

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

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*Abstract*

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 facilitates 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 2000 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 policymaking 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 indicate that in some cases offering monetary rewards to whistleblowers 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 government 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 anti-retaliation rights for whistleblowers who report financial misconduct.<sup>1</sup> Dozens of existing federal statutes and hundreds of state statutes include similar whistleblower protections and/or incentives in a vast range of fields, including tax regulation, environmental law, employment

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<sup>1</sup> The American Recovery and Reinvestment Act, Pub. L. No. 111-5 (Enacted 111 H.R. 1), § 1553 (2009). (The whistleblower protection clauses are often referred to as the "McCaskill Amendment.")

discrimination, health and safety and trading standards. Indeed, all regulatory systems have built in mechanisms designed to promote legal compliance. However, the variation among these regulatory mechanisms and incentives is immense.<sup>2</sup> Some statutes are designed to protect employees against retaliation when they resist or report illegal activities. Other statutes state an obligation of the individual to report, and, at times, impose penalties for failure to report. Yet another class of incentive-based systems encourages reporting by sharing part of the funds recovered from a report of corporate fraud. In addition to the vast differences between the statutes themselves, there are significant debates about the application of the various laws. Most notably, recent case law interpreting whistleblower protections has brought the field to a state of flux.<sup>3</sup> For example, in a recent decision decried as the “worst whistleblower decision” in five decades,<sup>4</sup> the United States 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.”<sup>5</sup> Other recent cases similarly reveal a deep ambivalence and uncertainty about the role of individuals in resisting illegality in organizations.

The legislative and adjudicative variations in the field of social enforcement -- the act of individual reporting of illegality -- indicate great uncertainty and under-theorizing 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 motivation, 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 2000 employees, the empirical study examines four prototypical legal mechanisms designed to promote individual reporting: 1) Anti-Retaliation 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

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<sup>2</sup> See generally, Orly Lobel, *Citizenship, Organizational Citizenship and the Laws of Overlapping Obligations*, C.L. REV. (forthcoming 2009).

<sup>3</sup> *Id.*

<sup>4</sup> David G. Savage, *Supreme Court Limits Free Speech in Workplace for Public Employees*, SEATTLE TIMES, May 31, 2006, at A1.

<sup>5</sup> *Garcetti v. Ceballos*, 547 U.S. 410, 421 (2006).

surrounding legal regimes as affecting individual behavior. Building on prior studies by the collaborators, the study fills this research gap and argues that motivation to report is multi-dimensional and correlated with the operative legal incentive.<sup>6</sup> 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 whistleblowing incentives and protections have not been grounded in a coherent set of valuations. The experiments at 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 and, the “holier than thou” effect, and gender differences in motivation and action. For policy development, the results suggest that in laws which are likely to trigger strong internal ethical motivation, offering monetary rewards may be unnecessary or, worse yet, counterproductive. In such circumstances in which 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 which regulators can offer, as it neither motivates high levels of reporting nor is it 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 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, policymakers must consider the characteristics of the target population of social enforcers and incentivize them accordingly.

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<sup>6</sup> Yuval Feldman & Orly Lobel, *Decentralized Enforcement in Organizations: An Experimental Approach*, 2 REG. & GOVERNANCE 165, 171-181 (2008) (demonstrating impact of institutional processes on individual decisions about whether to blow whistle on illegality).

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 will behave according to self-interest and will 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 others than male 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 whistleblowing, including anti-retaliation protection, duties to report, liability fines, and monetary incentives. It further introduces the contemporary realities of social enforcement and the importance of incentives in helping whistleblowers 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 whistleblowers and the legal and organizational environment in which they operate.<sup>7</sup> 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 IV provides an overview of the various behavioral theories and empirics on how incentives may 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 V of the paper presents the experimental design and the findings of the study. Part VI 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 policymakers 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 whistleblowers, 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 regulation would be better informed by more

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<sup>7</sup> *Id.*

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 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.<sup>8</sup> 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. 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.<sup>9</sup> In addition to direct work retaliation, reporting often entails psychological and societal costs, including fear, guilt and mistreatment by peers and community.<sup>10</sup> The fears of whistleblowers have been substantiated by recent data showing that external whistleblowers often experience retaliation by their supervisors and are shunned by their social circles.<sup>11</sup> One commentator has described whistleblowing as “professional suicide.”<sup>12</sup>

In the past, popular culture has generally portrayed whistleblowers as “lowlifes who betra[y] a sacred trust largely for personal gain.”<sup>13</sup> At the same time, in recent years the act of whistleblowing has been reshaped in the media as a heroic act that can bring deeply corrupt practices to a halt. In 2002, the whistleblowers of the WorldCom and Enron financial debacles along with the government whistleblower from the FBI were featured on the cover of *Time Magazine* as the “Persons of the Year.”<sup>14</sup> Moreover, whistleblowing has become a focal point in legislative reform as a key means to preventing corporate illegality. In a myriad of contexts, ranging from the prevention of

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<sup>8</sup>On “suffering in silence,” see Brian Barry, *Review Article: “Exit, Voice, and Loyalty,”* 4 BRIT. J. POL. SCI. 79, 97 (1974). 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).

<sup>9</sup>ALAN WESTIN ET. AL, WHISTLEBLOWING (1981).

<sup>10</sup>Marcia P. Miceli & Janet P. Near, BLOWING THE WHISTLE: THE ORGANIZATIONAL & LEGAL IMPLICATIONS FOR COMPANIES AND EMPLOYEES 511-15 (1992); Frank Aneciarico & James B. Jacobs, THE PURSUIT OF ABSOLUTE INTEGRITY: HOW CORRUPTION CONTROL MAKES GOVERNMENT INEFFECTIVE (1996).

<sup>11</sup>Janet P. Near, Terry M. Dworkin & Marcia P. Miceli, *Explaining the Whistle-Blowing Process: Suggestions from Power Theory and Justice Theory*, 4 ORG. SCI. 393-411 (1993); Alan F. Westin, *Introduction*, in WHISTLE-BLOWING! LOYALTY AND DISSENT IN THE CORPORATION (Alan F. Westin ed., 1981).

<sup>12</sup>See Natalie Dandekar, *Contrasting Consequences: Bringing Charges of Sexual Harassment Compared with Other Cases of Whistleblowing*, 9 J. BUS. ETHICS 151 (1990).

<sup>13</sup>Terance Miethe, WHISTLEBLOWING AT WORK: TOUGH CHOICES IN EXPOSING FRAUD, WASTE, AND ABUSE ON THE JOB (1999).

<sup>14</sup>Richard Lacayo & Amanda Ripley, *Persons of the Year 2002*, TIME MAGAZINE, December 30, 2002.

financial misconduct to the prevention of discrimination and pollution, legislators and policymakers attempt to encourage individuals to step forward and report illegal conduct.

Because of its inherent risks, whistleblowing 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.<sup>15</sup> This complexity has led policymakers to use a variety of enforcement and compliance strategies. 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. Some corporations even offer reward systems to their employees for reporting illegalities such as discrimination or harassment. Taken together, this spectrum of regulatory strategies underscores the inherent complexity of this area of law and the 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.<sup>16</sup> This has meant that whistleblowers have become a vital part of any “democratic, free enterprise system.”<sup>17</sup> On the legislative side, there are dozens of separate federal statutes and hundreds of state statutes that contain provisions for whistleblower protection.<sup>18</sup> Some of these statutes are general whistleblowing laws, while others are designed to protect employees who blow the whistle on specific types of alleged misconduct such as environmental pollution, safety and health violations, and financial fraud. 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.<sup>19</sup> Legislators and courts constantly struggle with defining what reporting activities should be protected either constitutionally or by statute.<sup>20</sup> In sum, although the significance of social enforcement and regulatory incentives is striking, there is little knowledge on the comparative advantages of the myriad of 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 anti-retaliation 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.

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<sup>15</sup> Lobel & Feldman, *supra* note 6.

<sup>16</sup> Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342 (2004).

<sup>17</sup> *Winters v. Houston Chronicle Pub. Co.*, 795 S.W.2d 723 (Tex. 1990).

<sup>18</sup> M. Kohn, *Fuzzy Legality in Regulation: The Legislative Mandate Revisited*, 23 L. & POL'Y 469 (2001).

<sup>19</sup> *Id.*

<sup>20</sup> Lobel, *supra* note 2. For examples of how other countries are similarly in the process of rethinking their whistleblower 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, 168 (2005); Elletta Sangrey Callahan, Terry Morehead Dworkin & David Lewis, *Australian, U.K., and U.S. Approaches to Disclosure in the Public Interest*, 44 VA. J. INT'L L. 879 (2004).

### A. Anti-Retaliation Protections

Like many other statutes in the fields of environmental, consumer, and financial regulation, the 2009 Stimulus bill offers traditional anti-retaliation protection: non-federal 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.<sup>21</sup> 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 employer retribution threats persuaded employees to “swallow the whistle.” Consequently, these statutes are designed to provide individuals with broad anti-retaliation measures. In contrast to the whistleblower protections for federal employees, the American Investment and Recovery act explicitly extends protection for disclosures made during the course of an employee’s duties. Important example is found in the 2002 Sarbanes-Oxley Act (SOX), which protects corporate whistleblowers when they report financial misconduct to the SEC or internally within their organization. Hailed by scholars as “the gold standard of whistleblower protection,” 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.<sup>22</sup>

Despite their prominence, existing legal protections for reporting misconduct are largely unsettled and heatedly debated.<sup>23</sup> Anti-retaliation 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 good cause, for no cause, or even for morally wrong cause.”<sup>24</sup> As early as the 1930s, and significantly more since the 1960s and 1970s, legislatures have carved away at this default by enacting laws that grant employees rights against discharge.<sup>25</sup> These federal statutes include anti-retaliation provisions designed to enable employees to claim their rights and report illegal conduct without fear of retribution.<sup>26</sup> These statutes encompass a broad range of regulatory fields, including financial, environmental, consumer, health and safety regulation.<sup>27</sup>

As a parallel development to legislative protections for whistleblowers, courts have also developed the tort of wrongful termination, which allows plaintiffs to overcome

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<sup>21</sup> The American Recovery and Reinvestment Act, Pub. L. No. 111-5 (Enacted 111 H.R.1), § 1553 (2009).

<sup>22</sup> Stephen M. Kohn et al., *WHISTLEBLOWER LAW: A GUIDE TO LEGAL PROTECTIONS FOR CORPORATE EMPLOYEES* (2004).

<sup>23</sup> James P. Kohn, *Fuzzy Legality in Regulation: The Legislative Mandate Revisited*, 23 L. & POL’Y 469, 472 (2001).

<sup>24</sup> *Payne v. Western & Atl. R.R. Co.*, 81 Tenn. 507, 519-20 (Tenn. 1884).

