TURNING CORPORATE COMPLIANCE INTO COMPETITIVE ADVANTAGE

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Compliance is a core concern for corporate governance. Firms devote tremendous amounts of money, personnel, and attention to ensure compliance with regulatory mandates, and yet compliance failures proliferate. This is because the current static and binary view of compliance hinders both efficient compliance by firms and effective regulation by government. Understanding the reality that compliance is both dynamic and driven by efficiency empowers firms to evolve past mere conformance and into wealth maximizing innovation. This Article develops an efficient investment-risk (EIR) model of compliance that captures the tradeoffs between cost and risk, parses the oft-commingled concepts of technical efficiency and allocative efficiency, and enables firms to obtain a competitive advantage through compliance. We also turn our attention to regulators and highlight how the EIR model can enhance regulatory design, foster regulator-firm cooperation, and advance the mutual goals of business and society.

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INTRODUCTION

This is a critical time for the study of compliance. Corporate and regulatory compliance, which consists of the internal processes that firms use to ensure that their employees do not violate applicable laws and regulations,[1] has become big business. The stakes for firms are high. Costs associated with compliance are as high as $10,000 per employee and impose multi-billion dollar expenditures.[2] Regulation of business continues to grow unabated,[3] particularly in heavily regulated industries,

1. GEOFFREY P. MILLER, THE LAW OF GOVERNANCE, RISK MANAGEMENT, AND COMPLIANCE 3, 137 (Vicki Been et al. eds., 2014).

2. *See* W. Mark Crain & Nicole V. Crain, *The Cost of Federal Regulation to the U.S. Economy, Manufacturing and Small Business*, NAT'L ASS'N. OF MFRS. 1 (2014) http://www.nam.org/Data-and-Reports/Cost-of-Federal-Regulations/Federal-Regulation-Full-Study.pdf [HTTPS://PERMA.CC/EF8Y-YMZ3] (reporting the quantified costs of regulatory compliance on firms).

3. *See* OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, DRAFT 2015 REPORT TO CONGRESS ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS AND AGENCY COMPLIANCE WITH THE UNFUNDED MANDATES REFORM ACT 8 (Oct. 16, 2015), https://www.whitehouse.gov/sites/default/files/omb/inforeg/2015_cb/draft_2015_cost_benef

such as health care and financial services.[4] Compliance staffing has rapidly increased, and firms are allocating extensive resources towards managing the compliance function.[5] The only thing more costly than compliance is non-compliance, with a survey of firms revealing that the cost of non-compliance is more than double the price of following the rules.[6] It is little wonder why fifty-eight percent of compliance officers wake up in the middle of the night worrying about work.[7]

With so much at stake, and with such great resources allocated, why do so many firms still fail to comply with legal rules? The usual suspects—bad actors, an unethical business culture, and compromised regulators—are surely present. However, failures to comply still occur in environments where bad actors are few, the culture is conducive, and regulators are not particularly vulnerable to regulatory capture. Even though a new industry in corporate compliance has sprung up,[8] it is unclear whether simply spending more money on compliance necessarily produces a more compliant enterprise.[9] While company investments in compliance often lead to perceptible benefits,[10] many firms are struggling with the rapidly

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it_report.pdf [HTTPS://PERMA.CC/LWU7-C8CX] [hereinafter OMB REPORT] (disclosing that federal administrative agencies published 36,457 rules between fiscal years 2005 and 2014).

4. *See State of Compliance Survey 2015*, PRICEWATERHOUSECOOPERS 5 (2015), http://www.pwc.com/us/en/risk-management/state-of-compliance-survey/assets/pwc-2015-state-of-compliance-survey-final.pdf [HTTPS://PERMA.CC/EFR6-2LRX] (noting the particular compliance-related challenges faced by companies that enter the health care or financial services market).

5. *See* Rich Steeves, *JPMorgan to Double Compliance Budget in 2014*, INSIDE COUNSEL (Dec. 12, 2013), http://www.insidecounsel.com/2013/12/12/jpmorgan-to-double-compliance-budget-in-2014 [HTTPS://PERMA.CC/UR9H-835Z] (reporting on JPMorgan's $2 billion budget for compliance staffing and training in response to investigations and enforcement actions).

6. *The True Cost of Compliance*, PONEMON INST., LLC 2 (Jan. 2011), http://www.ponemon.org/local/upload/file/True_Cost_of_Compliance_Report_copy.pdf [HTTPS://PERMA.CC/B3WV-RN4A].

7. Michael O'Brien, *Stress and the Compliance Officer*, HUM. RES. EXEC. ONLINE 1 (Feb. 6, 2012), http://www.hreonline.com/HRE/view/story.jhtml?id=533344814 [HTTPS://PERMA.CC/Q69E-DXRP]. *See* Michele DeStefano, *Creating a Culture of Compliance: Why Departmentalization May Not Be the Answer*, 10 HASTINGS BUS. L.J. 71, 129 n.251 (2014) (noting that a "running theme" of interviews of compliance specialists was that the "[Chief Compliance Officer] is a tough and lonely job.").

8. *See, e.g.*, Gregory J. Millman & Samuel Rubenfeld, *Compliance Officer: A Dream Career?*, WALL ST. J. (Jan. 15, 2014) ("In a U.S. economy struggling to create jobs, at least one field is booming: compliance.").

9. *See* Kimberly D. Krawiec, *Organizational Misconduct: Beyond the Principal-Agent Model*, 32 FLA. ST. L. REV. 571, 591 (2005) ("[L]ittle empirical evidence exists regarding the effectiveness of internal compliance structures in deterring organizational misconduct . . . .").

10. *See* Ken Tysiac, *SOX Compliance Costs Rise For Many Companies, Report Finds*, J. ACCOUNTANCY (May 2013), http://www.journalofaccountancy.com/news/2013/

rising costs of compliance in the face of ever more complex, far-ranging, and sometimes ambiguous regulatory mandates.[11]

The consequences are significant. If firms perceive their obligations as insurmountable, they may turn way from good faith efforts to comply and concentrate on spending resources to defy or evade regulation.[12] If managers become cynical about compliance, a culture of disrespect against compliance may develop, which is ultimately harmful to the firm.[13] That attitude, in turn, foments unethical behavior that is destructive to society at large through unethical business practices that destabilize the economy. A climate of doubt and distrust between the regulator and the firm imposes losses on both parties and society at large. With examples of non-compliance firmly in the public limelight,[14] citizens openly question both the legitimacy of regulators and corporate actors to maintain the public trust.[15] Amidst these challenges, the concrete has yet to harden on how to optimally produce public-private engagement that meets regulatory goals, curtails firm-borne compliance costs, and minimizes negative externalities on society.

Compliance scholars and professionals tend to focus on the organization as the relevant locus of action and on procedural and

may/20137990.html [https://perma.cc/SRQ3-42YH] (noting different ways a focus on compliance generates positive results for companies).

11. *See* Daniel M. Gallagher, Comm'r, U.S. Sec. & Exch. Comm'n, Remarks at the 2013 National Compliance Outreach Program for Broker-Dealers (Apr. 9, 2013), http://www.sec.gov/News/Speech/Detail/Speech/1365171515226#P22_4354 [HTTPS://PERMA.CC/7V7Z-Z9S8] (noting the "overwhelming volume and pace of new and anticipated regulations" in the securities industry and the difficulty of firms in complying with them).

12. *See* Lauren B. Edelman & Shauhin A. Talesh, *To Comply or Not to Comply: That Isn't the Question: How Organizations Construct the Meaning of Compliance*, *in* EXPLAINING COMPLIANCE: BUSINESS RESPONSES TO REGULATION 112–13 (Christine Parker & Vibeke Lehmann Nielsen eds., 2011) (describing how regulated firms are able to "reshape the meaning of compliance" through political contestation).

13. Donald C. Langevoort, *Behavioral Ethics, Behavioral Compliance*, *in* RESEARCH HANDBOOK ON CORPORATE CRIME AND FINANCIAL MISDEALING 12 (Jennifer Arlen ed., forthcoming 2015), http://ssrn.com/abstract=2651101 [HTTPS://PERMA.CC/72KF-N2XW].

14. *See* Memorandum from Sally Quillian Yates, Deputy Attorney Gen., U.S. Dep't of Justice, to All Component Heads and U.S. Attorneys 6–7 (Sept. 9, 2015), http://www.justice.gov/dag/file/769036/download [HTTPS://PERMA.CC/9W2M-Y6MP] (discussing how the Department of Justice's new policies on individual corporate wrongdoing reflect a bolstered regulatory focus on the substantive elements of a company's compliance program).

15. *See* Christopher M. Matthews, *Survey Finds Unethical Business Practices on the Rise*, WALL. ST. J. (May 23, 2012), http://blogs.wsj.com/corruption-currents/2012/05/23/survey-finds-unethical-business-practices-on-the-rise [HTTPS://PERMA.CC/MG4G-P9NX] (explaining a study evidencing the willingness of many corporate executives to partake in unethical business practices).

institutional rules as the means of ensuring conformity.[16] An overly simplistic view of compliance, however, does a disservice to regulators and firms alike. Compliance needs to be understood and addressed pragmatically as it exists and with the powerful potential it truly holds. Accordingly, this Article develops an efficient investment-risk (EIR) model of corporate compliance that illuminates the opportunities in compliance-based regulation. Drawing on concepts of law and economics, the EIR model shows how firms decide whether—and to what extent—to comply along a compliance "frontier" in order to optimize the relative benefits of compliance to the firm relative to cost, thereby minimizing avoidable costs resulting from inefficient deployment of firm resources. By highlighting the consequences for a firm to comply in any given instance, our model increases the effectiveness of business regulation that advances the public good.[17] The EIR model also equips regulators with a dynamic understanding of how compliance functions respond to different kinds of regulatory mandates. Through our model, we identify and define three distinct kinds of regulatory mandates—Direct Regulation, Collaborative Regulation, and Market Contingent Regulation—and show how regulators can strategically use different combinations of regulatory approaches to compel more firm-efficient compliance. Applying the EIR model to corporate compliance will increase the overall effectiveness of business regulation. Regulators and lawmakers will be better able to calibrate regulatory enforcement measures to public policy goals. Firms will more clearly see the strategic benefits of complying with law through a more risk-aware view of their compliance functions.

This Article proceeds as follows. Part I examines corporate compliance as a set of non-binary, dynamic, and bounded choices by firms in response to regulatory mandates. Instead of static and dichotomous decisions of whether to comply or not, compliance requires that firms constantly assess the degree to which they want to comply, all the while facing factual ambiguity or uncertainty. Parts II and III develop the EIR model in two stages. In Part II, we demonstrate how compliance can be mapped along a continuum of compliance decisions that takes into account the costs associated with a firm's investments in compliance (e.g., additional personnel or infrastructure) relative to the risks associated with the firm's decision to comply (i.e., the probability of incurring legal

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16. *See* MILLER, *supra* note 1, at 171–93 (discussing organizational compliance through the internal enforcement of institutional policies and programs).

17. *See* Paul J. Heald, *Economics As One of the Humanities: An Ecumenical Response to Weisberg, West, and White*, 4 S. CAL. INTERDISC. L.J. 293, 309 (1995) ("[W]e should remember that the choice between rights and efficiency does not inevitably make the efficiency norm look inhumane.").

sanctions for non-compliance multiplied by the penalties or damages from enforcement). Using these concepts, Part III presents the EIR model to conceptualize the implications of under-compliance or over-compliance by firms. Finally, Parts IV and V apply the insights of the EIR model to address fundamental questions regarding business regulation. In Part IV, we show how different kinds of regulatory mandates influence the dynamic relationship between regulators and regulated firms in respect of a firm's decision to comply. Part V analyzes the ways in which firms can reduce compliance risk without investing in additional compliance resources. This is achieved through what we describe as "risk-cost transformation," and we explore how corporations, in particular, can improve individual employee decision-making and firm-wide internal governance to achieve this potential "win-win" scenario.

I. COMPLIANCE AS A NON-BINARY, DYNAMIC, AND BOUNDED CHOICE

Compliance, both as a legal requirement and a business practice, is woefully misunderstood. First, compliance is too often misunderstood as conformance with binary rules, whereby a firm is either in compliance or out of compliance with the requirement. Conceiving of compliance as a binary rule is not without advantages. Binary rules offer clear imperatives for proper conduct.[18] A firm is either in compliance with the rule or out of compliance.[19] Binary rules offer little in terms of nuance or context.[20] As a result, binary rules have the advantage of being clear and easy to interpret from the regulated firm's perspective.

Binary rules, however, can cause problems. Because such rules are inflexible by nature, they may lead to unnecessarily costly or unjust outcomes.[21] Binary rules also resist contextual interpretation by courts and are not easily adaptable to changing social, environmental, or marketplace conditions. They also undermine the opportunity for consideration that more flexible rules might produce. Instead of considering the underlying purpose of the regulation, a binary rule encourages a manager to meet a

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18. Dan L. Burk, *Legal and Technical Standards in Digital Rights Management Technology*, 74 FORDHAM L. REV. 537, 549 (2005).

19. *Id.*

20. *Id. See also* Timothy F. Malloy, *Disclosure Stories*, 32 FL. ST. U. L. REV. 617, 637–39 (2005) (describing binary disclosure under the Clean Air Act).

21. *See* Burk, *supra* note 18, at 549 ("Rules offer clear imperatives for behavior, but this means that they tend to be essentially binary; that is, one is either in compliance or one is not. This in turn means that in their pure form, rules leave little room for nuance or factual shading. Due to their inflexibility, they may lead to costly outcomes if they fit a given situation poorly.").

given standard without further reflection.[22] This is known as "regulatory ritualism," whereby actors accept means for meeting regulatory goals but lose focus on achieving the purpose of those goals.[23] Actors use this as a means of "get[ting] by" in a regulatory society,[24] but risk doing so at an eventual cost to the firm.

Instead of binary conditions, firms can exist in various gradations of compliant and non-compliant states. Firms can be in minor non-compliance or severe non-compliance depending on the enterprise's deviation from a given regulatory rule or standard.[25] Firms can also be fully compliant without any deviation. In addition, compliance with a given regulation may be different for each firm according to their unique internal and external combination of resources. A firm's combination of industry, market positioning, human resources, capital investments, and relationship with regulators can determine whether and to what extent a firm is non-compliant and what conditions are necessary to satisfy the regulatory requirement.[26]

Second, compliance is all too often not treated as a dynamic system. Compliance is a system that is typified by constant change, activity, or evolution.[27] Compliance requirements, even for sweeping regulatory

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22. *See* Malloy, *supra* note 20, at 662 (applying a binary rule may prevent thoughtful consideration of the basis underlying the rule in the first place).

23. Carol A. Heimer & J. Lynn Gazley, *Performing Regulation: Transcending Regulatory Ritualism in HIV Clinics*, 46 LAW & SOC'Y REV. 853, 856 (2012).

24. *Id.* (quoting JOHN BRAITHWAITE ET AL., REGULATING AGED CARE: RITUALISM AND THE NEW PYRAMID 330 (2007)).

25. *See, e.g.*, Katie Bergstrom, Brian Dillion & Gray Plant Mooty, *Quality of Care as a Basis for False Claims Act Liability: Is the Proof Insurmountable?*, 9 SEDONA CONF. J. 147, 148 (2008) ("In fact, in most cases, a [health care] provider's level of compliance with a particular quality of care standard will fall somewhere on a continuum between full compliance and no compliance at all.").

26. *See* Timothy F. Malloy, *Regulating by Incentives: Myths, Models, and Micromarkets*, 80 TEX. L. REV. 531, 535–36 (2002) (conceptualizing how a firm's organization and internal processes affect its reaction to regulation).

27. Lori A. Richards, Dir., Office of Compliance Inspections & Examinations, U.S. Sec. & Exch. Comm'n., Remarks Before the Investment Adviser Compliance Best Practices Summit: Compliance Programs: Our Shared Mission 2 (Feb. 28, 2005), http://www.sec.gov/news/speech/spch022805lar.htm [https://perma.cc/BY77-TH7S] ("One of the most important lessons we have learned is that your compliance program cannot be static. It can't be 'done,' 'on the shelf,' or 'fixed.' An effective compliance program must continue to evolve and, to do so, the program must be able to identify, meet, and incorporate changes in your business and changes in your customers, to continue to identify conflicts of interest, to be responsive to changes in the statutory and regulatory regime, and to continually strive to find the best technology and the best people. It must be measured by its results. Indeed, much of this conference is dedicated to providing practical advice on how to ensure that your compliance program is actively preventing, detecting and correcting securities laws violations. I have heard this concept of an activist compliance program

mandates, are not consistent across different firms. Each company faces its own regulatory mix from which arises the collective compliance obligations of the enterprise. Small companies may be exempt from obligations that larger firms must follow.[28] Firms in different industries may require specialized compliance capacity to respond to industry-specific regulatory mandates. One firm may have a more productive history with a regulatory authority than another, leaving open the possibility of it receiving the benefit of the doubt when non-compliance occurs.[29] A firm's culture may require compliance processes to be implemented in different ways. Employees motivated by rewards may be more interested and engaged in compliance procedures through gamification of compliance standards.[30]

States of compliance and non-compliance evolve over time. In response to changing regulatory requirements, firms typically use resources to improve their compliance practices.[31] They train their employees to better spot and proactively remedy compliance problems.[32] They also hire

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referred to as having a 'living, breathing' compliance program.").

28. *See* OMB REPORT, *supra* note 3, at 41–42 (noting that many statutes and regulations explicitly attempt to reduce regulatory burdens on small businesses by limiting costs and providing exemptions and slower phase-in periods).

