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Articles

The Incentives Matrix: The Comparative Effectiveness of Rewards, Liabilities, Duties, and Protections for Reporting Illegality[†]

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Social enforcement is becoming a key feature of regulatory policy. Increasingly, statutes rely on individuals to report misconduct, yet the incentives they provide to encourage such enforcement vary significantly. Despite the clear policy benefits that flow from understanding the factors that facilitate social enforcement, i.e., the act of individual reporting of illegal behavior, the field remains largely understudied. Using a series of experimental surveys of a representative panel of over 2,000 employees, this Article compares the effect of different regulatory mechanisms—monetary rewards, protective rights, positive obligations, and liabilities—on individual motivation and behavior. By exploring the interplay between internal and external enforcement motivation, these experiments provide novel insights into the comparative advantages of legal mechanisms that incentivize compliance and social enforcement. At the policy-making level, the study offers important practical findings about the costs and benefits of different regulatory systems, including findings about inadvertent counterproductive effects of certain legal incentives. In particular, the findings

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indicate that in some cases offering monetary rewards to whistle-blowers will lead to less, rather than more, reporting of illegality. At the more theoretical level, the findings contribute to several strands of inquiry, including motivational crowding-out effects, framing biases, the existence of a “holier-than-thou effect,” and gender differences among social enforcers. Together, these findings portray a psychological schema that offers invaluable guidance for policy and regulatory design.

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I. Introduction

Questions about social enforcement and the role of individual reporting in preventing corporate and governmental misconduct are at the forefront of current debates and reforms. Most recently, the 2009 stimulus bill introduced by President Obama for the recovery of our troubled economy includes elaborate antiretaliation rights for whistle-blowers who report financial misconduct.¹ Dozens of existing federal statutes and hundreds of state statutes include similar whistle-blower protections or incentives in a vast range of fields including tax regulation, environmental law, employment discrimination, health and safety, and trading standards.² Indeed, all regulatory systems have built-in mechanisms designed to promote legal compliance. However, the variation among these regulatory mechanisms and incentives is immense.³ Some statutes are designed to protect employees against retaliation when they resist or report illegal activities.⁴ Other statutes state an obligation of the individual to report and, at times, impose penalties for failure to report.⁵ Yet another class of incentive-based systems encourages reporting by sharing part of the funds recovered from a report of corporate fraud.⁶ In addition to the vast differences among the statutes themselves, there is significant debate about the application of the various laws. Most notably, recent case law interpreting whistle-blower protections

1. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, sec. 1553, 123 Stat. 115, 297–302. The whistle-blower protection clauses are often referred to as the “McCaskill Amendment.” E.g., Orly Lobel, *Citizenship, Organizational Citizenship, and the Laws of Overlapping Obligations*, 97 CAL. L. REV. 433, 455 n.135 (2009); Daphne Eviatar, *McCaskill Proposes Protection for Government Contractor Whistleblowers*, WASH. INDEP., Feb. 4, 2009, available at <http://washingtonindependent.com/29016/mccaskill-proposes-protection-for-govt-contractor-whistleblowers>.

2. See *infra* note 30 and accompanying text.

3. See Lobel, *supra* note 1, at 445, 447 (arguing that whistle-blower statutes vary widely regarding scope, content, and protection).

4. See *infra* subpart II(A).

5. See *infra* subpart II(B).

6. See *infra* subpart II(C).

has brought the field to a state of flux.⁷ For example, in a recent decision decried as “the worst Supreme Court ruling on whistleblowing,”⁸ the U.S. Supreme Court, in a 5–4 decision, refused to extend constitutional protections to employees who report illegal conduct when such reporting is “pursuant to their official duties.”⁹ Other recent cases similarly reveal a deep ambivalence and uncertainty about the role of individuals in resisting illegality in organizations.¹⁰

The legislative and adjudicative variations in the field of social enforcement—the act of individual reporting of illegality—indicate great uncertainty and undertheorizing about the comparative advantages and effectiveness of various reporting channels, protections, and incentives that affect the decision of individuals to report illegal conduct. In this Article, we offer new insights on the psychology of social enforcement. The Article presents original empirical research examining how incentives and variance in regulatory mechanisms affect individual motivation and behavior. By exploring the interplay between internal and external enforcement motivations, these experiments provide novel insights into the comparative advantages of legal mechanisms that incentivize compliance and social enforcement. Our findings reveal important differences in the effectiveness of existing mechanisms designed to incentivize reporting. Most strikingly, our findings suggest that legal incentives to report are frequently ill-designed and can in fact be inadvertently counterproductive.

Using a series of experimental surveys of a representative panel of more than 2,000 employees, the empirical study examines four prototypical legal mechanisms designed to promote individual reporting: (1) Antiretaliation Protection; (2) Duty to Report; (3) Liability Fines; and (4) Monetary Incentives. The experiments measure the value individuals attach to different types of regulatory mechanisms in deciding whether to react to illegality within their work environment. Through interactive regressions, the study further investigates the relationships between such incentives and the moral and practical considerations that underlie individual decisions to respond to a certain type of mechanism. The empirical study offers methodological advantages over existing studies. Departing from most empirical studies in the fields of behavioral economics and social psychology, the study offers a unique focus on the effect of regulatory approaches on individual behavior. Existing empirical research has largely neglected the role of the surrounding legal regimes as affecting individual behavior. Building on prior studies by

7. See Lobel, *supra* note 1, at 445–55 (discussing the disparate judicial interpretation of whistleblower statutes among the several states and the federal government).

8. Joyce Howard Price, *Justices Ease Whistleblower Protections*, WASH. TIMES, May 31, 2006, at A1 (internal quotations omitted).

9. *Garcetti v. Ceballos*, 547 U.S. 410, 421 (2006).

10. See Lobel, *supra* note 1, at 434 (asserting that there is judicial ambivalence about the role of individuals in exposing illegality in group settings); *infra* notes 56–58, 96–100, 135–38 and accompanying text.

the collaborators,¹¹ the study fills this research gap and argues that motivation to report is multidimensional and correlated with the operative legal incentive. The study thus develops a unique lens combining the study of behavioral economics with insights from new-governance theory, the school of thought that focuses on the significance of regulatory design. This lens enables the identification of problems in contemporary regulatory mechanisms. Legislators, as well as adjudicators, must consider tailoring the incentives embedded in the law to the misconduct and the individual that it targets as an enforcer. A major obstacle to such a comprehensive approach has been the difficulty of translating such factors into policy, including dollar metrics and effective incentive mechanisms. By and large, decisions about how to design whistle-blowing incentives and protections have not been grounded in a coherent set of valuations. The experiments that form the basis of this Article allow for the development of principled and effective legal design.

From a practical perspective, the Article presents new evidence about key factors that determine whether or not people will actively report and resist illegal conduct. Our findings suggest that a systematic approach to regulation must include an understanding of the fit between the adopted law, the misconduct it addresses, and the individuals it aims to incentivize. On a broader level, the findings of the study contribute to the scientific body of knowledge in a range of key social-science debates, including crowding-out effects, the implications of framing biases to the expressive function of the law, the “holier-than-thou effect,” and gender differences in motivation and action. For policy development, the results suggest that in laws that are likely to trigger strong internal ethical motivation, offering monetary rewards may be unnecessary or, worse yet, counterproductive. In such circumstances, where legal violation is generally perceived as morally offensive, creating a duty to report may be sufficient. Where potential informants lack a moral imperative to report, our findings further indicate that offering low rewards is the worst mechanism that regulators can offer, as it neither motivates high levels of reporting nor is perceived by most individuals as constituting good citizenship behavior. In fact, offering low rewards triggers less reporting than merely offering protection or establishing a duty. Thus, the findings suggest that many existing laws may have inadvertent counterproductive effects by offering monetary incentives rather than triggering internal motivations of potential reporting individuals. More generally, this suggests that framing the reporting behavior as a commodity may actually crowd out, or suppress, internal moral motivation.

The findings further indicate important interactions between different types of legal incentives and the demographics of individuals for which they

11. See Yuval Feldman & Orly Lobel, *Decentralized Enforcement in Organizations: An Experimental Approach*, 2 REG. & GOVERNANCE 165, 171–81 (2008) (demonstrating the impact of institutional processes on individual decisions about whether to blow the whistle on illegality).

are designed, including gender, levels of income, job status, and professional roles. In particular, the results clearly show that while men care significantly more than women about the size of the monetary reward, women care more about protection against retaliation, as well as the impositions of a legal duty. Given the complexity observed in these interactions, we argue in this Article that there is no one-size-fits-all solution for policy design. Rather, policy makers must consider the characteristics of the target population of social enforcers and incentivize them accordingly.

At a theoretical level, the findings reveal pervasive gaps in how individuals perceive the motivations driving their own behavior and the actions of the general population. In particular, the findings provide significant evidence of a holier-than-thou effect, in which individuals believe that their own morality is stronger than that of their peers and strangers. Overwhelmingly, the respondents in the study perceived their own reporting behavior as being more motivated by intrinsic ethical concerns than the actions of others. Unlike their own morally driven actions, individuals predicted that others would behave according to self-interest and would be motivated primarily by external rewards provided through law. However, this effect was reduced among women participants, who were found to be more ethically motivated and more confident about the ethical motivations of other female participants. Furthermore, the findings point to a general gap between people's perception of the motivation for their behavior and the actual effect of different incentives on their behavior. Respondents tend to overestimate their internal moral motivation and underestimate the extent to which monetary rewards dictate their behavior.

The Article proceeds as follows. Part II of the Article introduces the range of mechanisms that are employed by our legal system to encourage whistle-blowing, including antiretaliation protections, duties to report, liability fines, and monetary incentives. It further introduces the contemporary realities of social enforcement and the importance of incentives in helping whistle-blowers overcome their fears to undertake such action. Part III explains the framework of the study, which links behavioral economics with new-governance theory. The study is based on the understanding that decisions to report illegality will be affected by the individual characteristics of potential whistle-blowers and the legal and organizational environment in which they operate.¹² Building on prior studies of the collaborators, we argue that these aspects must be linked in order for experimental findings to offer policy insights. Part III thus provides an overview of the various behavioral theories and empirics on how incentives may

12. *See id.* at 175–81 (evaluating the effects of cultural variations on the probability of employees reporting illegal practices, including the following: individualism versus group solidarity; degree of job security; length of legal tradition of enforcement and types of legal protection; management responses to claims; and individual characteristics, such as gender and level of moral outrage).

affect individual action. These include theories about crowding-out effects in the interaction between internal and external motivation, framing biases when costs are presented as fines or rewards, and behavioral attitudes toward duties and protections. Part IV continues the theoretical framework of behavioral analysis by adding the dimension of expressive theories of law, hypothesizing that law can induce reporting by making certain behaviors salient and valued. Part V then offers a caveat about the ability of people to predict their own reporting behavior and discusses our hypothesis of a holier-than-thou effect in the context of legal compliance systems. Part VI of the Article presents the experimental design and the findings of the study. Part VII discusses the implications of these findings for both theory and practice. We conclude with a few suggestions for future research.

A better understanding of individual motivation and behavior can improve the currently chaotic choices between protection-based, duty-based, liability, and monetary incentives for reporting illegality. If policy makers knew which legal mechanisms trigger reporting action, a more tailored approach could be designed to provide employees with the needed motivation. Despite the developments in the legal protection of whistle-blowers, there is inadequate knowledge of the factors that contribute to effective private efforts to assist regulatory compliance and the ways in which behavioral economics can predict the comparative success of such efforts. The lack of empirical knowledge contributes to the many inconsistencies in legal protections and enforcement strategies in policy and adjudication. More generally, current debates about the desirability and effectiveness of private-enforcement approaches and their ability to replace traditional command-and-control regulation¹³ would be better informed by more empirical knowledge about private individual behavior. At the broadest level, more knowledge about the behavior of individuals in reaction to illegality offers an important scholarly contribution to the interdisciplinary study of motivation, cooperation, norms, and institutional design.

II. Protect—Command—Fine—Pay: The Legal Structures of Social Reporting

The decision of whether to blow the whistle is a complex one and inevitably involves certain risks. In any organizational setting, employees

13. Compare CHRISTINE PARKER, *THE OPEN CORPORATION: EFFECTIVE SELF-REGULATION AND DEMOCRACY* 29–30 (2002) (discussing the promise of and strategies for corporate self-regulation as opposed to traditional command-and-control legislation), and Cynthia Estlund, *Rebuilding the Law of the Workplace in an Era of Self-regulation*, 105 COLUM. L. REV. 319, 377–83 (2005) (voicing new strategies for employee empowerment in the new age of self-regulation), with Anthony Ogus, *Rethinking Self-regulation*, 15 OXFORD J. LEGAL STUD. 97, 98–99 (1995) (summarizing traditional criticisms of self-regulation), and Darren Sinclair, *Self-Regulation Versus Command and Control? Beyond False Dichotomies*, 19 LAW & POL'Y 529, 532–33 (1997) (advocating for a regulatory approach that blends self-regulation and command-and-control regulation).

and managers must decide whether to take on some of these risks in order to report wrongdoing or, instead, ignore or participate in the illegal behavior. Empirical studies indicate that most employees will choose to “suffer in silence” in the face of wrongdoing for fear of retaliation in the form of termination and harassment.¹⁴ Indeed, some of the biggest legal scandals were known to insiders long before they became public. For example, today, evidence exists that the causal link between asbestos and lung disease was clearly known to the manufacturing companies as early as 1924.¹⁵ Yet, it was not until decades later that product-liability lawsuits were successfully launched against the industry, following years of active suppression of the damaging information within the companies.¹⁶ In addition to direct employment retaliation, reporting often entails psychological and societal costs, including fear, guilt, and mistreatment by peers and community.¹⁷ The fears of whistle-blowers have been substantiated by recent data showing that external whistle-blowers often experience retaliation by their supervisors and are shunned by their social circles.¹⁸ One commentator has described whistle-blowing as “professional suicide.”¹⁹

14. On “suffering in silence,” see Brian Barry, *Review Article: ‘Exit, Voice, and Loyalty,’* 4 BRIT. J. POL. SCI. 79, 97 (1974), for the assertion that if a consumer is too loyal to blow the whistle, and the status quo is more desirable than exiting the situation, then the employee will choose to “stay and be silent.” For an empirical study indicating low levels of reporting, see Terance D. Miethe & Joyce Rothschild, *Whistleblowing and the Control of Organizational Misconduct*, 64 SOC. INQUIRY 322, 330–33 (1994), showing that across five studies of employee reactions to misconduct, on average, 58% remained silent and only 21% reported misconduct outside the company.

15. See P W J Bartrip, *History of Asbestos Related Disease*, 80 POSTGRAD MED. J. 72, 72 (2004) (“The first medical article on the hazards of asbestos dust appeared in the *British Medical Journal* in 1924.”); Morris Greenberg, *Knowledge of the Health Hazards of Asbestos Prior to the Merewether and Price Report of 1930*, 7 SOC. HIST. OF MED. 493, 501 (1994) (stating that a wealth of evidence was available in the 1920s indicating that asbestos was associated with severe respiratory disease).

16. See, e.g., Alan F. Westin, *Introduction to WHISTLE BLOWING! LOYALTY AND DISSENT IN THE CORPORATION* 1, 11–12 (Alan F. Westin et al. eds., 1981) (describing the pervasive suppression of medical reports and other industry findings linking asbestos to lung disease).

17. See FRANK ANECHARICO & JAMES B. JACOBS, *THE PURSUIT OF ABSOLUTE INTEGRITY: HOW CORRUPTION CONTROL MAKES GOVERNMENT INEFFECTIVE* 64–69 (1996) (cataloguing past efforts to strengthen the federal and New York state protections for whistle-blowers, which were motivated in part by concerns for the harassment and collateral costs often incurred independent of initial retaliation); MARCIA P. MICELI & JANET P. NEAR, *BLOWING THE WHISTLE: THE ORGANIZATIONAL & LEGAL IMPLICATIONS FOR COMPANIES AND EMPLOYEES* 79–89 (1992) (describing hostile reactions to whistle-blowers by others within the organization and management).

18. Natalie Dandekar, *Contrasting Consequences: Bringing Charges of Sexual Harassment Compared with Other Cases of Whistleblowing*, 9 J. BUS. ETHICS 151, 152 (1990); Westin, *supra* note 16, at 2–3. But see Janet P. Near et al., *Explaining the Whistle-Blowing Process: Suggestions from Power Theory and Justice Theory*, 4 ORG. SCI. 393, 398 (1993) (“Contrary to the popular perception, most whistle-blowers do not suffer retaliation, at least among federal employees . . .”).

19. James Gobert & Maurice Punch, *Whistleblowers, the Public Interest, and the Public Interest Disclosure Act 1998*, 63 MOD. L. REV. 25, 35 (2000).

In the past, popular culture has generally portrayed whistle-blowers as “lowlife[s] who betray[] a sacred trust largely for personal gain.”²⁰ In recent years, however, the act of whistle-blowing has been reshaped in the media as a heroic act that can bring deeply corrupt practices to a halt. In 2002, the whistle-blowers of the WorldCom and Enron financial debacles along with the government whistle-blower from the FBI were featured on the cover of *Time* magazine as the “Persons of the Year.”²¹ Moreover, whistle-blowing has become a focal point in legislative reform as a key means to preventing corporate illegality.²² In a myriad of contexts, ranging from the prevention of financial misconduct to the prevention of discrimination and pollution, legislators and policy makers attempt to encourage individuals to step forward and report illegal conduct.²³

Because of its inherent risks, whistle-blowing must be incentivized through regulatory policies that will encourage individuals to break the code of silence in corrupt organizations. However, identifying and understanding the various predictors of social enforcement in organizations is highly complex, as predictors are comprised of individual, organizational, and state-level factors.²⁴ This complexity has led policy makers to use a variety of enforcement and compliance strategies.²⁵ Corporations themselves have also implemented internal strategies for encouraging reporting, often with the promise that an employee will not be retaliated against for using these channels.²⁶ Some corporations even offer reward systems to their employees for reporting illegalities such as discrimination or harassment.²⁷ Taken together, this spectrum of regulatory strategies underscores the inherent

20. TERANCE D. MIETHE, *WHISTLEBLOWING AT WORK: TOUGH CHOICES IN EXPOSING FRAUD, WASTE, AND ABUSE ON THE JOB* 12 (1999).

21. *Persons of the Year: The Whistleblowers*, TIME, Dec. 30, 2002, at cover.

22. See Richard E. Moberly, *Sarbanes–Oxley’s Structural Model to Encourage Corporate Whistleblowers*, 2006 BYU L. REV. 1107, 1108 (characterizing recent whistle-blower legislation as a response to corporate scandals meant to “encourage employees to become more effective corporate monitors”).

23. See William Dorsey, *An Overview of Whistleblower Protection Claims at the United States Department of Labor*, 26 J. NAT’L ASS’N ADMIN. L. JUDICIARY 43, 48–50 (2006) (giving examples of statutes protecting individuals that report unlawful behavior such as unsafe environmental practices, discrimination in the trucking industry, and corporate fraud).

24. See Feldman & Lobel, *supra* note 11, at 171–74 (detailing the litany of factors found to affect social-enforcement choices made by individuals in whistle-blowing contexts including individual, organizational, and state-level factors).

25. See Lobel, *supra* note 1, at 467 (indicating that administrative agencies have built upon principles from established business strategies and regulatory approaches to expand their collaborative compliance programs, increasingly relying on internal self-regulation to complement traditional adversarial enforcement).

26. See *id.* at 496–97 (remarking on a “growing understanding that, in order to motivate employees to respond to unlawful behavior, employers must create procedures that allow third-party review and impartial judgments” and providing examples of such procedures).

27. See *id.* at 443–44 (describing “bounty programs” that offer monetary incentives for employees who externally report illegal behavior).

complexity of this area of law and provides capacity for fine-tuning these mechanisms to the particular problems they seek to address.

