease further, it will be harder to compete as an honest taxpayer, and compliance will spiral downward. In some ways, then, the likelihood of eventual decay may seem to undermine the enforcement project.

However, as dismal as the eventual, even likely, decay may seem, it does not necessarily undermine the case for concentrated enforcement. Recall that the base case for concentrated enforcement is that, when enforcement is limited and costly and violations are high, total compliance may increase when enforcement resources are concentrated on a smaller portion of the overall cash business taxpayer sector. This can be true even if the concentration leaves the remainder of cash business taxpayers with very low incentives to comply. In this regard, focusing on compliance decay is somewhat beside the point. The most important question is whether concentrated enforcement increases overall compliance. It may be able to do so by increasing compliance in the subsectors actually subject to enforcement projects at any given time, even if the other subsectors exhibit drastically low rates of compliance. For instance, to take the extreme case, even if Manhattan dry cleaners do not comply at all after the Manhattan dry cleaner enforcement project ends, concentrated enforcement would still make sense if the compliance in the subsectors subject to enforcement projects made up for the dry cleaners’ (and other non-enforcement project subsectors’) lack of compliance. Additionally, as suggested previously, there are reasons to think that compliance might be sustainable, to some extent, after an enforcement project subsides. Improved (if not perfect) comparative analysis, norms, uncertainty aversion, and media attention to enforcement projects all serve as independent, and yet, reinforcing reasons why some amount of compliance in the dry cleaning subsector might remain after the enforcement project. For instance, if norms of compliance are high enough to keep compliance at a higher level in the dry cleaning subsector after the enforcement project, then the higher compliance may interact with the other mechanisms to help maintain compliance, which may keep norms higher. In

\textsuperscript{244} This result could be exaggerated by a “bomb crater” effect, whereby being subject to an enforcement project (or being audited) makes taxpayers believe that the likelihood of being subject to a subsequent enforcement project (or being audited) is very low, making room for evasion. Boris Maciejevsky et al., \textit{Misperceptions of Chance and Loss Repair: On the Dynamics of Tax Compliance}, 28 J. ECON. PSYCH. 678 (2007).
short, while compliance decay may occur, compliance decay alone would not undermine concentrated enforcement, and concentrated enforcement may actually help stem the decay.

Another potential problem is taxpayer entrenchment to tax evasion positions. An underlying assumption of much of the discussion about concentrated enforcement has been that taxpayers would respond to an announced enforcement project by reporting more tax liability as a result of the greater probability of detection. However, in response to an enforcement project, cash business taxpayers may report lower tax liability to create greater bargaining leverage with the IRS. Additionally, the multi-year nature of audits may give taxpayers some incentive not to raise tax liability reporting in response to an enforcement project because doing so may signal to the IRS that the taxpayer was previously evading, thereby flagging the taxpayer’s prior years as ripe for IRS review.

While this entrenchment is certainly possible, some evidence suggests that, at least across cash business taxpayers, the more likely response to an enforcement project is higher reporting of tax liability. The high correlation between information reporting and tax compliance,245 and the strong relationship between higher audit rates and higher voluntary reporting of tax liability,246 suggests that taxpayers heavily weigh the likelihood of getting caught in their calculus of how much tax liability to report. With respect to a higher chance of being audited, researchers ran an experiment in Minnesota in which taxpayers received a letter indicating that the tax returns they were going to file would be “closely examined.” In response to this letter, high-income taxpayers actually lowered their reported tax liability, but medium and low income taxpayers raised their tax liability.247 While the researchers could not conclude with certainty what explained this behavior, they hypothesized that the high-income taxpayers (now freed of the belief that they should report a high enough tax liability to evade audit altogether) may have lowered their reported tax liability to increase their bargaining leverage with the IRS.248 This is a tactic that makes some sense when the tax law is uncertain, as is often the case for high-income taxpayers engaged in complex tax planning, because uncertainty breeds a fair amount of room for potential bargaining between taxpayers and the IRS, and aggressive, low reporting has fewer downsides for taxpayers

245. See sources cited supra note 181.

246. Plumley, The Determinants of Individual Income, supra note 51, at 35 (finding that “audits have a strong, positive impact on reporting compliance”); see also Alm & McKee, Audit Certainty, supra note 95 (finding that informing individuals that they would be audited increased their compliance).


248. Id. at 482.
when the tax law is uncertain. However, cash business taxpayers engaging in tax evasion are not dealing in uncertain tax law. Instead, they are flouting clear obligations, such as an obligation to include in income all payments they receive. As a result, they are unlikely to gain much bargaining leverage by lowering their reported tax liability. Additionally, unlike in the Minnesota experiment, cash business taxpayers subject to an enforcement project would not be totally sure they would be audited. As a result, in response to an enforcement project, taxpayers may feel additional pressure to report high enough tax liability to avoid the very high chance of audit attention resulting from the enforcement project.