29. *See, e.g.*, Marc A. Rodwin, *Reforming Pharmaceutical Industry-Physician Financial Relationships: Lessons from the United States, France, and Japan*, 39 J.L. MED. & ETHICS 662, 665 (2011) (noting passage of guidelines stating that firms that follow an industry code are considered to "demonstrate[] good faith efforts" toward compliance).

30. *See, e.g.*, Ryan J. Baxter et al., *Applying Basic Gamification Techniques to IT Compliance Training: Evidence from the Lab and Field*, 30 J. INFO. SYS. 119, 121 (2016) (discussing how gamification can be used as a business tool to engage people in non-game situations through a similar type of rewards system); Raymund J. Lin et al., *Designing a Web-based Behavior Motivation Tool for Healthcare Compliance*, 23 HUM. FACTORS & ERGONOMICS IN MANU. & SVC. INDUS. 58, 61–63 (2013) (designing a program where "desired user behaviors can be motivated through proper rewards on actions").

31. It is theoretically possible, though unlikely, that firms will devolve their compliance framework. One common response to rising compliance costs is outsourcing arrangements with third-party service providers. *See The Evolving Role of Compliance*, SEC. INDUS. & FIN. MARKETS ASS'N 16–17 (Mar. 2013), www.sifma.org/workarea/downloadasset.aspx?id=8589942363 [HTTPS://PERMA.CC/2CNG-EQAP] [hereinafter "SIFMA Compliance White Paper"] (outsourcing may increase efficiencies and reduce costs of compliance).

32. *See* Scott Killingsworth, *Modeling the Message: Communicating Compliance Through Organizational Values and Culture*, 25 GEO. J. LEGAL ETHICS 961, 979–81 (2012) ("Explicit compliance communications are not enough. Compliance officers must reach across functional boundaries to executive management and the human resources group and, if necessary, educate them about the principles of employee engagement and the value of consistent explicit and behavioral messaging that activates the employees' values and brings out their best natures. Compliance officers must secure the active cooperation of these groups not only in transmitting the right words, but also in modeling ethical behavior, trustworthiness, fairness, and quality interpersonal treatment of employees.").

personnel to administer compliance processes and determine necessary steps to comply with regulation. This results in some firms practicing compliance better than others, creating the possibility that effective compliance can be a source of competitive advantage over rivals.[33] Some firms will simply do compliance more efficiently and more effectively than others. In addition, investments in capital assets will provide the information systems and control processes to monitor firm activity, maintain records, and deliver necessary data to regulators and auditors.[34] These twin paths of human and capital investment help sustain compliant behavior when the firm is under stress and generate compliance norms that are self-sustaining. Firms generally have an overall incentive to comply with regulations in the short- and long-term.[35]

In addition, compliance, somewhat counterintuitively, becomes more difficult the more completely a firm seeks to achieve it. Firms will generally seek compliance with the regulations that are least costly to follow or have the greatest return on their investment.[36] Easily obtained gains, however, are eventually consumed as firms need more complicated and extensive investments to achieve more complete states of compliance. A firm's first compliance initiative is substantively different in form and function than its tenth initiative or its hundredth. Compliance personnel must be agile enough to recognize when processes work and when innovations are necessary even when the regulatory waters are quiet. The more firms move toward the ideal of perfection, the more difficult the improvements get.

Third, and perhaps most important, compliance is bounded by human limitations.[37] Such bounded knowledge arises even before a given rule becomes enforceable. For example, a legislative authority may design a rule that is unnecessarily ambiguous or complex. Such suboptimal drafting may be the result of inattention to the consequences of such regulation, lack

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33. *See generally* James Rathz, *Compliance as the Competitive Differentiator*, 12 DUQ. BUS. L.J. 13 (2009) (describing potential competitive advantage for compliance in a financial services context).

34. *See* Elizabeth Horrigan Rathz, *Organic Compliance . . . Doing More With Less*, 12 DUQ. BUS. L.J. 1, 1 (2009) ("For regulated entities, timely and perceptive identification of regulatory and reputational risk contributes to improved productivity and a greater return on capital investment over the long run.").

35. Sidney A. Shapiro & Randy S. Rabinowitz, *Punishment Versus Cooperation in Regulatory Enforcement: A Case Study of OSHA*, 49 ADMIN L. REV. 713, 716–18 (1997).

36. *See* Malloy, *supra* note 26, at 538 ("[R]egulatory investments join in the competition and are subject, to varying degrees, to evaluation on the basis of such factors as the return on investment, the fit with corporate strategic goals, and the extent of the sponsoring sub-unit's influence within the firm.").

37. *See* Robert F. Weber, *Structural Regulation as Antidote to Complexity Capture*, 49 AM. BUS. L.J. 643, 658–59 (2012) (focusing on regulator-bounded rationality).

of sufficient time and resources by staffers to fully attend to emerging language, or deliberate vagueness created in order to ensure amenability by antagonistic political interests.[38] From the moment the rule is enacted, it is already imbedded with imperfections that make complete compliance unknowable.

These human limitations may be amplified by the enforcing regulator. Regulators, though in possession of significant expertise, are tasked with enforcing a rule that is already unclear. Regulators are thus often forced to interpret and apply uncertain language, increasing the potential further for ambiguity and lack of understanding of what precisely the rule demands.[39] Regulators or their administrators may also have political assumptions or aspirations that color their perception about how "hard" or "softly" a rule will be interpreted.[40] Such political factors can change when a new administration takes control, further obfuscating the ability to define a knowable standard for a given rule. These interpretive limitations, through legislative drafter to rulemaking administrator to regulatory enforcer, can result in a frustrating metaphorical game of telephone, where the original purpose of the drafter travels through multiple actors who either willfully or inadvertently muddy the intent of the lawmakers.[41]

Consequently, when the message of compliance with the rule finally reaches the regulated, it faces a separate set of distortive lenses as the rule is processed and interpreted by the firm. Knowledge frictions in acquisition or dissemination may prevent employees from optimally

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38. *See* Donald L. Horowitz, *Decreeing Organizational Change: Judicial Supervision of Public Institutions*, 1983 DUKE L.J. 1265, 1282 (1983) ("The clash of interest groups, the greater ease of sensing the existence of problems than of framing solutions, the wish to retain flexibility, the desire to please as wide a constituency as possible, the benefits of calculated ambiguity, or the serendipity of unintended ambiguity—all of these have produced a growing number of statutes embodying vague standards or none at all."); Victoria F. Nourse & Jane S. Schachter, *The Politics of Legislative Drafting: A Congressional Case Study*, 77 N.Y.U. L. REV. 575, 594–95 (2002) ("Staffers regularly cited two clarifying-undermining dynamics: the lack of sufficient time and the phenomenon of deliberate ambiguity.").

39. *See* Horowitz, *supra* note 38, at 1282–83 ("If [the statute's] meaning or their reach is unclear, someone will have to interpret them. In the first instance, that someone will often be the administrative agency charged with implementing the law. Sometimes the agency has taken a bold view of its authority, which has then been ratified by the courts, and sometimes the agency has been found to be too timid in fulfilling its mandate.").

40. *Id.*

41. *See, e.g.*, David B. Spence, *The Shadow of the Rational Polluter: Rethinking the Role of Rational Actor Models in Environmental Law*, 89 CAL. L. REV. 917, 975 (2001) (summarizing an Environmental Protection Agency (EPA) study providing evidence that "many violations result from sincere disagreements or differing interpretations of what EPA regulations mean").

understanding or complying with rules.[42] Aspirations to achieve compliance may be insufficient or misdirected.[43] Counsel assigned to interpret and disseminate the rule can impose their own perspective based upon practice background and specialized training. Individual managers, even with guidance, may not have the knowledge capacity to navigate complex or unclear rules and thus are left to use shortcut heuristics to divine a mandate. Even if managers are fully guided, agency problems can intervene whereby managers bypass responsibility in order to protect or further their own careers.[44]

If, even through all of these interpretive lenses, a standard of compliance can be properly understood, exogenous forces can revive ambiguity. Changes in political power can threaten an established regulatory agenda.[45] Economic shocks can trigger unexpected changes in regulation that render prior compliance practices out-of-date.[46] Unexcused compliance can unexpectedly result from natural disasters.[47] Catastrophes can trigger legislative overreaction from an angry public, resulting in hasty

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42. Donald C. Langevoort, *Monitoring: The Behavioral Economics of Corporate Compliance with Law*, 2002 COLUM. BUS. L. REV. 71, 107 (2002) ("This process of social construction [of managerial motives] is both personal to each agent and heavily influenced by his or her local peers at the firm. And there is no guarantee that this will produce an accurate construction of management's motives."). In the employment context, for example, many employees misunderstand their legal rights and obligations under employment-at-will laws, erroneously believing they have legal rights akin to just cause. *See* Jesse Rudy, *What They Don't Know Won't Hurt Them: Defending Employment-at-Will in Light of Findings that Employees Believe They Possess Just Cause Protection*, 23 BERKELEY J. EMP. & LAB. L. 307, 310–11, 311 n.16 (2002) (commenting on the misperceptions surrounding employment-at-will contracts).

43. *See* John T. Nicolaou, *Whistle While You Work: How the False Claims Act Amendments Protect Internal Whistleblowers*, 2011 COLUM. BUS. L. REV. 531, 540 (2011) (noting in the False Claims Act context that an overly broad interpretation of protected activity by well-meaning employers can cause employees to run afoul of the rules).

44. *See* Malloy, *supra* note 26, at 558–60 (noting the role of specialization within firms in respect of profit maximization).

45. *See, e.g.*, *House Republicans Take Aim at Dodd-Frank in Budget Plan*, REUTERS (Mar. 17, 2015, 11:20 AM), http://www.reuters.com/article/financial-regulation-housebudget-idUSL2N0WJ0ZC20150317 [HTTPS://PERMA.CC/UDJ5-Q6AX](describing ongoing efforts in the House of Representatives to weaken and repeal the Dodd-Frank Act).

46. *See* Kristin N. Johnson, *Addressing Gaps in the Dodd-Frank Act: Directors' Risk Management Oversight Obligations*, 45 U. MICH. J. L. REFORM 55, 92–100 (2011) (describing the implementation of new disclosure and corporate governance requirements under the Dodd-Frank Act to regulate risk management practices).

47. *See Natural Events and Disasters*, U.S. ENV. PROT. AGENCY, http://www.epa.gov/agriculture/agriculture-natural-events-and-disasters (last visited Feb. 2, 2016) [HTTPS://PERMA.CC/RB7X-8K2Z] ("Even though natural events and disasters can be devastating to agricultural production, it does not excuse noncompliance with state and federal environmental laws.").

and ill-conceived standards.[48] Even without a prior trigger, society can simply demand greater compliance than a firm expects, punishing a company even when it finds itself fully compliant with established rules.[49] To cite a historically prominent example, when a jury found Ford Motor Company criminally liable for negligent manufacture of an automobile, it did so even though it found that Ford had complied with federal government automobile safety standards at the time of manufacture.[50] In this instance, Ford was in compliance with law, until a jury decided that it was not.

Skilled compliance professionals—whether lawyers or non-legal compliance professionals—can bring significant protection, as well as value,[51] to the enterprise, and a robust compliance program is *de rigueur* for a corporation or any other firm of any substantial size.[52] However, any attempt to make compliance work must be cognizant of its limitations. Corporate compliance is an imperfect science, and those tasked with compliance can never achieve a perfect state.[53] The forces preventing

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48. *Cf.* Kyle Welch, *The Patriot Act and Crisis Legislation: The Unintended Consequences of Disaster Lawmaking*, 43 CAP. U. L. REV. 481 (2015); Gregory L. Ryan, *Distinguishing Fong Yue Ting: Why the Inclusion of Perjury as an Aggravated Felony Subjecting Legal Aliens to Deportation Under the Antiterrorism and Effective Death Penalty Act Violates the Eighth Amendment*, 28 ST. MARY'S L.J. 989, 991 n.3 (1997) (noting overreaction by Congress in response to terrorist acts).

49. *See* Neil Gunningham, Robert A. Kagan & Dorothy Thornton, *Social License and Environmental Protection: Why Businesses Go Beyond Compliance*, 29 LAW & SOC. INQUIRY 307, 308 (2004) (defining social license "as the demands on and expectations for a business enterprise that emerge from neighborhoods, environmental groups, community members, and other elements of the surrounding civil society.").

50. Grimshaw v. Ford Motor Co., 119 Cal. App. 3d 757, 771 (1981). *See also* Matthew T. Lee, *The Ford Pinto Case and the Development of Auto Safety Regulations, 1893-1978*, 27 BUS. & ECON. HIST. 390, 390–91 (1998) (explaining how the NHTSA [(National Highway Traffic Safety Administration)] engineer group found the Ford Pinto "unsafe" even though its fire threshold met the federal minimum standard); R. Eric Reidenbach & Donald P. Robin, *A Conceptual Model of Corporate Moral Development*, 10 J. BUS. ETHICS 273, 277 (1991) (describing how Ford's attorney's argument was that "the Pinto *met all federal, state, and local government standards concerning auto fuel systems*."). The jury in this case nonetheless awarded the plaintiffs $125 million in punitive damages. Paul J. Zwier, *Due Process and Punitive Damages*, 1991 UTAH L. REV. 407, 427–28 (1991).

51. *See generally* Robert C. Bird & Stephen Kim Park, *The Domains of Corporate Counsel in an Era of Compliance*, 53 AM. BUS. L.J. 203 (2016) (describing how corporate counsel can improve corporate governance and promote a culture of integrity).

52. Kimberly D. Krawiec, *Cosmetic Compliance and the Failure of Negotiated Governance*, 81 WASH. U. L.Q. 487, 488 (2003) (noting the rapid growth in ethics and compliance consulting following the Enron scandal and the enactment of the Sarbanes-Oxley Act).

53. Spence, *supra* note 41, at 975 (summarizing an EPA study providing persuasive evidence that "perfect compliance is almost impossible to achieve even for sophisticated and conscientious firms"); Langevoort, *supra* note 42, at 79 ("Within the securities business and

"perfect" compliance are as fundamental as those governing human nature. While egregious conduct can certainly be curbed through robust enforcement and clear mandates, mistakes, mishaps, and misinterpretations are inevitable.[54] Social, political, and economic forces can change the expectations of compliance without warning.[55] No matter how diligent compliance professionals are, the practice of compliance is embedded with imperfections. Conflict with the regulatory environment for most firms of significant size is all but inevitable.

II. COMPLIANCE IN AN ENVIRONMENT OF RISK-INTELLIGENCE

If a perfect state of compliance is unachievable, and compliance is inundated with constant change, then both regulator and firm must accept those conditions in order to make compliance work. Fortunately, there is more to compliance than bounded limitations and dynamically changing standards. Making compliance work requires viewing compliance decisions through the lens of risk. Risk is defined as "the potential for loss caused by an event (or series of events) that can adversely affect the achievement of a company's objectives."[56] The understanding of risk has matured from reducing the probability of hazards to treating risk in a systematic way.[57] The management of risk is now a proactive decision that firms make in anticipation of key decisions or problems that arise. The decision to comply with rules, even under a compulsive regime, thus remains a considered choice. That choice can trigger sanctions if the improper choice is made,[58] but is done so with a firm being aware as much as it can be of the consequences of that decision.

elsewhere, there is no reasonable expectation of, or even desire for, perfect compliance with law.").

54. Spence, *supra* note 41, at 975.

55. *See* Joseph W. Yockey, *Choosing Governance in the FCPA Reform Debate*, 38 J. CORP. L. 325, 331 (2013) (attributing the rise in enforcement of the Foreign Corrupt Practices Act to regulatory emphasis on rule of law in foreign markets, greater international cooperation with anti-corruption enforcement, and enactment of the Sarbanes-Oxley Act and the Dodd-Frank Act).

56. *The Risk Intelligent Enterprise*, DELOITTE 5 (2013), http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Governance-Risk-Compliance/dttl-grc-riskintelligent-erm-doneright.pdf [HTTPS://PERMA.CC/7GJM-6Z5D]. On constructing this definition, the document states that "[m]any definitions exist, with varying degrees of detail and precision. We have analyzed and assimilated several, combined them with our own perspective, and distilled the result" to the definition quoted in the text. *Id.*

57. KIT SADGROVE, THE COMPLETE GUIDE TO BUSINESS RISK MANAGEMENT 1–2 (2015).

58. Edward K. Cheng, *Structural Laws and the Puzzle of Regulating Behavior*, 100 NW. U. L. REV. 655, 671 (2006).

There are different considerations that impact risk-intelligent decision-making, but most coalesce under two broad considerations. The first is the risk of non-compliance or compliance risk.[59] Firms calculate the consequences of their actions if a firm is not in compliance with a rule. Non-compliance, as mentioned, is not simply one of two possible choices, but one of a range of states that a firm can engage. Firms can pervasively minimize their compliance risk through thorough training of employees, implementation of complex control systems, hiring dedicated staff, and introducing substantial rewards and penalties that encourage compliant decision-making.[60] Other firms may not expend resources at all, leaving the compliance risk high, or implement measures that produce substantial, though not complete, reductions in compliance risk.

In addition to risk, firms also account for the resources allocated to investments in compliance. While the firm that engages in a pervasive compliance program may reduce their risk of non-compliance, they may do so at a cost that becomes unsustainable for maintaining a competitive market position. Fundamentally, firms "purchase" a given amount of compliance in order to reduce a given amount of risk to the enterprise.[61] When measurements of compliance reveal no results, negative results, or results that are not proportionate to the cost invested, the purchase decision will change.[62]

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59. Compliance risk is defined as:

> The adverse consequences that can arise from systemic, unforeseen, or isolated violations of applicable laws and regulations, internal standards and policies, and expectations of key stakeholders[,] . . . which can result in financial losses, reputation damage, regulatory sanctions, and, in severe cases, loss of franchise or rejected mergers and acquisitions.