Increasingly, state and federal agencies such as the Securities and Exchange Commission (SEC), the Occupational Safety and Health Administration (OSHA), and the Environmental Protection Agency (EPA) rely on private enforcement.²⁸ This has meant that whistle-blowers have become a vital part of any “democratic, free enterprise system.”²⁹ On the legislative side, there are dozens of federal statutes containing whistle-blower provisions, and many states have a statutory scheme in place that outlines whistle-blower protections.³⁰ Some of these statutes are general whistle-blowing laws,³¹ while others are designed to protect employees who blow the whistle on specific types of alleged misconduct such as environmental pollution,³² safety and health violations,³³ and financial fraud.³⁴ While this network of statutory provisions covers a significant range of social reporting, it is also “riddled with loopholes” that may leave individuals who report illegality unexpectedly vulnerable in certain cases.³⁵ Legislators and courts constantly struggle with defining which reporting activities should be protected either constitutionally or by statute.³⁶ In sum, although the significance of social enforcement and regulatory incentives is striking, there is little knowledge on the comparative advantages of the myriad regulatory tools available for providing such incentives. Despite this vast complexity, however, the current landscape of incentive programs nonetheless reveals several prototypes that may provide some structure to the regulatory toolbox. The most widely used strategies are providing employees with antiretaliation protections, creating a duty to report, imposing liability for failure to report, and incentivizing reporting with money. Some statutes include several of these legal categories, whereas others offer only one of these alternatives.

28. Feldman & Lobel, *supra* note 11, at 167–68.

29. *Winters v. Houston Chronicle Publ'g Co.*, 795 S.W.2d 723, 730 (Tex. 1990).

30. STEVEN M. KOHN, CONCEPTS AND PROCEDURES IN WHISTLEBLOWER LAW 1 (2001).

31. *Id.* at 30, 99–104.

32. *Id.* at 141–42.

33. *Id.* at 94–95, 228–29.

34. *Id.* at 81–82.

35. *Id.* at 79.

36. See Lobel, *supra* note 1, at 447–50 (describing the addition of protections for internal whistle-blowing activities to classic external reporting protections, the widely varied scope of protections afforded to employees by legislatures, and the lack of consensus by jurists on the boundaries of protected employee actions). For examples of how other countries are similarly in the process of rethinking their whistle-blower laws and reforming their compliance and enforcement strategies, see Matthias Schmidt, *Whistle Blowing Regulation and Accounting Standards Enforcement in Germany and Europe—An Economic Perspective*, 25 REV. L. & ECON. 143, 153–61 (2005), comparing the status quo of U.S., U.K., and German whistle-blowing statutory schemes and discussing possible expansions of both external and internal whistle-blowing protections; and Elletta Sangrey Callahan et al., *Australian, U.K., and U.S. Approaches to Disclosure in the Public Interest*, 44 VA. J. INT'L L. 879, 889–95 (2004), contrasting the internal and external whistle-blowing protections afforded by U.S., U.K., and Australian statutory schemes.

A. Antiretaliation Protections

Like many other statutes in the fields of environmental, consumer, and financial regulation, the 2009 stimulus bill offers traditional antiretaliation protection: nonfederal employers may not retaliate against an individual who reasonably believes that there has been a legal violation in her organization and takes action to report the violation.³⁷ As such, the reporting individual is protected by law against any adverse action by her superiors, be it firing, demotion, or acts of harassment. Many of these reporting protections were developed in response to corporate scandals, such as Enron and WorldCom, where employers' retribution threats persuaded employees to "swallow the whistle."³⁸ Consequently, these statutes are designed to provide individuals with broad antiretaliation measures.³⁹ In contrast to the whistle-blower protections for federal employees, the American Investment and Recovery Act explicitly extends protection for disclosures made during the course of an employee's duties.⁴⁰ Another important example is found in the 2002 Sarbanes–Oxley Act (SOX), which protects corporate whistle-blowers when they report financial misconduct to the SEC or internally within their organization.⁴¹ Hailed by scholars as "the gold standard" of whistle-blower protection,⁴² SOX provides civil remedies for individuals who experience retaliation in reaction to such reporting and makes it a felony to act against such an individual.⁴³

Despite their prominence, existing legal protections for reporting misconduct are largely unsettled and heatedly debated.⁴⁴ Antiretaliation protections have developed as a patchwork of state and federal statutory and common law exceptions to the employment-at-will regime, a century-old default rule that has allowed employers to terminate their employees "for

37. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, sec. 1553, 123 Stat. sec. 115, 297–302.

38. See Feldman & Lobel, *supra* note 11, at 168 ("[I]n response to recent corporate scandals . . . such as Enron and WorldCom, both federal and state legislatures have been strengthening whistle-blower protections."); see also Charles Derber, *Managing Professionals: Ideological Proletarianization and Mental Labor*, in PROFESSIONALS AS WORKERS: MENTAL LABOR IN ADVANCED CAPITALISM 167, 177 (Charles Derber ed., 1982) (labeling employees who decide not to report organizational misconduct as "swallow[ing] the whistle").

39. See American Recovery and Reinvestment Act sec. 1553(a) (prohibiting reprisals for a broad range of good-faith reporting conduct); *id.* sec. 1553(b) (establishing additional procedural protections during the investigation of reprisal complaints); *id.* sec. 1553(c)(3)–(5) (defining remedies and providing further administrative and judicial relief and appeals).

40. *Id.* sec. 1553(a).

41. Sarbanes–Oxley Act of 2002 § 806, 18 U.S.C. § 1514A (2006).

42. E.g., Cynthia Eastland, *Rebuilding the Law of the Workplace in an Era of Self-regulation*, 105 COLUM. L. REV. 319, 376 (2005).

43. 18 U.S.C. §§ 1513(e), 1514A.

44. See, e.g., Margit Cohn, *Fuzzy Legality in Regulation: The Legislative Mandate Revisited*, 23 LAW & POL'Y 469, 472 (2001) (claiming that no legislative mandate is necessary for regulators in a centralized government and inferring that future regulation by such regulators may disregard schemes considered settled by previous legislative action).

good cause, for no cause, or even for morally wrong cause.”⁴⁵ As early as the 1930s, and even more significantly since the 1960s and 1970s, legislatures have carved away at this default by enacting laws that grant employees rights against discharge.⁴⁶ These federal statutes include antiretaliation provisions designed to enable employees to claim their rights and report illegal conduct without fear of retribution.⁴⁷ These statutes encompass a broad range of regulatory fields, including financial,⁴⁸ environmental,⁴⁹ consumer,⁵⁰ health,⁵¹ and safety regulation.⁵²

As a parallel development to legislative protections for whistle-blowers, courts have also developed the tort of wrongful termination, which allows plaintiffs to overcome the hurdle of at-will employment by claiming they were discharged for engaging in social enforcement in the face of corporate misconduct.⁵³ Thus, even in a context where there exists no statute that provides antiretaliation protection, courts have frequently held that individuals cannot be terminated by their employer for reporting legal violations.⁵⁴ In fact, retaliation is the fastest growing type of employment-law claim.⁵⁵ However, courts significantly disagree over the scope of such protections.⁵⁶

45. *Payne v. W. & Atl. R.R. Co.*, 81 Tenn. 507, 519–20 (1884), *overruled by* *Hutton v. Watters*, 179 S.W. 134, 137 (1915).

46. *See, e.g.*, 29 U.S.C. § 158 (2006) (protecting workers from “unfair labor practices,” such as discharge for union membership or activities); 42 U.S.C. § 2000e-2(a)(1) (2006) (prohibiting employment discharge based on race, color, religion, sex, or national origin).

47. *See, e.g.*, 5 U.S.C. § 2302(b)(8)(A) (2006) (protecting federal employees from discharge or retaliation for good-faith whistle-blowing); 29 U.S.C. § 2002 (prohibiting employers from retaliating against employees who refuse to take a lie-detector test).

48. *See supra* notes 38–42 and accompanying text.

49. *See, e.g.*, 42 U.S.C. § 5851(a) (prohibiting retaliation against employees who report violations of the Atomic Energy Act of 1954).

50. *See, e.g.*, 15 U.S.C.A. § 2087(a)(1) (West 2009) (prohibiting employers from discharging or discriminating against an employee who reports a violation of the Consumer Product Safety Act).

51. *See, e.g.*, 20 U.S.C. § 3608 (2006) (prohibiting retaliation against whistler-blowers who report asbestos violations).

52. *See, e.g.*, 29 U.S.C. § 660(c) (protecting workers from retaliation for reporting potential violations under OSHA).

53. *See, e.g.*, *Perks v. Firestone Tire & Rubber Co.*, 611 F.2d 1363, 1365 (3d Cir. 1979) (holding that firing an employee for exercising the statutory right not to submit to a polygraph test gives rise to a cause of action for tortious discharge); *Reuther v. Fowler & Williams, Inc.*, 386 A.2d 119, 121–22 (Pa. Super. Ct. 1978) (holding that an employee fired for performing jury duty had a cause of action for wrongful termination).

54. *See, e.g.*, *Ostrofe v. H.S. Crocker Co.*, 670 F.2d 1378, 1383–84 (9th Cir. 1982) (upholding claim of wrongful discharge for objecting to employer’s violation of the Clayton Act, despite absence of an antiretaliation clause in order to promote “interests of antitrust enforcement”).

55. For example, the EEOC reports that retaliation charges for discrimination complaints have nearly doubled in the past decade. *See* U.S. EQUAL EMPLOYMENT OPPORTUNITY COMM’N, CHARGE STATISTICS FY 1997 THROUGH FY 2009 (2009), *available at* <http://www.eeoc.gov/eeoc/statistics/enforcement/charges.cfm> (noting 19,694 retaliation charges in fiscal-year 1999 and 33,613 retaliation charges in fiscal-year 2009). In fiscal-year 2009, 36% of all discrimination claims contained retaliation charges. *Id.*

56. *See* Lobel, *supra* note 1, at 433 (discussing controversial whistle-blower cases).

At the constitutional level, the Supreme Court remains sharply divided on what kind of reporting by public employees is constitutionally protected, recently holding in a split 5–4 decision that “when public employees make statements pursuant to their official duties, the employees are not speaking as citizens for First Amendment purposes, and the Constitution does not insulate their communications from employer discipline.”⁵⁷ At the tort level, courts vary in the extent to which they are willing to extend antiretaliation protections to different channels of reporting, different types of reported misconducts, and different categories of workers.⁵⁸

B. Affirmative Reporting Duties and Liabilities for Failure to Report

Affirmative duties to report illegality have been imposed in several contexts including child abuse, elder abuse, domestic violence, environmental offenses, and financial crimes.⁵⁹ For the most part, duties to report are limited to either senior corporate officers or to members of certain professions such as lawyers,⁶⁰ accountants,⁶¹ doctors,⁶² and teachers.⁶³ At times, even when a duty is not explicitly assigned by law or corporate policy, courts may infer that individuals have an obligation to report misconduct or mismanagement.⁶⁴ These duties and liabilities are an exception to the general proposition that the law does not punish omission.⁶⁵ Therefore, duties to actively report are imposed in situations where the victim of misconduct is particularly vulnerable or the harm will be widespread.⁶⁶ Many of these duties impose criminal liabilities, and in many states, those required to report may be held civilly liable for their failure to report.⁶⁷ The statutes vary in the level of evidence at which the duty is imposed and the channels of reporting required.⁶⁸

57. *Garcetti v. Ceballos*, 547 U.S. 410, 421 (2006).

58. *Id.* at 444–55.

59. See Sandra Guerra Thompson, *The White Collar Police Force: “Duty to Report” Statutes in Criminal Law Theory*, 11 WM. & MARY BILL RTS. J. 3, 3 (2002) (discussing the duty-to-report statutes in each of these areas and locating them in criminal law theory).

60. See MODEL RULES OF PROF’L CONDUCT R. 8.3(a) (2006) (laying out lawyers’ duty to report professional misconduct).

61. See 15 U.S.C. § 78j-1(b)(3)(B) (2006) (requiring accounting firms to report a client corporation’s illegal activities to the SEC if the board of directors fails to do so).

62. See, e.g., ARIZ. REV. STAT. ANN. § 13-3620 (2009) (imposing upon doctors, teachers, and others a duty to report suspected child abuse).

63. *Id.*

64. Thompson, *supra* note 59, at 36–37.

65. See, e.g., Williamson M. Evers, *The Law of Omissions and Neglect of Children*, 2 J. LIBERTARIAN STUD. 1, 1 (1978) (distinguishing between a legally binding obligation and one that is solely moral).

66. Thompson, *supra* note 59, at 37.

67. *Id.* at 18–19.

68. *Id.* at 16–17.

In recent legislation following the early twenty-first century financial debacles, a range of affirmative duties was put into place. For example, the affirmative reporting duties imposed under SOX extend to both attorneys and executives of public companies subject to SEC proceedings or investigations.⁶⁹ Under these compelled whistle-blower provisions, attorneys representing companies in an SEC proceeding must conduct an internal investigation into any evidence of securities fraud and report any relevant findings to the company's chief legal officer or its CEO.⁷⁰ The appropriate executive officer must then review the evidence and, upon finding any violations, must assume the duty of correcting the illegality within the company.⁷¹ Where the officer fails to conduct an adequate investigation, the reporting attorney is then further required to report the evidence to the company's audit committee or board of directors.⁷² Attorneys and executives who fail to comply in good faith with these SEC rules may be subject to civil liability for securities fraud.⁷³ However, by limiting the positive reporting obligations to the highest ranks within the corporation, SOX has narrowed its application to those actors who are most able to bear the potential retaliatory costs as well as prevent the violations at the earliest stage possible.⁷⁴

Companies that handle environmentally hazardous substances are also subject to strict reporting duties under the relevant provision of the Comprehensive Environment Response, Compensation, and Liability Act (CERCLA).⁷⁵ Enacted in 1980, this act provides the most significant federal environmental reporting requirements for actual or threatened releases of hazardous substances. Section 9603(a) imposes an affirmative reporting duty on "[a]ny person in charge of a vessel or an offshore or an onshore facility"

69. Standards of Professional Conduct for Attorneys Appearing and Practicing Before the Commission in the Representation of an Issuer, 17 C.F.R. § 205.3 (2003); *see also* Orly Lobel, *Lawyering Loyalties*, 77 *FORDHAM L. REV.* 1245, 1265 (2009) ("[T]he Sarbanes-Oxley Act changed the attitude toward the obligations of attorneys representing publicly traded corporations. The SEC rules now permit lawyers to disclose a client's 'material violation' to the Commission, and failure to do so may carry significant sanctions."). In general, the ABA rules do not impose an affirmative duty to report; most of the reporting duties for in-house counsel are too qualified or discretionary to be considered mandatory. *See* MODEL RULES OF PROF'L CONDUCT R. 1.13(b) (2009) (requiring in-house counsel to report certain organizational misconduct but qualifying that such reporting is not necessary if the in-house counsel "reasonably believes that it is not necessary in the best interest of the organization to do so"). The only situation where an attorney has an unqualified duty to report involves peer misconduct, but even these provisions are vaguely limited to violations that raise "a substantial question" about another attorney's "honesty, trustworthiness or fitness as a lawyer." *Id.* R. 8.3.

70. 17 C.F.R. § 205.3.

71. *Id.*

72. *Id.*

73. *Id.* § 205.6.

74. *See* Elizabeth C. Tippet, *The Promise of Compelled Whistleblowing: What the Corporate Governance Provisions of the Sarbanes-Oxley Act Mean for Employment Law*, 11 *EMP. RTS. & EMP. POL'Y J.* 1, 50 (2007) (applying the Calabresian theory of torts, which holds that tort liability should be allocated to the cheapest cost avoider).

75. 42 U.S.C. § 9603 (2006).

that has knowledge of a hazardous release in excess of the permitted quantities.⁷⁶ The supervisor must immediately notify the National Response Center, which then assumes the remainder of the reporting duties.⁷⁷ These reports must ordinarily not exceed fifteen minutes after the person has knowledge of the hazardous release.⁷⁸ Failure to immediately report a release is a felony punishable by up to three years in prison for the first offense and up to five years for any subsequent convictions.⁷⁹ The EPA has categorized the severity of the violation along a three-tier scale, depending on the total delay in reporting the violation.⁸⁰ Courts have broadly extended the scope of the statute to apply equally to corporations and individual officers.⁸¹ As the Eighth Circuit explained, “construction of CERCLA to impose liability upon only the corporation and not the individual corporate officers and employees who are responsible for making corporate decisions about the handling and disposal of hazardous substances would open an enormous, and clearly unintended, loophole in the statutory scheme.”⁸²

Banks and financial institutions maintain similar reporting obligations for any suspicious activity relating to money laundering and insider fraud. Under the terms of the Annunzio-Wylie Act (1992),⁸³ a reporting duty is imposed through Suspicious Activity Reports (SARs) that must be filed with the Financial Crimes Enforcement Network of the Department of the Treasury for any “known or suspected violation of Federal law or a

76. *Id.* § 9603(a).

77. *Id.*

78. EPA, ENFORCEMENT RESPONSE POLICY 12 (1999), available at <http://www.epa.gov/compliance/resources/policies/civil/epcra/epcra304.pdf>.

79. 42 U.S.C. § 9603(b).

80. EPA, *supra* note 78, at 11–13. The lowest penalties are issued for reports coming in within an hour but after the fifteen-minute notification period, intermediate penalties are issued for reports coming between one and two hours, and the highest penalties are reserved for reports exceeding two hours after the individual had knowledge of the release. *Id.* at 12–13. To avoid deterring reports involving potential self-incrimination, CERCLA includes an immunity provision that prevents the reported material from being used in any criminal case, except a prosecution for perjury or for giving a false statement. 42 U.S.C. § 9603(b). This immunity does not extend to civil liability, as self-reporters may still be liable for civil fines or damages to third parties. *Id.*

81. *See, e.g.,* United States v. Ne. Pharm. & Chem. Co., Inc., 810 F.2d 726, 744 (8th Cir. 1986) (holding that Illinois corporate law did not shield two corporate officers from their reporting liabilities under CERCLA where they exercised direct control over a hazardous spill). Some courts have limited this liability to cases where the corporate officer directly participated in the hazardous release. *See, e.g.,* United States v. Conservation Chem. Co., 619 F. Supp. 162, 190 (W.D. Mo. 1985) (finding that corporate officials who actively participate in the management of a disposal facility can be held liable under CERCLA); United States v. Mottolo, 629 F. Supp. 56, 59–60 (D.N.H. 1984) (holding that under CERCLA, individual officers may be held liable for tortious activity of their corporations if the officers participated in the activity). Other courts have imposed liability where the officer was in a position to prevent the hazardous conduct. *See, e.g.,* Michigan v. ARCO Indus. Corp., 723 F. Supp. 1214, 1219 (W.D. Mich. 1989) (requiring proof that an officer could have prevented or abated hazardous waste discharge in order to impose individual liability under CERCLA).

82. *Ne. Pharm.*, 810 F.2d at 743.

83. 31 U.S.C. § 5318 (2006).

suspicious transaction related to a money laundering activity or a violation of the Bank Secrecy Act.”⁸⁴ For crimes requiring immediate attention, banks incur the additional duty of immediately notifying an appropriate law enforcement authority and the OCC in addition to filing a timely SAR.⁸⁵ Failure to file an SAR may subject individuals at all levels within the institution to supervisory action.⁸⁶

Ironically, in some contexts, a duty to report serves as a reason for not applying antiretaliation protection. While an employee would normally be able to bring a wrongful-termination claim against her employer when the termination is based on her protected speech, the existence of a duty to report may put an employee’s speech outside of the protection of the First Amendment and thus outside of antiretaliation protections. Two recent cases illuminate this paradox of an affirmative obligation offsetting protections. In *Ruotolo v. City of New York*,⁸⁷ the plaintiff was an officer with the NYPD for twenty years that was serving as Command Safety Officer for the 50th Precinct in the Bronx. Pursuant to his duties in this position, Ruotolo drafted a report on possible air and water contamination caused by spills from gasoline storage tanks within the precinct.⁸⁸ Shortly after Ruotolo submitted the report to his commanding officer, the precinct’s environmental hazards appeared in the local media.⁸⁹ Ruotolo then experienced a series of retaliatory and demeaning acts by his superiors.⁹⁰ Despite the temporal proximity of the precinct’s actions, the court refused to treat Ruotolo’s report as protected activity because the environmental report was made pursuant to Ruotolo’s official duties as an NYPD officer.⁹¹ Similarly, in *Casey v. West Las Vegas Independent School District*,⁹² a former school superintendent’s claim for illegal termination for reporting financial oversights to federal authorities was dismissed because the court found that the report was made pursuant to the employee’s duties.⁹³ The Tenth Circuit Court of Appeals reasoned that since the employee was aware that she “would be held legally responsible for having knowledge of something that was wrong and not reporting,” any

84. 12 C.F.R. § 21.11 (1996). These reporting duties are triggered for: (1) insider abuses involving any amount; (2) violations over \$5,000 where a suspect can be identified; and (3) crimes over \$25,000 in which the bank believes it was an actual or potential victim or that it was used to facilitate a criminal transaction, even if there is no substantial basis for identifying a suspect or group of suspects. *Id.* § 21.11(c)(1)–(3).