<sup>25</sup> Civil Rights Act of 1964 (Title VII), 42 U.S.C. § 2000e-2(a)(1) (1988); National Labor Relations Act, 29 U.S.C. §§ 151-69 (1935).

<sup>26</sup> *See, e.g.*, Occupational Safety and Health Act, 29 U.S.C. § 660(c) (1988); Polygraph Protection Act of 1988, 29 U.S.C.A. §§ 2001-2009 (1988); Civil Service Reform Act, 5 U.S.C. § 2302(b)(8)(A) (1988) (protecting federal employees from being terminated for blowing the whistle).

<sup>27</sup> Energy Reorganization Act, 42 U.S.C. § 5851(a) (1988) (prohibiting retaliation against whistleblowers); Asbestos School Hazard Detection & Control Act, 20 U.S.C. § 3608 (1988) (prohibiting retaliation against whistleblowers reporting asbestos violations).



the hurdle of at-will employment by claiming they were discharged for engaging in social enforcement in the face of corporate misconduct.<sup>28</sup> Thus, even in a context where there exists no statute that provides anti-retaliation protection, courts have frequently held that individuals cannot be terminated by their employer for reporting legal violations.<sup>29</sup> In fact, retaliation is the fastest growing type of employment law claim.<sup>30</sup> However, courts significantly disagree over the scope of such protections.<sup>31</sup> 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 4-5 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.”<sup>32</sup> At the tort level, courts vary in the extent to which they are willing to extend anti-retaliation protections to different channels of reporting, different types of reported misconducts, and different categories of workers.<sup>33</sup>

#### 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.<sup>34</sup> For the most part, duties to report are limited to either senior corporate officers or to members of certain professions, such as lawyers, accountants, doctors and teachers.<sup>35</sup> 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.<sup>36</sup> These duties and liabilities are an exception to general proposition that the law does not punish omission. Therefore, duties to actively report are imposed in situations where the victim of misconduct is particularly vulnerable or the harm will be widespread.<sup>37</sup> Many of these duties impose criminal liabilities, and, in many states, those

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<sup>28</sup> See, e.g., *Perks v. Firestone Tire & Rubber Co.*, 611 F.2d 1363 (3d Cir. 1979) (employee fired for exercising statutory right not to submit to polygraph test); *Reuther v. Fowler & Williams, Inc.*, 386 A.2d 119, 121-22 (Pa. S. Ct. 1978) (employee fired for performing jury duty).

<sup>29</sup> See, e.g., *Ostrofe v. H.S. Crocker Co.*, 670 F.2d 1378, 1383-84 (9th Cir. 1982), aff'd 740 F.2d 739 (9th Cir. 1984) (upholding claim of wrongful discharge for objecting to employer's violation of Clayton Act, despite lack absence of anti-retaliation clause in order to promote "interests of antitrust enforcement"), cert. denied, 469 U.S. 1200 (1985).

<sup>30</sup> For example, the EEOC reports that retaliation charges for discrimination complaints have doubled in the past decade, now representing almost 30% of all discrimination claims. See *Charge Statistics FY 1997 through FY 2008* (2009) <http://eeoc.gov/stats/charges.html>.

<sup>31</sup> Lobel *supra* note 2.

<sup>32</sup> *Garcetti v. Ceballos*, 547 U.S. 410, 421 (2006).

<sup>33</sup> See generally Lobel, *supra* note 2.

<sup>34</sup> See generally Sandra Guerra Thompson, *The White Collar Police Force: "Duty to Report Statutes in Criminal Law Theory* 11 WM. & MARY BILL RTS. J. 3 (2009) (discussing the duty to report statutes in each of these areas and locating them in criminal law theory).

<sup>35</sup> Karen Boxer & Helaine Gregory, *Compliance is Good for Your Corporate Health*, 1178 PLI/CORP. 387, 418 (2000).

<sup>36</sup> *Williams v. Dallas Indep. Sch. Dist.*, 480 F.3d 689, 690-91 (5th Cir. 2007).

<sup>37</sup> *Supra* note 33, at 37.

required to report may be held civilly liable for their failure to report.<sup>38</sup> The statutes vary in the level of evidence at which the duty is imposed and the channels of reporting required.<sup>39</sup>

In recent legislation following the early twenty-first century financial debacles, a range of affirmative duties were 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.<sup>40</sup> Under these compelled whistleblower 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 and/or its CEO. The appropriate executive officer must then review the evidence and, upon finding any violations, must then assume the duty of correcting the illegality within the company. 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. Attorneys and executives that fail to comply in good faith with these SEC rules may be subject to civil liability for securities fraud.<sup>41</sup> However, by limiting the positive reporting obligations to the highest ranks within the corporation, SOX has narrowed its application to those actors that are most able to bear the potential retaliatory costs, as well as prevent the violations at the earliest stage possible.<sup>42</sup>

Companies that handle environmentally hazardous substances are also subject to strict reporting duties under the provision of the Comprehensive Environment Response, Compensation, and Liability Act (CERCLA).<sup>43</sup> 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 "any person in charge of a vessel or an offshore or an onshore facility" that has knowledge of a hazardous release in excess of the permitted quantities. The supervisor must then immediately notify the National Response Center, which then assumes the remainder of the reporting duties. These reports must ordinarily not exceed fifteen minutes after the person has knowledge of the hazardous release.<sup>44</sup> 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.<sup>45</sup> The EPA has categorized the severity of the violation along a three-tier scale, depending on the total

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<sup>38</sup> *Supra* note 33, at 18.

<sup>39</sup> *Supra* note 33.

<sup>40</sup> 17 C.F.R. 205.3 (2003). *See also* Orly Lobel, *Lawyering Loyalties*, *FORD. L. REV.* (forthcoming 2009). 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. 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." ABA Model Rule 8.3(a).

<sup>41</sup> 17 C.F.R. 205.6 (2003).

<sup>42</sup> Elizabeth C. Tippet, *The Promise of Compelled Whistleblowing: What the Corporate Governance Provisions of the Sarbanes-Oxley Act Mean for Employment Law*, 11 *EMPL. RTS. & EMPLOY. POL'Y J.* 1, 50 (applying the Calabresian theory of torts, which holds that tort liability should be allocated to the cheapest cost avoider).

<sup>43</sup> 42 U.S.C. § 9603 (1996).

<sup>44</sup> Environmental Protection Agency, *Enforcement Response Policy*, at 11 (1999), <http://www.epa.gov/compliance/resources/policies/civil/epcra/epcra304.pdf>.

<sup>45</sup> 42 USCS § 9603(b).

delay in reporting the violation.<sup>46</sup> Courts have broadly extended the scope of the statute to apply equally to corporations and individual officers. 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."<sup>47</sup>

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),<sup>48</sup> 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 suspicious transaction related to a money laundering activity or a violation of the Bank Secrecy Act."<sup>49</sup> 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. Failure to file a SAR may subject individuals at all levels within the institution to supervisory action.<sup>50</sup>

Ironically, in some contexts, a duty to report serves as a reason for not applying anti-retaliation 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 anti-retaliation protections. Two recent cases illuminate this paradox of an affirmative obligation offsetting protections. In *Ruotolo v. City of New York*, the plaintiff was an officer with the NYPD for 20 years that was serving as Command Safety Officer for the 50th Precinct in the Bronx.<sup>51</sup> Pursuant to his duties in this position, Ruotolo drafted a report on possible air

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<sup>46</sup> *Supra* note 43, at 11-12. The lowest penalties should be issued for reports coming within an hour but after the fifteen minute notification period, intermediate penalties should issue 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. 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. This immunity does not extend to civil liability, as self-reporters may still be liable for civil fines or damages to third parties.

<sup>47</sup> *United States v. Northeastern Pharm. & Chemical Co., Inc.*, 810 F.2d 726, 743 (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, *United States v. Mottolo*, 629 F. Supp. 56 (D.N.H. 1984); *United States v. Conservation Chem. Co.*, 619 F. Supp. 162, 187 (W.D. Mo. 1985). Other courts have imposed liability where the officer was in a position to prevent the hazardous conduct. *Michigan v. ARCO Indus. Corp.*, 723 F. Supp. 1214 (W.D. Mich. 1989); *Kelley v. Thomas Solvent Co.*, 727 F. Supp. 1532 (W.D. Mich. 1989).

<sup>48</sup> 31 U.S.C. § 5318 (2004).

<sup>49</sup> 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. 12 C.F.R. 21.11(c)(1)-(3).

<sup>50</sup> 12 C.F.R. 21.11(j).

<sup>51</sup> *Ruotolo v. City of New York*, 2006 U.S. Dist. LEXIS 49903 (S.D.N.Y. July 19, 2006).

and water contamination caused by spills from gasoline storage tanks within the precinct. Shortly after Ruotolo submitted the report to his commanding officer, the precinct's environmental hazards appeared in the local media. Ruotolo then experienced a series of retaliatory and demeaning acts by his superiors. Despite the clear 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. Similarly, in *Casey v. West Las Vegas Independent School District*, 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.<sup>52</sup> 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 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. Thus, at least in the context of public sector whistleblowing, 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 whistleblower activity, several exceptions have emerged that carry the potential to chill potential reporting. For example, in the public employment setting, the federal Whistleblower Protection Act (WPA) has developed a similar "job duty" exception that excludes protection when "a disclosure is made in the ordinary course of to an employee's duties."<sup>53</sup> In other words, under the "job duty" defense, employees who report illegality within the scope of their work duties are not protected from retaliation.<sup>54</sup> For example, in *Huffman v. Office of Personnel Management*, the Federal Circuit held that a law enforcement officer whose duties include the investigation and reporting of crime to his immediate supervisor was "a quintessential example" for exclusion from WPA anti-retaliation protection.<sup>55</sup> Similarly, in *Langer v. Dept of the Treasury*, 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 were to review the actions of the IRS's criminal division.<sup>56</sup>

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<sup>52</sup> *Casey v. W. Las Vegas Indep. Sch. Dist.*, 473 F.3d 1323 (10th Cir. N.M. 2007).

<sup>53</sup> *Willis v. Dep't of Ag.*, 141 F.3d 1139, 1145 (Fed. Cir. 1998); *Horton v. Department of Navy*, 66 F.3d 279, 282 (C.A.Fed.1995), cert. denied, 516 U.S. 1176, 116 S.Ct. 1271, 134 L.Ed.2d 218 (1996); *Maturi v. McLaughlin Research Corp.*, 413 F.3d 166 (1st Cir. 2005) (False Claims Act); *Sasse v. U.S. DOL*, 409 F.3d 773 (6th Cir. 2005) ("Sasse's investigation and prosecution of environmental crimes were not protected activities because he has a duty, as an Assistant United States Attorney, to perform them.") *Kodrea v. City of Kokomo, Indiana*, 2006 WL 1750071 (S.D. Ind., June 22, 2006); *Gilder-Lucas v. Elmore County Board of Education*, 2006 U.S. App. LEXIS 16167 (11th Cir., June 26, 2006).