Michael D. Kelsey & Michael Matossian, *Compliance Risk: Ensuring the Risk Taken is the Risk Intended*, ABA BANK COMPLIANCE 6 (May-June 2004) http://www.aba.com/Compliance/Documents/4d653dd0ea5d45bcba1b4ebfa0189003CompRisk.pdf [HTTPS://PERMA.CC/K7SZ-SCQR]. *See also Compliance and the Compliance Function in Banks*, BANK FOR INT'L SETTLEMENTS, BASEL COMM. ON BANKING SUPERVISION 7 (Apr. 2005) http://www.bis.org/publ/bcbs113.pdf [HTTPS://PERMA.CC/QX86-MRAQ] (defining compliance risk as "the threat posed to an organization's financial, organizational, or reputational standing resulting from violations of laws or regulations, self-regulatory industry standards, codes of conduct, or organizational standards").

60. For more discussion, see *infra* Part V.B.

61. William S. Laufer, *Corporate Liability, Risk Shifting, and the Paradox of Compliance*, 52 VAND. L. REV. 1343, 1359 (1999).

62. Richard S. Gruner, *Lean Law Compliance: Confronting and Overcoming Legal Uncertainty in Business Enterprises and Other Complex Organizations*, 11 N.Y.U. J.L. & BUS. 247, 311 (2014).

The combination of investments in compliance protocols and the risk of non-compliance can be visualized in the following figure:

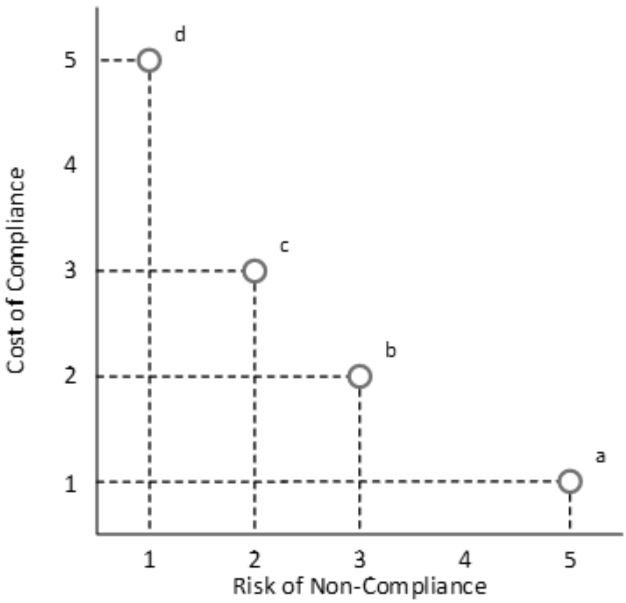

FIGURE 1. INTERSECTIONS OF COMPLIANCE RISK AND COST

The horizontal x-axis is the risk adjusted "price" or "cost" of non-compliance, which represents the total risk to which the firm is currently exposed. This axis is intended to incorporate whatever costs facing the enterprise that may arise from non-compliance, including formal penalties, reputational impacts on customers, organizational morale costs, relations with regulators, and perceptions of society. These costs are risk-adjusted in order to account for their likelihood of actually arising. The lower the firm's risk-adjusted cost of compliance, the farther to the left the firm appears on the x-axis. The vertical y-axis is the quantity of resources a firm invests in human and capital compliance. Like the x-axis, this can include virtually any protocol that the firm deems necessary to achieve a sufficient compliance program. This can include training employees, hiring compliance professionals, monitoring requirements, and investing in information technology. The higher the firm's position on the y-axis, the more investments in compliance the firm has made.

Finally, the combination of the firm's compliance investments and the risk in its environment produce a compliance position for the enterprise. This compliance position highlights a given commitment to investing in compliance resources and the resultant non-compliance risks that exist as a result of that investment. Crucially, this depiction of the compliance function is scalable along multiple dimensions: it can be applied to analyze the decision-making of a single employee tasked with conforming to a single regulation, or an entire firm evaluating its compliance practices in light of the sum of regulatory mandates to which it is subject.

Figure 1 offers three examples. Assume that at point "*a*," a firm invests $1 in compliance protocols, as reflected on the y-axis. As a result of these investments, the firm sustains a risk exposure of $5. The total cost of compliance, as expressed by intersection of the axes, is $6. At point "*b,*" a firm increases its investments to $2. As one would expect when a firm allocates more resources to compliance, the firm's risk-adjusted cost of non-compliance changes in response. In the example provided, at point "*b*", the firm's $2 investment in compliance results in its risk exposure decreasing to $3. Total cost of compliance at point "*b*" is $5. Point "*c*" is the inverse of "*b,*" as the firm invests $3 and has $2 of risk exposure. At point "*d,*" the firm has substantially increased its investments to $5, perhaps representing an aggressive initiative to avoid legal and societal exposure from violated rules. This $5 investment at point "*d*" generates a risk exposure of only $1 for the enterprise, with a total cost of $6. Each point has its own combination of investment input and output of a given risk level.

Figure 1 reveals meaningful information regarding the nature of compliance. First, compliance is judged through both price and risk criteria, which makes the necessary investments accountable to reductions in risk exposure. Second, firms have the power to make choices about those criteria independently or in conjunction with one another. Third, regardless of how firms perceive the price of compliance and the risk of non-compliance, a compliance decision forces these two factors to interact with one another. Fourth, the interaction of price and risk places the firm in a single position within the range of possible compliance positioning choices. A firm's compliance profile does not arise by chance but through tacit or deliberate choices to weigh investments relative to risk.

Notably, not all of the choices in Figure 1 are created equal. Points "*d*" and "*a*" are essentially the same from the firm's perspective. The primary difference between the choices is to whom the cost of compliance is paid. At point "*a,*" most of the cost of compliance is paid in sanctions and penalties. At point "*d,*" most of the cost of compliance arises from investments in protocols by the firm. Points "*b*" and "*c*", however, represent a superior choice for the firm. The net cost of compliance is only $5, lower than what it costs at "*a*" or "*d*." This allows the firm, through optimal allocation of resources, to receive a greater reduction in risk relative to its investments in compliance. It represents a risk-efficient position, and one that firms should naturally seek out.

This difference in value more accurately represents how compliance actually functions. Firms are rarely indifferent about compliance. Managers do not typically conclude that the same price will be paid no matter what action the firm takes, whether it be payment in sanctions or investments. The choice to either invest in compliance or pay the cost of non-compliance implies imperfect substitutes. Firms can switch between compliance and sanction, but the tradeoff is not identical. This means that a firm can select a suboptimal compliance strategy and pay $6, or seek out the superior positioning and pay $5.

Given the presence of imperfect substitutes and the nearly infinite range of choices from which a firm can choose a compliance position, the compliance options of a firm can be modeled as shown in the following figure:

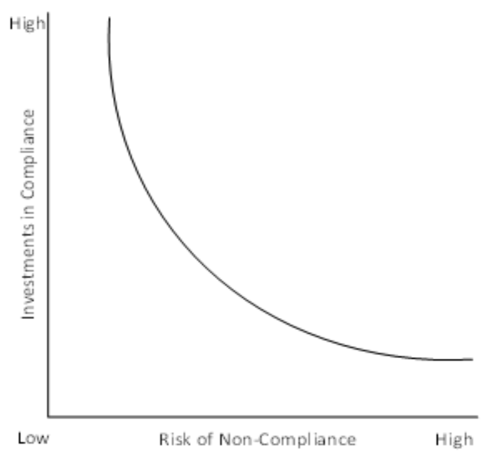

FIGURE 2. A CONTINUUM OF FIRM COMPLIANCE

The compliance function in Figure 2 is a "flipped" version of the production function.[63] Value is represented on the x-axis and cost is represented on the y-axis. The productivity frontier is represented by a downward concave continuum of best practices that a firm can attain for a given combination of cost-value activities. In this production function, a firm can choose a high-cost, high-value production strategy or a low-cost,

63. In microeconomics, a production function involves a tradeoff between two or more inputs that produce a given output. WALTER NICHOLSON, MICROECONOMIC THEORY 311 (6th ed. 1995).

low-value alternative.[64] Most firms would be somewhere "beneath" the curve, choosing a given cost-value function while striving to make their production processes more efficient, and thus toward the productivity frontier.

In the compliance context, rather than trying to deliver the maximum value-cost combination, firms seek to minimize their risk-cost profile through compliance practices. In Figure 2, the range of input choices is modeled by a curved line that highlights the set of points at which the combination of investment and risk choices produces a series of outputs (e.g., here, the total firm cost of compliance). The concavity of the curved line shows the substitutability of compliance "goods" on the x and y axis — i.e., the substitutability of compliance investments versus exposure to non-compliance. The curved line represents a continuum of choices that incorporate different investment-risk profiles—in other words, a compliance frontier.[65] A firm set at a point on the lower right end of the compliance frontier chooses to invest few resources in compliance. Those resources in labor and capital can be invested somewhere else to make the firm more competitive, but leave the firm exposed to a high risk of non-compliance and the associated penalty and reputational costs that arise if a violation is recognized. A firm at the upper left end of the compliance frontier presents an aggressively low compliance risk profile. There is little chance that such a firm will be found non-compliant, insulating itself from the indirect and direct costs that arise from breaking the rules. However, such a firm achieves that low risk state at a great, indeed inefficiently great, cost of resources. The firm spends more on compliance than it generates in risk reduction return. Those resources lost cannot be allocated elsewhere to

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64. A helpful, albeit highly simplified, description of the productivity function is presented in Michael E. Porter, *What is Strategy?*, 74 HARV. BUS. REV. 61, 62 (1996). Porter explains:

> Think of it as the maximum value that a company delivering a particular product or service can create at a given cost, using the best available technologies, skills, management techniques, and purchased inputs. The productivity frontier can apply to individual activities, to groups of linked activities such as order processing and manufacturing, and to an entire company's activities. When a company improves its operational effectiveness, it moves toward the frontier. Doing so may require capital investment, different personnel, or simply new ways of managing.

Id.

65. The notion of compliance as a continuum has been indirectly applied in a variety of contexts to conceptualize compliant conduct by an individual or a firm. *See, e.g.*, Sarah B. Lawsky, *Probably? Understanding Tax Law's Uncertainty*, 157 U. PA. L. REV. 1017, 1035–36 (2009) (describing a tax compliance continuum); Bergstrom et al., *supra* note 25, at 148 (discussing health care provider compliance as a continuum).

advance the enterprise.[66]

Viewed in dynamic terms, the concavity of the compliance frontier determines the nature of the tradeoff between investment and risk, with the firm investing more or less in compliance initiatives, as illustrated by the following figure:

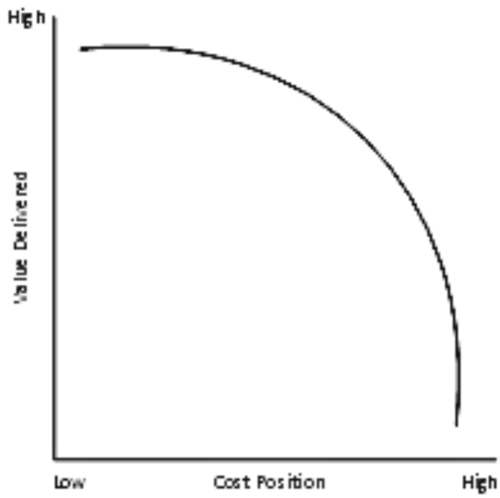

FIGURE 3. VARIATIONS IN THE CONCAVITY OF COMPLIANCE FRONTIERS

In Figure 3, the straight line (*a*) would represent a compliance frontier in which investments in compliance and non-compliance penalties are perfect substitutes. A perfect substitute would mean that investments and non-compliance penalties have the same effect from the firm's perspective. Both represent expenditures that the firm must pay; whether to regulators and the public or through private investments, the cost remains the same. If investments and non-compliance penalties were perfect substitutes, firms would be indifferent to compliance practices because the outcome would be the same—an expenditure by the firm.

Compliance investments and non-compliance penalties are not perfect substitutes, however, and replacement of one for the other changes the overall equation. That imperfection in substitution is represented in the model by the curved line. Different locations on the curve represent different places where investments are cheaper than penalties or vice versa.

66. Firms in the center of the curve neither over nor underinvest in compliance form a subject that will be discussed in more detail with a more complex model later in this Article. *See infra* Part IV.

The compliance frontier represented by curve (*b*), a weakly concave curve, would represent some imperfect substitution. The compliance frontier represented by curve (*c*) represents even less imperfect substitutes. The greater the concavity of the curve, the less substitutable the investment and penalty choices are on a compliance profile. The compliance frontier represented by line (*d*) represents an unusual situation where the incremental investments in compliance are so low per unit of risk reduction that reducing risk as much as possible is always the best option. Every unit of investment in compliance generates more than that unit of return in reduced risk. Conversely, the compliance frontier represented by line (*e*) represents another unusual situation where compliance investments are so incrementally costly that the firm's best incentive is to not invest at all and simply pay whatever penalties arise. Any unit of investment will not result in an equal or greater reduction in risk, and such investments are therefore inefficient.

III. THE EFFICIENT INVESTMENT-RISK MODEL OF CORPORATE COMPLIANCE

As described above, a firm's decision to comply incorporates an inverse production function expressed as a compliance frontier. However, compliance in practice is inefficient due to the inability of firms to assess and weigh the tradeoffs between investment in compliance and risk of non-compliance. To address this problem, the following discussion builds on this compliance function to develop the efficient investment-risk (EIR) model. The EIR model applies the economic concepts of technical efficiency and allocative efficiency to compliance in order to identify the inputs used by firms to most efficiently expend and allocate limited resources towards compliance.

A. *Impediments to Efficient Compliance*

Firms explicitly or tacitly assume a compliance profile that represents a mix of compliance investment and risk exposure. Another variable that must be considered is the problem of information frictions, which can impede the acquisition and utilization of full knowledge required in order for a firm to make an optimal decision. Frictions occur when employees lack sufficient knowledge about the compliance profile of the firm. Employees may not have received correct or complete information about the compliance goals, corporate culture, or organizational risks of the enterprise.[67] These agents, typically employees, will be out of sync with what the firm wants to achieve in compliance.[68] Thus, employees may act in suboptimal fashion, either by overweighting compliance at the expense of potential opportunities or underweighting compliance and exposing the company to unnecessary compliance risk.

Even if the optimal state of compliance is fully known to an enterprise, and that information is at least theoretically available, employee decision-making may prevent the firm from realizing optimal compliance. Employees may embody the classic principal-agent problem, in that their actions serve their own self-interest at the expense of the firm. For example, a temporary salesperson responsible for selling his or her company's products to foreign governments may be more willing to violate the Foreign Corrupt Practices Act (FCPA)[69] because the value of a short-term commission exceeds the risk of individual liability. A violation of the FCPA may come at a high price of non-compliance to the firm as principal,[70] which the employee as agent does not fully internalize.[71] In addition, the predisposition of the human mind toward mental shortcuts and assumptions often impairs individual decision-making.[72] Such rationality intends to be rational, but only limitedly,[73] and can result in decisions that

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67. This happens as law becomes endogenous within organizations, and the meaning and interpretation of law becomes increasingly institutionalized within organizational structures. Edelman & Talesh, *supra* note 12, at 109–10. Edelman and Talesh posit that these organizational structures can be exposed to the judiciary, which in time may shape constructions of law. *Id.* at 110.

68. *Id.* at 109–10.

69. Foreign Corrupt Practices Act of 1977, Pub. L. No. 95-213, 91 Stat. 1494 (1977) (codified at 15 U.S.C. § 78dd (2012)).

70. *See* David Hess, *Combating Corruption through Corporate Transparency: Using Enforcement Discretion to Improve Disclosure*, 21 MINN. J. INT'L L. 42, 42–43 (2012) (noting the sharp increase in FCPA enforcement activity since 2007 and characterizing FCPA enforcement risk as "a top issue for corporate legal and compliance departments").

71. *See* Mike Koehler, *The Foreign Corrupt Practices Act Under the Microscope*, 15 U. PA. J. BUS. L. 1, 20–22 (2012) (citing evidence of the lack of individual prosecutions relative to corporate FCPA enforcement actions); Yockey, *supra* note 55, at 354–55 (noting the principal-agent problem in anti-corruption enforcement and observing that FCPA sanctions are primarily borne by organizations).

72. Herbert A. Simon, *Rational Choice and the Structure of the Environment*, 63 PSYCHOL. REV. 129, 136 (1956) ("Since the organism . . . has neither the senses nor the wits to discover an 'optimal' path . . . [it will apply] a choice mechanism that will lead it to pursue a 'satisficing' path, a path that will permit satisfaction at some specified level of all of its needs."). *See generally* Jon Conlisk, *Why Bounded Rationality?*, 34 J. ECON. LIT. 669, 670–72 (1996) (discussing the limits cognitive heuristics can impose on reasoning and decision-making).

73. Charles J. Goetz & Robert E. Scott, *Principles of Relational Contracts*, 67 VA. L. REV. 1089, 1090 n.4 (1981) (describing bounded rationality as "intendedly rational, but only limit[ly] so" (citations intentionally omitted)).

generate unnecessary exposure to penalties or authorize expenditures that cause overinvestment. The cognitive limits of individual employees have a collective impact on the organization, which the firm's decision-makers may not be able to recognize.[74] The frictions and bounds of information create an environment where a firm may not be able to reach its own optimal preferences. Therefore, firms must develop systems and processes to ensure their compliance function is both efficient and effective.