85. *Id.* § 21.11(d).

86. *Id.* § 21.11(i).

87. 03 Civ. 5045, 2006 U.S. Dist. LEXIS 49903 (S.D.N.Y. July 19, 2006).

88. *Id.* at *4.

89. *Id.* at *4–5.

90. *See id.* at *5 (detailing Ruotolo’s claims, including that he was denied time off, demoted, moved to a less desirable precinct, disciplined for trivial infractions, and received his first-ever negative performance evaluation).

91. *Id.* at *9–13.

92. 473 F.3d 1323 (10th Cir. 2007).

93. *Id.* at 1328–31.

statements issued in furtherance of these obligations were entirely within the scope of her duties, therefore excluding the employee's claim for First Amendment protections.⁹⁴ Thus, at least in the context of public-sector whistle-blowing, courts have recently interpreted the various regulatory mechanisms designed to encourage reporting as mutually exclusive: even where informants correctly expose misconduct pursuant to their official duties, the presence of a legal obligation may push such reports outside the realm of protected activity.

Even in statutes designed to encourage whistle-blower activity, several exceptions have emerged that carry the potential to chill potential reporting. For example, in the public-employment setting, various courts interpreting the federal Whistleblower Protection Act (WPA)⁹⁵ have developed similar "job duty" exceptions that exclude protection when a disclosure is made in the ordinary course of an employee's duties.⁹⁶ In other words, under the "job duty" defense, employees who report illegality within the scope of their work duties are not protected from retaliation.⁹⁷ For example, in *Huffman v. Office of Personnel Management*,⁹⁸ the Federal Circuit held that a law enforcement officer whose duties included the investigation and reporting of crime to his immediate supervisor was "a quintessential example" for exclusion from WPA antiretaliation protection.⁹⁹ Similarly, in *Langer v. Department of the Treasury*,¹⁰⁰ the Federal Circuit held that an IRS employee did not engage in protected activity under the WPA when he informed a Department of Justice official that a grand-jury investigation disproportionately targeted minorities because the employee's official duties included reviewing the actions of the IRS's criminal division.¹⁰¹

94. *Id.* at 1330–31.

95. Pub. L. No. 101-12, 103 Stat. 16 (1989) (codified in scattered sections of 5 U.S.C.).

96. *See, e.g.,* *Gilder-Lucas v. Elmore County Bd. of Educ.*, 186 F. App'x 885, 887 (11th Cir. 2006) (finding that a public-school coach who responded to a questionnaire pursuant to her official duties was not making protected speech); *Maturi v. McLaughlin Research Corp.*, 413 F.3d 166, 172–73 (1st Cir. 2005) (requiring a terminated employee to demonstrate that his actions went beyond his regular duties in order to alert his employers that he was engaging in protected conduct); *Sasse v. U.S. Dep't of Labor*, 409 F.3d 773, 780 (6th Cir. 2005) ("Sasse's investigation and prosecution of environmental crimes were not protected activities because he had a duty, as an Assistant United States Attorney, to perform them."); *cf. Kodrea v. City of Kokomo*, 458 F. Supp. 2d 857, 867–68 (S.D. Ind. 2006) (finding a genuine issue of material fact as to whether a terminated employee acted within the scope of his duties or as a "concerned citizen" and therefore whether his speech was protected).

97. *See, e.g.,* *Erickson v. City of Orr*, No. A05-481, 2005 WL 2277395, at *5 (Minn. Ct. App. Sept. 20, 2005) (inquiring into a terminated employee's job duty defense).

98. 263 F.3d 1341 (Fed. Cir. 2001).

99. *Id.* at 1352.

100. 265 F.3d 1259 (Fed. Cir. 2001).

101. *Id.* at 1267.

C. Monetary Incentives

In addition to protections and affirmative duties, monetary incentives exist in some instances to encourage reports of organizational illegality. Rewards are not as prevalent as antiretaliation protections, and, while they exist in several central federal programs in the United States, they are controversial, understudied, and have not been widely adopted in other countries.¹⁰² The primary example of such programs is the qui tam process under the False Claims Act (FCA).¹⁰³ Qui tam claims encourage reporting of fraudulent government-contractor claims by providing informants with a percentage of the recovery.¹⁰⁴ Employees who file a qui tam suit on behalf of the government are compensated by up to 30% of the recovery in a successful suit.¹⁰⁵

This bounty model has provided the basis for similar recovery programs such as that used by the IRS, which offers financial rewards to those who report tax evasion.¹⁰⁶ The IRS program, which already receives thousands of annual applications and has led to the recovery of billions in federal taxes, was further expanded under the Tax Relief and Health Care Act of 2006¹⁰⁷ to significantly increase the financial rewards paid to informants in high value cases and create a separate Whistleblower Office within the IRS.¹⁰⁸ These amendments responded to many of the uncertainties that have surrounded the IRS informant process.¹⁰⁹ Since the enactment of the bounty program in 1867,¹¹⁰ the IRS has been highly conservative in providing rewards to informants—rewarding only about 8% of informants¹¹¹ and returning only 3% to 6% of the total recoveries.¹¹² In contrast to the previous program, where the Secretary maintained full discretion over the amount issued for all successful recoveries,¹¹³ the 2006 amendment provided an alternative mandatory reward program for actions where “the tax, penalties, interest, additions

102. See Lobel, *supra* note 1, at 443–44, 489–91 (describing how federal agencies reward whistle-blowers and noting that Europe has been more resistant to adopting whistle-blower protections than the United States).

103. 31 U.S.C. § 3730 (2006).

104. *Id.* § 3730(d).

105. *Id.* § 3730(d)(2).

106. 26 U.S.C. § 7623(b) (2006).

107. Pub. L. No. 109-432, § 406, 120 Stat. 2922, 2958 (codified at 26 U.S.C. § 7623).

108. IRS, History of the Whistleblower/Informant Program, <http://www.irs.gov/compliance/article/0,,id=181294,00.html> (last updated Apr. 21, 2008) [hereinafter IRS].

109. See *id.* (explaining that before the 2006 Amendment, awards were discretionary, policies defined award percentages and caps, and awards were not paid if certain circumstances existed).

110. Marsha J. Ferziger & Daniel G. Currell, *Snitching for Dollars: The Economics and Public Policy of Federal Civil Bounty Programs*, 1999 U. ILL. L. REV. 1141, 1167; IRS, *supra* note 108.

111. Tom Herman, *Whistleblower Law Scores Early Success: Higher Rewards Attract Informants Submitting Tips*, WALL ST. J., May 16, 2007, at D3.

112. Ferziger & Currell, *supra* note 110, at 1167.

113. IRS, *supra* note 108; see also Ferziger & Currell, *supra* note 110, at 1203 (indicating that the 1867 bill authorizing payments to tax evasion informants allowed payment of such sums “as may in [the commissioner of internal revenue’s] judgment be deemed necessary”).

to tax, and additional amounts in dispute [including taxes, penalties and interest for those disputed amounts] exceeds \$2,000,000.”¹¹⁴ For claims involving individual taxpayers, the new subsection only applies if the individual’s gross income also “exceeds \$200,000 for any taxable year subject to such action.”¹¹⁵ Claims that fall below this threshold are still subject to discretionary review and maximum reward caps, which generally do not exceed 15%.¹¹⁶ For claims that meet these high-value criteria, the amended rewards program provides that successful informants shall receive a mandatory reward of between 15% and 30% of the collected proceeds.¹¹⁷ Unlike the rewards issued for discretionary cases, these high-value rewards are further expanded by eliminating the \$10 million reward cap, including any funds collected from settlements, and explicitly adding penalties and interest to the collected funds from which an informant may be rewarded.¹¹⁸ The provision further ensured whistle-blower rewards by permitting informants to appeal the amount or denial of a reward in the U.S. Tax Court.¹¹⁹

Although the 2006 amendments did provide further incentives and certainty for potential whistle-blowers, Congress nonetheless limited their application to a small set of high-value cases.¹²⁰ Perhaps unsurprisingly, considering the little knowledge that currently exists on the comparative effectiveness of regulatory incentives, the legislative record does not provide any explanation for why these incentives were limited to this \$2,000,000 mark.¹²¹ In 2007 the Senate amended legislation introduced by the House to reduce the threshold amount from \$2,000,000 to \$20,000, but the amendment was not enacted.¹²² Stephen Whitlock, Director of the IRS Whistleblower Office, has explained the 2006 amendments as a means of tapping into

situations where there may be substantial tax noncompliance but the Service may have difficulty identifying it without assistance of a knowledgeable insider. When the statute was amended, it increased the percentage for rewards and removed the policy caps in place under the old statute. The basic idea here is to create a substantial financial

114. 26 U.S.C. § 7623(b)(5)(B) (2006); *see also* IRS, *supra* note 108 (noting that the Tax Relief and Health Care Act of 2006 made “fundamental changes” to the whistle-blower reward program).

115. 26 U.S.C. § 7623(b)(5)(A).

116. *See* IRS, *supra* note 108 (implying that the limitations of the program in place prior to the 2006 amendments, including a maximum award cap of 15%, still apply for actions that do not fall within the threshold requirements specified by 26 U.S.C. § 7623(b)(5); *see also* 26 U.S.C. § 7623(b)(5) (specifying the requirements for the mandatory reward provisions to apply).

117. 26 U.S.C. § 7623(b)(1).

118. *Id.*

119. STAFF OF J. COMM. ON TAXATION, 109TH CONG., GENERAL EXPLANATION OF TAX LEGISLATION ENACTED IN THE 109TH CONGRESS 745–46 (Comm. Print 1997).

120. 26 U.S.C. § 7623(b)(5).

121. *See* 152 CONG. REC. H9032–33 (2006) (proposing without explanation language that would limit the statute’s application to \$2,000,000).

122. H.R. 1591, 110th Cong. § 543(a) (2007) (engrossed amendment as agreed to by the Senate, Mar. 29, 2007).

incentive for people to come forward with information that will help the Service make cases that we might not be able to make without them.¹²³

The Amendment appears to have had some success in drawing its high-value targets. As Whitlock explains:

Some of the things we've received over the past few months are consistent with the statutory purpose, and people who were in a position to know what was going on inside a corporation have come forward and told us about it. In some cases, they're talking about tens and hundreds of millions of dollars. That's not what the program was getting very often in the preamendment days. Many preamendment cases were much smaller issues.¹²⁴

With regard to the proposed amendment to reduce the threshold to \$20,000, Whitlock has also noted that low requirements could create a "significant problem" for the current policy of concentrating on large-dollar cases,¹²⁵ and another commentator points out reduced thresholds could allow more "weak claims and vindictive cases among neighbors."¹²⁶

Another such system is the SEC's bounty program,¹²⁷ though the primary utility of this program has come from its ability to reveal the unsuccessful and unappealing features of would-be reward systems. Enacted under the Insider Trading and Securities Fraud Act of 1988,¹²⁸ this program was designed to draw upon the IRS model to increase successful prosecutions against inside traders.¹²⁹ However, by all measures, the program has failed to make any significant contribution toward this end. In fact, in the decade following its enactment, it is estimated that only a single bounty was paid out to an informant.¹³⁰ Considering the relative success of its FCA and IRS counterparts, there appear to be several explanations for the complete failure of the SEC program. With regard to the total bounty compensation, the SEC's 10% cap falls considerably behind the 15–30% available under the FCA and the updated IRS plan, thereby eliminating a large class of externally

123. Interview by Jeremiah Coder with Stephen Whitlock, Dir., IRS Whistleblower Office (July 3, 2007) (transcript available at 116 TAX NOTES 98, 98 (2007)).

124. *Id.*; see also Erika A. Kelton, *To Catch a Tax Cheat*, N.Y. TIMES, Aug. 7, 2008, available at <http://www.nytimes.com/2008/08/07/opinion/07iht-edkelton.4.15087010.html> (lauding the IRS whistle-blower program for making recovery in large cases more likely and citing successful examples in international tax whistle-blower programs, including Germany and Britain).

125. Dennis J. Ventry, Jr., *Whistleblowers and Qui Tam for Tax*, 61 TAX LAW. 357, 385 n.153 (2008).

126. *Id.*

127. 15 U.S.C. § 78u-1(e) (2006).

128. Pub. L. No. 100-704, sec. 3(a)(1), 102 Stat. 4677, 4677–80 (codified as amended at 15 U.S.C. § 78u-1).

129. Ferziger & Currell, *supra* note 110, at 1144.

130. *Id.*

motivated informants.¹³¹ This reward gap is further underscored by the fact that the SEC limits its rewards to the penalties imposed under the Act, whereas the FCA also permits its qui tam litigants to recover their shares of any settlements.¹³² Furthermore, the SEC rewards are entirely discretionary and not subject to judicial review.¹³³ In other words, even in the event of a successful prosecution, SEC informants are not guaranteed any proportion of the recovery.¹³⁴

Although the success of these bounty programs has led states to enact mini-FCAs,¹³⁵ courts have struggled to define the effective boundaries of this reward mechanism. Recently, the Supreme Court opined in a 6–2 vote that a qui tam plaintiff cannot rely upon information previously disclosed to the public.¹³⁶ In this case, the Court overturned a qui tam claim of a former employee who won a \$4.1 million judgment for reporting radioactive contamination at a nuclear-weapons plant.¹³⁷ In a dissenting opinion, Justice Stevens argued that “the Court has misinterpreted these provisions to require that an ‘original source’ in a qui tam action have knowledge of the actual facts underlying the allegations on which he may ultimately prevail.”¹³⁸ Once again, these recent debates signify the large uncertainty as to the function and effect of existing social-enforcement mechanisms. Such uncertainty seems to be especially troubling given the huge resources being allocated—both by the government and the industry—to the different incentivizing

131. Compare 15 U.S.C. § 78u-1(e) (“[T]here shall be paid from amounts imposed as a penalty under this section and recovered by the Commission or the Attorney General, such sums, not to exceed 10 percent of such amounts . . . to the person or persons who provide information leading to the imposition of such penalty.”), with 26 U.S.C. § 7623(b)(1) (2006) (“If the Secretary proceeds with any administrative or judicial action . . . based on information brought to the Secretary’s attention by an individual, such individual shall . . . receive as an award at least 15 percent but not more than 30 percent of the collected proceeds . . .”).

132. Compare 15 U.S.C. § 78u-1(e) (“[T]here shall be paid from amounts imposed as a penalty under this section and recovered by the Commission or the Attorney General, such sums, not to exceed 10 percent of such amounts, as the Commission deems appropriate, to the person or persons who provide information leading to the imposition of such penalty.”), with 31 U.S.C. § 3730(d) (2006) (“If the Government proceeds with an action brought by a person under subsection (b), such person shall . . . receive at least 15 percent but not more than 25 percent of the proceeds of the action or settlement of the claim . . .”).

133. See 15 U.S.C. § 78u-1(e) (noting that the Commission’s determination as to an appropriate reward “shall be final and not subject to judicial review”).

134. Still, given that the IRS program also includes a discretionary provision for recoveries under \$2 million, it seems this feature in itself cannot account for the failure of the program. Rather, even if the 5% difference between the SEC and IRS reward caps could be dismissed as negligible, it appears that the SEC’s stingy history compared to the IRS’s pro-informant policies has done much more to decrease informant confidence than its reserved right to confiscate potential rewards. In 1997 the IRS raised its reward ceiling from \$100,000 to \$2 million, and again increased this cap to \$10 million in 2006.

135. E.g., Florida False Claims Act, FLA. STAT. ANN. §§ 68.081–09 (West 2009); New Jersey False Claims Act, N.J. STAT. ANN. §§ 2A:32C-1 to -15, -17 (West 2009).

136. *Rockwell Int’l Corp. v. United States*, 549 U.S. 457, 470–71 (2007).

137. *Id.* at 466, 478–88.

138. *Id.* at 479.

mechanisms without clear enough understanding of their efficacy and social implications.

D. Understanding the Incentive Spectrum

Interestingly, the FCA is an example of a law that combines several mechanisms, using both bounty rewards and retaliation protections as incentives to encourage reporting.¹³⁹ In fact, many of our existing laws combine more than one incentive mechanism to promote reporting. Yet, while regulators and courts use this broad spectrum of regulatory mechanisms to ensure compliance in most areas of law, there is little knowledge about the comparative advantage of each mechanism or the effectiveness of combining various mechanisms. As Professor Roberta Romano has commented, “[C]ongressional initiatives rarely are constructed from whole cloth; rather, successful law reform in the national arena typically involves the recombination of old elements that have been advanced in policy circles for a number of years prior to adoption.”¹⁴⁰ Commenting on the adoption of SOX, Romano concludes that the legislation was enacted under conditions of limited legislative debate with provisions that were “poorly conceived, because there was no basis to believe they would be efficacious.”¹⁴¹ Bringing together the various developments in incentivizing social enforcement, the study of whistle-blowing provides an ideal context for studying the interplay between individual compliance behavior, the organizational setting in which it is detected, and the regulatory regime that defines the contours of legality.¹⁴² Surprisingly, despite the widespread recognition of the importance of social enforcement and the potential application of different behavioral predictors to regulatory policy, questions about these fundamental interactions between individual, organizational, and state-level factors have received relatively little research attention.¹⁴³

139. See 31 U.S.C. § 3730(d) (2006) (providing for rewards for qui tam plaintiffs); *id.* § 3730(h) (providing for reinstatement and damages when an employee who has brought an action under the FCA is discharged, demoted, or harassed because of the action).

140. Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance*, 114 YALE L.J. 1521, 1524 (2005).

141. *Id.* at 1594.

142. See generally MICELI & NEAR, *supra* note 17, at 179–230 (exploring the interaction between various factors influencing whistle-blowing, including the individual characteristics of whistle-blowers, situational variables, long-term consequences, and legal approaches).

143. See Yuval Feldman & Oren Perez, *How Law Changes the Environmental Mind: An Experimental Study of the Effect of Legal Norms on Moral Perceptions and Civic Enforcement*, 36 J.L. & SOC’Y 501, 502 (2009) (noting that the “expressive influence of the law in the context of a multi-faceted regulatory environment” had not yet been explored); Marcia P. Miceli & Janet P. Near, *Standing Up or Standing By: What Predicts Blowing the Whistle on Organizational Wrongdoing*, 24 RES. PERSONNEL & HUM. RESOURCES MGMT. 95, 97 (2005) (noting that despite enduring interest in whistle-blowing, there is relatively little research on the topic in leading management journals).

III. Linking Behavioral Economics with New Governance

The study explores motivations that underlie the willingness to engage in whistle-blowing. While there have been important developments in the research of human motivation in the field of behavioral research, legal inquiry has lagged behind in adopting contemporary insights. The underlying framework of our empirical study is a linkage between two areas: behavioral research and new-governance theory. From the behavioral perspective, most studies on social enforcement have been conducted by experimental economists using laboratory simulations and games.¹⁴⁴ These studies have yielded important findings, yet have been largely detached from the real-world context.¹⁴⁵ Indeed, while the study of motivation has been the subject of academic inquiry for over a century, with literally thousands of studies and experiments on the subject, very few of these studies have examined the effects of legal mechanisms.¹⁴⁶ Moreover, although the contribution of behavioral studies has been highly significant, lab-based models have “largely lack[ed] social or organizational context.”¹⁴⁷ This deficiency has in turn limited their potential to inform concrete law and policy. In particular, the importance of more textured studies is highly pronounced in the context of reporting behavior where a range of factors—individual, organizational, and legal environments—may impact decision making. Although existing behavioral studies have successfully pointed to key factors affecting reaction

144. See, e.g., Feldman & Perez, *supra* note 143, at 505–06 (describing an experiment in which the authors exposed individuals to corporate-pollution scenarios and examined the extent to which the individuals were willing to engage in social enforcement).