<sup>54</sup> *Erickson v. City of Orr*, 2005 WL 27773915 (Minn. App. 2005) ("job duty" defense inquiry); *Marano v. Dept. of Justice*, 2 F.3d 1137 (Fed. Cir. 1993) ("job duties" rationale rejected); *McGinn v. Pa. Rival Water Authority*, 2005 WL 373720 (Pa. Comm. Pl. 2005) (unpublished) ("job duties" defense inapplicable).

<sup>55</sup> *Huffman v. Office of Pers. Mgmt.*, 263 F.3d 1341, 1352 (Fed. Cir. 2001)

<sup>56</sup> *Langer v. Dep't of the Treasury*, 265 F.3d 1259, 1267 (Fed. Cir. 2001).

### 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 anti-retaliation 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.<sup>57</sup> The primary example of such programs is the *qui tam* process under the False Claims Act (FCA).<sup>58</sup> *Qui tam* claims encourage reporting of fraudulent government contractor claims by providing informants with a percentage of the recovery. Employees who file a *qui tam* suit on behalf of the government are compensated by up to thirty percent of the recovery in a successful suit.

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.<sup>59</sup> 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 2006<sup>60</sup> to significantly increase the financial rewards paid to informants in high value cases and create a separate Whistleblower Office within the IRS.<sup>61</sup> These amendments responded to many of the uncertainties that have surrounded the IRS informant process. Since the enactment of the bounty program in 1987, the IRS has been highly conservative in providing rewards to informants – rewarding only about 8 percent of informants<sup>62</sup> and returning only 3 to 6 percent of the total recoveries.<sup>63</sup> In contrast to the previous program, where the Secretary maintained full discretion over the amount issued for all successful recoveries, the 2006 amendment provided an alternative mandatory reward program for actions where “the tax, penalties, interest, additions to tax, and additional amount in dispute (including taxes, penalties and interest) exceeds \$ 2,000,000.” 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.” Claims that fall below this threshold are still subject to discretionary review and maximum reward caps, which generally do not exceed fifteen percent. 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 percent of the collected proceeds. 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. The provision further

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<sup>57</sup> Lobel, *supra* note 2.

<sup>58</sup> 31 USCS § 3750

<sup>59</sup> 26 U.S.C. § 7623(b) (2006).

<sup>60</sup> 109 Pub.L. No. 432, § 406 (2006).

<sup>61</sup> *History of the Whistleblower/Informant Program* (2008),

<http://www.irs.gov/compliance/article/0,,id=181294,00.html>.

<sup>62</sup> Tom Herman, *Whistleblower Law Scores Early Success, Higher Rewards Attract Informants Submitting Tips*, WALL ST. J., May 16, 2007, at D3.

<sup>63</sup> See 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 (1999).

ensured whistleblower rewards by permitting informants to appeal the amount or denial of a reward in the United States Tax Court.<sup>64</sup>

Although the 2006 amendments did provide further incentives and certainty for potential whistleblowers, Congress nonetheless limited their application to a small set of high value cases. Perhaps unsurprisingly, considering the little knowledge which 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. In 2007 the House introduced legislation to reduce the threshold amount from \$2,000,000 to \$20,000, but the amendment was not enacted.<sup>65</sup> Stephen Whitlock, Director of the IRS Whistle-Blower 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 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.”<sup>66</sup> 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 pre-amendment days. Many pre-amendment cases were much smaller issues.”<sup>67</sup> 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 and allow more “weak claims and vindictive cases among neighbors.”<sup>68</sup>

Another such system is the SEC's bounty program, though the primary utility of this program has come from its ability to reveal the unsuccessful and unappealing features of would-be reward systems.<sup>69</sup> Enacted under the Insider Trading and Securities Fraud Act of 1988, this program was designed to draw upon the IRS model to increase successful prosecutions against inside traders. However, by all measures, the program has failed to make any significant contribution towards this end. In fact, in the decade following its enactment, it is estimated that only a single bounty was paid out to an informant.<sup>70</sup> Considering the relative success of its FCA and IRS counterpart, there appear to be several explanations for the complete failure of the SEC program. With

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<sup>64</sup> *General Explanation of the Tax Legislation Enacted in the 109<sup>th</sup> Congress: Prepared by the Staff of the Joint Committee on Taxation* 109<sup>th</sup> Cong., 744-45 (2007).

<sup>65</sup> See 2007 H.R. 1591, § 543(a) (1st Sess. 2007).

<sup>66</sup> Jeremiah Coder, *Tax Analysts Exclusive: Conversations: Stephen Whitlock*, 116 TAX NOTES 98 (citing Stephen Joyce, *IRS Working on Whistleblower Office Rules: Issues Include Confidentiality, Reward Process*, DAILY TAX REP. (BNA), May 15, 2007, at G-2).

<sup>67</sup> See Erika A. Kelton, *To Catch a Tax Cheat*, N.Y. TIMES, August 7, 2008 (detailing the success of the IRS whistleblower program for recovery in large cases and citing similar examples in international tax whistleblower programs, including Germany and Britain).

<sup>68</sup> See Dennis J. Ventry, Jr., *Whistleblowers and Qui Tam for Tax*, 61 TAX LAW 357 (2008).

<sup>69</sup> 15 U.S.C. § 78(u-1) (1988).

<sup>70</sup> Ferziger & Currell, *supra* note 67, at 1144.

regard to the total bounty compensation, the SEC's 10% cap falls considerably behind the 15–30% available under the FCA and updated IRS plan, thereby eliminating a large class of externally motivated informants.<sup>71</sup> 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 share of any settlements.<sup>72</sup> Furthermore, the SEC rewards are entirely discretionary and not subject to judicial review. In other words, even in the event of a successful prosecution, SEC informants are not guaranteed any proportion of the recovery.<sup>73</sup>

Although the success of these bounty programs has led states to enact mini-FCAs, 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.<sup>74</sup> 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. 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.”<sup>75</sup> 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 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.<sup>76</sup> 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, “congressional 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

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<sup>71</sup> 109 Pub.L. No. 432, § 406 (2006). Under the 2006 IRS changes, this 15 – 30% range applies only to recoveries over \$2 million.

<sup>72</sup> 31 U.S.C. § 3730(d)(1994).

<sup>73</sup> Still, given that the IRS program also shares this 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, *Whistleblower Informant Award* (2008), <http://www.irs.gov/compliance/article/0,,id=180171,00.html>.

<sup>74</sup> *Rockwell Int'l Corp. v. United States*, 549 U.S. 457 (2007).

<sup>75</sup> *Id.*

<sup>76</sup> 31 U.S.C. § 3730(h)(1994).

adoption.”<sup>77</sup> 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.”<sup>78</sup> Bringing together the various developments in incentivizing social enforcement, the study of whistleblowing 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.<sup>79</sup> 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.<sup>80</sup>

### 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. These studies have yielded important findings yet have been largely detached from real-world context.<sup>81</sup> 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.<sup>82</sup> Moreover, although the contribution of behavioral studies has been highly significant, lab-based models have largely lacked social or organizational context.<sup>83</sup> This has in turn limited their potential to

<sup>77</sup> Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance*, 114 YALE L. J. 1521, 1528 (2005).

<sup>78</sup> *Id.*

<sup>79</sup> Marcia P. Miceli & Janet P. Near, BLOWING THE WHISTLE: THE ORGANIZATIONAL & LEGAL IMPLICATIONS FOR COMPANIES AND EMPLOYEES 511-15 (1992).

<sup>80</sup> 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*, J. LAW SOC’Y (forthcoming 2009); M. P. Miceli & J. P. Near, *Standing Up or Standing By: What Predicts Blowing the Whistle on Organizational Wrongdoing*, in RESEARCH IN PERSONNEL AND HUMAN RESOURCES MANAGEMENT, Vol. 24, 95-136 (Joseph Martocchio, ed. 2005).

<sup>81</sup> See, e.g., Gary E. Bolton & Alex Ockenfels, *ERC: A Theory of Equity, Reciprocity, and Competition*, 90 AM. ECON. REV. 166 (2000); Y. Kroll, & L. Davidowitz, *Inequality Aversion Versus Risk Aversion*, 70 ECONOMICA 19 (2003); Ernst Fehr & Simon Gächter, *Cooperation and Punishment in Public Goods Experiments*, 90 AM. ECON. REV. 980 (2000).; Michael E. Price et al., *Punitive Sentiment as an Anti-Free Rider Psychological Device*, 23 EVOLUTION & HUM. BEHAV. 203, 231 (2002); Jeffery J. Carpenter & P. H. Matthews, *Why Punish? Social Reciprocity and the Enforcement of Pro-Social Norms*, 14 J. OF EVOLUTIONARY ECON. 407 (2004); Ernst Fehr & Simon Gächter, *Altruistic Punishment in Humans*, 415 Nature 137, 140 (2002); E. Fehr & U. Fischbacher, *Third Party Punishment and Social Norms*, 25 EVOLUTION & HUM. BEHAV. 63-87 (2004); D. Hirshleifer & E. Rasmusen, *Cooperation in the Repeated Prisoner’s Dilemma with Ostracism*, 12 J. OF ECON. BEHAV. AND ORG. 87 (1989).

<sup>82</sup> See Thomas S. Bateman & J. Michael Crant, *Revisiting Intrinsic and Extrinsic Motivation* (2000) [http://www.commerce.virginia.edu/faculty\\_research/research/papers/imobhdp24.pdf](http://www.commerce.virginia.edu/faculty_research/research/papers/imobhdp24.pdf) (counting thousands of studies on the topic).

<sup>83</sup> See generally Feldman & Lobel, *supra* note 6.



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 by those witnessing wrongdoing -- primarily self-interest and moral outrage - 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 anti-retaliation 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 whistleblowing? 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 socio-legal studies rejects the idea that employee behavior within organizations is “reducible to individuals and their characteristics.”<sup>84</sup> It further rejects the idea that institutions are simply the object of regulation. Instead, the lens of new governance theory is a systemic mapping of the range of possibilities in the interaction between regulation and regulated parties.<sup>85</sup> 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. 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, socio-legal research is introducing evidence that procedures and incentives can induce illegal conduct by limited oversight or, alternately, promote ethical behavior by emphasizing social responsibility.<sup>86</sup> Behavior is shaped not simply by isolated decisions of individuals but also by the institutional and legal environment.<sup>87</sup> 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.”<sup>88</sup> For example, studies show that organizations which constantly pressure their employees to meet unreasonable expectations can lead employees to resort to illegal means to achieve these goals.<sup>89</sup> Similarly, recent studies point to counterproductive effects of regulation, as when the regulatory action is perceived as illegitimate and creates resistance within private actors.<sup>90</sup>

<sup>84</sup> Robert Tillman & Henry N. Pontell, *Organizations and Fraud in the Savings and Loan Industry*, 73 SOC. FORCES 1439-63 (1994).