Firms building risk-compliant systems and processes are pursuing what is defined as technical efficiency. Technical efficiency is the ability of a firm to produce a level of output with a minimum quantity of input.[75] Such inputs include capital, labor, and equipment, which are used in a fashion that does not waste resources.[76] Firms identify relevant risks, assess and evaluate those risks, and then respond to them in a fashion that can be readily implemented and monitored over time.[77] Investments can be made in areas such as human resources, information technology, auditing, legal, and compliance. This results in a reduced exposure to risk from non-compliance that can impair a firm's reputation, trigger costly fines, impede operations, or impact a firm's long-term strategy.[78]

Technical efficiency, however, does not mean achieving compliance at all costs.[79] Firms can expose themselves to substantial risk of non-compliance and remain technically efficient if the returns on those risks are sufficiently high.[80] This cost-benefit approach requires executives to be

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74. *See* Robert A. Prentice, *Moral Equilibrium: Stock Brokers and the Limits of Disclosure*, 2011 WISC. L. REV. 1059, 1080–84 (2011) (describing how individuals find it difficult to undo biases in their own judgment when faced with new information).

75. R. Quentin Grafton, Dale Squires & Kevin J. Fox, *Private Property and Economic Efficiency: A Study of A Common-Pool Resource*, 43 J. L. & ECON. 679, 690 (2000). *See also* John A. Nyman & Simonetti Samuels, *The Boren Amendment and Data Envelopment Analysis*, 7 HEALTH MATRIX 335, 339 (1997) (defining "technical efficiency" as "produc[ing] a level of output (or outputs) using a technology that does not waste resources").

76. Nyman & Samuels, *supra* note 75, at 339–40 (discussing the interplay of labor, capital, and technology to determine technical efficiency).

77. *The Risk Intelligent Chief Compliance Officer*, DELOITTE 13, http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Governance-Risk-Compliance/dttl-grc-riskintelligentchiefcomplianceofficer.pdf (last visited Feb. 2, 2016) [HTTPS://PERMA.CC/8MAW-3ZZZ] (discussing the ERM and compliance risk management processes).

78. *Id*. at 15 (describing how compliance problems can negatively impact certain areas, including reputation, operations, strategy, and finance).

79. Daniel R. Fischel & Alan O. Sykes, *Corporate Crime*, 25 J. LEGAL STUD. 319, 346 (1996) (noting that compliance without regard to costs is not desirable, as it can lead to too much spending on compliance precautions).

80. DELOITTE, *supra* note 77, at 9 (noting that a company can incur inherent risk when the potential returns outweigh the risk—this is a decision left to company leaders and their perspectives on risk).

able to accept residual risk and restrict that risk to a specific tolerance.[81] At the same time, firm leaders will have zero-tolerance for compliance failures that fall outside of that accepted risk.[82] As one useful analogy puts it, "many people who run for fitness willingly tolerate a slightly higher risk of joint injury (relative to non-runners) as a fair trade for running's overall benefits. That doesn't mean they ignore it if their knees start to hurt."[83] The technically efficient firm is the active runner, reaching the potential (though bounded) frontier of compliance practice by attaining the maximum reduction of compliance risk with a minimum of cost, given the firm's culture and tolerance for acceptable risk.

The acquisition and attainment of technically efficient compliance can be a seductive goal for the firm.[84] Technical efficiency is easier to identify through the relative rarity of non-compliant events. It is also easier to display tangibly through technology and investments in human resources. These investments, in turn, are visible and cognizable signals to the market that a firm is doing its best to meet the state of the art of compliance practices. Compliance investments are thus commonly reported as budget increases, allocation of additional manpower, and capital investments—the hallmarks of technical efficiency.[85]

Technical efficiency, however, is only one aspect that influences firm behavior toward compliance. It does not necessarily satisfy a firm's goal of full economic efficiency. A firm may have utilized maximum resources with minimum cost to achieve a particular compliant state, but it may also have mismatched its resource allocations to achieve its overall optimal risk profile. The result can place the firm in one of two possible states of compliance. Firms can be over-compliant relative to the benefit they receive for certain compliance allocations. Such firms may have achieved a state of low compliance risk, but they have done so with an over-expenditure of resources that brings relatively little reduction of risk relative to cost. Firms can also be under-compliant. Such firms do not

81. Not only is perfect compliance unachievable, it is also inefficient. *See* Langevoort, *supra* note 42, at 79 ("Within the securities business and elsewhere, there is no reasonable expectation of, or even desire for, perfect compliance with law. . . . The optimal level of compliance is one that balances the costs and benefits.").

82. DELOITTE, *supra* note 77, at 9 (discussing that a company can have incur some risk while also having a zero-tolerance policy for known compliance failures).

83. *Id.* at 9.

84. *See* KAREN PARSLEY & PHILOMENA CORRIGAN, QUALITY IMPROVEMENT IN HEALTHCARE: PUTTING EVIDENCE INTO PRACTICE 5–6 (2d ed. 1999) (noting that focusing on technical efficiency is "seductive" because it is easier to identify).

85. *See* Stacey English & Susannah Hammond, *Cost of Compliance 2014*, REUTERS 4 (2014), https://risk.thomsonreuters.com/sites/default/files/GRC00814.pdf [HTTPS://PERMA.CC/E43F-GTJD] (discussing the rising expenses and time investment of compliance and compliance teams worldwide).

make compliance investments that would provide an equal or greater benefit to the firm in risk reduction relative to the compliance cost. Under-compliant firms leave themselves exposed to unnecessary risk that could be rectified with measures less costly than the risk of exposure.

Both over-compliance and under-compliance can occur even if a firm remains technically efficient. A firm may, for example, achieve state-of-the-art compliance but do so in a way that costs too much relative to the risk reduced. This requires that firms take into account the concept of allocative efficiency, which represents a firm's ability to use its inputs in their most effective proportions in order to maximize the firm's welfare.[86] An allocatively efficient state of compliance is one that applies resources at the state-of-the-art compliance but also does so in a fashion that optimally balances cost and risk.[87] While a technically efficient firm extracts maximum output from a given use of resources,[88] an allocatively efficient firm represents the best possible use of a range of possible uses of resources. For example, assume that a firm uses its compliance officers only to process paperwork. If those compliance officers attain the maximum paperwork processing possible given resources utilized, this would be a technically efficient process. However, compliance officers who are deployed to create innovative compliance systems and promote a compliance culture, for example, would be more allocatively efficient than their paper pushing equivalents.[89]

A firm must both be technically and allocatively efficient in order to achieve the optimal state of firm compliance.[90] Put simply, while technical

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86. Noel D. Uri, *Technical Efficiency, Allocative Efficiency, and the Implementation of a Price Cap Plan in Telecommunications in the United States*, 4 J. APP. ECON. 163, 172 (2001). *See also* DANIEL H. COLE & PETER Z. GROSSMAN, PRINCIPLES OF LAW & ECONOMICS 13 (2d ed. 2011) (defining allocative efficiency as the distribution of goods and services in an economy to maximize social welfare).

87. *See* Grafton et al., *supra* note 75, at 690 ("A production process is allocatively efficient in its input usage when the firm equates ratios of marginal products with the input price ratios to minimize cost given output and input prices. Allocative efficiency (AE) represents the reduction in production costs if production were both technically and allocatively efficient, rather than technically efficient but allocatively inefficient.").

88. Uri, *supra* note 86, at 172 n.7 ("TE measures only that portion of inefficiency that could be eliminated by proportional reduction of inputs. It is the proximity of the data point (y_1, x_1) to the facet of the piecewise linear envelopment surface. Even after reducing input use by (1 - TE), however, some inputs may still exhibit slack (i.e., be used inefficiently).").

89. *See X-Inefficiency*, WIKIPEDIA http://en.wikipedia.org/wiki/X-inefficiency (last visited Feb. 2, 2016) [HTTPS://PERMA.CC/U897-3TL5] (providing a useful example of a firm using its brain surgeons to dig ditches to highlight the difference between technical and allocative efficiency). *See also* Harvey Leibenstein, *Allocative Efficiency vs. X-Efficiency*, 56 AM. ECON. REV. 392 (1966) (comparing allocative efficiency to other types of economic efficiency).

90. Grafton et al., *supra* note 75, at 683.

efficiency achieves "doing right compliance," allocative efficiency describes a firm that is "doing compliance right." Doing compliance right is not easy. A variety of influential forces pulls firms away from allocative efficiency and towards over- or under-compliance. One of the simplest problems is that firms may misunderstand a rule as being more rigorous than it is in reality and mismanage resources to meet perceived standards. This may be due to a lack of information arising from inadequate compliance or legal personnel or due to overcautious interpretations of ambiguous standards.[91]

A firm's risk culture can also encourage misallocation. An under-compliant risk culture may underestimate the likelihood of non-compliance and overestimate its ability to navigate out of trouble when non-compliance is brought to the attention of regulators. One of the most prominent examples of an under-compliant risk culture is Citigroup's prior to the financial crisis of 2008.[92] Citigroup's risk models, and its overall cultural attitude towards risk, did not account for the possibility that the national housing boom on which it relied could experience a downturn.[93] Such a culture of risk attraction can create disincentives for compliance, and unnecessarily expose the firm to harm.[94]

Less intuitive—but arguably no less relevant—is the possibility that a firm's culture can also encourage over-compliance. For corporations, the locus of decision-making authority with respect to compliance resides with the board of directors.[95] The board of directors is subject to a duty to

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91. *See* Richard Craswell & John E. Calfee, *Deterrence and Uncertain Legal Standards*, 2 J.L. ECON. & ORG. 279, 280 (1986) (presenting under-compliance and over-compliance as two alternative paths when faced with uncertainty in legal standards and noting the tendency toward over-compliance as more common); John E. Calfee & Richard Craswell, *Some Effects of Uncertainty on Compliance with Legal Standards*, 70 VA. L. REV. 965, 966 (1984) (discussing how uncertainty may lead to over-compliance). *But see* Tom Baker, Alon Harel & Tamar Kugler, *The Virtues of Uncertainty in Law: An Experimental Approach*, 89 IOWA L. REV. 445, 446 (2004) (stating that the reaction to uncertainty in regulation may also be a function of the risk aversion of the individual); Chin-Chin Yap, *The Tax Shelter Game*, 59 TAX LAW. 1021, 1036 (2006) (stating in the taxation context that "increased uncertainty induces greater compliance in risk averse individuals but induces lower compliance of risk seeking individuals").

92. *See* Michelle M. Harner, *Barriers to Effective Risk Management*, 40 SETON HALL L. REV. 1323, 1345–58 (2010) (discussing the effects of Citigroup's cultural norms); *see also* Arthur E. Wilmarth, Jr., *Citigroup: A Case Study in Managerial and Regulatory Failures*, 47 IND. L. REV. 69, 71 (2014) (showing how Citigroup had a high-risk culture).

93. Willmarth, *supra* note 92, at 104.

94. *See* BETHANY MCLEAN & PETER ELKIND, THE SMARTEST GUYS IN THE ROOM: THE AMAZING RISE AND SCANDALOUS FALL OF ENRON 114–22 (2003) (describing the impact of corporate culture on the ineffectiveness of risk management).

95. Regulation incentivizes firms to institutionalize the board's compliance oversight. Under the United States Sentencing Guidelines, a compliance program is deemed effective

monitor compliance, established by the Delaware Chancery Court's decision *In re Caremark International Inc. Derivative Litigation*,[96] but may not be able to easily do so due to their distance from day-to-day management of the firm. The *Caremark* standard does not impose hair trigger liability, as directors must either "utterly fail" to implement or "consciously fail" to monitor an existing compliance program to be held at fault.[97] Nonetheless, board members, corporate managers, and executives alike may be overly conservative because of their personal liability exposure.[98] A firm's regulatory culture may be an important driver of over-compliance. Firms may have a tendency towards over-compliance due to a disproportionate fear of sanction.[99] Another benign interpretation is that lawyers, because of their professional training and conduct standards, place a paramount emphasis on process over result.[100] The risk-averse tendencies of lawyers may be heightened by accountability standards to which corporate gatekeepers—such as corporate counsel as well as auditors and compliance officers—are subject.[101] This, in turn, creates a pressure within the firm to attempt "absolute assurance" of compliant behavior, which is all but impossible to achieve.[102] Yet, efforts to achieve that absolute assurance can certainly be made, creating a compliance culture that over-expends

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and thus eligible for credit or reduced sanctions if "[t]he organization's governing authority [is] knowledgeable about the content and operation of the compliance and ethics program and [ ] exercise[s] reasonable oversight with respect to the implementation and effectiveness of the compliance and ethics program." U.S. SENTENCING GUIDELINES MANUAL § 8B2.1(b)(2)(A) (2015).

96. 698 A.2d 959 (Del. Ch. 1996).

97. MILLER, *supra* note 1, at 63; Stephen M. Bainbridge, Caremark *and Enterprise Risk Management*, 34 J. CORP. LAW 967, 976–77 (2009). *See* Stone v. Ritter, 911 A.2d 362 (Del. 2006) (confirming and clarifying the *Caremark* standard under Delaware law). *But see* Renee M. Jones, *Law, Norms, and the Breakdown of the Board: Promoting Accountability in Corporate Governance*, 92 IOWA L. REV. 105, 111–12 (2006) (arguing that the business judgment rule effectively precludes judicial scrutiny into the adequacy of a corporation's compliance program).

98. *But see* ERIC W. ORTS, BUSINESS PERSONS: A LEGAL THEORY OF THE FIRM 148–50 (2014) (noting that in practice, personal liability of corporate executives is sharply curtailed by the prevalence of D&O indemnification and insurance agreements).

99. *See* Michael W. Peregrine, *Caution by Company Officers Can Create Problems for Boards*, N.Y. TIMES DEALBOOK (Dec. 22, 2015), http://www.nytimes.com/2015/12/23/business/dealbook/caution-by-company-officers-can-create-problems-for-boards.html [HTTPS://PERMA.CC/3PLG-K3TN] (arguing the self-protective conduct arising from fear of personal legal liability may hinder certain company initiatives).

100. *See* Lawrence A. Cunningham, *The Appeal and Limits of Internal Controls to Fight Fraud, Terrorism, Other Ills*, 29 J. CORP. L. 267, 308–09 (2004) (demonstrating that the business judgment rule leads lawyers to focus on process designs and controls).

101. Peregrine, *supra* note 99 (describing how corporate gatekeepers engage in self-protective conduct at the potential expense of strategic firm initiatives).

102. Cunningham, *supra* note 100, at 308–09.

resources relative to actual risk.

A less benign possibility is that over-compliance is being stoked by professional service providers—such as compliance officers, auditors, attorneys, and management consultants—that are incentivized to dramatize or even exaggerate compliance risk in order to generate revenue or accrue prestige and influence.[103] This may be especially effective when legal regimes are new and their implications uncertain.[104] For example, when wrongful discharge protections for employees were increasing in prominence during the 1980s, human resources consultants applied hyperbolic language to describe these legal innovations. The trade literature was subjected to a steady stream of publications citing the "epidemic," "avalanche," and "explosion" of employment litigation.[105] Managers during that time period learned of exceptional cases with very large jury awards, warnings about jury bias against employers, and the looming threat of massive punitive damages.[106] This hyperbole may have increased the professional influence of consultants and perhaps the amount of business they could generate.[107]

More recent reforms may have attracted a similar increase in consultative influence. The financial regulatory reforms enacted over the past fifteen years have been a substantial driver of external compliance costs. To cite one prominent example, the Sarbanes-Oxley Act (SOX) implemented new corporate reporting mandates.[108] Audit and law firms, in particular, sought to exploit the costs associated with SOX non-compliance to corporate boards.[109] More recently, advocates for the emerging corporate compliance field have emphasized liability risk from sanctions

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103. Krawiec, *supra* note 52, at 528–32 (describing the self-interested role of legal compliance professionals, which include lawyers, ethics and compliance consultants, and internal compliance personnel). *See also* Tanina Rostain, *The Emergence of "Law Consultants*", 75 FORDHAM L. REV. 1397 (2006) (discussing the emergence of the law consulting industry in areas such as compliance)

104. *See* Krawiec, *supra* note 52, at 529–30 (noting how legal compliance professionals economically benefit from incomplete or vague legal rules).

105. Lauren B. Edelman, Steven B. Abraham & Howard S. Erlanger, *Professional Construction of Law: The Inflated Threat of Wrongful Discharge*, 26 LAW & SOC'Y REV. 47, 64–68 (1992).

106. *Id*. at 68.

107. *Id*. at 76–77.

108. Pub. L. No. 107-204, 116 Stat. 745, 784 (codified in sections of 11, 15, 18, 28, and 29 U.S.C. (2012)). These mandates require, most notably, that companies certify and attest to their financial statements and disclose information regarding their internal controls and financial reporting procedures. 15 U.S.C. §§ 7241, 7262 (2012).