145. See, e.g., Gary E. Bolton & Alex Ockenfels, *ERC: A Theory of Equity, Reciprocity, and Competition*, 90 AM. ECON. REV. 166, 189 (2000) (describing the study as limited “in the sense that it explains *stationary patterns* for relatively *simple games*, played over a *short time span* in a *constant frame*”); Ernst Fehr & Urs Fischbacher, *Third-Party Punishment and Social Norms*, 25 EVOLUTION & HUM. BEHAV. 63, 85 (2004) (contrasting the experiment with “real life”); Ernst Fehr & Simon Gächter, *Altruistic Punishment in Humans*, 415 NATURE 137, 140 (2002) (describing the experiment as being conducted on computer screens using experimental software); Ernst Fehr & Simon Gächter, *Cooperation and Punishment in Public Goods Experiments*, 90 AM. ECON. REV. 980, 982 (2000) (explaining that the experiment was conducted in a computerized laboratory with no interaction between the subjects); David Hirshleifer & Eric Rasmusen, *Cooperation in a Repeated Prisoners’ Dilemma with Ostracism*, 12 J. ECON. BEHAV. & ORG. 87, 90 (1989) (summarizing the experiment as a game presenting a situation with limited responses and outlining several assumptions in the examination of results); Yoram Kroll & Liema Davidovitz, *Inequality Aversion Versus Risk Aversion*, 70 ECONOMICA 19, 26–27 (2003) (disclaiming that the study’s sample was not “representative of the general population” and cautioning that in order to draw certain conclusions, the study should be replicated with adults); Michael E. Price et al., *Punitive Sentiment as an Anti-Free Rider Psychological Device*, 23 EVOLUTION & HUM. BEHAV. 203, 226 (2002) (admitting that the experiment’s hypothesis should be tested among people in living conditions more representative of the environments provided in the study).

146. See, e.g., Thomas S. Bateman & J. Michael Crant, *Revisiting Intrinsic and Extrinsic Motivation* (unpublished manuscript, on file at http://74.125.47.132/search?q=cache:4KzmCTxDn64J:gates.comm.virginia.edu/Mirror/faculty_research/Research/Papers/IMOBHDP24.pdf+revisiting+intrinsic+and+extrinsic+motivation&cd=1&hl=en&ct=clnk&gl=us) (counting thousands of studies on extrinsic motivation).

147. Feldman & Lobel, *supra* note 11, at 167.

by those witnessing wrongdoing—primarily self-interest and moral outrage¹⁴⁸—the literature to date has failed to differentiate between various regulatory mechanisms. For example, it is highly difficult to draw conclusions from the existing literature about mechanism selection: Are statutory antiretaliation protections more compatible with supporting individual reporting than government bounty programs? Will different levels of monetary rewards increase or diminish the likelihood of reporting? Is a combination of various incentive mechanisms more effective than selecting a single mechanism to encourage whistle-blowing? While these questions are crucial for evaluating the optimal design of mechanisms that would encourage social enforcement, they remain largely unanswered by the behavioral literature.

Departing from the behavioral approach, the field of new governance in sociolegal studies rejects the idea that employee behavior within organizations is “reducible to individuals and their characteristics.”¹⁴⁹ It further rejects the idea that institutions are simply the object of regulation.¹⁵⁰ Instead, the lens of new-governance theory is a systemic mapping of the range of possibilities in the interaction between regulation and regulated parties.¹⁵¹ New-governance scholars call for an understanding of the regulatory process as consisting of a range of possible tools and mechanisms, each with its comparative advantages and costs.¹⁵² The new-governance lens thus helps to frame the inquiry about the possible incentives that can be applied by law to encourage certain behaviors. Increasingly, sociolegal research is introducing evidence that procedures and incentives can induce illegal conduct by limiting oversight or, alternately, promote ethical behavior by emphasizing social responsibility.¹⁵³ Behavior is shaped not simply by

148. See Price et al., *supra* note 145, at 203 (concluding that providers of a public good harbor punitive sentiments against free riders to mitigate the fitness advantage such parties achieve through their free-riding behavior).

149. Robert Tillman & Henry Pontell, *Organizations and Fraud in the Savings and Loan Industry*, 73 SOC. FORCES 1439, 1459 (1995).

150. See *id.* at 1458–59 (suggesting that organizations and their practices may be the mechanisms through which illegal schemes are conducted, rather than the mere context in which those schemes exist).

151. LESTER M. SALAMON, *THE TOOLS OF GOVERNMENT: A GUIDE TO THE NEW GOVERNANCE* 1–14 (2002). For an overview of new governance scholarship as a new school of thought see Orly Lobel, *Formulating a New Paradigm: Newness and the Ripeness of the Moment*, 2005 WIS. L. REV. 479; Orly Lobel, *The Paradox of “Extra-Legal” Activism: Critical Legal Consciousness and Transformative Politics*, 120 HARV. L. REV. 937 (2007); Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342 (2004); Orly Lobel, *Setting the Agenda for New Governance Research*, 89 MINN. L. REV. 498 (2004).

152. See SALAMON, *supra* note 151, at 1–2 (discussing new governance in terms of the “tools of public action” and explaining that those tools vary in their “operating procedures, skill requirements, and delivery mechanism[s]”).

153. See, e.g., JOHN BRAITHWAITE, *CRIME, SHAME AND REINTEGRATION* 9 (1989) (“Shame is conceived as a tool to allure and inveigle the citizen to attend to the moral claims of the criminal law, to coax and caress compliance, to reason and remonstrate with him . . .”).

isolated decisions of individuals but also by the institutional and legal environment.¹⁵⁴ There is a widespread consensus among organizational theorists that “structures, processes, and tasks are opportunity structures for misconduct because they provide (a) normative support for misconduct, (b) the means for carrying out violations, and (c) concealment that minimizes detection and sanctioning.”¹⁵⁵ For example, studies show organizations that constantly pressure their employees to meet unreasonable expectations can lead employees to resort to illegal means to achieve these goals.¹⁵⁶ Similarly, recent studies point to counterproductive effects of regulation, as when the regulatory action is perceived as illegitimate and creates resistance among private actors.¹⁵⁷

Building on these insights, the current study thus fills a research gap by bringing together the individual aspects of behavior and motivation with the institutional perspective of regulatory variance. The integration of behavioral and new-governance approaches understands individuals, their work environment, and the legal regime in which they operate as symbiotic. In sum, the integrative methodological approach enables better investigation of the effect of law and policy on individual motivation and behavior. The study is based on the understanding that at the enforcement stage, there are certain conditions and incentives that encourage and support action by individuals, while others are more likely to invoke inaction and silence in the face of illegality.

In a previous study that aimed to provide an integrative approach to the study of social enforcement, we measured enforcement behaviors by manipulating common misconducts in five different domains: financial, environmental, sexual harassment, safety, and employee theft.¹⁵⁸ We found that individual characteristics, such as gender, income, and cultural

154. See IRVING L. JANIS, *GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS AND FIASCOES* 243 (1982) (arguing that a “sizable percentage” of the decisions made by any single policy-making group will “prove to be at least partly attributable to groupthink tendencies”); Diane Vaughan, *Toward Understanding Unlawful Organizational Behavior*, 80 MICH. L. REV. 1377, 1377 (1982) (“[A]ll social control efforts encounter natural constraints because of the ways in which the social structure continuously and systematically generates unlawful organizational behavior.”); On Amir & Orly Lobel, *Stumble, Predict, Nudge: How Behavioral Economics Informs Law and Policy*, 108 COLUM. L. REV. 2098, 2109 (2008) (book review) (citing behavioral economics in claiming that measures adopted by regulators, even when noncoercive, may nonetheless steer individuals to make the “right” choices for themselves).

155. Diane Vaughan, *The Dark Side of Organizations: Mistake, Misconduct, and Disaster*, 25 ANN. REV. SOC. 271, 289 (1999).

156. MARSHALL B. CLINARD, *CORPORATE ETHICS AND CRIME* 140–44 (1983).

157. See, e.g., Orly Lobel, *The Four Pillars of Work Law*, 104 MICH. L. REV. 1539, 1552 (2006) (describing the benefits of collective-labor laws, which allow for flexibility and dynamic learning, as opposed to traditional command-and-control regulations); Orly Lobel, *Interlocking Regulatory and Industrial Relations: The Governance of Workplace Safety*, 57 ADMIN. L. REV. 1071, 1089–91 (2005) (describing how the OSHA’s dense, unreasonable rules enforced by spot inspections have deterred employers from complying).

158. Feldman & Lobel, *supra* note 11, at 170.

differences, have strong effects on the willingness of employees to engage in social enforcement.¹⁵⁹ These findings demonstrate the variation in the role of intrinsic and extrinsic motivation with regard to each of those misconducts.¹⁶⁰ Moreover, the type of motivation activated by particular misconducts affected the choice of enforcing behaviors by employees, ranging between direct confrontation, corporate procedures, and government reporting.¹⁶¹ While this prior collaboration was an important step in understanding social enforcement in action, perhaps the most important question—both theoretically and practically—is still missing: How can policy makers ensure that the incentives offered fit the motivational range of enforcing employees? In other words, while the motivation of the individual employees in institutions was the focus of the previous collaborative research, it did not answer pressing questions on how law and policy can translate motivational and organizational insights into concrete regulatory mechanisms. By integrating the two disciplinary approaches of behavioral and institutional studies, our new study brings into focus the question of social enforcement in relation to the spectrum of concrete regulatory mechanisms available to policy makers.

The incentive matrix at the basis of the experiments builds on the four categories that currently exist in our legal system: protections, duties, fines, and monetary incentives. We hypothesize that each mechanism will have varying levels of effectiveness across different categories of individuals and settings. In the following section, we shall set the ground for the empirical part of the Article by focusing on the theoretical assumptions that underlie our predictions for the behavioral consequences of each one of the mechanisms described thus far.

A. The Hypotheses of the Empirical Study

In developing the experimental studies, we hypothesized that the effectiveness of regulatory incentives for the initiation of enforcement litigation is related to both the objective price the individual would pay and to the individual's subjective willingness to pay it. In some cases the motivation is primarily instrumental and utilitarian, and, hence, the level of incentives needs to be high. However, in other contexts, where the motivation to report is intrinsic and moralistic, offering remuneration may undermine the likelihood that misconduct will be reported by producing a crowding-out effect in which the presence of external rewards dilutes the moral dimension of the act.¹⁶² In such cases, it is reasonable to assume that

159. *Id.* at 180–81.

160. *See id.* (“[F]or different types of misconduct, behavioral incentives and institutional environments varied in their impact on the decision to socially enforce . . .”).

161. *See id.* (describing how reporting of misconduct is predictable by factors such as “perceived norms, moral outrage, and legitimacy” and that various forms of misconduct activate different motivations, which can influence the choice of enforcement behavior).

162. *See Amir & Lobel, supra* note 154, at 2135 (observing that rewards may motivate compliance but that their use beyond a certain level may “backfire”).

antiretaliation protections may prove more effective than monetary incentives as these regulatory mechanisms, at best, place the individual in a situation where she is not worse off than she was prior to the report. This dilemma demonstrates the importance of identifying *ex ante* what motivates the prospective whistle-blower in a given situation. Nonetheless, the goal of policy is complicated by the fact that increased enforcement can be counterproductive.¹⁶³ For example, overprotection may encourage bad-faith reporting and exaggerated, or even false, accusations. It can also diminish the positive ties and organizational citizenship behavior (OCB) of institutional players.

An additional question that our study attempts to answer is whether all employees are affected by various mechanisms in similar ways. For example, some scholars have theorized that women are more likely to report misconduct because of their status as organizational outsiders.¹⁶⁴ It has been suggested that women's shorter and more intermittent work histories may lead them to feel less organizational loyalty.¹⁶⁵ At the same time, the existing literature reveals the complexity of accounting for gender differences in social enforcement. Some studies suggest that women are more likely to blow the whistle because of different moral and ethical viewpoints than men.¹⁶⁶ Others postulate that the majority of whistle-blowers are white males in part due to their higher esteem and higher positions within corporations.¹⁶⁷ Further, one study found that women whistle-blowers suffer more retaliation than men.¹⁶⁸ Our own previous experiments reveal that women are more likely to report wrongdoing to law-enforcement authorities.¹⁶⁹ Yet, we could not conclusively explain the motivational source of such difference. A factor that is completely missing in prior studies is whether men and women are expected to react similarly to different legal mechanisms. For example, it might be expected that the greater retaliation against women would lead to

163. *Id.* at 2131.

164. Cindy Schiapani & Terry Dworkin, *Women and the New Corporate Governance: Pathways for Obtaining Positions of Corporate Leadership*, 65 MD. L. REV. 504, 530–31 (2006).

165. See Patricia A. Gwartney-Gibbs & Denise H. Lach, *Gender and Workplace Dispute Resolution: A Conceptual and Theoretical Model*, 28 LAW & SOC'Y REV. 265, 273 (1994) (suggesting that women's shorter and more intermittent work histories due to family responsibilities may prompt conflict with managers and supervisors).

166. See Mary Brabeck, *Ethical Characteristics of Whistle Blowers*, 18 J. RES. PERSONALITY 41, 50 (1984) (describing a study in which females scored higher in moral reasoning); Terance D. Miethe & Joyce Rothschild, *Whistleblowing and the Control of Organization Misconduct*, 64 SOC. INQUIRY 322, 334 (1994) (suggesting that women may feel more compelled to speak out against wrongdoing).

167. See Philip Jos et al., *In Praise of Difficult People: A Portrait of the Committed Whistle-Blower*, 49 PUB. ADMIN. REV. 552, 556 (1989) (justifying an overwhelmingly white and male sample size in a survey of whistle-blowers by noting that demographic group's disproportionate distribution among higher ranking corporate positions).

168. Michael T. Rehg et al., *Antecedents and Outcomes of Retaliation Against Whistleblowers: Gender Differences and Power Relationships*, 19 ORG. SCI. 221, 233 (2008).

169. Feldman & Lobel, *supra* note 11, at 179.

greater reliance on protection for women. In contrast, men's greater reliance on financial incentives in the decision making may suggest that using rewards might be more beneficial for them.

The behavioral effects of the different legal mechanisms used to encourage reporting are highly relevant for optimal regulatory design. An important insight from our previous study was that when the misconduct is harmful to the public but useful to the organization as a whole or to its senior managers, reporting to a state agency is viewed by employees as the most effective and justifiable course.¹⁷⁰ Studying the interaction between the manipulated factors—i.e., different legal incentives to encourage reporting—and the behavioral characteristics of the employee helps answer important policy questions.

B. Behavioral Theories on the Interplay between Intrinsic and Extrinsic Motivation

Based on a review of the literature, we hypothesize that each of the four mechanisms will affect motivation differently. Motivation is often divided into “intrinsic” or “extrinsic.”¹⁷¹ Extrinsic motivation is linked to actions that are driven by external commands or rewards such as payments.¹⁷² Conversely, intrinsic motivation is when the behavior is chosen from within the individual out of a sense of moral or civic duty.¹⁷³ There is an ongoing, heated debate in the behavioral-economics literature about the relationship between the intrinsic and extrinsic aspects of motivation.¹⁷⁴ While some view extrinsic rewards as undermining intrinsic motivation, others find that the two mechanisms can be reinforcing.¹⁷⁵ Most generally, the crowding-out

170. *Id.* at 180–81.

171. See, e.g., Edward L. Deci & Richard M. Ryan, *The “What” and the “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior*, 11 *PSYCHOL. INQUIRY* 227, 233–36 (2000) (distinguishing intrinsic motivation, which concerns “active engagement with tasks that people find interesting,” from extrinsic motivation, in which people’s behavior is controlled by “specific external contingencies”); Judith M. Harackiewicz & Carol Sansone, *Rewarding Competence: The Importance of Goals in the Study of Intrinsic Motivation*, in *INTRINSIC AND EXTRINSIC MOTIVATION: THE SEARCH FOR OPTIMAL MOTIVATION AND PERFORMANCE* 79, 79–80 (Carol Sansone & Judith M. Harackiewicz eds., 2000) (“When humans freely engage in an activity for its own sake, their behavior is considered intrinsically motivated [yet] interventions, communications, and incentives represent extrinsic intrusions that can affect subsequent intrinsic motivation . . .”).

172. Carol Sansone & Judith M. Harackiewicz, *Looking Beyond Rewards: The Problem and Promise of Intrinsic Motivation*, in *INTRINSIC AND EXTRINSIC MOTIVATION*, *supra* note 171, at 1, 1–2.

173. Edward L. Deci et al., *A Meta-analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation*, 125 *PSYCHOL. BULL.* 627, 627 (1999); T. Kasser & R.M. Ryan, *Further Examining the American Dream: Differential Correlates of Intrinsic and Extrinsic Goals*, 22 *PERSONALITY & SOC. PSYCHOL. BULL.* 280, 280–87 (1996).

174. Harackiewicz & Sansone, *supra* note 172, at 1–2.

175. For one of the early studies on the subject, see Edward L. Deci, *Effects of Externally Mediated Rewards on Intrinsic Motivation*, 18 *J. PERSONALITY & SOC. PSYCHOL.* 105 (1971). Since then, the debate has continued. See, e.g., Thomas S. Bateman & J. Michael Crant, *Extrinsic*

literature suggests that when people attribute their behavior to external rewards, they discount any moral incentives for their behavior, thereby lowering the perceived effect of intrinsic motivation.¹⁷⁶ As applied to the regulatory incentives, crowding-out theory predicts that external incentives that utilize monetary rewards or punishments may undermine intrinsic motivations.¹⁷⁷ For instance, paying people in return for their blood might lead donors to view the event as a transaction rather than a charitable act, thereby eroding altruistic blood donations.¹⁷⁸ In a series of lab-based experiments, Deci found that tangible rewards undermine intrinsic motivation for a range of activities.¹⁷⁹ Deci, Koestner, and Ryan have argued in their research that “tangible rewards tend to have a substantially negative effect on intrinsic motivation.”¹⁸⁰ They thus warn that attempts to externally control people’s behavior may yield considerable long-term counterproductive results.¹⁸¹ Such findings have led some organizational theorists to strongly advise against the use of extrinsic rewards when trying to achieve behavior.¹⁸²

Rewards and Intrinsic Motivation: Evidence from Working Adults 17 (McIntire Sch. of Commerce, Working Paper, 2005), available at http://www.commerce.virginia.edu/faculty_research/faculty_directory/documents/IntrinsicJPSP.pdf (discussing the findings of their survey showing that extrinsic rewards have some positive relationships with intrinsic motivation).

176. See BRUNO S. FREY, NOT JUST FOR THE MONEY: AN ECONOMIC THEORY OF PERSONAL MOTIVATION 14 (1997) (“A group of social psychologists have identified that under particular conditions monetary (external) rewards undermine intrinsic motivation.”).

177. See, e.g., Ernst Fehr & Armin Falk, *Psychological Foundations of Incentives*, 46 EUR. ECON. REV. 687, 687–88 (2002) (postulating that a narrow view based exclusively on economic incentive without consideration for other psychological factors is likely to result in an incomplete and inaccurate understanding of human motivation); Ernst Fehr & Bettina Rockenbach, *Detrimental Effects of Sanctions on Human Altruism*, 422 NATURE 137, 137 (2003) (“Here we show experimentally that the prevailing self-interest approach has serious shortcomings because it overlooks negative effects of sanctions on human altruism.”); Ernst Fehr & Simon Gächter, *Do Incentive Contracts Undermine Voluntary Cooperation?* 1 (Univ. of Zurich, Inst. for Empirical Research in Econ., Working Paper No. 34, 2002), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=313028 (“Our results show that incentive contracts may undermine voluntary cooperation.”). For a review, see generally FREY, *supra* note 176; George A. Akerlof, *Labor Contracts as Partial Gift Exchange*, 97 Q.J. OF ECON. 543 (1982); and Bruno S. Frey & Reto Jegen, *Motivation Crowding Theory: A Survey of Empirical Evidence* (Ctr. for Econ. Studies, Working Paper No. 245, 2000), available at <http://ssrn.com/abstract=203330>.

178. See RICHARD M. TITMUS, THE GIFT OF RELATIONSHIP: FROM HUMAN BLOOD TO SOCIAL POLICY 157, 205–06 (1971) (arguing that monetary payments to givers of blood could diminish the amount of blood given voluntarily).

179. See Deci et al., *supra* note 173, at 658–59 (providing a meta-analysis of 128 studies concluding that “tangible rewards tend to have a substantially negative effect on intrinsic motivation” within certain limitations).

180. *Id.*

181. See *id.* (“[S]trategies that focus primarily on the use of extrinsic rewards do, indeed, run a serious risk of diminishing rather than promoting intrinsic motivation . . .”).

182. See Alfi Kahn, *By All Available Means: Cameron and Pierce’s Defense of Extrinsic Motivators*, 66 REV. EDUC. RES. 1, 3 (1996) (“[E]ven a casual survey of the literature reveals research . . . that attests to the detrimental effects of rewards.”).