<sup>85</sup> Lester M. Salamon, THE TOOLS OF GOVERNMENT: A GUIDE TO THE NEW GOVERNANCE 1-14 (2002).

<sup>86</sup> John Braithwaite, CRIME, SHAME AND REINTEGRATION (1989).

<sup>87</sup> On Amir & Orly Lobel, *Stumble, Predict, Nudge: How Behavioral Economics Informs Law and Policy* 108 COLUMBIA LAW REVIEW 2098 (2008); Diane Vaughan, *Toward Understanding Unlawful Organizational Behavior*, 80 MICH. L. REV. 1377 (1982); Irving L. Janis, GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS AND FIASCOES (1982)

<sup>88</sup> Diane Vaughan, *The Dark Side of Organizations: Mistake, Misconduct, and Disaster*, 25 ANN. REV. SOC. 271 (1999).

<sup>89</sup> Marshall B. Clinard, CORPORATE ETHICS AND CRIME (1983); See also Tom Tyler, WHY PEOPLE OBEY THE LAW (1989)

<sup>90</sup> Orly Lobel, *Interlocking Regulatory and Industrial Relations: The Governance of Workplace Safety*, 57

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 which 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,<sup>91</sup> we measured enforcement behaviors by manipulating common misconducts in five different domains: financial, environmental, sexual harassment, safety, and employee theft. We found that individual characteristics such as gender, income, and cultural differences have strong effects on the willingness of employees to engage in social enforcement. These findings demonstrate the variation in the role of intrinsic and extrinsic motivation with regard to each of those misconducts. 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. 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 to ensure that the incentives offered by policymakers 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 policymakers.

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 paper 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

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ADMIN. L. REV. 1071 (2005); Orly Lobel, *The Four Pillars of Work Law*, 104 MICH. L. REV. 1539, 1557 (2006).

<sup>91</sup> Feldman & Lobel, *supra* note 6

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.<sup>92</sup> In such cases, it is reasonable to assume that anti-retaliation 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 whistleblower in a given situation. Nonetheless, the goal of policy is complicated by the fact that increased enforcement can be counter-productive.<sup>93</sup> For example, over-protection 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, prior studies indicate that women are more likely to report misconduct because of their status as organizational outsiders.<sup>94</sup> It has been suggested that women's shorter and more intermittent work histories may lead them to feel less organizational loyalty.<sup>95</sup> 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.<sup>96</sup> Others show that the majority of whistleblowers are white males in part due to their higher esteem and higher positions within corporations.<sup>97</sup> Further, one study found that women whistleblowers suffer more retaliation than men.<sup>98</sup> Our own previous experiments reveal that women are more likely to report wrongdoing to law enforcement authorities.<sup>99</sup> 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 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

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<sup>92</sup> Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342 (2004).

<sup>93</sup> *Id.*; Lobel (2005), *supra* note 94.

<sup>94</sup> Cindy Schiapani & Terry Dworkin, *Women and the New Corporate Governance: Pathways for Obtaining Positions of Corporate Leadership*, 65 Md. L. Rev. 504 (2006).

<sup>95</sup> Patricia A. Gwartney-Gibbs & Denise H. Lach, *Gender and Workplace Dispute Resolution: A Conceptual and Theoretical Model*, 28 LAW & SOC'Y REV. 265 (1994).

<sup>96</sup> Mary Brabeck, *Ethical Characteristics of Whistle Blowers*, 18 J. RES. PERSONALITY 41 (1984); Terance D. Miethe & Joyce Rothschild, *Whistleblowing and the Control of Organization Misconduct*, 64 SOC. INQUIRY 322 (1994).

<sup>97</sup> Philip Jos et al., *In Praise of Difficult People: A Portrait of the Committed Whistleblower*, 49 PUB. ADMIN. REV. 552 (1989).

<sup>98</sup> Michael T. Rehg et al., *PREDICTORS OF RETALIATION* (2005).

<sup>99</sup> Feldman & Lobel, *supra* note 6.

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.<sup>100</sup> 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 to “intrinsic” or “extrinsic.”<sup>101</sup> Extrinsic motivation is linked to actions that are driven by external commands or rewards, such as payments. Conversely, intrinsic motivation is when the behavior is chosen from within the individual out of a sense of moral or civic duty.<sup>102</sup> There is an ongoing heated debate in the behavioral economics literature about the relationship between the intrinsic and extrinsic aspects of motivation. While some view extrinsic rewards as undermining intrinsic motivation, others find that the two mechanisms can be reinforcing.<sup>103</sup> Most generally, the crowding out 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. As applied to the regulatory incentives, crowding out theory predicts that external incentives that utilize monetary rewards or punishments may undermine intrinsic motivations.<sup>104</sup> 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.<sup>105</sup> In a series of lab based experiments, Deci found that tangible rewards

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<sup>100</sup> *Id.*

<sup>101</sup> J.M. Harackiewicz & C. 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* 82-103 (Sansone & Harackiewicz, eds. 2000); E.L. Deci and R.M. Ryan, *The “What” and the “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior*, 11 *PSYCHOL. INQUIRY* 227-268 (2000).

<sup>102</sup> Deci, E.L., R. Koestner & R.M. Ryan, *A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation*, 125 *PSYCHOL. BULL.* 627 (1999); T. Kasser & R.M. Ryan, *Further Examining the American Dream: Differential Correlates of Intrinsic and Extrinsic Goals*, 22 *Personality and Social Psychology Bulletin* 280-287 (1996).

<sup>103</sup> One of the early studies on the subject is Deci, E.L., *Effects of externally mediated rewards on intrinsic motivation*, 18 *J. OF PERSONALITY & SOC. PSYCHOL.* 105 (1971). Since then, the debate continues to today. See Thomas S. Bateman & J. Michael Crant, *Revisiting Intrinsic and Extrinsic Motivation* (2003) (working paper) [http://www.commerce.virginia.edu/faculty\\_research/Research/Papers/IMOBHDP24.pdf](http://www.commerce.virginia.edu/faculty_research/Research/Papers/IMOBHDP24.pdf).

<sup>104</sup> See, e.g., Ernst Fehr & Simon Gächter, *Do Incentive Contracts Undermine Voluntary Cooperation?* Univ. of Zürich, Inst. for Empirical Research in Econ., Working Paper No. 34 (2002); Ernst Fehr & Armin Falk, *Psychological Foundations of Incentives*, 46 *EUR. ECON. REV.* 687, 724 (2002); Ernst Fehr & Bettina Rockenbach, *Detrimental Effects of Sanctions on Human Altruism*, 422 *NATURE* 137 (2003). For a general review see Bruno S. Frey, *Not Just for the Money: An Economic Theory of Personal Motivation* (1997); George A. Akerlof, *Labor Contracts as Partial Gift Exchange*, 97 *Q.J. ECON.* 543, 569 (1982); Bruno S. Frey & Reto Jegen, *Motivation Crowding Theory: A Survey of Empirical Evidence* Ctr. for Econ. Studies & Info Inst. for Econ. Research, Working Paper No. 245 (2000) <http://ssrn.com/abstract=203330>.

<sup>105</sup> Richard M. Titmus, *THE GIFT OF RELATIONSHIP: FROM HUMAN BLOOD TO SOCIAL POLICY* (1971) (arguing that monetary payments to givers of blood could diminish the amount of blood given voluntarily).

undermine intrinsic motivation for a range of activities.<sup>106</sup> Deci, Koestner, and Ryan have argued in their research that “tangible rewards tend to have a substantially negative effect on intrinsic motivation.”<sup>107</sup> They thus warn that attempts to externally control people’s behavior may yield considerable long-term counterproductive results. Such findings have led some organizational theorists to strongly advise against the use of extrinsic rewards when trying to achieve behavior.<sup>108</sup>

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.<sup>109</sup> 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.<sup>110</sup> Similarly, Frey and Stutzer have argued that tradable emission rights and emission taxes could create a different crowding out effect, bringing about different behavior.<sup>111</sup> 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. This idea has found some empirical support in studies showing that in some instances rewards can in fact increase perceived self-determination.<sup>112</sup>

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 described above focuses on work behaviors.<sup>113</sup> In the context of incentives mechanism, it

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<sup>106</sup> Edward L. Deci, *A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation*, 125 PSYCHOL. BULL. 627, 699 (1999) (providing a meta-analysis and arguing that “it is finally clear that the ‘accepted reality’ of the undermining effect is in fact a reality after all”).

<sup>107</sup> *Id.*, at 658-659.

<sup>108</sup> Alfi Kohn, *By All Available Means: Cameron and Pierce’s Defense of Extrinsic Motivators*, 66 *Rev. of Educ. Res.* 1 (1996).

<sup>109</sup> Fehr & Gächter, *supra* note 108.

<sup>110</sup> Bruno S. Frey & Alois Stutzer, *Environmental Moral and Motivation*, Univ. of Zurich, Inst. for Empirical Research in Econ., No. 14-16 (2006).

<sup>111</sup> Robert Eisenberger & Judy Cameron, *Detrimental Effects of Reward: Reality or Myth?*, 51 *AM. PSYCHOLOGIST* 1153 (1996); Eisenberger et al., *supra* note 112.

<sup>112</sup> *Id.*, at 658-659.

<sup>113</sup> Alfi Kohn, *By All Available Means: Cameron and Pierce’s Defense of Extrinsic Motivators*, 66 *Rev. of Educ. Res.* 1 (1996).

<sup>114</sup> Fehr & Gächter, *supra* note 108.

<sup>115</sup> Bruno S. Frey & Alois Stutzer, *Environmental Moral and Motivation*, Univ. of Zurich, Inst. for Empirical Research in Econ., No. 14-16 (2006).

<sup>116</sup> Robert Eisenberger & Judy Cameron, *Detrimental Effects of Reward: Reality or Myth?*, 51 *AM. PSYCHOLOGIST* 1153 (1996); Eisenberger et al., *supra* note 112.