109. Donald C. Langevoort, *Internal Controls After Sarbanes-Oxley: Revising Corporate Law's "Duty of Care as Responsibility for Systems"*, 31 J. CORP. L. 949, 966–68, 971–72 (2006).

under the Dodd-Frank Act[110] and other new regulatory regimes as justification for bolstering in-house compliance functions.[111]

B. *Risk-Intelligence Compliance Through an Efficient Investment-Risk Model*

Regardless of the source, firms are subjected to significant internal and external pressures to over-comply or under-comply with regulations. How firms determine their allocative efficiency and technical efficiency depends upon a given firm's regulatory and resource mix. This view may be conceptualized in a dynamic, multi-variable model of corporate compliance that accounts for a firm's risk aversion, technical efficiency investments, allocative efficiency positioning, and its specific internal and external regulatory environments. This efficient investment-risk (EIR) model is shown in the following figure:

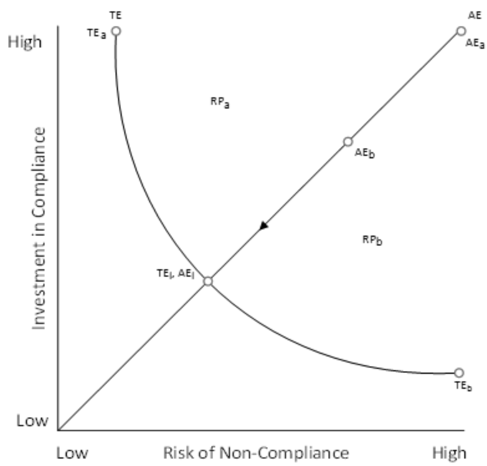

FIGURE 4. THE EFFICIENT INVESTMENT-RISK MODEL

The curved line represents the compliance frontier—i.e., the sum of all existing best practices for compliance with a particular regulation by a

110. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) [hereinafter Dodd-Frank Act].

111. *See* John G. Browning, *Why Chief Compliance Officers are More Important than Ever*, D MAG. 2–4 (July-Aug. 2013), http://www.dmagazine.com/publications/d-ceo/2013/july-august/why-chief-compliance-officers-are-more-important-than-ever [HTTPS://PERMA.CC/53N5-TZUK] (describing the role of compliance professional membership organizations, such as Society of Corporate Compliance and Ethics and the Health Care Compliance Association).

particular firm. The compliance frontier assumes that investments in compliance and penalties from compliance are moderately imperfect substitutes. While investments can reduce penalties, for example, the ratio of investments made to penalties reduced changes according to the quantity of investments made, similar to the decision firms actually face in a competitive and regulated market. The firm can choose a high-risk, low-cost compliance strategy that keeps compliance cheap but exposes the company to potential liability. Conversely, the firm can invest heavily in compliance and minimize most risks, but at great expense. The concave curve represents the continuum of optimal compliance practices given a particular risk-cost combination by the enterprise. Most firms would be somewhere "above" the compliance frontier, striving both to minimize their risk of compliance and reduce the cost of doing so.

TE represents the risk-combinations at the compliance frontier. A firm reaching a point on *TE* has achieved technical efficiency for its risk-cost profile. That firm is using its resources most effectively given its risk culture and environment. It is important to note that such combinations along the *TE* frontier are curvilinear, and not simply linear, in nature. If the *TE* curve represented a linear relationship (specifically, that of a diagonal line running from TE_b to TE_a), the choice of risk-cost combinations firms would be irrelevant. Any choice along the line would be as efficient as the next.

However, the risk-cost relationship that arises from compliance tends to be curvilinear in nature. A firm at TE_b has made few, if any, investments in regulatory compliance and is at a high risk of non-compliance.[112] For such "low-hanging fruit," firms can substantially reduce their risk exposure with only a minimum of resources.[113] This may be as simple as informing employees of the need for compliance and to be aware of issues that may arise. Reward programs for compliant behavior can incentivize employees and also convey positive cultural message with little effort.[114] Investments

112. It is possible that a firm making no investments in compliance may still achieve a compliance state due to the moral compulsion of certain firm's employees to comply even without support from their employer, investments in place for unrelated reasons that happen to promote compliance, or sheer luck.

113. *See* Edwin G. Foulke Jr., *Managing an OSHA Inspection: Former OSHA Chief Advises Employers to Address 'Low-Hanging Fruit,'* OSHA GUIDE FOR HEALTH CARE FACILITIES NEWSL., Feb. 2013, at 4 (advising the correction of "low-hanging fruit" as an easy way to avoid citations and fines).

114. *See* Killingsworth, *supra* note 32, at 986 ("Examples of low-hanging fruit . . . include consideration of ethical leadership and compliance in performance reviews, compensation and promotion decisions, especially for managers; recognition of employees who have conspicuously done 'the right thing' in difficult situations; and time off or a pizza party for the work group that finishes compliance training first.").

like these are easy to implement and generate significant "bang" for the compliance "buck."[115] As firms make these investments, they move on the *TE* curve from TE_b toward TE_i.[116] Each investment in compliance generates a proportionally greater return in the form of reduced compliance risk.

Over time, as the metaphorical low-hanging fruit of compliance is plucked, returns on compliance investments decline. Once the firm passes TE_i, the cost of compliance increases at a marginal rate greater than the return it provides in reduced risk of non-compliance. Compliance investments at this state are not worth their return on investment to the firm. As a firm approaches TE_a, compliance investments are highly costly and generate little if any additional risk-reduction return. For example, if employees were required to attend daily one-hour compliance meetings and change their passwords on an hourly basis, it might improve regulatory compliance, nudging the firm towards TE_a, but do so at an unacceptably high productivity cost to the enterprise. Where firms fall on the curve is determined by the firm's risk-cost profile.

The *AE* line represents a firm's pursuit of allocative efficiency. Moving from the most inefficient state at AE_a, a firm pursues allocative efficiency along the diagonal line until it reaches AE_i. Firms positioned at AE_b, or elsewhere on the *AE* line, represent firms that are using compliance inputs in their optimal proportion without achieving the technical efficiency necessary to drive their risk-cost profile toward AE_i. While technical efficiency is a necessary precondition to achieve allocative efficiency,[117] such firms on the *AE* line are already "doing compliance right," but simply need to improve their efficiency in investments to achieve both technical and allocative efficiency. These firms could be thought of as allocatively sub-efficient, insofar that they have achieved optimal proportional use of resources but need to generate efficient input use.

The point AE_i, TE_i represents the point at which a firm achieves both technical and allocative efficiency. At this point, the firm has achieved the greatest reduction in non-compliance risk relative to the cost of compliance

115. *See* Jeffrey J. Sama, *Environmental Permits in the Next Century: The DEC's Deputy Permit Administrator Outlines His Recipe for Reform*, 1 ALB. L. ENVTL. OUTLOOK 15, 21 (1995) (noting in the environmental context that "selective and targeted compliance activities provide a lot more 'bang for the buck,' and preserve the benefits of regulatory reform while enabling compliance staff to devote the bulk of their time to high risk and environmentally sensitive regulated activities").

116. This assumes that the firm has reached *TE*. Firms that have not achieved technical efficiency will be limited by their own bounded curve with the same curvilinear shape as *TE* but one closer to AE_b or even AE_a.

117. *See* Daniel Clough, *Law and Economics of Vertical Restraints in Australia*, 25 MELB. U. L. REV. 551, 555 (2001) (defining the relationship between technical and allocative efficiency).

invested. Any increases in compliance investment from this point would bring decreasing risk-reduction returns. Also, any reductions in compliance investment would bring disproportionally increasing exposure to non-compliance. AE_i, TE_i represents the optimal point for a firm's compliance function. In a perfectly efficient compliance system, firms would seek to reach this point. Accordingly, we refer to this point as the compliance equilibrium. As we explore further in this Article, there are multiple forces exerted by the regulator and the firm that preclude the regulator-firm relationship from achieving a stable compliance equilibrium.[118]

Finally, it bears noting the profile of firms in the inefficient spaces behind the frontier. Firms in the RP_a field represent enterprises that over-invest in compliance relative to their reduction in risk. Such firms are typically bureaucratically heavy enterprises with a conservative attitude toward risk.[119] Investments in this space may be prominent through the use of easily recognizable forms and procedures. However, such process may do little to actually reduce risk or do so at an unsustainable cost to productivity. A principal-agent problem may push a firm towards RP_a, such as when managers expend disproportionate resources to preserve compliance in order to avoid hurting their own careers for non-compliant decisions. Managers situated in a "don't stick your neck out" culture are incentivized to create overly conservative or cumbersome compliance programs in order to avoid personal reputational or liability risk.[120] Corporate boards may also overvalue compliance vis-a-vis their firms' risk-cost profiles in order to protect their own reputations.[121]

Firms in the RP_b space represent enterprises that underinvest in compliance. Such firms may have a risk attractive culture that encourages business gambles for the lure of a high return. In such firms, a compliance department may be understaffed or non-existent. Lawyers and other authorities on regulation may be marginalized due to their perceived unimportance. Managers may have had a negative experience with the

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118. *See infra* Part IV.

119. *See* Caroline H. Bledsoe et al., *Regulating Creativity: Research and Survival in the IRB Iron Cage*, 101 NW. U. L. REV. 593, 608 (2007) (noting that "managers intentionally overestimate risk to create wide margins of safety in order to avoid inefficiency and avert costly accidents. Instituted as precautionary measures in the forms of additional rules and insistence on strict adherence to the formalized procedures of the organization, these margin-of-safety measures, originally intended to ensure that the organization's goals are met, become the overriding concern.").

120. *See* Yockey, *supra* note 55, at 358 (noting the problem of "check the boxes" compliance programs caused by static, rigid regulatory requirements). *See also supra* text accompanying notes 98–101.

121. *See supra* text accompanying notes 96–97.

legal environment and thus have a negative view on the purpose and goals of regulation.[122] This may create a culture where, while compliance issues are widely known, few take responsibility for managing the compliance function.

IV. THE CHOICE OF REGULATORY RULES AND THE IMPACT OF REGULATOR OVERSIGHT ON FIRM RESPONSES TO REGULATION

The EIR model can be used to analyze how regulators and regulated firms interact. Regulators are interested in achieving specific policy goals, and ideally would prefer that all firms achieve perfect compliance with applicable laws and regulations. Regulators use a number of different kinds of legal authority to encourage firms to comply with a rule, thus shifting firms away from a high risk of non-compliance (such as TE_i) and toward a low risk of non-compliance (shifting leftward on the x-axis). The *ex ante* choice of rule affects how firms comply and the dynamic nature of the regulator-firm relationship over time.

The following discussion begins by defining the three major categories of regulatory mandates. Then it proceeds by examining the impact of these different types of rules on firm compliance, the regulator's relationship with the firm, and the achievement of regulatory objectives.

A. *Types of Regulatory Rules: Direct, Collaborative, and Market Contingent Regulation*

The legal authority that structures the behavior of firms may be categorized in three basic archetypes of regulation. The first type of regulatory approach consists of governmental mandates that fall under traditional command-and-control regulation, which we collectively refer to as "Direct Regulation".[123] Under this rubric, governments use coercive powers to mandate the regulated firm's compliance with statutorily defined regulatory objectives through the threat of investigation, civil fines, and criminal prosecution.[124] Command-and-control regulation operates in a top-down manner that relies heavily on active governmental oversight.[125]

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122. *See* Robert C. Bird, *Law, Strategy, and Competitive Advantage*, 44 CONN. L. REV. 61, 84 (2011) (explaining various reasons why managers tend to have negative views towards the legal environment).

123. Malloy, *supra* note 26, at 531 n.1 (referring to "direct regulation" or "traditional regulation").

124. *Id.*

125. *See* Eric W. Orts, *Reflexive Environmental Law*, 89 NW. U. L. REV. 1227, 1235–36 (1995) (explaining the characteristics of command-and-control regulation as well as its

The second type of regulatory approach consists of various hybrid forms of governance in which the regulator leverages its relationship with private governance regimes and firm- or industry-based self-regulation. Described by various scholars as New Governance,[126] reflexive regulation,[127] responsive regulation,[128] co-regulation,[129] negotiated governance,[130] decentered regulation,[131] or other related theories,[132] we collectively refer to them as "Collaborative Regulation" in order to distinguish them from the governmentally established forms of Direct Regulation.

Collaborative Regulation is distinguishable from Direct Regulation in two ways: the nature of the regulator-regulatee relationship and the tools of regulation. First, Collaborative Regulation is based on ongoing deliberation and communication between the regulator and regulated firms.[133] While Direct Regulation is based on the administrative state as the sole locus of power to regulate, Collaborative Regulation is premised on a "collaborative, cooperative enterprise of shaping social outcomes through negotiation among numerous public and private actors with stakes in those outcomes".[134] In a Collaborative Regulation framework, government

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merits).

126. *See* Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342 (2004) (demonstrating a shift from formal regulation to the idea of a "New Governance" that combines both public and private actors).

127. *See* Orts, *supra* note 125; Gunther Teubner, *Substantive and Reflexive Elements in Modern Law*, 17 L. & SOC'Y REV. 239 (1983) (articulating the theory of reflexive law).

128. *See* IAN AYRES AND JOHN BRAITHWAITE, RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE 3–4 (1992) (exploring how better policy proposals can result from working with the symbiotic interaction between state regulation and self-regulation).

129. *See generally* CYNTHIA ESTLUND, REGOVERNING THE WORKPLACE: FROM SELF-REGULATION TO CO-REGULATION (2010) (examining how public regulation can encourage workplace self-governance).

130. *See* Krawiec, *supra* note 52, at 489 n.9 (listing various alternative names).

131. *See* Julia Black, *Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a 'Post-Regulatory' World*, 54 CURRENT LEGAL PROBS. 103 (2002) (noting the various connotations of the term "decentered regulation").

132. *See* Kevin Kolben, *Dialogic Labor Regulation in the Global Supply Chain*, 37 MICH. J. INT'L L. 425, 430–31 (2015).

133. *See* Cristie L. Ford, *New Governance, Compliance, and Principles-Based Securities Regulation*, 45 AM. BUS. L.J. 1, 27–28 (2008) (describing a new regulatory system with a more interactive role for regulated entities by accepting input from these regulated entities).

134. Saule T. Omarova, *Wall Street as Community of Fate: Toward Financial Industry Self-Regulation*, 159 U. PA. L. REV. 411, 427 (2011). *See* Robert F. Weber, *New Governance, Financial Regulation, and Challenges to Legitimacy: The Example of the Internal Models Approach to Capital Adequacy Regulation*, 63 ADMIN L. REV. 783, 836–37 (2010) (distinguishing New Governance from command-and-control regulation).

regulators share responsibility for achieving policy goals with both firms and society generally.[135] In many instances, regulatory authority is devolved from national governmental agencies to subsidiary bodies and civil society actors.[136] In a number of prominent cases, Collaborative Regulation is the basis for multi-stakeholder initiatives that establish new areas of regulation.[137] Collaborative Regulation is particularly appealing as a means to address transnational regulatory problems—such as environmental protection, labor rights, and financial capital flows—where governmental regulators and intergovernmental organizations are not able to effectively regulate the cross-border activities of multinational corporations.[138]

Second, Collaborative Regulation is defined by the mode of regulation itself. Eschewing the exclusive use of rules, Collaborative Regulation often relies on principles-based regulation, which provides the regulator with the autonomy to determine what conduct is permissible on the basis of an underlying evaluative framework.[139] Instead of drawing precise, bright line rules between prohibited and permissible conduct, principles-based regulation consists of standards that are flexibly applied by regulators in different ways depending on the specific factual context.[140] Collaborative

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135. *See* Lobel, *supra* note 126, at 344 (describing the recent shift to a collaborative governance model "in which government, industry, and society share responsibility for achieving policy goals").

136. Kolben, *supra* note 132, at 432.

137. *See* Cynthia A. Williams, *Civil Society Initiatives and "Soft Law" in the Oil and Gas Industry*, 36 N.Y.U. J. INT'L L. & POL'Y. 457, 471–91 (2004) (analyzing three transnational, multi-stakeholder initiatives: the Global Reporting Initiative (GRI), the Voluntary Principles on Security and Human Rights, and the Extractive Industry Transparency Initiative).

138. Kolben, *supra* note 132, at 434–35. *See* Kenneth W. Abbott & Duncan Snidal, *Strengthening International Regulation Through Transnational New Governance: Overcoming the Orchestration Deficit*, 42 VAND. J. TRANSNAT'L L. 501, 541–45 (2009) (identifying the features of transnational New Governance regulatory schemes); Eric J. Pan, *Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks*, 11 CHI. J. INT'L L. 243, 262–63 (2010) (describing the role of private standard setting bodies in international financial regulation). *See also* Burkard Eberlein et al., *Transnational Business Governance Interactions: Conceptualization and Framework for Analysis*, 8 REG. & GOVERNANCE 1, 6–14 (2014) (proposing a framework for analyzing the interactions between Collaborative Regulation actors).

139. *See* Ford, *supra* note 133, at 6–7 (describing the difference between rules and principles and the scholarly debate surrounding these two concepts). *See also* Dan Awrey, *Regulating Financial Innovation: A More Principles-Based Proposal?*, 5 BROOK. J. CORP. FIN. & COM. L. 273, 281–97 (2011) (arguing for more principles-based financial regulation).

140. *See* Awrey, *supra* note 139, at 276–78 (describing the differences between rules and principles and the advantages and disadvantages of both). As legal scholars have noted, however, this distinction should not be overemphasized. Any given regulatory system may

Regulation-based standards include quantitative indicators, industry benchmarks and best practices, and voluntary reporting initiatives.[141]

The third type of regulatory approach encompasses a range of regulatory mandates, including private rights of action, market-leveraging taxes, fees, and permits, and mandatory disclosure regimes.[142] Unlike Direct Regulation, these regulatory approaches do not mandate a specific action on the part of regulated firms. Nor do they necessarily incorporate the decentralized, public-private governance of Collaborative Regulation. Instead, these forms of "Market Contingent Regulation" seek to influence firm behavior by providing incentives or signals to regulated firms. The achievement of the regulator's objective is contingent on firms responding to these incentives or signals.