A refinement of the crowding-out literature has demonstrated that the framing of incentives may affect whether such incentives interact with the moral aspects of reporting. Indeed, studies increasingly show that framing has an effect on how people perceive legal regulation. For example, although traditional economic analysis would consider fines and pricing as equal if they entail the same amount of payment by an individual, researchers have shown that in reality the way payments are framed matters significantly.¹⁸³ For example, Fehr and Gächter found that when monetary incentives were framed as a price reduction, they had a greater effect than when they were framed as a bonus.¹⁸⁴ Similarly, Frey and Stutzer have argued that tradable emission rights and emission taxes could create a different crowding-out effect, bringing about different behavior.¹⁸⁵ This refinement of the crowding-out literature guides our hypothesis that the legal framing of payments could impact whether such rewards crowd out alternative reasons for action, thereby affecting people's behavior. Of course, the very idea that monetary incentives will crowd out internal motivations and decrease action runs counter to classic economic predictions. Normally, the introduction of money is a major push for action.¹⁸⁶ This idea has found some empirical support in studies showing that in some instances rewards can in fact increase perceived self-determination.¹⁸⁷

Thus, a key question is how do the two effects of "buying" behavior operate together: will a classic price effect emerge in which higher economic incentives lead to increased action, or will a crowding-out effect take hold, resulting in less action after the introduction of a financial reward? In other words, monetary and ethical motivations can be complements that mutually reinforce or, alternately, exclusive elements that inversely affect one another. The debate about whether extrinsic rewards undermine intrinsic motivation has largely been neglected in legal theory and practice. Mostly, the literature

183. See Fehr & Gächter, *supra* note 177, at 1 (providing an example of the effect that framing can have on incentives).

184. *Id.*

185. See Bruno S. Frey & Alois Stutzer, *Environmental Moral and Motivation* 14–16 (Univ. of Zurich, Inst. for Empirical Research in Econ., Working Paper No. 288, 2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=900370 (arguing that though government intervention through emission taxes reduces individuals' feelings of personal moral responsibility for protecting the environment, tradable emission rights create a stronger crowding-out effect as individuals are led to believe that they have paid for the right to pollute rather than seeing pollution as a harm for which they are monetarily punished).

186. See STEVEN E. LANDSBURG, *THE ARMCHAIR ECONOMIST: ECONOMICS & EVERYDAY LIFE* 3 (1993) ("Most of economics can be summarized in four words: 'People respond to incentives.' The rest is commentary.").

187. See, e.g., Robert Eisenberger & Judy Cameron, *Detrimental Effects of Reward: Reality or Myth?*, 51 *AM. PSYCHOL.* 1153, 1154 (1996) ("We argue here that claimed negative effects of reward on task interest and creativity have attained the status of myth, taken for granted despite considerable evidence that the conditions producing these effects are limited and easily remedied.").

described above focuses on work behaviors.¹⁸⁸ In the context of incentive mechanisms, it seems reasonable to expect that antiretaliation measures will have a more limited negative effect on the role of internal motivation than monetary incentives.¹⁸⁹ Because the former type of measure is designed to put the employee in the same position she was prior to her action, it is less likely to be interpreted as a type of external motivation. Similarly, with regard to bounty incentives, the study aims to provide valuable insight into the circumstances under which such monetary rewards will lead to increased reporting. Much of the literature on crowding out recognizes that the effect of incentives is not linear and that intermediate levels of incentives are most likely to curb value-driven behavior. In the context of incentives, there is a documented difference between small, intermediate, and high payoffs, such that intermediate payoffs trigger crowding-out effects most often.¹⁹⁰

C. *The Framing of Legal Dollars*

The potential effect of introducing monetary rewards depends not only on its interaction with internal motivation but also on the conditions that are set to trigger its effect. In that regard, there is a growing body of studies both in social psychology and in behavioral economics indicating that people respond more strongly to incentives than penalties.¹⁹¹ Bateman and Crant explain that “[r]eceiving rewards that we have earned means that we are no longer at the mercy of a capricious or over controlling environment, and we have gained control over our outcomes.”¹⁹² Gneezy and Rustichini used an experimental setting to explore whether fines may actually be interpreted as placing price tags on certain misconduct.¹⁹³ In their study, they imposed a monetary fine on parents who were late picking up their child from a day-care center.¹⁹⁴ After the introduction of the fine, they observed a steady *increase* in the number of parents coming in late.¹⁹⁵ Again, this result runs contrary to traditional deterrence models that predict that increasing the cost

188. See generally, e.g., Judith L. Komaki et al., *The Role of Performance Antecedents and Consequences in Work Motivation*, 67 J. APPLIED PSYCHOL. 334 (1982).

189. FREY, *supra* note 176, at 31.

190. See Frey & Stutzer, *supra* note 185, at 14–16 (using intermediate-sized environmental taxes as an example to illustrate that such situations incur the negative effect of eliminating the intrinsic-motivation factor while not being sufficiently strong to achieve particular behavior by means of extrinsic motivation).

191. See Raymond De Young, *Changing Behavior and Making It Stick: The Conceptualization and Management of Conservation Behavior*, 25 ENV'T & BEHAV. 485, 489 (1993) (“In general, environmental psychology argues against the use of punishment as a conservation behavior change technique.”).

192. Bateman & Crant, *supra* note 175, at 8.

193. Uri Gneezy & Aldo Rustichini, *A Fine Is a Price*, 29 J. LEG. STUD. 1, 3–9 (2000).

194. *Id.* at 4–5.

195. *Id.* at 5–8.

of an activity will necessarily decrease the rate at which it is performed.¹⁹⁶ Gneezy and Rustichini offer two explanations for their surprising results. First, the introduction of the fine may have changed parents' perception of the social dynamic between themselves and the day-care center.¹⁹⁷ That is, whereas the act of arriving late was previously wrong in itself, the introduction of a fine may have allowed parents to rationalize the fine as a price for arriving late. According to this logic, as long as they paid the price for such behavior, parents felt comfortable being late.¹⁹⁸ Second, the fine may have revealed information to parents regarding the expected sanction for tardiness.¹⁹⁹ Thus, parents who were previously punctual out of fear of incurring a costly sanction may have exercised less caution after learning the actual cost of the behavior as revealed by the fine.²⁰⁰ As applied to the context of regulatory compliance then, it appears that the use of fines may similarly interfere with the moral dimension of compliance activity: where certain types of misconduct were once inherently wrong, the introduction of a fine may inadvertently specify the financial tipping point at which the costs of reporting misconduct outweigh the moral and social benefits.

Correctly assessing the optimal level and type of rewards also has strong policy implications as it will allow policy makers to more effectively apply their limited resources toward ensuring that the proper incentives are in place to encourage the external reporting of organizational illegality.²⁰¹ Therefore, in addition to measuring the immediate crowding-out effects and willingness to report, the study also measures the participants' subjective evaluation of the severity of the misconduct, which we interpret to reveal their ethical stance on the illegal behavior they witnessed. The behavioral impact of the different mechanisms is expected to interact with the social aspects of whistle-blowing, which may also serve as facilitators of or impediments to social enforcement. To account for the social impact for the law, we now turn to the expressive-law literature.

196. See, e.g., *id.* at 2–3 (reviewing the general literature predicting that negative consequences should produce deterrence); see also Christopher R. Leslie, *Trust, Distrust, and Antitrust*, 82 TEXAS L. REV. 515, 651 (2004) (“The traditional deterrence model assumes that criminal law deters crimes by prohibiting specific acts and by assigning a particular penalty to each specific act, and that this makes firms less likely to commit those acts lest they get caught and suffer the punishment.”).

197. Gneezy & Rustichini, *supra* note 193, at 13–14.

198. *Id.* at 13–15.

199. *Id.* at 10.

200. *Id.* at 10–13.

201. In fact, the 2006 update to the IRS informant program may be a nod to the crowding-out literature. Disputes involving less than \$2 million are capped at 15% and not subject to appeal. IRS, WHISTLEBLOWER OFFICE, FY 2008 ANNUAL REPORT TO CONGRESS ON THE USE OF SECTION 7623, 2 (2009). For penalties over \$2 million, the recovery limit increases to 30%, the rewards are guaranteed, and the informant can appeal decisions to a tax court, suggesting these cases may be more externally driven. *Id.* at 3.

IV. The Expressive Function of Law

Developing the lens of intrinsic versus extrinsic motivation in the context of legal compliance connects the behavioral literature with an important insight of legal scholars in recent years, known as *expressive law*. Expressive-law theorists view law as having more than a simple, direct effect on human behavior.²⁰² Beyond simple calculative effects, individuals respond to the expressive signals embodied within our legal system.²⁰³ For traditional economists, the starting point of predicting behavior is the belief that individuals respond to rewards and sanctions.²⁰⁴ According to this traditional view, individuals will report noncompliance if the benefits from legal rewards, or the costs of legal liability, exceed the costs of reporting.²⁰⁵ However, social scientists increasingly recognize that the motivation for compliance, as well as reporting noncompliance, frequently defies a simplis-

202. See Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. PA. L. REV. 2021, 2024 (1996) (“[T]he expressive function of law [is] the function of law in ‘making statements’ as opposed to controlling behavior directly.”).

203. See Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503, 1504 (2000) (“[E]xpressive theories tell actors—whether individuals, associations, or the State—to act in ways that express appropriate attitudes towards various substantive values.”); Dan M. Kahan, *What Do Alternative Sanctions Mean?*, 63 U. CHI. L. REV. 591, 592 (1996) (“The political unacceptability of alternative [criminal] sanctions . . . reflects their inadequacy along the expressive dimension of punishment. The public rejects [them] . . . because they fail to express condemnation as dramatically and unequivocally as imprisonment.”); Richard H. Pildes & Elizabeth S. Anderson, *Slinging Arrows at Democracy: Social Choice Theory, Value Pluralism, and Democratic Politics*, 90 COLUM. L. REV. 2121, 2142 (1990) (“Rationality must be understood to be a matter of interpretation and evaluation, not merely of aggregation and calculation. And social institutions, including democratic ones, must play an active role in structuring individuals’ preferences to enable those preferences to rationally express the diverse values that individuals actually experience and affirm.”); Sunstein, *supra* note 202, at 2022–25, 2031–32, 2048, 2051 (explaining that laws, having moral weight, make statements that impact social norms, which in turn signal appropriate behavior, give legal consequences social meaning, and control the actions of some individuals). For a critical view, see Matthew D. Adler, *Expressive Theories of Law: A Skeptical Overview*, 148 U. PA. L. REV. 1363, 1375 (2000) (“I furnish reason to be skeptical about each and every [expressive theory]. Each theory involves some variant of the claim that the linguistic meaning of governmental action possesses foundational moral relevance; but in no case does the claim turn out to be persuasive or even particularly plausible.”). For empirical studies of the expressive function of the law, see generally Feldman & Perez, *supra* note 143 and Richard H. McAdams & Janice Nadler, *Testing the Focal Point Theory of Legal Compliance: Expressive Influence in an Experimental Hawk/Dove Game*, 2 J. EMPIRICAL LEGAL STUD. 87 (2005). For empirical evaluations of the different models for the expressive function of the law in the context of trade-secret laws, see generally Yuval Feldman, *The Expressive Function of Trade Secrets Laws, Legality, Cost, Intrinsic Motivation and Consensus*, 6 J. EMPIRICAL LEGAL STUD. 177 (2009).

204. See LANDSBURG, *supra* note 186, at 3–7 (describing how individuals respond to incentives, which take the form of positive and negative outcomes).

205. Most basically, this model is elaborated in the context of compliance and crime. See Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 176 (1968) (“[A] person commits an offense [and fails to comply with the law] if the expected utility to him exceeds the utility he could get by using his time and other resources on other activities.”).

tic cost–benefit analysis.²⁰⁶ Instead, people appear to evaluate legal compliance under a more nuanced cost–benefit scale that includes elements that are foreign to pure economic analyses: duty and legitimacy.²⁰⁷

Along those lines, theoretical and empirical expressive-law studies indicate that when the law presents either prohibitions or obligations, the very act of expressing this norm within the legal regime provides a reason for people to act. Even in the absence of sanctions or protections, the mere existence of the law helps to shape and define our world views.²⁰⁸ Expressivists argue that moral and legal evaluation and conduct depend on normative expressions embedded in the law.²⁰⁹ For example, the law can have a positive effect on norms because citizens view law as information that helps them make decisions about whether to engage in particular behaviors.²¹⁰ In this sense, the law solves a pluralistic ignorance problem by signaling the underlying attitudes of a community or society.²¹¹

206. See Lawrence M. Friedman, *Coming of Age: Law and Society Enters an Exclusive Club*, 1 ANN. REV. L. SOC. SCI. 1, 14 (2005) (“There is no question that human beings do react to the carrot and the stick. However, people are not blindly mechanical cost-benefit machines. . . . The moral sense—conscience and the sense of legitimacy, the feeling that we ought to obey the law . . .—is also a significant cluster of motives that surely affect how people behave.”).

207. See, e.g., James L. Gibson, *The Legitimacy of the U.S. Supreme Court in a Polarized Polity*, 4 J. EMPIRICAL LEGAL STUD. 507, 513 (2007) (“Some scholars equate legitimacy with compliance; others treat legitimacy as one of the many causes of compliance. I take the latter tack . . .”); Kristina Murphy, *Regulating More Effectively: The Relationship Between Procedural Justice, Legitimacy, and Tax Non-compliance*, 32 J.L. & SOC’Y 562, 567 (2005) (“Taken together, the procedural justice research appears to indicate that fair procedures play a significant role in people’s perceptions of legitimacy, and that these perceptions of legitimacy can in fact go on to influence subsequent cooperation and compliance with authority decisions and rules.”); Tom R. Tyler & Jeffrey Fagan, *Legitimacy and Cooperation: Why Do People Help the Police Fight Crime in Their Communities?*, 6 OHIO ST. J. CRIM. LAW 231, 235 (2008) (“What is legitimacy? Legitimacy is a feeling of obligation to obey the law and to defer to the decisions made by legal authorities. Legitimacy, therefore, reflects an important social value, distinct from self-interest, to which social authorities can appeal to gain public deference and cooperation.”); Michael Wenzel, *The Impact of Outcome Orientation and Justice Concerns on Tax Compliance: The Role of Taxpayers’ Identity*, 87 J. APPLIED PSYCHOL. 629, 640 (2002) (“Taxpayers [in Australia] were more compliant with tax laws when they identified with Australians and thought they were treated fairly and respectfully by the tax authorities. . . . When authorities convey . . . respect and acknowledgement, taxpayers are more compliant irrespective of whether decision outcomes are favorable to them.”). For an empirical demonstration of the limits of traditional economic models in the context of legal compliance, see Yuval Feldman & Doron Teichman, *Are All Legal Probabilities Created Equal?*, 84 N.Y.U. L. REV. 980, 985–86 (2009), which compares attitudes toward compliance in situations of uncertainty.

208. For an empirical demonstration of this point, see generally McAdams & Nadler, *supra* note 203.

209. See Anderson & Pildes, *supra* note 203, at 1504 (“[E]xpressive theories tell actors . . . to act in ways that express appropriate attitudes towards various substantive values [M]uch of our existing practices of moral and legal evaluation are best understood through expressivist perspectives . . . [and] expressivism is thus an internal account of existing normative practices.”).

210. See Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339, 358–72 (2000) [hereinafter McAdams, *Attitudinal Theory*] (describing expressive law as an information-signaling system); Richard H. McAdams, *The Expressive Power of Adjudication*, 2005 U. ILL. L. REV. 1043, 1068–74 [hereinafter McAdams, *Expressive Power*] (describing adjudication as an information-signaling system); McAdams & Nadler, *supra* note 203, at 117 (“That players are

The expressive function of law underscores the importance that individuals generally place on the opinion of others. Existing research suggests that such adherence to the social norm is important to compliance.²¹² The importance of group identity and the need of the individual to feel part of the group is well-established in the field of psychology.²¹³ The need to belong is widely recognized as a motivation that countervails immediate self-interest.²¹⁴ McAdams and Nadler contend that law can induce compliance by making a particular behavior salient.²¹⁵ Continuing this line of studies, we hypothesize that law can induce reporting by making the action of reporting seem significant and valued. In other words, imposing a duty to report is expected to send an important message of the social desirability of whistle-blowing and alter participants' behavior above and beyond the monetary consequences of conforming to the law.

V. Misperception of Social Support for Blowing the Whistle

The potential for social norms to shape enforcement behavior, discussed above,²¹⁶ gives them a particular significance in the context of whistle-blowing. Social attitudes towards blowing the whistle and predictions on how others would behave when faced with similar dilemmas are key to understanding individual decision making. However, the perception of what others will do is complex and often biased. In our study, we hypothesized that people would predict and evaluate their own actions more favorably than the actions of their peers and the general public. In a recent article, social

likely to choose a strategy [based on information clearly supplied] at random suggests that expression influences behavior even when it lacks legitimacy or intentionality. Legal expression always 'points to' an outcome. Law influences behavior in many ways, but we infer from this result that, at the most basic level, law *also* influences behavior ostensibly.”)

211. See McAdams, *Attitudinal Theory*, *supra* note 210, at 340 (“[L]aw changes behavior by signaling the underlying attitudes of a community or society . . . [and] individuals have imperfect information about what others approve.”).

212. See *id.* (“[T]here is a motivational assumption that an individual’s behavior depends, in part, on what actions she believes others will approve or disapprove.”); *id.* at 342 (“[A social choice theory] framework can explain social regularities, such as norms, that were at one time thought to be outside the range of economic theory [I]ndividuals have a preference for *esteem*; they care what others, even strangers, think of them as an end in itself.”); *id.* at 349–58 (describing at length the “pluralistic ignorance” problem).

213. See, e.g., Roy F. Baumeister & Mark R. Leary, *The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation*, 117 *PSYCHOL. BULL.* 497, 497 (1995) (listing numerous psychological inquiries into the need to belong and concluding that “[t]he existence of a need to belong is thus a familiar point of theory and speculation”).

214. See Marilyn B. Brewer & Roderick M. Kramer, *The Psychology of Intergroup Attitudes and Behavior*, 36 *ANN. REV. PSYCHOL.* 219, 227 (1985) (“[I]ntergroup comparisons must be considered above and beyond *interpersonal* factors in predicting social behavior in group contexts.”).

215. See McAdams & Nadler, *supra* note 203, at 108–18 (presenting results of an empirical study supporting the claim that third-party legal expression influences behavior by creating a focal point around which individuals coordinate).

216. See *supra* notes 208–14 and accompanying text.

psychologists Nick Epley and David Dunning found that most people view themselves as morally superior to the average person.²¹⁷ They found that people show a holier-than-thou effect in which they perceive themselves as being fairer, more altruistic, and more self-sacrificing.²¹⁸ Epley and Dunning hypothesized that two causes could be at the bottom of this bias: either people perceive themselves as better and more moral than they really are, or they view others as morally inferior.²¹⁹ In their experiment, participants were asked to predict what they and others would do in certain circumstances.²²⁰ In most cases, participants predicted they would do the right thing a lot more often than their peers.²²¹ Later, they compared findings of what participants would do in real life circumstances.²²² They found that individuals overestimated their own moral character but were quite accurate when it came to predicting how others would behave.²²³ However, Epley and Dunning's study examined moral behavior, such as giving to charity and civic voting, and thus did not involve regulatory contexts.²²⁴ Our experiment is the first to inquire into such comparisons in the context of reporting illegal misconduct.

217. Nicholas Epley & David Dunning, *Feeling "Holier Than Thou": Are Self-Serving Assessments Produced by Errors in Self- or Social Prediction?*, 79 J. PERSONALITY & SOC. PSYCHOL. 861 (2000) [hereinafter Epley & Dunning, *Holier Than Thou*]. For example, they asked their participants to predict whether they and others will buy flowers in an upcoming charity drive to benefit the American Cancer Society. *Id.* at 862. Among the 250 students who participated in the experiment, over 80% said they would buy a flower, but they predicted that only half their peers would be as generous. *Id.* After the actual charity drive took place, the study found that only 43% of the participants actually bought flowers at the event, indicating that students had a pretty good idea of how the group would behave, but not a good sense of their own individual behavior. *Id.* at 863. As for the students' estimation of voting behaviors, students similarly overestimated their civic responsibility, with 84% of them predicting their own participation, but expecting an overall participation of 67%. Nicholas Epley & David Dunning, *The Mixed Blessings of Self-Knowledge in Behavioral Prediction* (2004) (unpublished manuscript, on file with the authors). Again, the actual rates among the group turned out to be very close to the predictions about peer participation, as 68% of the students actually voted. *Id.*

218. Epley & Dunning, *Holier Than Thou*, *supra* note 217, at 862.

219. *Id.*

220. *Id.*

221. *See id.* ("Whereas people may be somewhat reluctant to say they are smarter than their peers, they have no difficulty noting that they are more generous, fair, ethical, or moral.")