<sup>117</sup> Judith L. Komaki, Robert L. Collins, and Pat Penn, *The role of performance antecedents and consequences in work motivation*, 67 *J APPLIED PSYCH.* 334 (1982).

seems reasonable to expect that anti-retaliation measures will have a more limited negative effect on the role of internal motivation than monetary incentives.<sup>114</sup> 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.<sup>115</sup>

### C. The Framing of Legal Dollars

The potential effect of introducing monetary rewards depends not only on its interaction with internal motivation, but also with regard to the conditions which are set to trigger its effect. In that regard, there is a growing body of studies both in social psychology and in behavioral economics which indicate that people respond more strongly to incentives than penalties.<sup>116</sup> Bateman and Crant explain that “receiving 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.”<sup>117</sup> Gneezy and Rustichini used an experimental setting to explore whether fines may actually be interpreted as placing price tags on certain misconduct.<sup>118</sup> In their study they imposed a monetary fine on parents who were late picking up their child from a day-care center. After the introduction of the fine, they observed a steady *increase* in the number of parents coming in late.<sup>119</sup> Again, this result runs contrary to traditional deterrence models that predict that increasing the cost of an activity will necessarily decrease the rate at which it is performed. 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. 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.<sup>120</sup> Second, the fine may have revealed information to parents regarding the expected sanction for tardiness. 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.<sup>121</sup> As applied to the context of regulatory compliance then, it

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<sup>114</sup> Bruno S. Frey, *NOT JUST FOR THE MONEY: AN ECONOMIC THEORY OF PERSONAL MOTIVATION* (1997).

<sup>115</sup> Bruno S. Frey and Alois Stutzer, ‘Environmental Morale and Motivation’ (2006) *IERE Working Paper No.* 288.

<sup>116</sup> Raymond De Young, *Changing Behavior and Making It Stick*, 25 *ENV’T AND BEHAV.* 485, 498 (1993).

<sup>117</sup> Thomas S. Bateman & Michael J. Crant, *Revisiting Intrinsic and Extrinsic Motivation* (2003) (working paper) [http://www.commerce.virginia.edu/faculty\\_research/Research/Papers/IMOBHDP24.pdf](http://www.commerce.virginia.edu/faculty_research/Research/Papers/IMOBHDP24.pdf).

<sup>118</sup> Uri Gneezy & Aldo Rustichini, *A Fine is a Price*, 29 *J. LEG. STUD.* 1 (2000).

<sup>119</sup> *Id.* at 5-8.

<sup>120</sup> *Id.* at 13-15.

<sup>121</sup> *Id.* at 10-13.

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 policymakers to more effectively apply their limited resources towards ensuring that the proper incentives are in place to encourage the external reporting of organizational illegality.<sup>122</sup> 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 whistleblowing, which may also serve as facilitators or impediments of social enforcement. To account for the social impact for the law, we now turn to the expressive law literature.

#### 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. Beyond simple calculative effects, individuals respond to the expressive signals embodied within our legal system.<sup>123</sup> For traditional economists, the starting point of predicting behavior is the belief that individuals respond to rewards and sanctions. According to this traditional view, individuals will report non-compliance if the benefits from legal rewards, or the costs of legal liability, exceed the costs of reporting.<sup>124</sup> However, social scientists increasingly recognize that the motivation for compliance, as well as reporting non-compliance, frequently defies a simplistic cost-benefit analysis.<sup>125</sup> Instead, people appear to evaluate

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<sup>122</sup> 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. 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.

<sup>123</sup> Richard H. Pildes & Elizabeth S. Anderson, *Slingshot Arrows at Democracy: Social Choice Theory, Value Pluralism, and Democratic Politics*, 90 COLUM. L. REV. 2121 (1990); Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503 (2000); Matthew D. Adler, *Expressive Theories of Law: A Skeptical Overview*, 148 U. PA. L. REV. 1363 (2000); Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. PA. L. REV. 2021 (1996); Dan M. Kahan, *What Do Alternative Sanctions Mean?*, 63 U. CHI L. REV. 591 (1996). For a critical view, see Matthew D. Adler, *Expressive Theories of Law: A Skeptical Overview*, 148 U. PA. L. REV. 1363 (2000). For empirical studies of the expressive function of the law, see Iris Bohnet & Robert D. Cooter, *Experimental Analysis of Expressive Law and Economics*, (2000) (Working Paper, UC Berkeley); 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 an empirical evaluation of the different models in the context of trade secrets laws, see Yuval Feldman, *The Expressive Function of Trade Secrets Laws, Legality, Cost, Intrinsic Motivation and Consensus*, J. OF EMPIRICAL LEGAL STUD. (forthcoming 2009)

<sup>124</sup> 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. ECONOMY 169 (1968).

<sup>125</sup> Lawrence M. Friedman, *Coming of Age: Law and Society Enters an Exclusive Club*, 1 ANN. REV. L. SOC. SCI. 1 (2005).

legal compliance under a more nuanced cost-benefit scale that includes elements that are foreign to pure economic analyses: duty and legitimacy.<sup>126</sup>

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.<sup>127</sup> Expressivists argue that moral and legal evaluation and conduct depend on normative expressions embedded in the law. 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.<sup>128</sup> In this sense, the law solves a pluralistic ignorance problem by signaling the underlying attitudes of a community or society.

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. 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.<sup>129</sup> The need to belong is widely recognized as a motivation that countervails immediate self interest.<sup>130</sup> McAdams and Nadler contend that law can induce compliance by making a particular behavior salient.<sup>131</sup> 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 whistleblowing 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, gives them a particular significance in the context of whistleblowing. Social attitudes

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<sup>126</sup> 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 (2008); Michael Wenzel, *The Impact of Outcome Orientation and Justice Concerns on Tax Compliance: The Role of Taxpayers' Identity*, 87 J. OF APPLIED PSYCHOL. 629 (2002); Murphy, Kristina Murphy, *Regulating More Effectively: The Relationship Between Procedural Justice, Legitimacy, and Tax Non-Compliance*, 32 J. OF L. & SOC. 562 (2005); James L. Gibson, *The Legitimacy of the U.S. Supreme Court in a Polarized Polity*, 4 J. EMPIRICAL LEGAL STUD. 507 (2007). For an empirical demonstration of the limits of traditional economic models in the context of legal compliance, see Yuval Feldman and Doron Teichman, *Are all Legal Probabilities Created Equal?*, N.Y.U. L. REV. (forthcoming 2009).

<sup>127</sup> For an empirical demonstration of this point, see 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).

<sup>128</sup> Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339 (2000); Richard H. McAdams, *The Expressive Power of Adjudication*, 2005 U. ILL. L. REV. 1043 (2005); McAdams & Nadler, *supra* note 132.

<sup>129</sup> Roy F. Baumeister & Mark R. Leary, *The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation*, 117 PSYCHOL. BULL. 497.

<sup>130</sup> Marilynn B. Brewer & Roderick M. Kramer, *The Psychology of Intergroup Attitudes and Behavior*, 36 ANN. REV. PSYCHOL. 219 (1985).

<sup>131</sup> Richard H. McAdams & Janice Nadler, *Testing the Focal Point Theory of Legal Compliance: The Effect of Third-Party Expression in an Experimental Hawk/Dove Game*, 2 J. EMPIRICAL LEGAL STUD. 87 (2005) (presenting results of empirical study supporting claim that third-party legal expression influences behavior by creating focal point around which individuals coordinate);.



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 psychologists Nick Epley and David Dunning found that most people view themselves as morally superior to the average person.<sup>132</sup> They found that people show a “holier than thou” effect in which they perceive themselves as being fairer, more altruistic and more self-sacrificing. 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. In their experiment, participants were asked to predict what they and others would do in certain circumstances. In most cases, participants predicted they would do the right thing a lot more often than their peers. Later, they compared findings of what participants would do in real life circumstances. They found that individuals overestimated their own moral character but were quite accurate when it came to predicting how others would behave. However, Epley and Dunning’s study examined moral behavior such as giving to charity and civic voting, and thus did not involve regulatory contexts.<sup>133</sup> Our experiment is the first to inquire into such comparisons in the context of reporting illegal misconduct.

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<sup>132</sup> 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). 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. Among the 250 students who participated in the experiment, over 80 percent said they would buy a flower but they predicted that only half their peers would be as generous. After the actual charity drive took place, the study found that only 43 percent 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. As for the students’ estimation of voting behaviors, students similarly overestimated their civic responsibility, with 84 percent of them predicting their own participation, but expected an overall participation of 67 percent. Again, the actual rates among the group turned out to be very close to the predictions about peer participation 68 percent of the students actually voted.

<sup>133</sup> For a formal analysis 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* (Forthcoming Review of Law & Economics, 2009) . See also, 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(1999) (surveying studies showing that people overestimate their abilities); see also Epley & Dunning, *supra* note 138); Michael McCall & Katherine Natrass, *Carding for the Purchase of Alcohol: I'm Tougher than the Other Clerks Are!*, 31 J. APPLIED SOC. PSYCHOL. 2184 (2001); Justin Kruger, *Lake Wobegon Be Gone! The "Below-Average Effect" and the Egocentric Nature of Comparative Ability Judgments*, 77 J. PERSONALITY & SOC. PSYCHOL. 221 (1999) (“most of us appear 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”); Chip Heath, *On the Social Psychology of Agency Relationships: Lay Theories of Motivation Overemphasize Extrinsic Incentives*, 78 ORG. BEHAV. & HUM. DECISION PROCESSES 25 (1999) (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); Dale T. Miller & Rebecca K. Ratner, *The Disparity Between the Actual and Assumed Power of Self-Interest*, 74 J. PERSONALITY & SOC. PSYCHOL. 53 (1998); Dale T. Miller & Rebecca K. Ratner, *The Power of the Myth of Self-Interest*, in, CURRENT SOCIETAL ISSUES IN JUSTICE (Leo Montada & Melvin J. Lerner eds., 1996) (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).

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 whistleblowers 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 on the current study will be on the four main mechanisms described above: anti-retaliation 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. By comparing their efficacy<sup>134</sup> in one setting, combined with data on relevant organizational and demographic characteristics, we hope to offer a comprehensive policy analysis.

## **VI. Intermediate Summary**

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<sup>135</sup> dilutes the moral dimension of the act.<sup>136</sup> This dilemma demonstrates the importance of identifying ex-ante what motivates the prospective whistleblower in a given situation. Nonetheless, the goal of policy is complicated by the fact that increased enforcement can be counter-productive.<sup>137</sup> For example, over-protection 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.

The findings of our study, described in the next sections, shed light on such issues of the interplay between identity and individual reactions to various regulatory mechanisms. The challenge for policymakers is not simply to increase social enforcement, but also ensure that the incentives are of the right magnitude in any given regulatory field.

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<sup>134</sup> As will be explained in the following section, the four mechanisms were tested in a few combinations, making it into eight experimental conditions.

<sup>135</sup> But not necessarily anti retaliation measures.

<sup>136</sup> Lobel, *supra* note 15.

<sup>137</sup> *Id.* ; Lobel, *supra* note 94.