Finally, concentrated enforcement could present some compliance or political backlash. Some scholars have worried that strong enforcement strategies can produce compliance backlash by crowding out taxpayers' nondeterrence motivations for compliance. The uproar (by some) over the IRS's alleged targeting of Tea Party groups has also underscored the serious political liabilities that can accompany perceived targeting of taxpayers. In the cash business context, it might be easy to take sincere (or less sincere, politically motivated) offense at the IRS engaging in focused enforcement projects on hard-working small businesses. Indeed, in an apparent

249. Osofsky, The Case Against Strategic Tax Law Uncertainty, supra note 33, at 532–34 (exploring how “[r]eporting less tax liability becomes more attractive as a negotiation tactic in case an audit actually occurs as uncertainty increases”).


251. An oft-cited study of crowding out is Uri Gneezy & Aldo Rustichini, A Fine Is a Price, 29 J. LEG. STUD. 1, 3 (2000) (detailing crowding out in daycare pickups). More generally, tax compliance scholars have worried that increasing deterrence mechanisms might crowd out nondeterrence motivations for tax compliance. See, e.g., Raskolnikov, Revealing Choices, supra note 19, at 704–05 (discussing crowding out as a “real concern” in tax enforcement).


response to the Tea Party scandal, an IRS official recently felt compelled to declare that the IRS uses a "highly automated" system.254

Beginning first with compliance backlash, in some ways this concern would be a bit misguided in response to concentrated enforcement. As stressed previously, concentrated enforcement does not involve increasing total enforcement against cash business taxpayers. Nor does it involve increasing penalties. Instead, concentrated enforcement is actually premised on the assumption that neither can be increased substantially. Nonetheless, part of the appeal of concentrated enforcement is that it may make enforcement seem more salient, which for all intents and purposes may be perceived as an increase in enforcement.

Assuming that concentrated enforcement would be perceived as an increase in enforcement by cash business taxpayers, it is difficult to know how much to make of the concern that enforcement could crowd out non-deterrence motivations to comply. Some scholars have expressed significant concern about enforcement crowding out non-deterrence motivations.255 On the other hand, Leandra Lederman has made a persuasive case that enforcement can be consistent with, and necessary for, maintaining norms of compliance.256 The high evasion in the cash business tax sector provides some indication that cash business taxpayers currently are not highly motivated by norms of compliance and that compliance backlash may not be great, or at least not as great as in other sectors.257

Perhaps the most troubling concern is not the potential for compliance backlash, but rather political backlash, arising out of distaste for a non-uniform enforcement approach. In some ways, the application of concentrated enforcement in the cash business tax sector does not seem particularly likely to raise concerns over focused enforcement. Cash businesses are profit-making enterprises. They are not engaged in the type of political activity that some believed made perceived targeting particularly offensive in the Tea Party context. Additionally, concentrated enforcement

254. Hoffman, IRS Doesn't Target, supra note 42; cf. Adams & Webley, VAT Compliance in the UK, supra note 195, at 205–07 (registering complaints in the United Kingdom that VAT may unfairly burden small businesses).


256. Lederman, The Interplay, supra note 24, at 1484–99; see also Bruno S. Frey, Tertium Datur: Pricing, Regulating and Intrinsic Motivation, 45 KYKLOS 161, 176 (1992) (suggesting that crowding out is less of a concern if enforcement efforts are concentrated on dishonest taxpayers).

257. See supra note 242 for a discussion of potentially greater concerns about compliance backlash in other sectors and potential responses.
Concentrated Enforcement would operate through rotating enforcement projects throughout the cash business tax sector, meaning that cash business taxpayers (or at least cash business taxpayers who are in relatively high risk subsectors, should such nodes of noncompliance be identifiable) may receive relatively equal enforcement attention over the long run. Moreover, the DIF score, which has not been subject to particular political criticism or concern regarding targeting, itself uses a targeted approach, focusing on individual taxpayers believed to be most noncompliant. As a result, while concentrated enforcement would broaden the focus of enforcement from individuals to groups, it would be applying a new type of non-uniform enforcement, rather than introducing it altogether.

Nonetheless, whether for self-serving reasons, or as a result of genuine outrage, some may react swiftly and strongly to even the perception of IRS targeting. For instance, the recent initiative by the IRS alluded to previously, which involved sending letters to 20,000 small business owners questioning whether they had underreported their business income, received prompt media coverage. The media coverage highlighted various objections by small businesses and their accountants, who indicated that they found the initiative "alarming," that they "really work hard . . . to . . . not only follow the law, but follow the letter of the law," and that the initiative "created some heartache for the small business community."

On the one hand, rhetoric alone should not be persuasive, to the extent that it is opportunistic. Powerful rhetoric about the need to protect small businesses has historically been used to gain political traction to defeat tax reforms. For instance, rhetoric regarding the need to protect small businesses and family farms proved particularly effective in opposing the estate tax at the beginning of George W. Bush's presidency, even though the rhetoric was notoriously overblown. One lesson from the estate tax

258. Cf. Lando & Shavell, The Advantage, supra note 91, at 216 (suggesting that "concern about inequity can presumably be met by focusing enforcement effort first on one group and then on another, so as to achieve equal treatments of individuals over time").