222. *Id.*

223. *Id.* at 868.

224. There are formal analyses of the long-term effect of misperception of social norms on ethical behavior of people. *See* Robert D. Cooter, Michal Feldman & Yuval Feldman, *The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium*, 4 REV. L. & ECON. 889, 889–90 (2008) (studying the effects of applying the equilibrium concept to psychological studies of cognitive biases); *see also* Epley & Dunning, *Holier Than Thou*, *supra* note 217, at 862 (analyzing why individuals make flattering self-assessments); Chip Heath, *On the Social Psychology of Agency Relationships: Lay Theories of Motivation Overemphasize Extrinsic Incentives*, 78 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 25, 54–55 (1999) (chronicling that subjects based job-satisfaction decisions on intrinsic values such as skill building or doing something worthwhile over extrinsic factors including job security and benefits but predicting incorrectly that their peers would be motivated by extrinsic factors); Justin Kruger, *Lake Wobegon Be Gone! The "Below-Average Effect" and the Egocentric Nature of Comparative Ability Judgments*, 77 J. PERSONALITY & SOC. PSYCHOL. 221, 223–29 (1999) ("[M]ost of us appear

In sum, social psychology and behavioral economics have produced an important array of insights that could inform regulators in designing compliance systems. Yet, by and large, these insights have not been incorporated into legal inquiry and regulatory practices. Our study is designed to build on existing insights and provide insights that are specifically geared to answer some of the most important questions for regulatory compliance: When and under what conditions will individuals chose to report illegality? Can the legal policy maker take into account the behavioral ramifications of each one of the competing mechanisms? Is there a legal mechanism that minimizes the inadvertent behavioral effect that incentivizing whistle-blowers might cause? Can we identify ex ante the optimal match between the legal mechanism, the individual, the organization, and the misconduct?

In an attempt to make the answer to these questions applicable to current legal policy, the focus of the current study will be on the four main mechanisms described above: antiretaliation protections, duties to report, liability fines, and monetary incentives. As reviewed in the previous Part, for each one of these mechanisms, there is a vast amount of behavioral research that suggests potential pros and cons of the mechanism.²²⁵ By comparing their efficacy²²⁶ in one setting, combined with data on relevant organizational and demographic characteristics, we hope to offer a comprehensive policy analysis.

VI. The Experiment

A. Design and Sample

1. *Experimental Design.*—The experimental survey consists of eight different questionnaires randomly assigned to eight subgroups. While each

to believe that we are more athletic, intelligent, organized, ethical, logical, interesting, fair-minded, and healthy—not to mention more attractive—than the average person.”); Justin Kruger & David Dunning, *Unskilled and Unaware of It: How Difficulties in Recognizing One’s Own Incompetence Lead to Inflated Self-Assessments*, 77 J. PERSONALITY & SOC. PSYCHOL. 1121, 1121 (1999) (surveying studies showing that people overestimate their abilities); Michael McCall & Katherine Natrass, *Carding for the Purchase of Alcohol: I’m Tougher Than Other Clerks Are!*, 31 J. APPLIED SOC. PSYCHOL. 2184, 2190–91 (2001) (examining bias related to predictions of whether identification would be requested for purchasers of alcohol); Dale T. Miller & Rebecca K. Ratner, *The Disparity Between the Actual and Assumed Power of Self-Interest*, 74 J. PERSONALITY & SOC. PSYCHOL. 53, 53 (1998) (discussing the results of five studies related to the overestimation of the influence of self-interest on attitudes and behaviors); Dale T. Miller & Rebecca K. Ratner, *The Power of the Myth of Self-Interest*, in CURRENT SOCIETAL CONCERNS ABOUT JUSTICE 25, 29–30 (Leo Montada & Melvin J. Lerner eds., 1996) (explaining that subjects demonstrated higher volunteerism when reward included payment to charity than when reward included payment to the volunteer, but predicted that their peers would choose the latter option).

225. See *supra* Part IV.

226. As will be explained in the following Part, the four mechanisms were tested in a few combinations, making it into eight experimental conditions.

questionnaire depicts a different legal mechanism, all groups were given the same factual scenario, as follows:

Imagine you are an employee of Roadblock LTD, one of the largest construction companies in the country. Roadblock has recently secured a fixed-price government contract to build a major highway in your city. One day, while staying late in the office, you run across a document that reveals that the company has been substituting lower grade and inferior quality parts from those specified in the contract. The document also reveals that the company has been omitting required testing and quality procedures. You estimate that as a result the government is overpaying your employer approximately \$10,000,000.

Each group of survey takers was asked to predict their own actions as well as the actions of others when encountering the described situation. The legal mechanisms were derived from the four leading incentive categories reviewed above: protection, duty, fine, and reward.²²⁷ Given the variation in the level of rewards, we have manipulated the size of the reward across the different bounty programs. In addition, in the context of duty, its combination with the other mechanisms was tested, resulting in the following eight categories of incentives:²²⁸

- 1) High Reward (\$1,000,000)
- 2) Low Reward (\$1,000)
- 3) Duty + High Reward
- 4) Duty + Low Reward
- 5) Antiretaliation Protection (1 year)
- 6) Duty + Antiretaliation Protection
- 7) Duty + Fine (\$10,000)
- 8) Duty

Following the factual scenario and the legal mechanism provided in each category, we measured the following variables:²²⁹

- 1) Intention of self and others to report
- 2) Evaluation of effect of the legal mechanism on the decision to report
- 3) Perceived morality, harm, and severity of the misconduct
- 4) Expected social and career ramifications
- 5) Organizational features and individual status

227. *See supra* subparts II(A) (protection), II(B) (duty and fine), and II(C) (reward).

228. The vignettes used for manipulating the eight conditions are accumulated in Appendix II.

229. In addition, we have measured an elaborated demographic profile.

2. *The Sample.*—The data collection was web based, using the survey firm Zoomerang.²³⁰ Zoomerang holds a panel of three million volunteers who earn credits toward online rewards in return for filling a survey.²³¹ The sample of the survey was drawn from a diverse, representative panel of working adults in the United States; the sample included participants of different genders and races, as well as various education levels, professions, and workplace structures. The 2,081 participants of our survey consisted of a representative panel based on census demographics in the United States.²³²

B. Findings

The findings of the study are presented in the three following sections. We begin by describing the effect of manipulating the eight categories of mechanisms on the individual's self-stated intentions to take action. We further compared individual behavior to one's predictions about the behavior of others under the same circumstances. In the second section, we present findings on the gap between the *actual* (experimental) effect on decisions to report, as measured in the first section, and the *perceived* (self-reported) effect the selected legal mechanism had on respondents' decision to report. In the third section, we focus on the social aspects of reporting. These include perception of social norms, social support, career effects, and the social meaning of reporting under the competing mechanisms.

1. *Regulatory Mechanisms and the Holier-Than-Thou Effect.*—The first set of findings focuses on the experimental effect of the manipulated legal mechanism on participants' intention to report the misconduct.²³³ The type of legal mechanism described in the scenario was entered as an independent

230. See generally Zoomerang, <http://www.zoomerang.com>.

231. Interview by Lynda Resnick with Dave Deasy, Gen. Manager of Zoomerang (June 23, 2009) (edited transcript available at <http://blog.lyndaresnick.com/2009/06/market-research-affordable-user-friendly-real-time/>).

232. Participants were 2,081 individuals, 47% women and 53% men, whose mean age was 45 years (SD=17 years) with 78% reporting completion of higher education (college or above) and only 3% reporting less than a high-school education. The majority of participants identified their racial or ethnic background as European-American (88%) with very small percentage of individuals who identified themselves as African-American (5%), Hispanic (3%), Asian (3%), or Native American (1%). Seventy percent were employed in professional industries (e.g., food service, manufacturing, construction, and agriculture), 52% in the public sector, 54% in companies with 100 or more employees, and 76% reporting the work place as not unionized. The majority of participants (61%) reported that there was no internal compliance department at their workplace. Data was collected in 2008 and 2009.

233. To test whether the perceived likelihood of action against the company differed among the legal mechanism subgroups, a one-way MANCOVA test was conducted. Three variables were included as covariates in the analyses, and they were controlled to reduce their value as competing explanations for the participants' outcomes: age, education (academic/nonacademic), and the existence of internal compliance mechanisms at the workplace. The Bonferroni post-hoc test was used to determine the significance of the differences among the adjusted mean scores. To prevent interference with the flow of the Article, the statistical tables were moved to Appendix I.

variable and the actions taken toward the company were entered as dependent variables.²³⁴ The findings indicate significant differences among the legal mechanisms.²³⁵

Respondents reported the highest self-reporting rates when faced with a combination of a *Duty* and *High Reward*, whereas respondents in the *Low Reward* condition were least likely to report.²³⁶ In line with the familiarity bias, peers were also predicted to report at the highest levels in the *Duty + High Reward* condition.²³⁷ By contrast, participants predicted that most people would take action in the highest levels when there were high rewards, thus revealing a perception that a stranger's decision to report is more likely to be externally driven.²³⁸ However, this crowding-out effect virtually disappears when participants are asked to predict what most other people will do under the various mechanisms. Respondents in the *High Reward* and *Duty + High Reward* conditions provided the highest scores for likelihood that others would report the company's misconduct.²³⁹

The findings reveal that individuals predict higher reporting action by themselves than by their peers and others. Using a two-way MANCOVA test,²⁴⁰ we find that respondents predicted that they themselves would be more likely to report²⁴¹ than their peers and that their workplace peers²⁴² would be more likely to report than most other people.²⁴³ In other words, individuals believe that they themselves will behave more ethically in the face of misconduct than others and that people with whom they are familiar will behave more ethically than the general population. This pattern was similar across the various subgroups. That is, for the most part, the legal

234. The actions taken toward the company include: (1) The participants' intention to report the misconduct [hereinafter *self-action*]; (2) their perception of the likelihood that most people will engage in reporting the misconduct [hereinafter *most people*]; and (3) the perceived likelihood that most employees in their own company would report the misconduct [hereinafter *most peers*].

235. Multivariate $F(21,5445) = 4.73, p < .001, \eta^2 = .02$.

236. In addition, participants in the *Duty + Fine* group were more likely than *Low Reward* to take self-action against the company.

237. See *infra* fig.1. *Duty + High Reward* graded higher than *Duty* in likelihood that "most employees" would report the employer.

238. *High Reward* saw the highest report rates, followed by *Duty + High Reward*—both of these categories graded higher than all the other subgroups in likelihood that "most people" would report the employer.

239. $F(7,1898) = 9.96, p < .001, \eta^2 = .03$.

240. The type of legal mechanism was entered as an independent variable, the initiator of the action taken against the company (*Self, Most People, Most Peers*) was entered as a within-subject factor, and background factors were held constant. Such analysis enables us to compare the three responses of each one of the participants when controlling for the other factors that differentiated the participants.

241. Mean and Standard Deviation: ($M = 8.41, SD = 2.16$).

242. Mean and Standard Deviation: ($M = 6.34, SD = 2.73$).

243. Mean and Standard Deviation: ($M = 5.52, SD = 2.58$), Multivariate $F(2,1897) = 49.75, p < .001, \eta^2 = .03$.

mechanism did not have an effect on the gaps between the three types of initiators (*Self, Peers, General Population*).

Interestingly, the only exception was the difference in perceived reporting behavior between the *Low Reward* and *High Reward* subgroups, which was particularly pronounced for the respondents' estimation of *Most People*.²⁴⁴ In this case, respondents believed that increasing the level of financial rewards is likely to have the greatest effect on the reporting behavior of the general population,²⁴⁵ suggesting a belief that the average person's actions are more externally motivated than the one's own actions.

These gaps support the research on a holier-than-thou effect, which suggests that people perceive their own actions as more ethically guided than those of others.²⁴⁶ The fact that respondents did not display this bias in the same intensity towards their peers suggests a reduced effect among familiar circles, supporting the psychological phenomenon of familiarity leading to increased perceptions of likeness.²⁴⁷ Importantly, according to previous holier-than-thou studies,²⁴⁸ and supported by other behavioral findings of our study discussed below concerning the gap between action and perception, participants' estimation of the reward-driven behavior of others may be more accurate than the estimation of their own expected behavior.

244. This gap was expected according to the holier-than-thou phenomenon discussed above. See *supra* notes 218–24 and accompanying text.

245. Notably, the general population consists of the people whom they know the least in comparison to their coworkers.

246. Epley & Dunning, *Holier Than Thou*, *supra* note 217, at 861.

247. Constantine Sedikides & John J. Skwronski, *The Law of Cognitive Structure Activation*, 2 *PSYCHOL. INQUIRY* 169, 179 (1991) ("Moreover, we would claim that familiarity and proximity contribute to the formation of relationships through their indirect effects on similarity. Familiarity and proximity provide the individual an opportunity either to discover commonalities . . . or to create commonalities through gradual changes in cognitive content.").

248. Epley & Dunning, *Holier Than Thou*, *supra* note 217, at 861.

Figure 1: The Relative Ranking of Reporting by Self, Peers, and General Population²⁴⁹

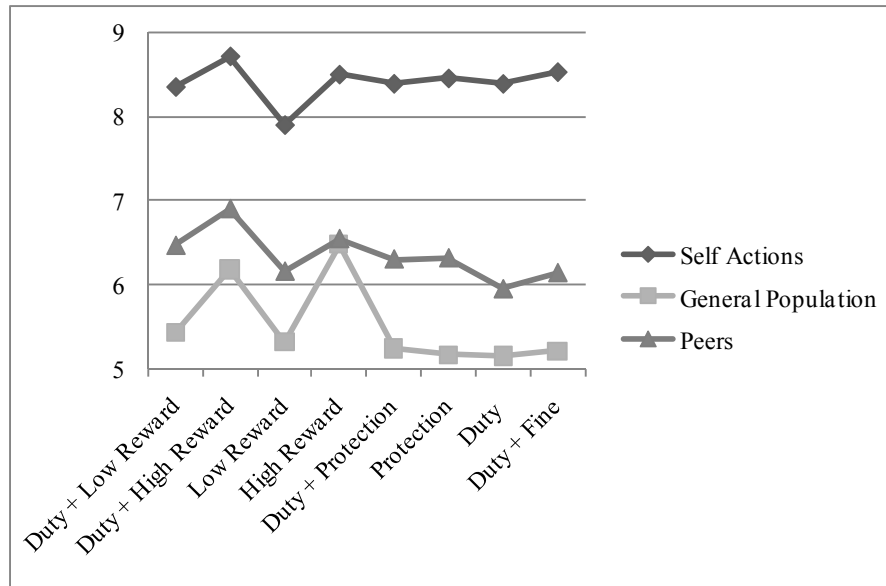


Figure 1 clearly demonstrates the holier-than-thou effect. For self-reporting, an affirmative duty to report remained an influential factor for increasing reporting rates even when it was not paired with fines or protection. However, with regard to others, especially nonpeers, respondents felt that high rewards would serve as a much stronger motivator than a duty to report.

2. *The Interplay Between Internal and External Motivation.*—The findings reveal significant differences between the subgroups in the evaluation of misconduct.²⁵⁰ As is expected intuitively, the more outraged respondents feel about the illegal behavior, the more likely they are to report and to predict reporting by others. Conversely, the less severe the misconduct, the less likely respondents are willing to take action. In order to test these predictions, participants were divided into two subgroups based on their evaluations of the misconduct. The first group included the respondents who evaluated the severity and immorality of the misconduct as high. The second group included those respondents who gave lower evaluations of the

249. Adjusted mean scores for the initiator of action against the company across the eight subgroups. The score ranged from 1–10, with higher values indicating higher likelihood of action taken against the company ($n = 1,909$).

250. In evaluation of the misconduct, we refer to a factor that is based on questions 19–26. Within it, we include factors such as moral outrage, percept of risk to the public government from the misconduct, legitimacy, and acceptability. Multivariate $F(3,1808) = 54.14, p < .001, \eta^2 = .08$.

severity of the misconduct.²⁵¹ The first group—the high-severity group—can be understood as including those individuals who are internally motivated to report (*High Internal*). Conversely, the second group—the low-severity group—can be understood as the group with lower levels of internal motivation (*Low Internal*).²⁵²

As expected, participants with *High Internal* motivation were more likely than participants with *Low Internal* motivation to predict self-reporting²⁵³ and to predict higher reporting rates for both peers²⁵⁴ and the general population.²⁵⁵

To examine the interplay between internal motivation and external legal mechanisms, we further tested the interaction between evaluation of the misconduct and intention to report. Among our two evaluation groups, a significant interaction was found between the type of legal mechanism and the perceived severity of the misconduct.²⁵⁶ Among the *Low Internal* subgroup, participants in the *High Reward, Duty + High Reward*, and *Duty + Fine* were more likely than *Low Reward* to report an intention to act. However, in the *High Internal* subgroup, no difference emerged between the subgroups; the pattern of differences among means was similar across the eight legal mechanisms.²⁵⁷ This signifies that, while the choice of legal mechanisms was important for those who viewed the misconduct to be relatively insignificant, there was largely no difference for those who viewed the misconduct to be severe. The findings suggest that when individuals recognize an ethical stake in an issue, policy-design variances are diminished.

251. Whether a respondent rated the misconduct as high or low was based upon their rating compared to the median value of the evaluation of the misconduct. A two-way MANCOVA test was then conducted. The type of legal mechanism and the evaluation of the misconduct subgroups were entered as independent variables. The actions taken against the company were entered as three dependent variables. Background factors were held constant.

252. The association between internal motivation to report (as opposed to reporting due to external rewards) and perception of the misconduct's severity is clear given that the items measuring perceived severity included moral and legitimacy concerns.

253. Univariate tests: $F(1,1890) = 159.10, p < .001, \eta^2 = .08$; *Low Evaluation of the Misconduct*: $M = 7.83, SD = 2.35$; *High Evaluation of the Misconduct*: $M = 9.03, SD = 1.72$.

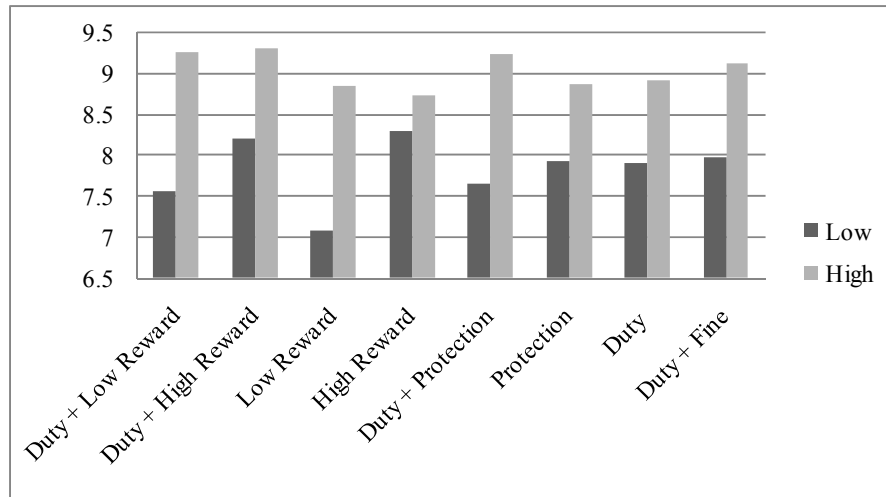
254. $F(1,1890) = 3.86, p < .05, \eta^2 = .00$; *Low Evaluation of the Misconduct*: $M = 5.41, SD = 2.45$; *High Evaluation of the Misconduct*: $M = 5.64, SD = 2.71$.

255. $F(1,1890) = 3.86, p < .05, \eta^2 = .00$; *Low Evaluation of the Misconduct*: $M = 5.41, SD = 2.45$; *High Evaluation of the Misconduct*: $M = 5.64, SD = 2.71$.

256. $F(7,1890) = 2.89, p < .01, \eta^2 = .01$.

257. See *infra* app. I, tbl.2 (showing no statistical difference between the different groups among the various legal mechanisms).

Figure 2: Report Against the Company by Participants with High and Low Perception of Severity of the Act



To illustrate the interplay between internal and external motivation, Figure 2 presents the responses of participants across condition and perceived severity of the misconduct. The graph demonstrates the sharp contrast between incentive mechanisms once the moral impulse to report is removed as a potential source of motivation. When internal motivation is missing—i.e., the severity of the misconduct is perceived as low—external incentives matter much more when deciding whether or not to report misconduct. Respondents least likely to report were those offered a low reward while they had a low perception of misconduct severity. Reporting in those circumstances was even lower than situations where no incentive was present. Moreover, the perceived severity of the misconduct produced the greatest disparity in the reporting levels for respondents in the *Low Reward* category while it had the smallest effect on the *High Reward* category. These findings suggest that the introduction of an external reward interferes with the moral dimension of reporting.