Market Contingent Regulation is an interstitial category. It includes parallel forms of regulation that may be categorized either as Direct Regulation, Collaborative Regulation, or a hybrid of the two.[143] Mandatory disclosure—arguably the most important and prevalent regulatory technique in the United States—reflects this trait.[144] Laws mandating the public reporting of a firm's financial condition and business activities

include both rules-based and principles-based elements, and any given rule or principle may be applied in a manner that belies easy classification. *See* Lawrence A. Cunningham, *A Prescription to Retire the Rhetoric of "Principles-Based Systems" in Corporate Law, Securities Regulation, and Accounting*, 60 VAND. L. REV. 1411, 1417–25 (2007) (analyzing the tension in the classification of rules and principles and expressing skepticism about the feasibility of describing or designing a principles-based or rules-based system). *See also* Ford, *supra* note 133, at 9–10 (acknowledging the limitations of the rules-principles dichotomy).

141. *See* David Hess, *Social Reporting and New Governance Regulation: The Prospects of Achieving Corporate Accountability through Transparency*, 17 BUS. ETHICS Q. 453, 453–57 (2007) (analyzing corporate environmental and social reporting as New Governance regulation); Galit A. Sarfaty, *Regulating Through Numbers: A Case Study of Corporate Sustainability Reporting*, 53 VA. J. INT'L L. 575, 590–606 (2013) (analyzing the Global Reporting Initiative (GRI), a leading voluntary corporate reporting framework).

142. *See* Ford, *supra* note 133, at 26–27, 29–31, 36–40 (describing property-, market-, and information-based public regulation).

143. *See* Sarah E. Light & Eric W. Orts, *Parallels in Public and Private Environmental Governance*, 5 MICH. J. ENVTL. & ADMIN. L. 1, 23–53 (2015) (providing a comparative taxonomy of parallel forms of public environmental law and private environmental governance); Margaret Ryznar & Karen E. Woody, *A Framework on Mandating Versus Incentivizing Corporate Social Responsibility*, 98 MARQ. L. REV. 1667, 1669–74 (2015) (comparing governmental and private rights of action).

144. Omri Ben-Shahar & Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. PA. L. REV. 647, 652 (2011) (characterizing mandated disclosure as a "favored-weapon in the arsenals of legislatures, courts, [and] administrative agencies"); Cass R. Sunstein, *Informational Regulation and Informational Standing: Akins and Beyond*, 147 U. PA. L. REV. 613, 613 (1999) (calling informational regulation "one of the most striking developments in the last generation of American law").

undergird federal banking and securities regulation.[145] These laws have a coercive, command-and-control element insofar as they require regulated firms to disclose information that they otherwise would not voluntarily make public.[146] On the other hand, the effectiveness of mandatory disclosure is contingent on third party users (e.g., customers and investors) being able and willing to make use of this information.[147] The mandated exchange of information between regulated firms and third party users through this process is often directly linked to Collaborative Regulation.[148] The coerciveness of mandatory disclosure regulation primarily depends on two factors: (1) the discretion afforded to a regulated firm to determine what to disclose; and (2) the possibility or probability of governmental enforcement if the firm fails to disclose.[149] In many cases, this coerciveness is weak.[150]

The following figure compares select characteristics of these three categories of regulation:

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145. *See* Ben-Shahar & Schneider, *supra* note 144, at 658–59 (claiming that financial disclosures are pervasive and reaches all domains of consumer protection); ARCHON FUNG, MARY GRAHAM & DAVID WEIL, FULL DISCLOSURE: THE PERILS AND PROMISE OF TRANSPARENCY 107–09 (2007) (arguing that despite the significant political power of corporations, mandated financial disclosure requirements have gained more prominence over time).

146. Ruth Jebe, *Sustainability Reporting and New Governance: South Africa Marks the Path to Improved Corporate Disclosure*, 23 CARDOZO J. INT'L & COMP. L. 233, 247 (2015).

147. *See* Stephen Kim Park, *Targeted Social Transparency as Global Corporate Strategy*, 35 NW. J. INT'L L. & BUS. 87, 95 (2014) (describing the discretionary reaction of firms to stakeholder responses to disclosed information). *See also* Charlotte S. Alexander, *Transparency and Transmission: Theorizing Information's Role in Regulatory and Market Responses to Workplace Problems*, 48 CONN. L. REV. 177, 193–95 (2015) (explaining how regulators and outside interest groups use information disclosed by firms through transparency mandates to enforce labor and employment laws).

148. *See* David Hess, *The Three Pillars of Corporate Social Reporting as New Governance Regulation: Disclosure, Dialogue, and Development*, 18 BUS. ETHICS Q. 447, 467–73 (2008) (advocating for mandatory social reporting consistent with the GRI guidelines); Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197, 1301–03 (1999) (suggesting that the SEC should supervise social reporting modeled on existing private reporting frameworks and industry best principles).

149. *See* Jebe, *supra* note 146, at 252–54 (discussing the inadequacies of existing mandatory environmental and social disclosure regimes, namely the concept of materiality and the weaknesses of enforcement mechanisms).

150. *See id.* at 253 (citing Sweden and France as examples of mandatory reporting systems with weak enforcement mechanisms). To empower third party users, Aaron Dhir has proposed that social disclosure be used to empower corporate shareholders through the shareholder proposal mechanism. Aaron A. Dhir, *The Politics of Knowledge Dissemination: Corporate Reporting, Shareholder Voice, and Human Rights*, 47 OSGOODE HALL L.J. 47, 65–76 (2009).

	Direct Regulation	Collaborative Regulation	Market Contingent Regulation
Actors	Government regulators, regulated firms	Regulators, firms, civil society representatives (e.g., NGOs)	Government regulators, regulated firms, market-based third parties (e.g., customers, investors)
Means of enforcement	Civil and criminal sanctions	Private standards (e.g., membership rules), often in addition to Direct Regulation	Market forces intermediated through third parties
Prominent example	U.S. federal emissions rules	Fair Labor Association standards	Periodic reporting requirements under the U.S. Securities and Exchange Act of 1934
Coercion on regulated firms	High	Low	Varies

FIGURE 5. COMPARISON OF REGULATORY APPROACHES

B. *The Impact of Choice of Rule on Firm Compliance*

The EIR model illuminates the impact of the choice of regulatory rules and illustrates the potential interactions between them. As a business regulatory approach, Collaborative Regulation has its greatest potential for influence when the firm is at a high-risk state of non-compliance (such as TE_i). Collaborative Regulation can help the firm move toward a lower risk of non-compliance. Both the regulator and the firm can benefit from collaboration based on Collaborative Regulation principles. This interactive cycle begins with firms signaling their commitment to the policy goals of the regulator. This may be accomplished by making public disclosures of firm practices and commitments through self-reporting and self-policing,[151] social and environmental reporting,[152] active participation in stakeholder-based governance regimes,[153] and engaging in non-exploitative behavior toward regulatory mandates.[154] Regulators, in turn, respond to the firm's commitment to regulatory goals by allocating resources away from the monitoring function and de-escalate toward a non-confrontational posture.[155] The regulator further responds by developing partnerships with the firm as well as sharing expertise. At this point, the firm is not only better understanding the goals and attitudes of regulatory agency, but also learning how best to comply effectively from the very entity that is in charge of enforcing compliance. This, in turn, can promote still further investments in regulatory compliance, which still further deepen the relationship of trust, broaden the exchange of information, and decrease the costs of monitoring for both sides.[156]

This self-reinforcing cycle of compliance, relationship building, and information exchange creates a state of what is often characterized as meta-regulation.[157] In a meta-regulatory partnership, the government observes firm behavior only at a distance, focuses not on monitoring but rather on evaluating a firm's compliance function and controls, and ensures they function properly.[158] Instead of conformance with rules, regulation becomes a means for regulators to encourage firms to implement and

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151. *See* Michael W. Toffel & Jodi L. Short, *Coming Clean and Cleaning Up: Does Voluntary Self-Reporting Indicate Effective Self-Policing?*, 54 J.L. ECON. 609, 638–40 (2011) (finding "evidence that self-reporting can reliably indicate effectively implemented self-policing and that regulators are, in fact, using self-reporting to identify firms that are meaningfully monitoring their own operations").

152. *See* Stephen Kim Park & Gerlinde Berger-Walliser, *A Firm-Driven Approach to Global Governance and Sustainability*, 52 AM. BUS. L.J. 255, 298–302 (2015) (noting the role of disclosure regimes in promoting communication of adverse environmental and social impacts between firms, regulators, and stakeholders).

153. *See id.* at 302–06 (describing assessment and feedback mechanisms through public-private, multi-stakeholder initiatives).

154. *Cf.* Robert C. Bird, *Pathways of Legal Strategy*, 14 STAN. J.L. BUS. & FIN. 1, 14–15 (2008) (noting how certain firms exploit textual weaknesses in regulation).

155. This de-escalation is represented by an enforcement pyramid, which illustrates the various coercive and persuasive strategies a regulator may utilize to exert a pull to compliance over a firm. These can be weak or strong given the severity of the non-compliance or strength of the emerging partnership. Neil Gunningham, *Strategizing Compliance and Enforcement: Responsive Regulation and Beyond*, *in* EXPLAINING COMPLIANCE: BUSINESS RESPONSES TO REGULATION, *supra* note 12, at 199, 203.

156. *See* Deborah E. Rupp & Cynthia A. Williams, *The Efficacy of Regulation as a Function of Psychological Fit: Reexamining the Hard Law/Soft Law Continuum*, 12 THEORETICAL INQUIRIES L. 581, 602 (2011) (noting that "over time, the justice perceptions of individuals working together are said to converge").

157. *See* CHRISTINE PARKER, THE OPEN CORPORATION: EFFECTIVE SELF-REGULATION AND DEMOCRACY 245–91 (2002) (defining and examining the concept of meta-regulation).

158. Gunningham, *supra* note 155, at 200, 211–16.

sustain best practices for their internal compliance controls.[159] Regulators can also disseminate information about how firms need to comply, as well as which strategies are most cost-effective to make compliance happen. The regulator can reduce information barriers the firm possesses about understanding a regulation and what can be done to efficiently meet the regulation's requirements. This may result in the creation of new Collaborative Regulation-based regimes to enable regulators and firms to share information and generate surplus.[160] In essence, the regulator can inform the regulated firm how to more efficiently comply, and thereby lower its risk profile at a greater proportion to the cost of the firm's investment in compliance. A combination of regulatory interventions based on Collaborative Regulation may reinforce each other: the ability of regulators and regulated firms to communicate and collaborate leads to more contextual, shared understandings of their respective and shared policy goals, which are manifested as standards, and vice versa.[161]

As regulation innovates over time, it is shaped by both regulatory objectives and the responses of firms, as well as external stakeholders contributing their expertise and expressing their preferences.[162] As part of this process, regulators often directly involve regulated firms in the process of developing the standards to which they are held accountable.[163] This partnership in governance helps ensure that future compliance standards are both efficiently written and substantively effective. Firms that participate in the creation of standards become agents in the regulatory process instead of mere subjects of regulation.[164] In doing so, firms are motivated to invest in internal compliance functions and to view compliance as a means to

159. *Id*. at 211.

160. Among such measures are informational regulation measures, such as encouraging and facilitating the voluntary disclosure of information through New Governance-style industry-based reporting mechanisms. *See* Jamie Darin Prenkert & Scott J. Shackelford, *Business, Human Rights, and the Promise of Polycentricity*, 47 VAND. J. TRANSNAT'L L. 451, 487–91 (2014) (describing industry-level conflict minerals due diligence and reporting programs).

161. Awrey, *supra* note 139, at 288–89.

162. *See* Amiram Gill, *Corporate Governance as Social Responsibility: A Research Agenda*, 26 BERKELEY J. INT'L L. 452, 472 (2008) (describing organizations' inclusion of both "maximizing profits and serving the interests of shareholders" when defining corporate responsibility).

163. *See* Cynthia A. Williams & John M. Conley, *The Social Reform of Banking*, 39 J. CORP. L. 459, 474 (2014) (". . . if people within regulated entities are engaged with regulators or representatives of non-government organizations (NGOs) in developing the voluntary standards for actions, there is a good possibility of creating greater trust between the parties, and a state of shared values and mutual problem-solving that should lead to better compliance with the content of the standards.").

164. Ford, *supra* note 133, at 30 ("Requiring firms to fill in the content of those principles themselves makes firms *agents* rather than subjects of regulation.").

fulfill underlying principles of responsible business practice, instead of merely "cosmetic compliance."[165] Thus, perceiving compliance as a long-term investment, rather than a one-time cost-benefit decision, can help build a partnership between regulator and regulatee that makes present compliance more efficient and future regulation more responsive and effective.[166] In certain circumstances, a Collaborative Regulation-based approach to standard-setting can enable norms of compliance to spread within a firm[167] or among firms through processes of socialization.[168]

This regulator-regulatee relationship is not only laudable from a policy perspective but it may also be efficient from a firm-oriented microeconomic perspective. When the regulator and the firm exhibit trust and cooperation towards one another, which is an act foundationally characteristic of Collaborative Regulation, each relaxes their posture with respect to the compliance function. Regulators that trust that the enterprise is committed to satisfactory compliance practices can spend fewer resources monitoring and enforcing rules against the firm. The firm, in turn, under reduced threat of investigation, dedicates fewer resources to defending against actual or potential challenges by the regulator against the enterprise. This mutual relaxation of resources, based upon trust, creates a resource surplus that both firm and agency can share.[169] Regulators benefit from this posture because they can allocate their limited monitoring assets elsewhere, and can also more readily gather information about the firm's compliance practices.[170] Firms benefit from this posture by reducing their exposure to external audits, investigations, and penalties.[171] In terms of the

165. *Id.* at 29–30.

166. *See, e.g.*, Fiona Haines, *Regulatory Failures and Regulatory Solutions: A Characteristic Analysis of the Aftermath of Disaster*, 34 LAW & SOC. INQUIRY 31, 57 (2009) ("Newer forms of regulation such as metaregulation can, as demonstrated here, play a valuable role in maintaining integrity between regulatory goals, procedures, and site practices.").

167. *See* David E. DePianto, *Sticky Compliance: An Endowment Account of Expressive Law*, 2014 UTAH L. REV. 327, 336–39 (2014) (describing how the expression of law as social norms can promote compliance).

168. *See* Park, *supra* note 147, at 117–20 (describing the expressive dimension of mandatory social disclosure); *see also* Ford, *supra* note 133, at 28 ("The enforcement of law, like law itself, serves an expressive purpose. Regulatory approval . . . confers legitimacy on firm operations . . . .").

169. Williams & Conley, *supra* note 163, at 474 (discussing that regulator-regulatee conversation can build trust and understanding).

170. Ford, *supra* note 133, at 30–31; *see* Lobel, *supra* note 126, at 398–99 (describing New Governance-style feedback and learning, which helps keep regulation from being outdated).

171. *See* Ford, *supra* note 133, at 34–36 (discussing the benefits of this form of regulation, which encourages responsible firms to believe that regulatory actions are not arbitrary and their good behavior will be rewarded).

EIR model, Collaborative Regulation enables firms to shift leftward along the *TE* compliance curve away from TE_b by investing in compliance practices that generate risk reduction benefits that outweigh the initial cost. In addition to the previously mentioned low-hanging fruit that the firm discovers on its own, Collaborative Regulation creates a robust mechanism by which firms move toward a more efficient state of compliance.

C. *The Limits of Collaborative Regulation and the Effects of Direct Regulation and Market Contingent Regulation*

The effectiveness of Collaborative Regulation as a means of compelling firm compliance, however, is inherently limited. One reason that Collaborative Regulation is successful is that it creates a shared surplus arising from resource sharing, cooperation, and trust building measures. This effect can potentially bring the enterprise to compliance equilibrium, (i.e., TE_i, AE_i) where the firm is both technically and allocatively efficient in its compliance practices. In other words, the firm has achieved the greatest risk reduction for the least possible cost. A firm may move beyond compliance equilibrium for a time. It may be motivated by altruism towards the regulatory goal or a values-driven ethical commitment to the objectives of the agency that supersedes profit-making.[172]

The firm may, through legal mechanisms, consolidate a more durable commitment to compliance beyond the law. One prominent avenue is by organizing as a social enterprise, which uses revenue-producing commercial activity to pursue the common good as its primary purpose.[173] This enables an altruistic-minded firm to "lock in" socially minded, values-based compliance behavior that furthers the regulator's public goals.[174] Statutes recognizing social enterprise companies have been enacted in various forms by over one-half of U.S. states.[175] Most prominent among

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172. *See generally* Rikki Abzug & Natalie J. Webb, *Rational and Extra-Rational Motivations for Corporate Giving: Complementing Economic Theory with Organization Science*, 41 N.Y.L. SCH. L. REV. 1035 (1997) (discussing reasons for differences in corporate giving behavior).

173. J. Haskell Murray, *Social Enterprise Innovation: Delaware's Public Benefit Corporation Law*, 4 HARV. BUS. L. REV. 345, 347–48 (2014).

174. *See* Joseph W. Yockey, *The Compliance Case for Social Enterprise*, 4 MICH. BUS. & ENTREPRENEURIAL L. REV. 1, 19 (2014) (discussing value-based compliance's emphasis on agents who "intuitively consider every organizational priority when approaching any situation" and in turn, "behave responsibly and in the ways the organization prefers . . . ."); Alicia E. Plerhoples, *Social Enterprise As Commitment: A Roadmap*, 48 WASH. U. J. L. & POL'Y 89, 99 (2015) (reviewing legal scholars' discussions of social enterprise and their focus on commitment).