## VII. The Experiment

### A. Design and Sample

#### *1. Experimental Design*

The experimental survey consists of eight different questionnaires randomly assigned to eight sub-groups. While each 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, reward. Given that with regard to rewards, there is a variation in their level, across the different bounty programs we have manipulated also the size of the reward. In addition, in the context of duty, its combination with the other mechanisms was tested, resulting in the following eight categories of incentives:<sup>138</sup>

1. High Reward (\$1,000,000)
2. Low Reward (\$1,000)
3. Duty + High Reward
4. Duty + Low Reward
5. Anti-Retaliation Protection (1 year)
6. Duty + Anti Retaliation 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:<sup>139</sup>

- 1) Intention of self and others to report

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<sup>138</sup> The vignettes used for manipulating the eight conditions are accumulated in Appendix II.

<sup>139</sup> In addition, we have measured an elaborated demographic profile.

- 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

## 2. *The Sample*

The data collection was web-based, using the survey firm Zoomerang. Zoomerang holds a panel of 3 million volunteers who earn credits towards online rewards in return for filling a survey. 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 2081 participants of our survey consisted of a representative panel based on census demographics in the United States.<sup>140</sup>

## B. Findings

The findings of the study are presented in three consecutive 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 about 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.<sup>141</sup> The type of legal

<sup>140</sup> Participants were 2081 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, agriculture), 52% in the public sector, 54% in companies with 100 or more employees and 76% reporting the work place is 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.

<sup>141</sup> To test whether the perceived likelihood of actions taken 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 mechanism 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 paper, the statistical tables were moved to Appendix I. N

mechanism described in the scenario was entered as an independent variable and the actions taken towards the company were entered as the dependent variables.<sup>142</sup> The findings indicate significant differences among the legal mechanisms.<sup>143</sup>

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<sup>144</sup>.

In line with the familiarity bias, peers were also predicted to report at the highest levels in the *Duty + High Reward* condition<sup>145</sup> (see Figure 1).

By contrast, participants predicted that most people would take action in the highest levels when there were high rewards, thus revealing a perception that strangers' decision to report is more likely to be externally-driven<sup>146</sup>.

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 others would report the company's misconduct.<sup>147</sup>

The findings reveal that individuals predict higher reporting action by themselves than by their peers and others. Using a two-way MANCOVA test,<sup>148</sup> we find that respondents predicted that they themselves would be more likely to report<sup>149</sup> than their peers,<sup>150</sup> and that their workplace peers<sup>151</sup> would be more likely to report than most other people.<sup>152</sup> 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 mechanism did not have

<sup>142</sup> 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*).

<sup>143</sup> Multivariate  $F(21,5445)=4.73$ ,  $p<.001$ ,  $\eta^2=.02$ .

<sup>144</sup> In addition, participants in the *Duty+Fine group* were more likely than *low Award* to take **self action** against the company in comparison to low reward condition.

<sup>145</sup> *Duty+ High Award* graded higher than *Duty* the likelihood that **most employees** at the participant's workplace would report on the employer

<sup>146</sup> *High Award* was the highest, followed by *Duty+ High Award* both graded higher than all the other subgroups the likelihood that **most people** would take action against the company

<sup>147</sup>  $F(7,1898)=9.96$ ,  $p<.001$ ,  $\eta^2=.03$ .

<sup>148</sup> 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 of one of the participants when controlling for the other factors that differentiated the participants.

<sup>149</sup> (M=8.41, SD=2.16),

<sup>150</sup> (M=8.41, SD=2.16),

<sup>151</sup> (M=6.34, SD=2.73)

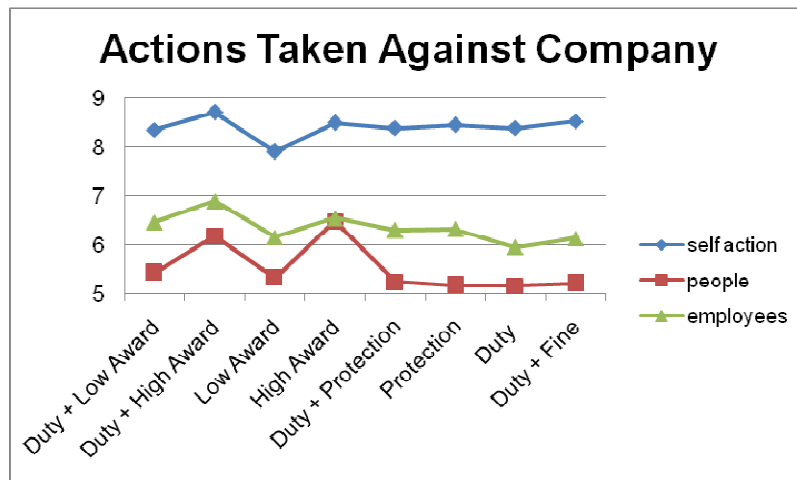
<sup>152</sup> (M=5.52, SD=2.58,  $F(2,1897)=49.75$ ,  $p<.001$ ,  $\eta^2=.03$ )

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*.<sup>153</sup> 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,<sup>154</sup> 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.<sup>155</sup> 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.<sup>156</sup> Importantly, according to previous “holier than thou” studies, and supported by other behavioral findings of our study discussed below concerning the gap between action/perception, participants' estimation of the reward-driven behavior of others may be more accurate than the estimation of their own expected behavior.

Figure 1: The Relative Ranking of Reporting by Self, Peers and General Population<sup>157</sup>



<sup>153</sup> This gap was expected according to the “holier than thou” phenomenon discussed *supra* note 138.

<sup>154</sup> Which consists of the people whom they know the least, in comparison to their co-workers.

<sup>155</sup> See 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).

<sup>156</sup> Find cites. NEED CITE INFO

<sup>157</sup> Adjusted mean scores for the initiator of action against the company across the eight sub-groups. The score ranged from 1-10, with higher values indicating higher likelihood of action taken against the company (n=1909).

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 non-peers, 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 the misconduct.<sup>158</sup> 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 includes the respondents who evaluated the severity and immorality of the misconduct as high. The second group includes those respondents who gave lower evaluations of the severity of the misconduct.<sup>159</sup> The first group, high severity group, can be understood as including those individuals who are internally motivated to report (*High Internal*). Conversely, the second group, low severity group, can be understood as the group with lower levels of internal motivation (*Low Internal*).<sup>160</sup>

As expected, participants with *High Internal* motivation were more likely than participants with *Low Internal* motivation to predict self-reporting<sup>161</sup> and to predict higher reporting rates for both peers<sup>162</sup> and the general population.<sup>163</sup>

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.<sup>164</sup> 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.<sup>165</sup>

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<sup>158</sup> 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  $F(3,1808)=54.14, p<.001, \eta^2=.08$ .

<sup>159</sup> Based upon 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 and background factors were held constant.

<sup>160</sup> 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.

<sup>161</sup> 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*:  $M=9.03, SD=1.72$ .

<sup>162</sup>  $F(1,1890)=3.86, p<.05, \eta^2=.00$ ; *Low Evaluation of the Misconduct*:  $M=5.41, SD=2.45$ ; *High Evaluation of the Misconduct*:  $M=5.64, SD=2.71$ .

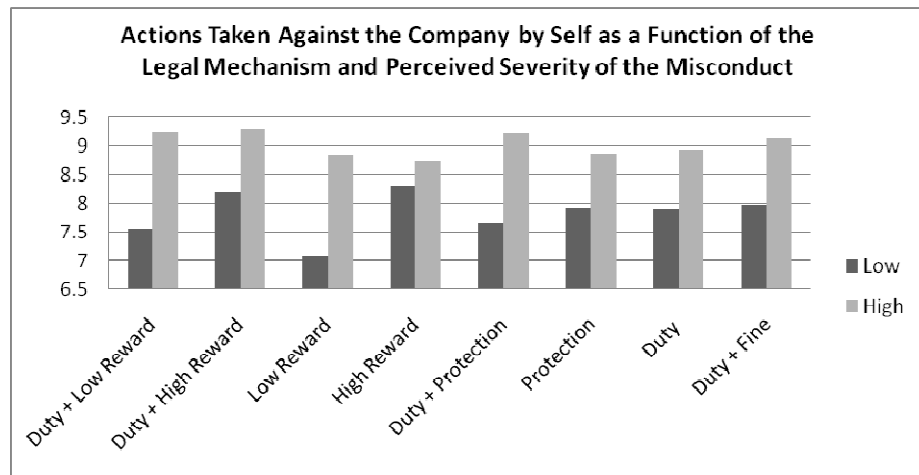
<sup>163</sup>  $F(1,1890)=3.86, p<.05, \eta^2=.00$ ; *Low Evaluation of the Misconduct*:  $M=5.41, SD=2.45$ ; *High Evaluation of the Misconduct*:  $M=5.64, SD=2.71$ .

<sup>164</sup>  $F(7,1890)=2.89, p<.01, \eta^2=.01$ .

<sup>165</sup> See Table 2 in Appendix

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.

Figure 2



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.

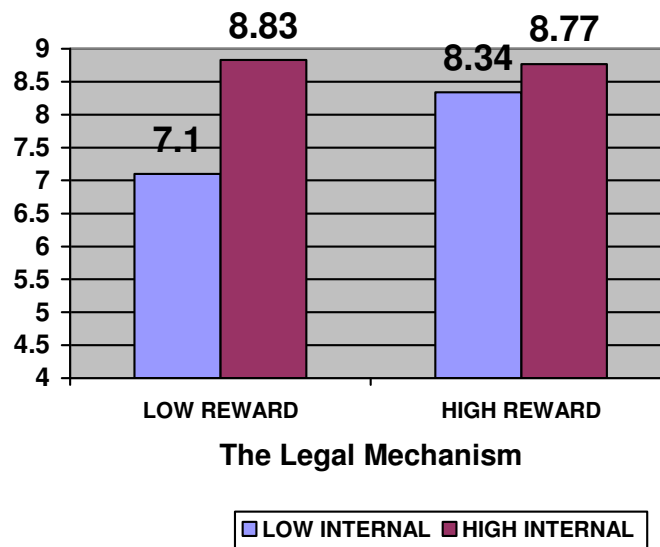
Another way to look at the importance of using high rewards, when there is a fear that some of the workers (and hence potential enforcers) might have low internal motivation, might come from the following analysis. Conducting a two-way ANCOVA revealed a significant interaction effect between the legal mechanisms (Low Reward/High Reward) and the internal motivation subgroups indicating that the monetary reward reduced the Self reporting differences between the *Internal motivated* subgroups.<sup>166</sup> Within the *Low Reward* condition, participants with a *High Internal* motivation were more likely to

<sup>166</sup>  $F(1,474)=10.60, p<.001, \eta^2=.02$ .



report than participants with a *Low Internal* motivation.<sup>167</sup> However, within the *High Reward* condition, there was no significant difference between the internal motivation subgroups ( $p>.05$ ). As demonstrated in figure \_\_\_\_, paying high reward basically decreases the differences between high and low internally motivated individuals<sup>168</sup>. While we don't have a measure of quality of reporting in this paper, measure which might point out for the inferiority of monetary driven reporting<sup>169</sup>, it is clear that high rewards are able to overcome internal motivation impediments to social reporting.