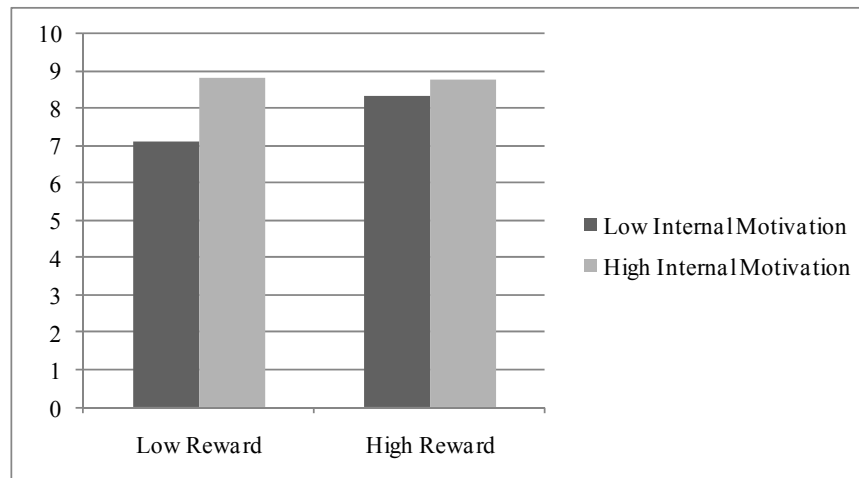
Another way to look at the importance of using high rewards when there is a fear that some of the workers—and hence potential enforcers—might have low internal motivation, is through the following analysis. Conducting a two-way ANCOVA revealed a significant interaction effect between the legal mechanisms (*Low Reward* and *High Reward*) and the internal motivation subgroups indicating that the monetary reward reduced the self-reporting differences between the internal motivation subgroups.²⁵⁸ Within the *Low Reward* condition, participants with a *High Internal* motivation were more

258. $F(1,474) = 10.60, p < .001, \eta^2 = .02$.

likely to report than participants with a *Low Internal* motivation.²⁵⁹ However, within the *High Reward* condition, there was no significant difference between the internal motivation subgroups ($p > .05$). As demonstrated in Figure 3, paying a high reward basically decreases the differences between high and low internally motivated individuals.²⁶⁰ While we do not have a measure of quality of reporting in this Article—a measure that might point out the inferiority of money-driven reporting²⁶¹—it is clear that high rewards are able to overcome internal-motivation impediments to social reporting.

Importantly, the decrease in reporting for employees who were not internally motivated was less pronounced for the other mechanisms: fines and protection. This suggests a key normative insight: both fines and protection are less likely to be perceived as external motivation and therefore carry less of a risk of crowding out internal motivation. Finally, and equally importantly, the findings indicate that creating a duty to report, which emphasizes the moral dimension of the reporting action, enhances the effect of severity on one's intention to engage in whistle-blowing. Namely, the combination of duty and a high level of internal motivation results in the highest levels of reporting behavior.

Figure 3: Effect of High and Low Extrinsic Rewards on Participants with High and Low Perception of Severity of the Act



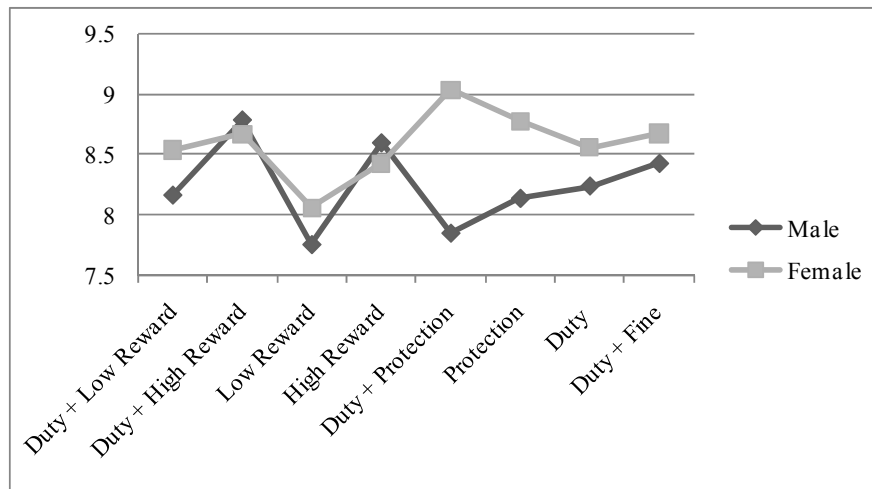
259. $F(1,474) = 35.00, p < .001, \eta^2 = .07$.

260. A three-way ANCOVA revealed that there was no significant interaction effect between the gender, the legal mechanisms (*Low Reward* and *High Reward*), and the internal motivation subgroups indicating that the same pattern of results was found among women and men.

261. This is so both in terms of motivation—e.g., honesty of the report—and in terms of quality of the report.

3. *Gender and Whistle-Blowing.*—Gender plays a role in predicting whistle-blowing behavior. Our findings indicate significant differences between men and women.²⁶² Women were far more likely than men to blow the whistle.²⁶³ At the same time, among women, the legal mechanism did not have a significant effect. In particular, women were significantly more likely than men to take action against the company in the subgroups *Duty + Protection* and *Protection*. Moreover, men were far more affected by the mechanism manipulations: while the level of monetary reward did not seem to matter to women, the higher reward significantly increased the likelihood of reporting among men.²⁶⁴

Figure 4: Gender and the Effect of the Alternative Incentive Mechanisms



As can be clearly seen from Figure 4, in conditions of *Duty* and *Duty + Protection*, women were far more likely than men to engage in whistle-blowing. These findings corroborate previous findings of a gender effect in that regard. However, the graph illustrates an important perspective regarding the interplay between choice of legal mechanisms and gender. Whereas men care significantly more than women about the size of the monetary

262. To examine whether the differences among the legal mechanisms varied according to gender, we conducted a two-way MANCOVA. The type of legal mechanism and gender were entered as independent variables, and the actions taken against the company were entered as three dependent variables: self action, actions by most people, and actions by most peers. Background factors were held constant. Multivariate $F(3,1875) = 6.03, p < .001, \eta^2 = .01$.

263. $F(1,1877) = 12.61, p < .001, \eta^2 = .01$. Men: $M = 8.24, SD = 2.28$; Women: $M = 8.59, SD = 2.02$.

264. $F(7,1877) = 2.40, p < .05, \eta^2 = .01$. Similarly, men in *Duty + High Reward* were also more likely than participants in the *Duty + Protection* to take self-action against the company. Furthermore, only among men, *Duty + High Reward* and *High Reward* were more likely than *Low Reward* to take self-action against the company.

reward, women are more incentivized by antiretaliation protections and legal duties.²⁶⁵

The experiment also revealed gender differences in the reported preferences of respondents concerning the reporting process itself. Women respondents cared more about maintaining anonymity both in relation to the employer²⁶⁶ and to the public.²⁶⁷ This finding could be explained by a greater job insecurity experienced by women, evident also in their greater reliance on protection mechanisms. There was also a gender effect for perceived social support.²⁶⁸ Women respondents graded higher than men the importance of reactions from both family²⁶⁹ and friends²⁷⁰ to their decision to report.

The gender differences with regard to women provide the following crowding-out effect that emerges from using monetary rewards. Using an ANCOVA, we see that among women within the *Low Internal* subgroup, participants in the *Duty* group were more likely than *Low Reward* to report an intention of most people to act.²⁷¹ However, among men within the *Low Internal* subgroup, participants in the *Duty* group were less likely than *Low Reward* to report an intention of most people to act.²⁷²

This reduction is a clear demonstration of a crowding-out effect where low rewards harm, rather than benefit, the willingness of individuals to engage in whistle-blowing when a duty is present. To demonstrate the effect graphically, Figure 5 presents the responses of men and women focusing on two of the conditions within the lower perceived severity of misconduct.

265. This finding accounts for differences in economic status of the respondents.

266. $F(1,1869) = 4.54, p < .05, \eta^2 = .002$; Male: $M = 7.44, SD = 2.91$; Female: $M = 7.72, SD = 2.78$.

267. $F(1,1869) = 4.08, p < .05, \eta^2 = .002$; Male: $M = 7.62, SD = 2.83$; Female: $M = 7.89, SD = 2.76$.

268. Multivariate $F(2,1874) = 8.99, p < .001, \eta^2 = .01$.

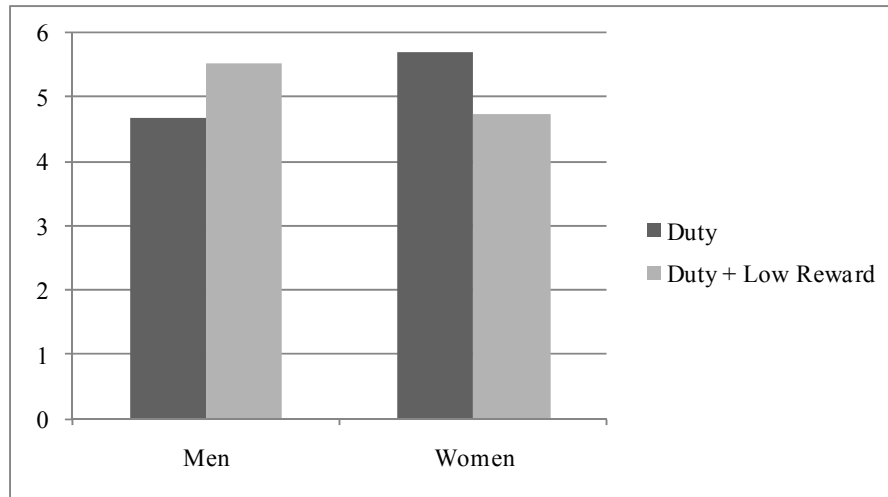
269. $F(1,1875) = 17.71, p < .001, \eta^2 = .009$; Male: $M = 7.87, SD = 2.16$; Female: $M = 8.28, SD = 2.06$.

270. $F(1,1875) = 4.61, p < .05, \eta^2 = .002$; Male: $M = 5.41, SD = 2.41$; Female: $M = 5.65, SD = 2.29$.

271. $F(1,105) = 4.16, p < .05, \eta^2 = .04$.

272. $F(1,125) = 3.41, p < .05, \eta^2 = .03$.

Figure 5: Actions Taken Against the Company by Most People as a Function of the Legal Mechanism and Gender Within the Low Internal Subgroup



4. *Real Versus Perceived Motivation to Blow the Whistle.*—The experiments had two stages. Stage 1 tested predictions about action under the various conditions. In Stage 2, we asked respondents to assess their own response in Stage 1. Thus far, we have focused on the results of Stage 1, the *experimental* effects of the different legal mechanisms. In this section, we analyze the results of Stage 2, the *perceived* effects and compare perception to the experimental findings. In this second stage, we investigate how people evaluate their own motivations and those of others when asked to reflect on the decision to report misconduct. We ask what individuals believe motivated reporting and whether those motivations are primarily internal or external.

To examine the overall ranking of the mechanisms based on their perceived influence on intention to enforce, a series of *t*-tests was conducted.²⁷³ The combined analysis showed that *Duty* and *Fine* were graded as major factors in a participant's decision to report, followed by *Protection*, *High Reward*, and *Low Reward*.²⁷⁴ Not surprisingly, the size of the reward was perceived to be influential. Respondents in *High Reward* conditions graded higher the influential effect of the reward on their decision to report than those offered low rewards.²⁷⁵ Similarly, respondents believed

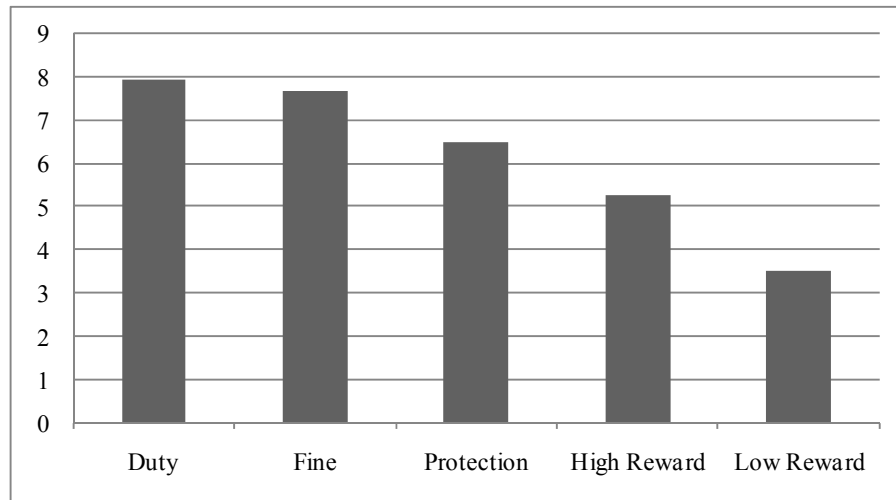
273. Using a simulator, which is available at <http://www.dimensionresearch.com/resources/calculators/ttest.html>.

274. The differences among the means were all significant (all p 's < .001) with the exception of *Duty* and *Fine* ($p > .05$).

275. $F(3,930) = 31.32, p < .001, \eta^2 = .09$.

their peers were more affected by the reward when the reward was high.²⁷⁶ Most interestingly, respondents thought that the size of the rewards was far more influential when it came to others and less influential when it came to themselves.²⁷⁷

Figure 6: Perceived Influence of the Different Legal Mechanisms



While the *High Reward* mechanism was more influential than *Duty* and *Fine* in the experimental setting, people perceived the imposition of a duty to be the most dominant mechanism in their decision to report, suggesting a misperception or a social-desirability bias in their own motivation to report. Similarly, in the experimental subgroups, where respondents were offered both rewards and were told they had a legal duty to report, respondents attributed their decision to report to the duty. Given that this disparity could not be seen in the actual effect of duty as measured in the experimental part,²⁷⁸ we attribute the gap to a behavioral tendency to undermine the role of money in one's own behavior. Fines, and especially protection, were not perceived to be more or less influential according to the two subgroups, suggesting that they were less likely to be seen as representing external

276. $F(3,930) = 17.93, p < .001, \eta^2 = .05$. We asked respondents how influential the size of the reward was to their peers' decision to report relative to their own: more important than to themselves, same as themselves, or less than themselves. These responses were then categorized to the 1–10 scale.

277. Indeed, the difference in percentage of participants who graded higher the influence of the reward on their friend's decision to report in comparison to their own decision was found to be significantly higher in the *Duty + High Reward* and *High Reward* subgroups (29.6% and 29.5%, respectively) than in the *Duty + Low Reward* and *Low Reward* subgroups (7.5% and 1.5%, respectively). $\chi^2(6, N = 1033) = 51.37, p < .001$.

278. In other words, the difference between *Duty + High Reward* and *High Reward* subgroups was marginal.

motivation. Overall, the dominance of the imposition of *Duty*, particularly in its perceived effect between the *Low* and *High* reward subgroups, suggests a tendency to overestimate the perceived effect of duty and to underestimate the perceived effect of reward.

C. *Framing the Social Meaning of Whistle-Blowing*

Given the importance of social norms and social approval in the decision to engage in reporting illegality, this subpart describes how participants predicted social perceptions of their decision to report. These perceptions are important, not only for understanding respondents' immediate decision to report but also in predicting long-term effectiveness of a given regulatory mechanism. If certain mechanisms are associated with negative status, their long-term efficacy will be jeopardized. As discussed in Part IV, law carries expressive meanings, and the mechanisms it chooses to employ are likely to shape the social understandings of whistle-blowing.

In our experiments, we measure social norms in various ways, including evaluating respect, attribution of virtue, law abidingness, and patriotism. The differences in the appreciation of actions taken against the company by others across the legal mechanisms are captured in Figure 7. Most strikingly, respondents viewed peers who reported without the promise of a reward as more worthy of their respect. The four *Reward* subgroups received the lowest evaluation levels, revealing a certain stigma²⁷⁹ against those who blow the whistle in response to these mechanisms. In this sense, employees who blow the whistle in low monetary-rewards regimes are the worse off: they receive less glory for a limited amount of money that, as shown in the first section, was unlikely to be influential in their decision to report.

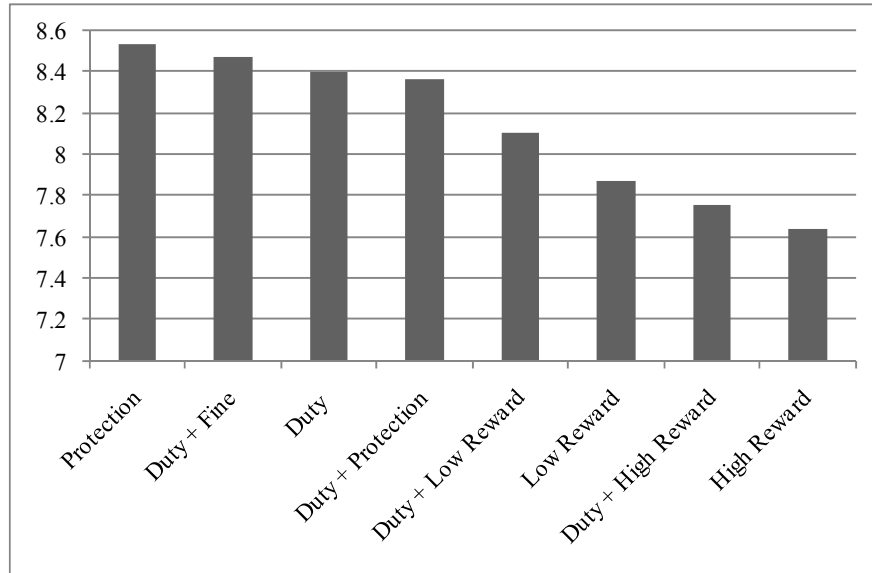
A further finding is that the existence of a duty caused participants to increase their appreciation for people who blew the whistle, while the introduction of a reward had the opposite effect of reducing respect for the informant. This result can be explained in two ways. Under one explanation, as hypothesized, the law has an expressive effect and a legal duty signals that certain behaviors are important.²⁸⁰ Alternatively, we can understand this effect as a general appreciation that people have for others who are motivated by respect for the law rather than by money. This hypothesis draws some support from the finding that a duty was in fact more meaningful when a low, rather than high, reward was attached. This may

279. In fairness, we must be very careful not to overstate this argument. Given that even for the "less popular" conditions, values were above 7 in a 1–10 scale, it is hard to define such scores as being negative. For the most part, this Article focuses on trends and comparison among subgroups, and in that regard, some incentive mechanisms are more likely to create more or less positive evaluation than others. Presumably, if this study had been conducted in a different setting—i.e., involving financially related misconduct—we might have seen bigger differences given the presented gap.

280. See *supra* text accompanying notes 207–215.

suggest that high rewards overwhelm the attribution of others' motivations such that the duty is perceived as a minor consideration.

Figure 7: Evaluation of Others



An additional measure of social meaning for whistle-blowing is related to the perceived career impact on whistle-blowers. Respondents viewed the receipt of low rewards as especially likely to create the most severe career problem for individuals. The tendency for low rewards to only minimally influence the likelihood of reporting and, at the same time, to have highly negative career effects once again underscores the social price and inefficiency of this mechanism.²⁸¹

VII. Discussion and Policy Implications

Through the experimental manipulation of different regulatory mechanisms attached to a common misconduct scenario, we sought to answer key questions about the optimal design of reporting mechanisms: Under which circumstances do individuals find themselves and others most likely to report misconduct? What are the ethical or professional motivations

281. Other than career effect, the other central aspect of social norms is the reaction of friends at work and family. We found that support by family was graded significantly higher. That is, in general, people expected a much stronger support for the enforcement behaviors from their family than from their friends at work. However, in contrast to career effect, there was no significant interaction effect between the legal mechanism and the type of support. This means that in contrast to career effects, the reactions of family and friends were not perceived by people to be sensitive to the mechanisms that were used in that context. Family ($M = 8.06$, $SD = 2.13$) than support by friends at work ($M = 5.53$, $SD = 2.36$) $F(1,1896) = 103.41$, $p < .001$, $\eta^2 = .05$.

driving these differences in reporting behavior? How are different types of reporting incentives perceived, and what kind of environments can be created to induce reporting?