175. Dana Brakman Reiser, *Regulating Social Enterprise*, 14 U.C. DAVIS BUS. L.J. 231, 232 (2014); *see also* J. Haskell Murray, *Choose Your Own Master: Social Enterprise,*

them is the benefit corporation statute, which has been adopted by twenty-six states and the District of Columbia.[176] Under many of these statutes, a social enterprise must include a "mission lock" provision in its charter that permits the amendment of the entity's public benefit or social purpose only upon a supermajority vote of shareholders.[177] Despite their commitments to furthering the public good beyond general business regulation, benefit corporations have demonstrated deficiencies in complying with the self-imposed heightened legal requirements to which they are subject under benefit corporation statutes.[178]

Apart from social enterprises, a firm's commitment to comply with law beyond the compliance equilibrium is often ephemeral, however. Firm ownership or management may change. Managers may not be certain how to address and reconcile competing firm goals and social policy goals. There may be differing views among managers, executives, and owners *qua* corporate shareholders concerning who and what should benefit from the firm's altruism.[179] Firm management may feel pressured by shareholders to optimize compliance costs.[180]

Certifications, and Benefit Corporation Statutes, 2 AM. U. BUS. L. REV. 1, 22–24 (2012) (discussing benefit corporation, low-profit limited liability company, and flexible purpose corporation statutes). A related, but distinct, organizational strategy is the for-profit philanthropic organization. *See generally* Shruti Rana, *Philanthropic Innovation and Creative Capitalism: A Historical and Comparative Perspective on Social Entrepreneurship and Corporate Social Responsibility*, 64 ALA. L. REV. 1121 (2013) (arguing that for-profit philanthropic organizations are part of a long history of philanthropy, and that important philanthropic benefits occur when firms take their business innovations and ideas and apply them to philanthropic endeavors).

176. Plerhoples, *supra* note 174, at 105.

177. *Id.* at 127. Connecticut's benefit corporation statute takes this principle one step further by permitting a benefit corporation to adopt a legacy preservation provision in its certificate of incorporation. Once adopted, this provision requires that, upon the firm's dissolution, its assets be distributed either to one or more charitable organizations or other benefit corporations that have adopted this provision. *See* CONN. GEN. STAT. § 33-1355 (2015).

178. *See* J. Haskell Murray, *An Early Report on Benefit Reports*, 118 W. VA. L. REV. 25 (2015) (determining that, based on survey data, compliance with benefit corporation reporting requirements was below ten percent).

179. One potential way to address this conflict is to require that the corporation include an express statement of its corporate objective in the certificate of incorporation. *See* Justin Blount & Patricia Nunley, *Social Enterprise, Corporate Objectives, and the Corporate Governance Narrative*, 52 AM. BUS. L.J. 201, 204 (2015) (proposing an amendment to corporate law statutes that require "for-profit corporations to include in their certificates of incorporation an express statement of the objective(s) they will pursue").

180. *See* Dana Brakman Reiser, *Benefit Corporations — A Sustainable Form of Organization?*, 46 WAKE FOREST L. REV. 591, 609 (2011) (noting the prevalence of the profit-maximization mindset among corporate fiduciaries); *see also* Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733, 768 (2005) (arguing that managers have the discretion—but not the legal duty—to sacrifice profit for

A firm may also absorb an inefficient compliance position in order to sustain the relationship with the regulator.[181] Looking to build a long-term partnership with an agency, the firm may be willing to absorb temporary economic loss but only for a time. There will likely come a point, however, when firm management will perceive the interaction with the regulator as a form of advantage-taking and withdraw from a Collaborative Regulation-based partnership. At that point, there is no additional surplus to generate and no more information to share. The firm will not move further along the curve toward TE_a because it is no longer efficient to do so.

A regulator may not be satisfied with the firm's preferred position in the EIR model. This position may still allow for substantial risk of non-compliance and the attendant failure of the agency to achieve its regulatory goals. If a regulator wants to move the firm past this efficient state, whereby the firm will invest more in reducing non-compliance risk at a disproportionally greater cost, the effectiveness of regulations based on Collaborative Regulation diminishes. At this point, the shared surplus has been distributed, and the regulator is asking the firm to engage in inefficient behavior to achieve regulatory goals.

When this happens, Direct Regulation may take over. Direct Regulation is coercive and punitive, enabling the regulator to exercise influence by imposing standards that are backed by sanctions if they are not followed.[182] Regulatory authority based on command-and-control principles can compel firms to engage in more risk reduction behavior that is inefficient for them, but furthers the regulatory goals of the agency. This action, however, erodes the possibility for future cooperation, as it denies

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social goals).

181. This behavior is analogous to that described in relational contracts, whereby contracting firms pursue value generation over the entire relationship rather than each transaction and also expect periodic deviations from value-maximizing behavior as a matter of course. *See, e.g.*, Robert C. Bird, *Employment as a Relational Contract*, 8 U. PA. J. LAB. & EMP. L. 149, 153 (2005) (discussing how shared experiences and bonds strengthened throughout a relationship results in "contracting [that] signifies a commitment to cooperate in far more depth than a mere bargained for allocation of risk"); Richard E. Speidel, *The Characteristics and Challenges of Relational Contracts*, 94 NW. U. L. REV. 823, 823, 828 (2000) (discussing how an extended duration of a relationship changes the business interactions with regards to terms and discretion).

182. *See* Jodi L. Short, *The Paranoid Style in Regulatory Reform*, 63 HASTINGS L.J. 633, 659–60 (2012) (pointing to an article defining the standard of Direct Regulation as "the exercise of influence by imposing standards backed by . . . sanctions"); Blake C. Norvell, *Business Regulatory Lessons Learned From Amusement Park Safety Concerns: An Integrated Approach to Business Regulation*, 27 TEMP. J. SCI. TECH. & ENVTL. L. 267, 270 (2008) ("A government that utilizes command and control regulations sets mandatory standards and penalizes those who do not comply. This method utilizes negative reinforcement techniques, such as monetary fines for rule violations, as the primary mechanism to encourage compliance.").

the environment of trust and shared goals to emerge between firms and regulators.[183] Compliance programs based solely on Direct Regulation often mimic extrinsic, incentive-based regulation, which may crowd out ethical norms within the firm by putting a price tag on behaving ethically.[184]

While awareness of the indirect costs of Direct Regulation is growing, regulators are nonetheless statutorily mandated to ensure compliance. The question remains, then: why do regulators not simply compel firms through Direct Regulation to achieve maximum compliance? Regulators may acknowledge the cost of regulation to businesses and may be statutorily obligated to do so,[185] but ultimately it is the policy objectives of the agency that supersede the cost and profit goals of the firms that they regulate.

This question may be answered by referring to the EIR model. For simplicity, assume that the regulator has no interest in firm costs, is responsive to no legal requirement to concern itself with firm costs, and is solely concerned with maximizing its regulatory objectives. In this situation, the regulator's ideal place for the firm is on the x-axis, which represents full compliance with the stated regulation. The regulator is indifferent to where the firm would be found on the x-axis, as the regulator is indifferent to the cost the firm must bear to achieve this compliance goal. More likely, under such conditions, the cost to the firm would be relatively high, and thus it may be reasonably assumed that the single-minded regulator would likely force firms toward $TE_{a,}$ where compliance is complete (or near complete) but accomplished at a very high cost to the firm.

The prevalence of laws based on Market Contingent Regulation further complicates the regulator's ability to compel compliance beyond the firm's compliance equilibrium. From the perspective of the regulator vis-à-

183. *Cf.* Park & Berger-Walliser, *supra* note 152, at 307–09 (describing adaptive learning by firms of industry best practices and stakeholder impacts through legally mediated communication with regulators and other firms).

184. *See* Maurice E. Stucke, *In Search of Effective Ethics & Compliance Programs*, 39 J. CORP. L. 769, 822–23 (2014) (discussing how incentive-based regulations may promote incentives towards illegal behavior).

185. For example, the Regulatory Flexibility Act requires in part that any agency promulgating a rule have to certify that the subsequent regulation will not impose significant harm on a substantial number of small businesses. *See* 5 U.S.C. §§ 601–612 (referencing statutes analyzing and describing regulatory functions and procedures regarding small businesses). Agencies that are unable to certify the absence of such significant harm must then conduct a more thorough analysis of the rule's impact and develop potential methods of reducing the burden. *See* Robert C. Bird & Elizabeth Brown, *Interactive Regulation*, 13 U. PA. J. BUS. L. 837, 838 (2011) (discussing relationships established under the Regulatory Flexibility Act between small business leaders and federal regulators that helped reduce administrative burdens facing small businesses).

vis a single regulated firm, Market Contingent Regulation introduces three unpredictable variables: time, firm responses, and market effects. Because Market Contingent Regulation, for the most part, relies on third party market participants to take action (e.g., by responding to disclosed information or exercising private rights of action), there is an inherent time lag and uncertainty concerning how a regulated firm will respond.[186] Further, in some cases, the responses of regulated firms to Market Contingent Regulation may lead to unforeseen or undesirable effects on the regulated activity until the regulator can modify its rules or policies.[187]

The regulator is meaningfully constrained from compelling full compliance by multiple competing forces that impact regulator-firm interactions. If Collaborative Regulation-based measures fail, regulators can compel firms to reach a desired state of risk-cost compliance if they have the appropriate legal mandate to exert Direct Regulation or change their rules or practices regarding Market Contingent Regulation. However, regulators do not operate in a vacuum and thus are subject to a variety of competing push-and-pull forces, which are represented by the arrows in the following figure:

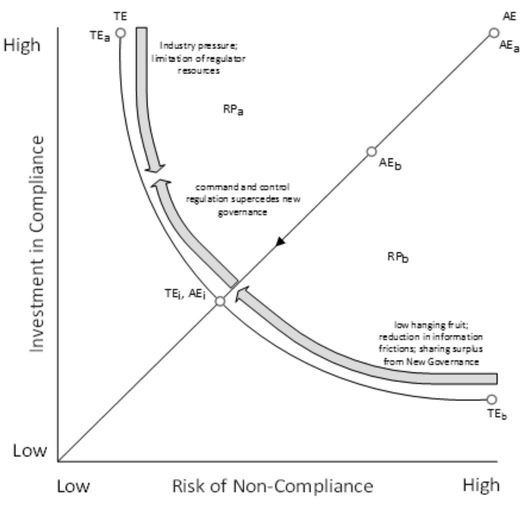

FIGURE 6. REGULATOR AND FIRM FORCES IMPACTING COMPLIANCE

186. *See* FUNG, GRAHAM & WEIL, *supra* note 145, at 66–68 (describing how the effectiveness of mandatory disclosure rules depends on the value, compatibility, and comprehensibility of users' responses to disclosed information).

187. *See* Geoffrey A. Manne, *The Hydraulic Theory of Disclosure Regulation and Other Costs of Disclosure*, 58 ALA. L. REV. 473, 510–11 (2007) (examining the market costs of mandatory disclosure rules).

Figure 6 shows how these competing push-and-pull forces determine where a firm falls within the continuum of compliance possibilities. Regulators—including independent administrative agencies, such as the Securities and Exchange Commission (SEC), and other powerful governmental regulators, such as the Federal Reserve—are constrained by limited enforcement resources.[188] Regulatory agencies often do not have sufficient money or manpower to pull all firms towards TE_a through aggressive investigative and enforcement measures. Agencies must accept—sometimes explicitly and other times only implicitly—an imperfect "second best" for achieving policy goals and aim for some state where systemic non-compliance occurs.[189]

Furthermore, regulatory agencies are also subjected to political pressure. Firms lobby legislators through corporate political activity, and legislators in turn respond to such lobbying by placing pressure on administrative agencies to relax their enforcement of stated objectives.[190] Legislators backed by political interests can compel agencies to relax their enforcement goals even in the presence of an explicit statutory command to push firms toward full compliance.[191] This, in turn, places further downward pressure on regulators to eschew compliance and allows possible minor deviations from compliance to go unpunished. The agency instead devotes its limited human and political capital to pursue narrower strategic goals, such as investigating repeat violators or deterring certain kinds of business conduct.[192] This political reality places further pressure

188. *See* Dylan Hanson, *Increased Responsibility, Same (Inadequate) Funding for the SEC, CFTC*, COLUM. BUS. L. REV. ONLINE (Mar. 6, 2011), http://cblr.columbia.edu/archives/11630 [HTTPS://PERMA.CC/JQ2A-RKVG] (noting the negative impact of Congressional underfunding on regulatory enforcement of the Dodd-Frank Act).

189. *See* Patrick Augustin, Menachem Brenner & Marti G. Subrahmanyam, *Informed Options Trading Prior to M&A Announcements: Insider Trading?* 2, 35 (June 12, 2014), www.irrcinstitute.org/wp-content/uploads/2015/09/Informed-Options-Trading_June-12-20141.pdf [HTTPS://PERMA.CC/786H-SLCR] (finding evidence of insider trading in approximately one-quarter of corporate mergers and acquisitions in the sample while identifying that the SEC litigated less than five percent of M&A transactions in the sample studied).

190. *See* Yockey, *supra* note 55, at 337–38 (noting corporate lobbying to ease FCPA enforcement practices and policies).

191. *See* Adam J. Levitin, *The Politics of Financial Regulation and the Regulation of Financial Politics: A Review Essay*, 127 HARV. L. REV. 1991, 2044–49 (2014) (describing how capture of federal financial regulators led to regulatory non-intervention and active deregulation prior to the 2008 financial crisis).

192. *See* James Sterngold, *Preet Bharara: Charging a Firm for Insider-Trading a 'Rare Use of Power'*, WALL ST. J. MONEYBEAT (July 17, 2013, 12:12 PM), http://blogs.wsj.com/moneybeat/2013/07/17/preet-bahrara-charging-a-firm-for-insider-

on the agency to tolerate less than perfect compliance, signaling to firms that somewhere further away from TE_a is the expected state of compliance. Thus, regulators' preferred state of compliance for firms, taking into account resource limitations and political realities, is somewhere between TE_a and TE_i.[193]

V. SURPASSING THE COMPLIANCE FRONTIER THROUGH RISK-COST TRANSFORMATION

Corporate compliance hinges on the relationship between regulators and regulated firms. As shown by the EIR model, the mode of this relationship is constantly subject to change, depending on the firm's risk-cost calculations and the regulator's policy objectives and resource constraints. There is another dimension to corporate compliance that the EIR model sheds light on. The following discussion explores the ways in which firms can improve the efficiency of their responses to regulatory mandates without materially increasing the risk of non-compliance.

A. *The Power of Risk-Cost Transformation*

Firms that find themselves on the compliance frontier have reached technical efficiency within their particular risk-cost profile. Risk-averse firms will be on a line closer to TE_a while risk aggressive firms will fall closer to TE_b. Firms that have found both technical and allocative efficiency will reach compliance equilibrium at TE_i, AE_i: the most efficient point in the space of bounded compliance.

Firms in highly regulated industries have ramped up the hiring of compliance officers and enhanced compliance-related information technology.[194] This "arms race" in compliance, however, has a finite capacity to improve compliance outcomes. The firm's allocation of

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trading-a-rare-use-of-power [HTTPS://PERMA.CC/LYS8-H4ZL] (quoting Preet Bharara, U.S. Attorney for the Southern District of New York, as saying that charging a company is a "rare use of power" but one that can be used in some cases "particularly where you have malfeasance over a long period of time").

193. Note that, although we are using movement on the productivity frontier curve to highlight these forces, it is not necessary for firms to reach technical efficiency (i.e., falling on the curve by reaching the outer bounds of the compliance frontier) for this effect to happen. Sub-efficient firms and sub-efficient regulators, can operate in a space above and to the right of the curve in the same fashion without reaching the compliance frontier, and have the same results.

194. *See, e.g.*, *Annual Report 2014*, JPMORGAN CHASE & CO. 23–24 (2014), https://www.jpmorganchase.com/corporate/annual-report/2014/ar-downloads.htm [HTTPS://PERMA.CC/5JJW-DWLP] (disclosing deployment of compliance-oriented resources to comply with applicable financial regulations).

resources to compliance is limited by its willingness and ability to divert capital investments away from other corporate objectives.[195] Due to the resource constraints depicted in the EIR model, a firm must find ways to increase its compliance capability (i.e., reduce the risk of non-compliance) per unit of compliance-specific resources that it invests.[196] In a regulatory environment in which the absolute size of the largest firms, the complexity of regulatory frameworks, and the opaqueness of firm decision-making all continue to increase, a compliance program based on internal enforcement of regulatory mandates is not adequate. Individual employees must have the willingness and ability to self-impose constraints on illegal conduct, not just respond to external sanctions.[197] Just as how ethical decision-making is a critical component of corporate social responsibility (CSR) and the firm's commitment to social goals, ethical development is often necessary to ensure compliance with applicable laws and regulations.[198]

But what if the compliance frontier can be expanded? A firm may find new ways to improve its compliance profile, which may open up a new curve, and result in a new series of risk-cost combinations. Such innovative firms push back the compliance frontier toward a new level of innovation. This new and uncharted frontier can generate one of the most sought after assets for an enterprise: a competitive advantage that is not easily imitable by rivals.[199] The expression of this new frontier in the EIR model is evident in the following figure:

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195. *See* SIFMA Compliance White Paper, *supra* note 31, at 22–24 (noting the very high costs and limited resources available for designing and staffing compliance surveillance).

196. *See* Malloy, *supra* note 26, at 585 (observing that firms prefer allocating capital to strategically oriented projects vis-à-vis proposed regulatory investments driven by cost reduction).

197. *See generally* Daniel K. Tarullo, Member, Bd. of Governors of the Fed. Reserve Sys., Remarks at the Federal Reserve Bank of New York Conference: Reforming Culture and Behavior in the Financial Services Industry (Oct. 20, 2014), http://www.federalreserve.gov/newsevents/speech/tarullo20141020a.pdf [HTTPS://PERMA.CC/WL5Y-EJ6U] (discussing how compliance systems management and regulators put in place to monitor and shape behavior is a work in progress).