**Self Reporting as a Function of the Legal Mechanism and of the Internal Motivation**



Importantly, the decrease in reporting for those employees who were not internally

<sup>167</sup>  $F(1,474)=35.00, p<.001, \eta^2=.07$ .

A three-way ANCOVA revealed that there was no significant interaction effect <sup>168</sup> between the gender, the legal mechanisms (Low Reward/High Reward) and the internal motivation subgroups, indicating that the same pattern of results was found among women and men.

<sup>169</sup> Both in terms of motivation – e.g. honesty of the report, and in terms of quality of the report.

motivated was less pronounced for the other mechanisms: fines and protection. This suggests a key normative insight: Both fine and protection are less likely to be perceived as external motivation and therefore carry less of a risk of the crowding out internal motivation. Finally, and equally important, 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 whistleblowing. Namely, the combination of duty and a high level of internal motivation results in the highest levels of reporting behavior.

### 3. Gender and Whistleblowing

Gender plays a role in predicting whistleblowing behavior. Our findings indicate significant differences between men and women.<sup>170</sup> Women were far more likely than men to report intention to blow the whistle.<sup>171</sup> 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 for women the level of monetary reward did not seem to matter, the higher reward significantly increased the likelihood of reporting among men.<sup>172</sup>

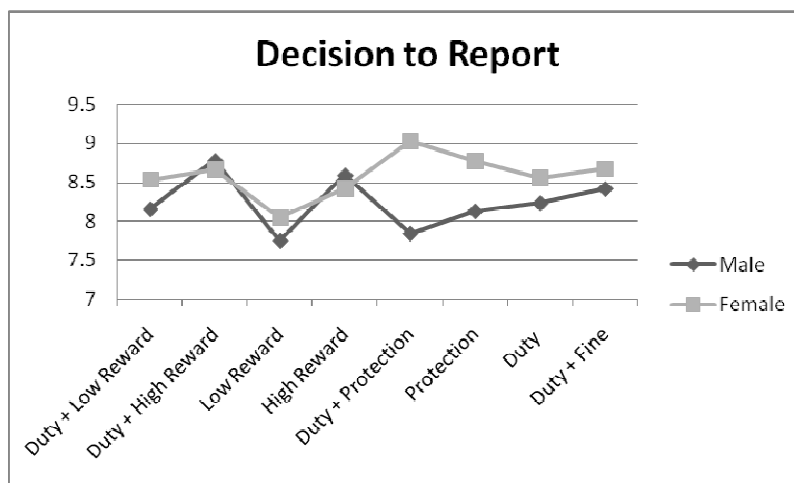
*Figure 3: Gender and the Effect of the Alternative incentive Mechanisms*

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<sup>170</sup> 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  $F(3,1875)=6.03$ ,  $p<.001$ ,  $\eta^2=.01$ .

<sup>171</sup>  $F(1,1877)=12.61$ ,  $p<.001$ ,  $\eta^2=.01$ . Men:  $M=8.24$ ,  $SD=2.28$ ; Women:  $M=8.59$ ,  $SD=2.02$ .

<sup>172</sup>  $F(7,1877)=2.40$ ,  $p<.05$ ,  $\eta^2=.01$ . 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, <sup>172</sup> Duty+ High Award and High Award were more likely than low Award to take self action against the company.



As can be clearly seen from Figure 3, in conditions of duty and duty+ protection women were far more likely than men to engage in whistleblowing. These findings corroborate previous findings of a gender effect in that regard. However the graph illustrates an important perspective the interplay between choice of legal mechanisms and gender. Where men care significantly more than women about the size of the monetary reward, women are more incentivized by anti-retaliation protections and legal duties.<sup>173</sup>

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 employer<sup>174</sup> and to the public.<sup>175</sup> 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.<sup>176</sup> Women respondents graded higher than men the importance of the reactions of both family<sup>177</sup> and friends<sup>178</sup> 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 ANOVA we see that women within the *Low Internal* subgroup, participants in the *Duty* were more likely than *Low Reward* to report an intention of most people to act.<sup>179</sup> However, among men within the *Low Internal* subgroup, participants in the *Duty* were less likely than *Low Reward* to report an intention of most people to act.<sup>180</sup>

This reduction is a clear demonstration of a crowding out effect where low rewards harm rather than benefit the willingness of individual to engage in whistle-blowing, when duty is present. To demonstrate the effect graphically, figure \_\_\_ presents the responses of

<sup>173</sup> This difference is above and beyond economic status.

<sup>174</sup>  $F(1,1869)=4.54, p<.05, \eta^2=.002$ ; Male:  $M=7.44, SD=2.91$ ; Female:  $M=7.72, SD=2.78$ .

<sup>175</sup>  $F(1,1869)=4.08, p<.05, \eta^2=.002$ ; Male:  $M=7.62, SD=2.83$ ; Female:  $M=7.89, SD=2.76$ .

<sup>176</sup> Multivariate  $F(2,1874)=8.99, p<.001, \eta^2=.01$ .

<sup>177</sup>  $F(1,1875)=17.71, p<.001, \eta^2=.009$ ; Male:  $M=7.87, SD=2.16$ ; Female:  $M=8.28, SD=2.06$ .

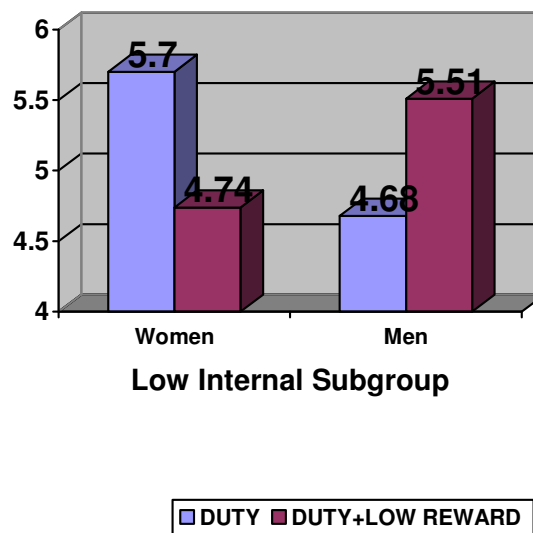
<sup>178</sup>  $F(1,1875)=4.61, p<.05, \eta^2=.002$ ; Male:  $M=5.41, SD=2.41$ ; Female:  $M=5.65, SD=2.29$ .

<sup>179</sup>  $F(1,105)=4.16, p<.05, \eta^2=.04$ .

<sup>180</sup>  $F(1,125)=3.41, p<.05, \eta^2=.03$ .

men and women focusing on two of the conditions within the low perceived severity of the misconduct.

**Actions Taken Against the Company by Most People as a Function of the Legal Mechanism and Gender within the Low Internal Subgroup**

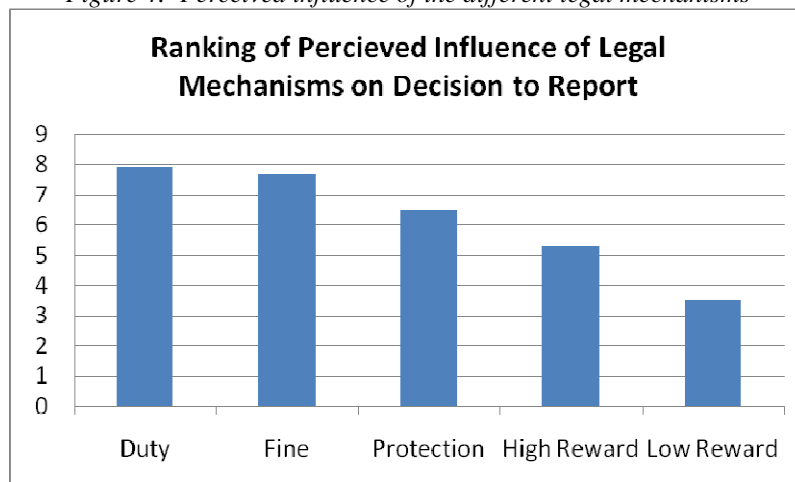


*4. Real versus Perceived Motivation to blow the whistle*

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 do 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.<sup>181</sup> The combined analysis showed that *Duty* and *Fine* were graded as major factors in the participant's decision to report, followed by *Protection*, *High Reward* and *Low Reward*.<sup>182</sup> 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.<sup>183</sup> Similarly, respondents believed their peers were more affected by the reward when the reward was high.<sup>184</sup> Most interestingly, respondents thought that size of the rewards was far more influential when it comes to others in comparison to themselves.<sup>185</sup>

Figure 4: Perceived influence of the different legal mechanisms



While the mechanism of high reward 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

<sup>181</sup> Using a simulator which is available in the attached link <http://www.dimensionresearch.com/resources/calculators/ttest.html>

<sup>182</sup> The differences among the means were all significant (all p's <001) with the exception of *Duty* and *Fine* (p>05)

<sup>183</sup> F(3,930)=31.32, p<.001,  $\eta^2$ =.09.

<sup>184</sup> F(3,930)=17.93, p<.001,  $\eta^2$ =.05. we categorized the 1-10 scale of how influential was the factor in your friends to three categories, more than yourself, same as yourself and less than yourself.

<sup>185</sup> 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%, 29.5%, respectively) than in the *Duty+ Low Reward* and *Low Reward* subgroups (7.5%, 1.5%, respectively).  $\chi^2$  (6, N=1033) = 51.37, p<.001.

<sup>157</sup> i.e., the difference between *Duty + High Reward* and *High Reward* subgroups was marginal.

**Comment [v1]:** What's wrong with this footnote

disparity could not be seen in the actual effect of duty as measured in the experimental part,<sup>186</sup> 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 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 Whistleblowing

Given the importance of social norms and social approval in the decision to engage in reporting illegality, this section 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 previous sections, law carries expressive meanings, and the mechanisms it chooses to employ are likely to shape the social understandings of whistleblowing.

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 5. 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 stigma<sup>187</sup> against those who blow the whistle in response to these mechanisms. In this sense, employees who will blow the whistle in low monetary rewards regimes are the worse off: they receive less glory for a limited amount of money which, as shown in the first section, was unlikely to be influential in their decision to report.