The findings of the study provide both practical and theoretical insights. The study clearly demonstrates that the choice of mechanism significantly influences decisions to report illegal conduct in the workplace. Moreover, our findings provide insight into the subtle interactions between legal mechanisms and factors such as gender, the perceived severity of the misconduct, and the social consequences of whistle-blowing. These findings can help policy makers refine their regulatory toolbox and design tailored and efficient incentive mechanisms.

A. The Inadvertent Effect of Rewards

The experimental study clearly indicates that levels of monetary rewards are consequential, frequently affecting levels of reporting. Only when actions are perceived as morally offensive do reward levels have minimal effects on actions. When the ethical significance attached to the reporting act is absent, the level of monetary compensation offered through the regulatory system is decisive. Most surprisingly, our experiment shows that where misconduct is expected to evoke a lower level of moral outrage, the introduction of small bounties may actually decrease the rate at which it is reported. In the experiment, reporting under such circumstances was even lower than in situations where no incentive was present.

In some respects, these findings continue the studies regarding a crowding-out effect. The experiment demonstrates²⁸² that framing reporting as a commodity with a price tag attached may actually suppress internally motivated action. At the same time, the findings demonstrate that the crowding-out effect largely disappears with the introduction of sufficiently high monetary rewards. From a practical perspective, legislatures can use these insights in developing and adjusting existing bounty programs to appropriate levels of monetary rewards, so as not to produce counterproductive effects by the introduction of money as a legal mechanism to induce compliance.

B. Motivation, Perception, and Whistle-Blowing

From a more theoretical perspective, our study provides significant contributions to the literature on motivation and behavior. The experiments show that individuals perceive their own actions as more motivated by intrinsic ethical concerns than the actions of others. In the absence of a legal duty to report, the introduction of a higher financial reward is perceived to have the greatest impact on the reporting behavior of others rather than on self-

282. Albeit, the experiment demonstrates this effect in a limited way—the crowding-out effect was significant only with regard to women and with regard to the perception of others.

behavior. Respondents felt that such higher bounties would only moderately increase their own reporting rates, as well as the reporting of their peers, yet they predicted that bounties would lead to significantly higher whistle-blowing activity for nonpeers. These findings are generally in line with the psychological holier-than-thou effect—the general belief of individuals that they themselves are more ethically driven than others.²⁸³ The respondents in our experiments expected others to exhibit more self-interested attitudes in their decision to report wrongdoing. Overall, people overestimated the effect of duty on their own behavior and underestimated the effect of reward on their behavior. In fact, high rewards were highly influential at the experimental stage, but those high rewards were ranked as the least influential factors when respondents were consciously estimating what factors influenced their own decisions to report.

We believe that this perceptual gap should receive more attention in regulatory discourse in general and particularly in the whistle-blowing context. Often, the decision to blow the whistle depends on whether one believes others will come forward as well. For example, if a financial reward is offered, employees who think that others would have preceded them may behave strategically and try to be the first to collect the reward. These questions, exploring such strategic behavior and the predictions of others' behavior, are highly relevant to recent legal debates, as exemplified by the split decision in *Rockwell International Corp. v. United States*.²⁸⁴ Furthermore, given the overestimation of the instrumental self-interested motivation of others, the introduction of monetary incentives by regulatory agencies may exacerbate perceptions of greed to a greater extent than it encourages desirable individual decision making.

C. *One Policy Fits All?*

The study points to major variation in the importance of regulatory design in relation to different illegalities. The greater the perception of severity of the misconduct, the less important the choice among the regulatory mechanisms. In our analysis, we used severity of the misconduct as a proxy for internal motivation.²⁸⁵ In the group of participants that viewed the illegality as highly offensive, and who hence had high levels of internal motivation for reporting, the type of mechanism available to informants was largely irrelevant. Respondents expected the reporting levels of themselves and others to remain consistently high across all categories of legal

283. See Emily Balcetis & David Dunning, "Holier Than Thou" Self-impressions and Social Attribution—And How Experience Diminishes the Fundamental Attribution Error 12 (2006) (unpublished manuscript, on file at <http://oak.cats.ohiou.edu/~balcetis/attributions.pdf>) ("[P]eople appear to hold the strongest holier-than-thou self-impressions when it comes to the social virtues of altruism and morality.").

284. 549 U.S. 457 (2007).

285. These included items such as moral outrage, legitimacy, and perceived risk from the misconduct.

mechanisms. However, when illegalities witnessed by potential enforcers were perceived as less severe, the use of high rewards and fines produced considerably higher levels of reporting than the use of low rewards. These findings suggest the importance of legal-mechanism selection in instances where individuals do not have an ethical stake in compliance. In such cases, triggering external motivation through regulatory policy takes on a far greater role in promoting reporting activity. Therefore, regulatory agencies may consider providing high monetary rewards when the goal is to incentivize reports in contexts that evoke less moral outrage, such as tax evasion.

In addition to the contextual variation, our study revealed dramatic gender differences. On balance, women were more likely than men to report misconduct. Women were also more likely to be motivated by internal ethical considerations and to view other people's behavior as similarly ethically motivated. For men, the decision to report was largely externally driven, such that the introduction of a higher reward significantly increased the rate at which men decided to report, both with and without a duty. Between the gender groups, the greatest difference existed where whistle-blowers were provided protection from retaliation, for which women were significantly more likely to report than men. On balance then, rewards were more effective to incentivize reporting by men, while imposing duties, and to some extent granting antiretaliation protections, were more important to women.

More generally, our findings on the interaction between internal motivation and the choice of legal mechanism suggest the following important policy insight. In areas where the misconduct is expected to trigger high internal motivation, there is less need to invest in incentive mechanisms. This is contrary to the basic intuition of the legal policy maker to give higher rewards as the misconduct is more severe (given its likely correlation with greater harm to society). Our findings suggest that when the misconduct is viewed to be severe, the type of mechanism used is less important. In areas where the misconduct is likely to be viewed, at least by some of the people, as severe, there is less need to use rewards that carry both monetary costs for the state and some social cost for the whistle-blower herself.

D. Incommensurability

The findings also bear on the general problem of "incommensurability," the difficulty people have in using monetary or other quantitative metrics to assess morality, beliefs, and behavior.²⁸⁶ In the context of whistle-blowing, this problem takes on a crucial role as individuals must necessarily make

286. See, e.g., ELIZABETH ANDERSON, VALUE IN ETHICS AND ECONOMICS 66-73 (1993) (explaining the human propensity to conceptualize goods hierarchically, with higher goods, such as justice and friendship, being immeasurable by comparison to lower goods, such as money and convenience); JOSEPH RAZ, THE MORALITY OF FREEDOM 321 (1986) ("[B]oth values and valuables are to a large degree incommensurable . . .").

normative and financial judgments in deciding whether to report misconduct. Many thinkers are skeptical about the ability of people to translate such qualitative judgments into a price.²⁸⁷ Our findings reveal that this problem may be further compounded in the context of incentive-driven reporting, where people appear to think differently about their own motivations and the behavior of others. Where people tend to portray themselves as internally motivated, duty-bound citizens, the reporting decisions of others are viewed as opportunistic actions that are primarily driven by external rewards. That these Good Samaritan self-assessments do not comport with actual behavior, which tends to resemble the reward-driven calculus that people attribute to others, may suggest that it is easier for people to predict commensurability for others but not for themselves. Related to this issue of incommensurability is the problem of translating moral judgments into action. In an experimental study about penalties, Cass Sunstein, Nobel Laureate Daniel Kahneman, and their colleagues described what they call “the translation problem” as a significant source of incoherence in various legislative penalties.²⁸⁸ They explain the translation problem as “the distinctive problem involved in translating a moral judgment of some kind into the terms made relevant by the legal system, such as monetary penalties, civil fines, or criminal punishment.”²⁸⁹ Their study indicates that such translation is frequently problematic because it is grounded neither in principle nor on a set of shared intuitions.²⁹⁰ While the translation problem is pervasive, our findings suggest that when a large enough gap exists between high and low rewards, people’s perceptions and behaviors will differ significantly, affecting judgments and internal motivations.

E. The Choice of Mechanism and Whistle-Blowing Status

Additionally, the results of our experiments reveal significant tendencies in the evaluation of reporting behaviors. Duty-based reporting provides the highest status to a whistle-blower, while rewards carry the highest levels of social stigma. Even when the rewards are low, are combined with a duty, or both, decisions to report in response to these mechanisms uniformly receive the lowest levels of social respect and appreciation. On the other hand, fines and duty were relatively neutral in this regard, drawing consistently high levels of social admiration for the reporter. These findings contribute an additional dimension to the process of designing effective regulatory mechanisms: even where certain mechanisms may be intrinsically

287. Cf. ANDERSON, *supra* note 286, at 68–69 (postulating that common-sense morality prohibits the comparison of value between higher goods and lower goods and using the example of the practical impossibility of valuing the cost of another’s humiliation in terms of the fun derived by bystanders at the person’s humiliation).

288. Cass R. Sunstein et al., *Predictably Incoherent Judgments*, 54 STAN. L. REV. 1153, 1155 (2002).

289. *Id.*

290. *Id.*

or financially appealing, the social praise and stigmas attached to certain reporting behaviors may add unexpected weight to the whistle-blowing scales. Such a view, which will take into account the social aspects of the incentive mechanisms used, might shift the cost–benefit balance of the mechanism-choice dilemma. For example, our study suggests that the existence of a duty is likely to increase the social status of whistle-blowers to a greater degree than it affected the levels of reporting. Yet, if there are long-term effects on the social status of whistle-blowers in a given community, imposing a duty to disclose is important even beyond its immediate ability to promote more reporting. Similar effects were found with regard to fines.²⁹¹ Our study therefore suggests the desirability of imposing duties and fines, as they tend to enhance the social status of whistle-blowers and reduce the stigma associated with rewards and legal protections.

However, the association between the choice of legal mechanisms and the social status of the reporter varies significantly in the various aspects of our study. Participants viewed their own behavior as less affected by external mechanisms and viewed their own perceptions of others as less affected by choice of mechanism. Furthermore, participants did not attach high importance to anonymity with regard to their own actions. These gaps between self and others in the interpretation of reporting behavior underscore the existence of a holier-than-thou effect. This effect further suggests that people’s self-perception of their own higher moral standards may lead them to believe that others view them in the same light. Alternately, this effect may be explained as a type of fundamental attribution error in which people construe their own reporting behavior as an expression of their character, irrespective of the legal mechanisms involved. At the same time, we do find that individuals fear negative implications for their career even as they perceived their actions and the reaction to their reporting by their peers and family to be positive.

VIII. Conclusion

Social enforcement has become a central feature in the design of effective regulatory systems. In many areas of law, government relies on private individuals to trigger detection of misconduct through reporting. This study demonstrates that empirical research, comparing the behavioral and social ramifications of the regulatory mechanisms used to incentivize social enforcement, carries important practical insights for policy. By exploring the interplay between internal and external enforcement motivation, these experiments provide novel understandings about the comparative strengths and

291. Fines were seen as reducing the perception of greed associated with blowing the whistle for a reward. Common to both mechanisms is their removing the voluntary nature of whistle-blowing. Apparently, at least in the context of reporting fraudulent behavior, participants thought more of people who blew the whistle because they were obliged to do so, rather than where they did so voluntarily.

advantages of different legal mechanisms. An important implication of the study is that no one-size-fits-all policy design exists, but rather, policy makers must evaluate the full scope of psychological and situational factors in order to design the most efficient incentive structures. In doing so, policy makers must consider several factors. First, policy makers must assess the nature and severity of the anticipated conduct. Where levels of moral outrage are expected to be low, financial rewards will likely be a decisive factor, and the inquiry may shift to discovering the true price tag of the reporting behavior. For inherently offensive misconduct, policy design must take a more nuanced approach that integrates the moral dimension of the situation. In such cases, where the informant is expected to have a greater ethical stake in the outcome, regulation must fully appeal to the informant's sense of duty. This may mean that financial incentives are not only unnecessary but are counterproductive and offset internal motivations to report. Identifying such crowding-out effects in regulatory design is particularly beneficial, as it can save public dollars while simultaneously pointing to better mechanisms to induce reporting.

The study, moreover, demonstrates that informed policy makers must factor in the possibility that informants may underestimate the role of financial incentives in their own decision to report. Whereas people perceive others as reporting mainly for money, they tend to perceive their own social-enforcement actions as more ethically driven. Moreover, in choosing among the various mechanisms available, the study demonstrates that stigma levels attached to reporting vary along the selected mechanism. Finally, policy makers must also consider the target individuals for which the regulatory mechanisms are provided. In particular, gender differences are highly pronounced in the realm of whistle-blowing and further research should consider the reasons for which women care much more than men about antiretaliation protections.

At a broader level, the study contributes to the empirical literature about individual and group behavior, including debates on motivational crowding out, trust, misperception of norms and attribution, and the ability of individuals to rationally balance the costs and benefits of their own decisions and to assess the behavior and interests of others. Despite the growing interest in the legal academy and practice in new-governance approaches to law and policy, the study of individual motivation and behavior as directly connected to legal design is in its developmental stages. The study reported in this Article offers an important scholarly contribution and a step forward in this nascent interdisciplinary field.

Appendix I: Statistical Tables

Table 1: Adjusted Mean Scores and Standard Deviations for the Actions Taken Against the Company as a Function of the Legal Mechanism

		Imitators of Whistle-blowing					
		Most Peers		Most People		Self Actions	
		Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Legal Mechanism	Duty + Low Reward	6.46	2.75	5.43	2.64	8.36	2.27
	Duty + High Reward	6.90	2.64	6.18	2.52	8.71	1.94
	Low Reward	6.15	2.81	5.31	2.55	7.91	2.45
	High Reward	6.54	2.66	6.48	2.59	8.50	2.14
	Duty + Protection	6.30	2.55	5.23	2.47	8.39	2.20
	Protection	6.31	2.81	5.16	2.48	8.46	1.95
	Duty	5.94	2.87	5.15	2.62	8.39	2.11
	Duty + Fine	6.14	2.67	5.21	2.44	8.53	2.17

Note: The score ranged from 1–10. Higher values indicate higher likelihood of action taken against the company ($n = 1909$).

Table 2: Adjusted Mean Scores and Standard Deviations for Action as a Function of the Evaluation of the Misconduct Across Legal Mechanisms

Legal Mechanism		Evaluation of the Misconduct		Actions Taken Against the Company					
				Most Peers		Most People		Self Actions	
				Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Duty + Low Reward	Low	6.24	2.55	5.16	2.37	7.55	2.45		
	High	6.71	2.94	5.72	2.89	9.26	1.63		
Duty + High Reward	Low	6.67	2.54	5.92	2.44	8.21	2.21		
	High	7.16	2.73	6.48	2.60	9.30	1.33		
Low Reward	Low	5.71	2.51	5.14	2.36	7.08	2.59		
	High	6.65	3.03	5.50	2.74	8.85	1.85		
High Reward	Low	6.42	2.47	6.30	2.44	8.30	2.17		
	High	6.70	2.89	6.70	2.76	8.73	2.08		
Duty + Protection	Low	6.09	2.60	5.12	2.43	7.66	2.40		
	High	6.53	2.48	5.36	2.53	9.23	1.51		
Protection	Low	6.09	2.52	5.09	2.34	7.92	2.23		
	High	6.49	3.01	5.21	2.59	8.86	1.58		
Duty	Low	5.99	2.75	5.18	2.59	7.90	2.15		
	High	5.89	3.01	5.11	2.66	8.92	1.95		
Duty + Fine	Low	6.16	2.56	5.34	2.40	7.98	2.40		
	High	6.10	2.82	5.05	2.49	9.12	1.66		

Note: The scores ranged from 1–10. Higher values indicate higher likelihood of action taken against the company ($n = 1909$).

Table 3: Adjusted Mean Scores and Standard Deviations for the Actions Taken Against the Company as a Function of Gender Across the Legal Mechanisms

		Actions Taken Against the Company					
		Most Peers		Most People		Self Actions	
Legal Mechanism	Gender	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Duty + Low Reward	Male	6.48	2.62	5.73	2.66	8.16	2.46
	Female	6.41	2.90	5.07	2.56	8.54	2.05
Duty + High Reward	Male	6.73	2.69	6.13	2.56	8.78	1.92
	Female	7.12	2.59	6.26	2.51	8.67	1.97
Low Reward	Male	6.11	2.75	5.42	2.46	7.75	2.49
	Female	6.19	2.91	5.19	2.69	8.05	2.41
High Reward	Male	6.94	2.58	6.79	2.65	8.59	2.11
	Female	6.07	2.69	6.12	2.48	8.42	2.18
Duty + Protection	Male	6.22	2.56	5.21	2.36	7.85	2.42
	Female	6.42	2.56	5.27	2.62	9.04	1.75
Protection	Male	6.27	2.92	5.22	2.57	8.13	2.05
	Female	6.36	2.68	5.09	2.36	8.77	1.84
Duty	Male	5.79	2.97	4.75	2.75	8.24	2.40
	Female	6.13	2.81	5.57	2.46	8.56	1.79
Duty + Fine	Male	6.21	2.64	5.43	2.32	8.42	2.21
	Female	6.04	2.72	4.92	2.58	8.67	2.13

Note: The score ranged from 1–10. Higher values indicate higher likelihood of action taken against the company ($n = 1896$).

Table 4: Adjusted Mean Scores and Standard Deviations for Respect of Others Decision to Report the Misconduct as a Function of the Legal Mechanism

		Evaluation of Others' Decision to Report	
		Mean	St. Dev.
Legal Mechanism	Duty + Low Reward	8.10	1.66
	Duty + High Reward	7.75	1.67
	Low Reward	7.87	1.63
	High Reward	7.64	1.78
	Duty + Protection	8.36	1.66
	Protection	8.53	1.55
	Duty	8.40	1.69
	Duty + Fine	8.47	1.62

Note: The scores ranged from 1–10. Higher values indicate higher evaluation of others' decision to report the misconduct ($n = 1922$).

Appendix II: Excerpts from the Survey Instrument²⁹²

A. *The Survey*

The next survey deals with the readiness of an employee to report on an employer. We will now present you with a hypothetical situation. Please read it carefully and answer the questions that follow.

Imagine you are an employee of Roadblock LTD, one of the largest construction companies in the country. Roadblock has recently secured a fixed-price government contract to build a major highway in your city.

One day, while staying late in the office, you run across a document that reveals that the company has been substituting lower-grade and inferior-quality parts from those specified in the contract. The document also reveals that the company has been omitting required testing and quality procedures. You estimate that as a result the government is overpaying your employer approximately \$10,000,000.

1. Condition 1 (Duty + Low Reward).—According to the Government Fraud Act, as an employee of a government contractor, you have a legal duty to inform the government of any fraudulent behavior of your employer.

²⁹² The full text of the survey questions are on file with the authors and will be sent upon request.

Furthermore a person who files an action against federal contractors claiming fraud against the government, stands to receive a portion of the recovered fraudulent billing. In this case, you are estimated to receive a reward of \$1,000.

2. *Condition 2 (Duty + High Reward)*.—According to the Government Fraud Act, as an employee of a government contractor, you have a legal duty to report to the government any fraudulent behavior of your employer. Furthermore, a person who files an action against federal contractors claiming fraud against the government stands to receive a portion of the recovered fraudulent billing. In this case, you are estimated to receive a reward of \$1,000,000.

3. *Condition 3 (Low Reward)*.—According to the Government Fraud Act, a person who files an action against federal contractors claiming fraud against the government stands to receive a portion of the recovered fraudulent billing. In this case, you are estimated to receive a reward of \$1,000.

4. *Condition 4 (High Reward)*.—According to the Government Fraud Act, a person who files an action against federal contractors claiming fraud against the government stands to receive a portion of the recovered fraudulent billing. In this case, you are estimated to receive a reward of \$1,000,000.

5. *Condition 5 (Duty + Protection)*.—According to the Government Fraud Act, as an employee of a government contractor, you have a legal duty to report to the government any fraudulent behavior of your employer. Furthermore, according to the Government Fraud Act, a person who files an action against federal contractors claiming fraud against the government cannot be fired because of the reporting.

6. *Condition 6 (Protection)*.—According to the Government Fraud Act, a person who files an action against federal contractors claiming fraud against the government cannot be fired because of the reporting.

7. *Condition 7 (Duty)*.—According to the Government Fraud Act, as an employee of a government contractor, you have a legal duty to report to the government any fraudulent behavior of your employer.

8. *Condition 8 (Duty + Fine)*.—According to the Government Fraud Act, as an employee of a government contractor, you have a legal duty to report to the government any fraudulent behavior of your employer. Furthermore, failure to report will result in a fine of \$10,000.