198. *See* Leslie E. Sekerka, *Compliance as a Subtle Precursor to Ethical Corrosion: A Strength-based Approach as a Way Forward*, 12 WYO. L. REV. 277, 278 (2012) (noting the difficulty that employees face in acting ethically due to the complexity of the issues and the pressure of short-term organizational goals such as profit).

199. *See* Jay Barney, *Firm Resources and Sustained Competitive Advantage*, 17 J. MGMT. 99, 102 (1991) (defining competitive advantage as the implementation of a value-creating strategy "not simultaneously being implemented by any current or potential competitors"); *see generally* MICHAEL E. PORTER, THE COMPETITIVE ADVANTAGE: CREATING AND SUSTAINING SUPERIOR PERFORMANCE (1985) (describing how firms create competitive advantage).

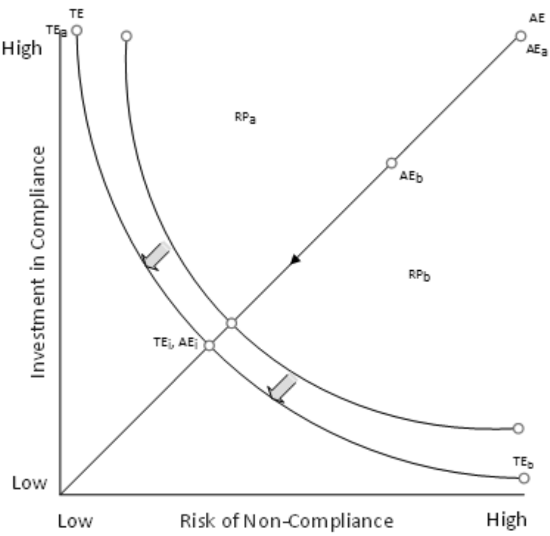

FIGURE 7. CREATING A NEW COMPLIANCE FRONTIER THROUGH RISK-COST TRANSFORMATION

As shown in Figure 7, this "risk-cost transformation" approach involves measures undertaken by the firm that shift its compliance curve downward toward the productivity frontier, thus enabling it to comply with regulation more efficiently. Reflecting this shift, the firm's compliance equilibrium moves down and to the left, reflecting a net improvement in its technical efficiency per unit of investment in compliance.

B. *Methods of Risk-Cost Transformation*

Risk-cost transformation of the corporate compliance function is accomplished through two distinct methods. Firms can seek to enhance the capacity either of individual firm employees or firm management as a whole to manage compliance. While the former focuses on improving individual decision-making by employees within the firm, the latter focuses on firm-wide internal governance. We briefly highlight the relevant aspects of each of these compliance-enhancing methods by reference to the EIR model.

To achieve risk-cost transformation by enhancing individual decision-making capacity, a widely recognized approach is to change the firm's corporate culture in order to make it more conducive to compliance.[200] Lynn Sharp Paine's formative research on organizational integrity focuses on establishing legitimacy with employees through the development of organizational values.[201] A culture of integrity, when implemented in a manner that calibrates the firm's risk appetite with its institutional capacity, not only motivates individual employees to act ethically, but just as importantly, equips them with the analytical tools and mindset to identify breaches of compliance.[202] Firms in a range of industries have established corporate integrity systems and, in many cases, have integrated them into their compliance functions.[203] In many cases, the attitude of managers, corporate executives, and other firm leaders towards ethics has an outsize impact on ethical behavior throughout the organization.[204] A "tone at the top" established by senior management and the board of directors is critical to ensuring corporate integrity and deterring fraud.[205]

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200. Corporate culture may be defined as "the set of shared beliefs and norms [within the corporation] that tells people how to act when there are no formal rules." René M. Stulz, *Risk-Taking and Risk Management by Banks*, 27 J. APPLIED CORP. FIN. 8, 16 (2015).

201. Lynn Sharp Paine, *Managing for Organizational Integrity*, 72 HARV. BUS. REV. 106, 111 (1994). *See* David Hess, *A Business Ethics Perspective on Sarbanes-Oxley and the Organizational Sentencing Guidelines*, 105 MICH. L. REV. 1781, 1791–95 (2007) (citing and describing scholarly research and industry studies on the impact of integrity-based programs).

202. *See* Bird & Park, *supra* note 51, at 234–38 (describing how a culture of integrity promotes compliance); *see also* Thomas C. Baxter, Exec. Vice President & Gen. Counsel, Fed. Reserve Bank of N.Y., Compliance – Some Thoughts About Reaching the Next Level, Remarks at the Fordham Journal of Corporate Counsel & Financial Law Symposium (Feb. 9, 2015), http://www.bis.org/review/r150210c.pdf [HTTPS://PERMA.CC/BF5X-MHBD] (citing research finding that compliance programs integrating values-based ethics training are more effective in promoting compliance).

203. *See* DeStefano, *supra* note 7, at 95–96 (noting how the compliance function has evolved to integrate ethics training); SIFMA Compliance White Paper, *supra* note 31, at 27 (noting the split between firms with a combined ethics/compliance function versus firms with separate ethics and compliance functions).

204. *See* Orly Lobel, *Linking Prevention, Detection, and Whistleblowing: Principles for Designing Effective Reporting Systems*, 54 S. TEX. L. REV. 37, 51 (2012) (noting studies indicating that the attitude of managers plays a pivotal role in shaping the ethical conduct of employees, such as reporting misconduct).

205. Bradley Lail et al., *The Influence of Regulatory Approach on Tone at the Top*, 126 J. BUS. ETHICS 25, 26 (2015) (defining tone at the top as "the standard set by the organization's leadership whereby performance is measured; the culture within which the members of the organization operate; the tone set by senior management; irrespective of management's documented strategy and policies, it is the force that drives individual professionals; the "unseen hand" that directs activities regardless of management's proximity to the action; and a commitment to the quality of care clients receive.") (quoting *Tone at the Top and Audit Quality*, INT'L FED'N OF ACCOUNTANTS 8 (Dec. 2007), http://www.ifac.org/system/files/publications/files/tone-at-the-top-and-audit-q.pdf) [HTTPS://PERMA.CC/9KWG-3C89])).

Integrity-based approaches to compliance are not infallible, however. Ethics programs integrated into the compliance function are often resource-intensive and require customized systems for firms in different industries, legal jurisdictions, and cultural environments.[206] The impact of integrity-building can be difficult to measure[207] and, according to some critics, do not have a material impact on compliance.[208] Furthermore, the payoff from integrity-based approaches may not be uniform across the firm.

Another method of risk-cost transformation can be achieved through enterprise risk management (ERM). ERM is a practice "designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, [and] to provide reasonable assurance regarding the achievement of entity objectives."[209] This includes compliance with applicable laws and regulations.[210] ERM enables a firm to more effectively identify and mitigate compliance risk in relation to other risks, rather than in isolation.[211] ERM views all sources and effects of risk as parts of an integrated, strategic, and enterprise-wide system.[212] In the aftermath of the financial crisis in 2008 and the subsequent enactment of the Dodd-Frank Act in 2010, there is now far greater scrutiny on the relationship between

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206. *See Managing Global Ethics and Compliance as an Asset, Not an Expense*, WALL ST. J. RISK & COMPLIANCE J. (Dec. 4, 2014, 12:01 AM), http://deloitte.wsj.com/riskandcompliance/2014/12/04/managing-global-ethics-and-compliance-as-an-asset-not-an-expense [HTTPS://PERMA.CC/H8EQ-XETK] (noting the ethics and compliance challenges that U.S. companies face when expanding into emerging markets).

207. *See* Stulz, *supra* note 200, at 16 ("There is little empirical work on the relation between culture and corporate outcomes, in large part because of the difficulty of measuring the dimensions of culture.").

208. *See* Krawiec, *supra* note 52, at 510–15 (citing empirical studies on codes of ethics, organizational compliance structures, and diversity training to argue that compliance programs are ineffective as a means to reduce socially harmful conduct).

209. *Enterprise Risk Management - Integrated Framework*, COMM. OF SPONSORING ORGS. OF THE TREADWAY COMM'N 2 (2004), http://www.coso.org/documents/COSO_ERM_ExecutiveSummary.pdf [HTTPS://PERMA.CC/736M-23C3].

210. *Id.* at 3.

211. *See* Martin F. Grace, J. Tyler Leverty, Richard D. Phillips & Prakash Shimpi, *The Value of Investing in Enterprise Risk Management*, 82 J. RISK & INS. 289, 290 (2015) (describing ERM as "a holistic approach to risk management . . . [where] a firm examines risks jointly, assessing the interaction of each risk with the firm's portfolio of other important risks"). Firms face a multitude of risks, including financial risks (such as credit, liquidity, and market risk), strategic risk, reputational risk, and various sources of operational risks. MILLER, *supra* note 1, at 539–41. Compliance risk is often categorized as a component of operational risk. *See Risk Management Practices and Regulatory Capital – Cross-Sectoral Comparison*, BANK FOR INT'L SETTLEMENTS, BASEL COMM. ON BANKING SUPERVISION 23 (Nov. 2001), http://www.bis.org/publ/joint04.pdf [HTTPS://PERMA.CC/VKB6-Q8BS] (noting that operational risks include legal and compliance-related risks).

212. Betty Simkins & Steven A. Ramirez, *Enterprise-Wide Risk Management and Corporate Governance*, 39 LOY. U. CHI. L.J. 571, 581 (2008).

corporate governance, risk management, and compliance.[213]

ERM facilitates firm-wide regulatory compliance in two interrelated ways. First, the integration of compliance with ERM enables a firm to identify the range of risks across the firm resulting from inadequate compliance. In many firms, the effectiveness of compliance is hindered by a compliance function that segregates responsibility within the firm based on the functions or units that are subject to regulation, the government agency that has regulatory authority, or the country in which regulation is being applied.[214] Compliance risk may lead to damage to a firm's brand or a loss of customer confidence that has adverse financial, business, and reputational impacts that go beyond the costs of regulatory enforcement actions or civil suits.[215] ERM-based compliance is particularly useful to address multi-jurisdictional regulatory mandates and overlapping legal and CSR obligations.[216]

Second, ERM-influenced compliance aims to improve effective communication channels among different business units and between business units and senior management and the board of directors.[217] By requiring unit-level managers within the firm to assess risk holistically and report these assessments up the ladder, the firm's decision-makers are able

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213. *See* Michelle M. Harner, *Ignoring the Writing on the Wall: The Role of Enterprise Risk Management in the Economic Crisis*, 5 J. BUS. & TECH. L. 45, 51 (2009) (noting that "UBS revamped its risk management structure" and "increased the emphasis on risk reporting" in response to the financial crisis); Michael E. Murphy, *Assuring Responsible Risk Management in Banking: The Corporate Governance Dimension*, 36 DEL. J. CORP L. 121, 123 (2011) (finding that large bank holding companies substantially modified their corporate governance policies by augmenting board oversight of risk management in the aftermath of the financial crisis); Paul Rose, *Regulating Risk by "Strengthening Corporate Governance*," 17 CONN. INS. L.J. 1, 3 (2010) (describing a link between risk management and corporate governance and how these failures contributed to the financial crisis). *See also* MILLER, *supra* note 1, at 1 (declaring governance, risk management, and compliance "in vogue").

214. *See The Risk Intelligent Enterprise*, DELOITTE *supra* note 56, at 8 (describing the tendency of organizations to separate into "silos" based on geography or business function). Silos can also occur within corporate departments as well as between them.

215. *Compliance Risk Assessments*, DELOITTE 4 (2015), http://www2.deloitte.com/content/dam/Deloitte/us/Documents/risk/us-aers-compliance%20riskassessments-02192015.pdf [HTTPS://PERMA.CC/9T7E-WJQ8].

216. *Demystifying Sustainability Risk: Integrating the Triple Bottom Line Into an Enterprise Risk Management Program*, COMM. OF SPONSORING ORGS. OF THE TREADWAY COMM'N 5–6 (May 2013), http://www.coso.org/documents/COSO-ERM%20Demystifying%20Sustainability%20Risk_Full%20WEB.pdf [HTTPS://PERMA.CC/2R5U-LKYJ] (describing global environmental and non-financial reporting risks). *See also* Bird & Park, *supra* note 51, at 230 (referring to ethical and social mandates whose legal status may be uncertain or contested).

217. *See* Harner, *supra* note 92, at 1334 (noting the importance of effective communication and the free flow of information regarding risk assessment).

to identify firm-wide trends, patterns, and inconsistencies across the firm's various compliance-related activities.[218] For purposes of analytical clarity, the EIR model conceptualizes the response of a firm to a single regulatory mandate. Of course, in reality, corporate compliance is multimodal: any given firm must simultaneously manage compliance with a range of distinct, but sometimes overlapping, regulatory requirements. Through an enterprise-wide assessment of its responses to all regulatory mandates, a firm can capture aggregate efficiency gains by identifying compliance strategies that address multiple legal obligations or even strategic opportunities outside of compliance.[219]

While potentially transformative, ERM is not a panacea for compliance challenges. First and foremost, there is a danger in simply equating compliance and risk management. While risk and compliance functions are interrelated,[220] they do not necessarily implicate the same level of legal scrutiny.[221] Contrary to binary conceptions of compliance, the EIR model shows that firms can make tradeoffs between compliance risk and other business investments. However, the nature and scope of these tradeoffs are not as visible nor as value-enhancing as comparable tradeoffs involving other forms of risk. Expected returns from greater risk-taking are higher in respect of other types of risk.[222] Firms that view non-compliance risk-taking as equivalent to compliance run the risk of encumbering the ability of business units to take advantage of opportunities to increase firm value by assuming greater risk.[223] Further, subsuming the

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218. *See* Harner, *supra* note 213, at 55 ("Thinking about ERM solely as a monitoring process undercuts its potential value. . . . But equally important is the information targeted by the system and transmitted to the board.").

219. *See* Malloy, *supra* note 26, at 603 (describing how compliance may be inhibited by inconsistent incentives between operational managers and compliance officers and by ineffective communication channels between them).

220. *See* Carlo V. di Florio, Dir., Office of Compliance Inspections & Examinations, Secs. & Exch. Comm'n, Speech at NSCP National Meeting: The Role of Compliance and Ethics in Risk Management (Oct. 17, 2011), http://www.sec.gov/news/speech/2011/spch101711cvd.htm [HTTPS://PERMA.CC/C9Z7-T4FL] (differentiating compliance, ethics, and risk management).

221. *See* Robert T. Miller, *Oversight Liability for Risk-Management Failures at Financial Firms*, 84 S. CAL. L. REV. 47, 100 (2010) (discussing the relationship between oversight liability and risk management practices); Robert T. Miller, *The Board's Duty to Monitor Risk After Citigroup*, 12 U. PA. J. BUS. L. 1153, 1158–1160 (2010) (criticizing the application of *Caremark* oversight liability to risk management); *see also* Bainbridge, *supra* note 97, at 984 ("Just as the business judgment rule insulates risk taking from judicial review, so *Caremark* should insulate risk management from judicial review.").

222. *See* Stulz, *supra* note 200, at 15.

223. *Id.* (describing the tradeoffs between risk management and expected return such as when an inflexible risk management structure impedes firms' abilities to take advantage of business opportunities).

compliance function into ERM—such as, for example, involving the Chief Risk Officer in the reporting of compliance to the CEO or the board—may lower the stature and perceived importance of compliance within the firm.[224]

CONCLUSION

Compliance is an increasingly complex and diverse area of legal and business activity. A growing array of regulatory mandates and modes of regulatory enforcement and an increasing number of firms and jurisdictions have spurred interest among legal scholars, practicing lawyers, and compliance professionals alike. This Article seeks to distill the process of compliance by focusing on the risk-cost tradeoffs that guide the interactions of firms with regulators. The insights from the EIR model shed new light on corporate governance debates in various areas of law. By showing how different forms and approaches to regulation affect compliance, our model suggests that the effectiveness of business regulation as a form of social ordering heavily depends on how it shapes firm-derived incentives.

This Article highlights the central role of regulators in helping firms achieve risk-intelligent compliance that optimizes investments in compliance made by both regulators and regulated firms. While business regulation and the business of corporate compliance continue to grow, it is unrealistic to assume that regulators have unlimited resources and dubious to argue that regulators should have infinite power. Instead, in light of the limited capacity of regulators to compel firms to maximize compliance (i.e., occupy the upper left quadrant of the EIR model), regulators and policymakers must find more innovative ways to achieve the public policy goals of regulation. The EIR model suggests that regulators should be more cognizant of the mix of Direct Regulation, Collaborative Regulation, and Market Contingent Regulation that they use vis-à-vis any given firm or industry. For certain regulations where the societal costs of firm non-compliance are relatively high, this observation may lend support for more stringent regulation—either in the form of greater use of Direct Regulation or increased incentives to third parties for Market Contingent Regulation—in order to flatten the left tail of firms' individual compliance curves and thus decrease the ratio of compliance investment over non-compliance risk. In many other cases, regulators and firms would benefit from collaboration

224. Michael A. Dawson, *Integrating Compliance Risk Management into Enterprise Risk Management*, 21 BANK ACCOUNTING & FIN. 30, 33 (2008). *See also* Malloy, *supra* note 26, at 580–82 (noting how capital allocation within firms is driven by the relative influence of certain units and their perceived strategic importance).

to enable more self-aware compliance decisions by firms. Firms stand to benefit from determining the shape of their compliance curves and the location of their compliance equilibria. Regulators stand to benefit from thinking about regulation in smarter, more subtle ways. The theoretical insights of this Article provide a conceptual framework for improving firm effectiveness and guiding regulatory reform.