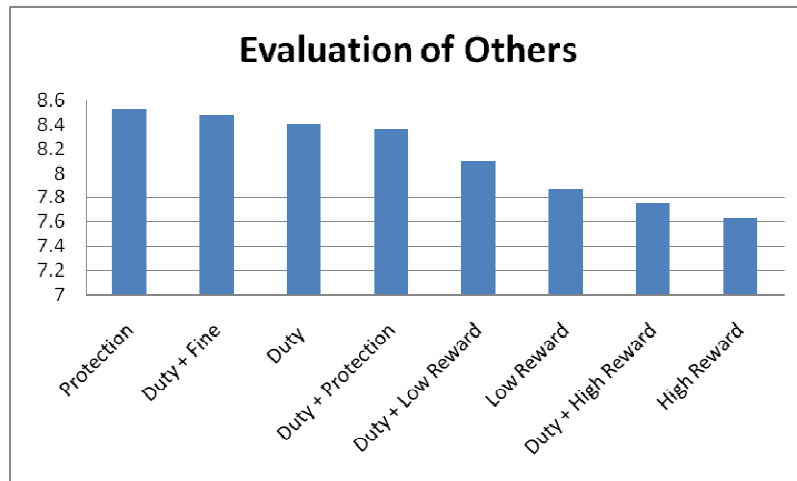
A further finding is that the existence of a duty caused participants to increase the appreciation for people who blew the whistle, while the introduction of a reward had the opposite effect of reducing respect for the informant. This result can be explained in two ways. Under one explanation, as hypothesized, the law has an expressive effect and a legal duty signals that certain conducts are important. Alternatively, we can understand this effect as a general appreciation that people have for others who are motivated by respect of 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 high, reward was

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<sup>187</sup> In fairness, we have to be very careful not to overstate this argument. Given 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, in this paper we focus on trends and comparison among sub-groups, and in that regard some incentive mechanism are more likely to create more or less positive evaluation with them. presumably if this study would have been conducted in a different setting (more financially related misconduct) we might have seen bigger differences, given the presented gap.

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

Figure 5: Evaluation of Others



An additional measure for social meaning of whistleblowing is related to the perceived career impact on whistleblowers. Respondents viewed the receipt of low rewards especially as likely to create the most severe careers problem for individuals. The tendency for low rewards to only minimally influence the likelihood of reporting and at the same time to have high negative career effects once again underscores the social price and inefficiency of this mechanism.<sup>188</sup>

<sup>188</sup> 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, here 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)  $F(1,1896)=103.41$ ,  $p<.001$ ,  $\eta^2=.05$

## VI. 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 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 insights about the subtle interactions between legal mechanisms and factors such as gender, the perceived severity of the misconduct, and the social consequences of whistleblowing. These findings can help policymakers refine their regulatory toolbox towards designing 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, 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.

From a more theoretical standpoint, these findings continue the studies on a crowding out effect. The experiment demonstrates<sup>189</sup> 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 counter-productive effects by the introduction of money as a legal mechanism to induce compliance.

### B. Motivation, Perception and Whistleblowing

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<sup>189</sup> Albeit in a limited way -crowding out effect was significant only with regard to women and with regard to the perception of others.



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 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 whistleblowing activity for non-peers. 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. 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 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 in the whistleblowing discourse in particular. 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 about such strategic behavior and predictions of others’ behavior are highly relevant to recent legal debates, as exemplified by the split decision in *Rockwell Int’l Corp. v. United States*.<sup>190</sup> Furthermore, given the overestimation of the instrumental self-interested motivation of others, the introduction of monetary incentives by regulatory agencies may exacerbate the perceptions of greed much more than self-interest plays a role in individual decision-making in reality.

### 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.<sup>191</sup> In the group of participants that viewed the illegality as highly offensive, and 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 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,

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<sup>190</sup> 549 U.S. 457 (2007).

<sup>191</sup> These included items as moral outrage, legitimacy and perceived risk from the misconduct in this factor.

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 context 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 whistleblowers 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 duty, and to some extent granting anti-retaliation 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. While the basic intuition of the legal policy maker, is 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 mechanisms used was **less** important. In areas where the misconduct is likely to be viewed, at least by some of the people, as severe, there is less rather than more need to use rewards, which carry both monetary costs for the state and some social cost for the whistleblower 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.<sup>192</sup> In the context of whistleblowing, this problem takes on a crucial role as individuals must necessarily make 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.<sup>193</sup> 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 instead 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

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<sup>192</sup> Elizabeth Anderson, VALUE IN ETHICS AND ECONOMICS (1993); Joseph Raz, THE MORALITY OF FREEDOM 321-66 (1985).

<sup>193</sup> *Id.*

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. 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.”<sup>194</sup> Their study indicates that such translation is frequently problematic because it is grounded neither in principle nor on a set of shared intuitions.<sup>195</sup> 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 Whistleblowing 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 whistleblower, while rewards carry the highest levels of social stigma. Even when the rewards are low and/or combined with a duty, 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 or financially appealing, the social praise and stigmas attached to certain reporting behaviors may add unexpected weight to the whistleblowing scales. Such view, that 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 was likely to increase the social status of whistleblowers to a greater degree than it affected the levels of reporting. Yet, if there are long term effects on the social status of whistleblowers 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.<sup>196</sup> Our study therefore suggests the desirability of imposing duties and fines, as they tend to enhance the social status of whistleblowers 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, their own perceptions by others as less affected by choice of mechanism, and they 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 underscores the existence of a

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<sup>194</sup> Cass R. Sunstein et al., *Predictably Incoherent Judgments*, 54 STAN. L. REV. 1153 (2002).

<sup>195</sup> *Id.*

<sup>196</sup> Fines were seen as reducing the greediness associated with blowing the whistle for a reward. What was common to both mechanisms was that they have taken the voluntary nature of whistleblowing. 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 when they were did it voluntarily.

“holier-than-thou” effect. It 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 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.

## **VII. Conclusion**

Social enforcement has become a central feature in the design of effective regulatory systems. In almost any area of law, government relies on private individuals to trigger detection of misconduct through reporting. The 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 advantages of different legal mechanisms. An important implication of the study is that no one-size-fits-all policy design exists but rather, policymakers must evaluate the full scope of psychological and situational factors in order to design the most efficient incentives structures. In doing so, policymakers must consider several factors. First, policymakers 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 policymakers must factor in the possibility that informants may underestimate the role of financial incentives in their own decision to report. Whereas others are perceived as reporting mainly for money, people 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, policymakers must also consider the target potential individuals for which the regulatory mechanisms are provided. In particular, gender differences are highly pronounced in the realm of whistleblowing and further research should consider the reasons for which women care much more than men about anti-retaliation 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 nascent 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*

<b>Imitators of Whistleblowing</b>						
<b>Most Peers</b>		<b>Most People</b>		<b>Self Actions</b>		
<b>(SD)</b>	<b>M</b>	<b>(SD)</b>	<b>M</b>	<b>(SD)</b>	<b>M</b>	<b>Legal Mechanism</b>
(2.75)	6.46	(2.64)	5.43	(2.27)	8.36	<b>Duty - Low Reward</b>
(2.64)	6.90	(2.52)	6.18	(1.94)	8.71	<b>Duty - High Reward</b>
(2.81)	6.15	(2.55)	5.31	(2.45)	7.91	<b>Low Reward</b>
(2.66)	6.54	(2.59)	6.48	(2.14)	8.50	<b>High Reward</b>
(2.55)	6.30	(2.47)	5.23	(2.20)	8.39	<b>Duty – Protection</b>
(2.81)	6.31	(2.48)	5.16	(1.95)	8.46	<b>Protection</b>
(2.87)	5.94	(2.62)	5.15	(2.11)	8.39	<b>Duty</b>
(2.67)	6.14	(2.44)	5.21	(2.17)	8.53	<b>Duty – Fine</b>

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*

<b>Actions Taken Against the Company</b>							
<b>Most Peers</b>		<b>Most People</b>		<b>Self Actions</b>			
<b>(SD)</b>	<b>M</b>	<b>(SD)</b>	<b>M</b>	<b>(SD)</b>	<b>M</b>	<b>Evaluation Of the Misconduct</b>	<b>Legal Mechanism</b>
(2.55)	6.24	(2.37)	5.16	(2.45)	7.55	Low	<b>Duty - Low Reward</b>
(2.94)	6.71	(2.89)	5.72	(1.63)	9.26	High	

(2.54)	6.67	(2.44)	5.92	(2.21)	8.21	Low	<b>Duty - High Reward</b>
(2.73)	7.16	(2.60)	6.48	(1.33)	9.30	High	
(2.51)	5.71	(2.36)	5.14	(2.59)	7.08	Low	<b>Low Reward</b>
(3.03)	6.65	(2.74)	5.50	(1.85)	8.85	High	
(2.47)	6.42	(2.44)	6.30	(2.17)	8.30	Low	<b>High Reward</b>
(2.89)	6.70	(2.76)	6.70	(2.08)	8.73	High	
(2.60)	6.09	(2.43)	5.12	(2.40)	7.66	Low	<b>Duty - Protection</b>
(2.48)	6.53	(2.53)	5.36	(1.51)	9.23	High	
(2.52)	6.09	(2.34)	5.09	(2.23)	7.92	Low	<b>Protection</b>
(3.01)	6.49	(2.59)	5.21	(1.58)	8.86	High	
(2.75)	5.99	(2.59)	5.18	(2.15)	7.90	Low	<b>Duty</b>
(3.01)	5.89	(2.66)	5.11	(1.95)	8.92	High	
(2.56)	6.16	(2.40)	5.34	(2.40)	7.98	Low	<b>Duty - Fine</b>
(2.82)	6.10	(2.49)	5.05	(1.66)	9.12	High	

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

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

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*

<b>Legal Mechanism</b>	<b>Evaluation of Others decision to report</b>	
	<b>M</b>	<b>(SD)</b>
<b>Duty - Low Reward</b>	8.10	(1.66)
<b>Duty - High Reward</b>	7.75	(1.67)
<b>Low Reward</b>	7.87	(1.63)
<b>High Reward</b>	7.64	(1.78)
<b>Duty - Protection</b>	8.36	(1.66)
<b>Protection</b>	8.53	(1.55)
<b>Duty</b>	8.40	(1.69)
<b>Duty – Fine</b>	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 Instrument***<sup>197</sup>

### **i. 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.

*Condition 1 (duty + small reward)*

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<sup>197</sup> The full text of the survey questions are on file with the author(/journal) and will be sent upon request.

**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. **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*.

*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*.

*Condition 3 (small 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.

*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*.

*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 of 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.

*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.

*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 of any fraudulent behavior of your employer.

*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 of any fraudulent behavior of your employer. ***Furthermore***, Failure to report will result in a *fine of \$10,000*