259. For an interesting discussion as to what might animate distaste for strong enforcement against cash business taxpayers in particular, see Bankman, Eight Truths, supra note 219, at 510 ("What may play a role in our moral intuitions is . . . that some portion of the benefit of underreporting in the cash sector is realized by consumers.").


261. Id.


263. MICHAEL J. GRAETZ & IAN SHAPIRO, DEATH BY A THOUSAND CUTS: THE FIGHT OVER TAXING INHERITED WEALTH 50–51, 62–66 (2005); Karen C. Burke
experience (and the many other experiences in which protecting small businesses has been used as a rallying cry) is that simply cowing to the rhetoric may undermine reasonable tax policy discourse. Tax policy or, in the case of concentrated enforcement, tax enforcement, that makes sense should not be foresworn simply because of calls of unfairness toward small businesses, especially when such calls may not be justified. Additionally, in the compliance context, if the calls of unfairness are largely bluster, outweighed by increased compliance and perhaps general confidence in the IRS, the calls should not merit much of a response. In terms of defending the program, to the extent that nodes of noncompliance can be identified, the IRS can explain that enforcement projects are determined efforts against particularly noncompliant groups of taxpayers. The IRS could explain that it had gone through extensive analysis in deciding which subsectors were most noncompliant and therefore would be subject to enforcement projects at any given time. Doing so may weaken adverse reaction by the public, but not provide so much information so as to inoculate any cash businesses subsector from concentrated enforcement.

On the other hand, some might have deeper concerns about concentrated enforcement as it relates to administration of the law. In particular, one might reasonably worry about the impact of concentrated enforcement on compliant taxpayers who are nonetheless part of an enforcement project. This concern is far from straightforward. Such taxpayers may feel a fair amount of distress regarding the prospect of being subject to an enforcement project, even if they are fully compliant. However, to the extent that concentrated enforcement ensures significantly greater compliance, that significantly greater compliance may outweigh the prospect of such taxpayer distress. Greater compliance can ensure greater fairness in relative tax burdens and provide compliant taxpayers a greater opportunity to


264. Cf. Roy Bahl, Reaching the Hardest to Tax: Consequences and Possibilities, in TAXING THE HARD-TO-TAX, supra note 40, at 337, 354 (stating in concluding remarks on volume regarding the “hard-to-tax” that “everything depends on the willingness of the government to enforce the tax system”).

265. Cf. Adams & Webley, VAT Compliance in the UK, supra note 195, at 205–07 (reporting from interviews with small business proprietors in the United Kingdom that most believed strong agency powers were necessary for compliance).

266. Cf. FACTORS INFLUENCING VOLUNTARY COMPLIANCE, supra note 201 (using DIF analysis to identify low-compliance communities). This report was able to identify low-compliance communities by geography and to identify industry groups with high noncompliance. See id. at 23 (identifying industries that tended to be noncompliant), 31 (mapping low-compliance communities based on geography).
compete in markets they might otherwise be priced out of. Government officials can emphasize that concentrated enforcement is an important means of ensuring that taxpayers pay their tax obligations and that it is designed to root out tax evasion, not honest taxpayers. The IRS could also indicate that, even for taxpayers in subsectors subject to enforcement projects, if they are compliant, then they will not be subject to enforcement penalties. Indeed, to the extent that the IRS continues to focus on taxpayers in a given enforcement project based on “worst-first” methodologies, compliant taxpayers may not even be subject to scrutiny.

Even more broadly, concentrated enforcement may raise questions about when it is justifiable for a tax enforcement agency to engage in innovative compliance campaigns, rather than simply act as a revenue collection agency. However, this last, intriguing question can be left for another day. This Article has made the case that, under certain circumstances, concentrated enforcement can increase tax compliance, and has fleshed out how concentrated enforcement might apply to the particularly problematic cash business tax sector. Considering when concentrated enforcement might increase compliance is a pressing question in light of the project-based enforcement that exists in practice. By considering the compliance benefits of concentrated enforcement, this Article has taken the first, but certainly not the last, step in evaluating concentrated enforcement. Future work and experimentation should follow.

267. See Bankman, Eight Truths, supra note 219, at 507-08 (describing consumers, rather than cash business tax evaders, as beneficiaries of evasion); Benshalom, Taxing Cash, supra note 181, at 74 (“[T]ax-evasion practices force otherwise honest taxpayers who operate in cash-sector activities to misreport their income to align with market practices or to seek different employment opportunities where they can compete without evasion.”).

268. See supra text accompanying notes 85-86 for examples of strong defenses of the HMRC campaigns and their importance in a fair tax system.

269. For some (preliminary) discussion of this issue, see supra note 107.