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Taking the "I" Out of "Team": Intra-Firm Monitoring and the Content of Fiduciary Duties

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Taking the “I” out of “Team”: Intra-Firm Monitoring and the Content of Fiduciary Duties

Eric Talley*

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I. INTRODUCTION

Depending on whom one asks, the last decades’ proliferation of statutory business structures is a cause for either celebration or concern. Some laud this recent trend, arguing that a highly permutated menu of tax treatments, liability limitations, and governance hierarchies facilitates the alignment of legal status with organizational need. Others view statutory variety more skeptically, warning that it may simply portend

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greater cost externalization, strategic behavior, and distributional inequity.¹ But one set of legal doctrines has persisted throughout: the concept of fiduciary duty. Indeed, fiduciary obligations remain fundamental to the legal governance structure of virtually every statutory business entity.

That said, the precise normative relationship between fiduciary standards and organizational form remains highly contested. A number of courts and commentators maintain that fiduciaries of "closely-held" firms (e.g., close corporations and partnerships) should be subject to substantially more onerous fiduciary obligations than their counterparts in public corporations.² Lacking the convenient exit options and the external discipline provided by well-developed securities markets, the argument goes, owners of closely-held firms must rely exclusively (or nearly so) on fiduciary duties to check managerial opportunism. Critics have challenged this view, pointing out that the larger ownership stake typically possessed by fiduciaries of closely-held firms requires them to bear a substantial share of the costs from their own managerial decisions.³ Moreover, such firms frequently comprise participants with long-standing (and even familial) relationships—a source of repeat interaction that facilitates the formation of extra-legal behavioral norms to stem managerial misfeasance.⁴ Consequently, these critics contend, the categorical case for strict legal duties within closely-held structures is far from compelling.

In the pages below, I endeavor to revisit this governance debate, albeit through a slightly different lens: the "team-production" theory of the firm. In its most basic form, the team-production account spotlights the observation that productive activities within many economic organizations require coordinated, firm-specific investments from two or more participants. (Stronger forms of this account posit that team structures are pervasive within commercial activity, and are in fact the defining characteristic of all multi-person firms).⁵ Although the team-production model is enjoying renewed popularity within numerous industrial and academic realms,⁶ it poses particular challenges for organizational governance issues. Indeed, the output produced by a team is frequently non-separable in nature, a characteristic that frustrates attempts to deduce *ex post* the

1. For an overview of this debate, see *infra* Part II.

2. See, e.g., PAUL MAHONEY, TRUST AND OPPORTUNISM IN CLOSE CORPORATIONS (National Bureau of Econ. Research Working Paper No. 6919, 1998) (arguing, using a game-theoretic model with complete information, that easy exit options can induce majority shareholders to exercise restraint in behaving opportunistically); J.A.C. Hetherington & Michael P. Dooley, *Illiquidity and Exploitation: A Proposed Statutory Solution to the Remaining Close Corporation Problem*, 63 VA. L. REV. 1 (1977) (using this argument to propose a put option for minority shareholders in closely-held corporations, which would, if exercised, force majority shareholders to buy them out at a specified strike price); Margaret Blair & Lynn Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247 (1999), reprinted in 24 J. CORP. L. 751 (1999); Robert Thompson, *The Shareholder's Cause of Action for Oppression*, 48 BUS. LAW. 699 (1993).

3. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, *Close Corporations and Agency Costs*, 38 STAN. L. REV. 271 (1986); Charles R. O'Kelley, Jr., *Filling Gaps in the Close Corporation Contract: A Transaction Cost Analysis*, 87 NW. U. L. REV. 216 (1992).

4. FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW 229, 243-44 (1991).

5. Blair & Stout, *supra* note 2.

6. See, e.g., CHARLES C. MANZ & HENRY P. SIMS JR., BUSINESS WITHOUT BOSSES (1993); Yeon-Koo Che and Seung-Weon Yoo, Optimal Incentives in Teams (November 1998) (unpublished manuscript, on file with author) (detailing this popularity).

contributions of individual team members.⁷ In turn, this form of non-contractibility can exacerbate problems of strategic behavior, reducing the overall productive capacity of the team.⁸ But within this quagmire of opportunism lies a potentially important role for law. Appropriately-crafted default legal rules can mollify team-production dilemmas by reshaping the incentive structure faced by team members to enhance the well-being and productivity of the firm's participants.

So animated, a team-production approach can inject helpful new insights into the existing debate over the relationship between organizational structure and fiduciary obligation. This Article explores one such insight. Explicitly, I argue that imposing enhanced fiduciary duties on closely-held firms may actually be counter-productive once one accounts for the strategic effects that enhanced duties can have on the members of a productive team. In fact, I shall argue, these strategic effects can be sufficiently grave to undermine the aggregate productivity of the team, thereby justifying fiduciary duties in at least some closely-held firms that are *weaker* than those that govern widely-held organizations.

The core of my argument is as follows. If one supposes that a principal purpose of fiduciary law is to deter intra-firm opportunism,⁹ then the substantive content of legal duties should, as a normative matter, be sensitive to the composition and incentives of the productive "team" in question. In closely-held firms, participants generally find themselves wearing dual hats. Those who engage in productive activities are quite often the same individuals who are its residual claimants, and are thus the presumptive enforcers of one another's fiduciary obligations.¹⁰ Within such a context, an enhanced fiduciary duty engenders two competing strategic effects. The first stems from the fiduciary's increased fear of being "caught" engaging in misfeasance, inducing her to refrain from opportunism. But a second, competing effect also emerges. Enhanced fiduciary obligations increase one's expected returns from successfully detecting a fellow team member's transgressions. This latter effect can give team members an affirmative incentive to step up their efforts at monitoring, leaving them less time to engage in productive activities. In what follows, I shall refer to these two competing effects, respectively, as the *deterrence effect* and the *monitoring effect*. Significantly, which of these two effects dominates is indeterminate on *a priori* grounds. Consequently, in evaluating whether enhanced fiduciary duties should govern closely-held firms, one must

7. For similar descriptions, see Blair & Stout, *supra* note 2, at 249-50, *reprinted in* 24 J. CORP. L. 751, 752-53 (1999). See generally SUSAN ALBERS MOHRMAN ET AL., *DESIGNING TEAM-BASED ORGANIZATIONS* (1995).

8. Though opportunistic behavior by team members is my principal focus, others have highlighted additional problems within teams, such as rent seeking and collusion among the individual team members. See Jean J. Laffont & David Martimort, *Collusion Under Asymmetric Information*, 66 *ECONOMETRICA* 875 (1997).

9. Both contractarian and non-contractarian corporations scholars appear to agree that fiduciary duties serve this fundamental role. See EASTERBROOK & FISCHEL, *supra* note 4, at 91-93; David Millon, *Communitarianism in Corporate Law: Foundations of Law Reform Strategies*, in *PROGRESSIVE CORPORATE LAW* 1, 14 (Lawrence E. Mitchell ed., 1995).

10. In fact, in some industries, such as law practice, members of a team are required to be the sole residual claimants on the enterprise. See MODEL RULES OF PROFESSIONAL CONDUCT Rule 5.4 (1992); MODEL CODE OF PROFESSIONAL RESPONSIBILITY, DR 3-102(A), 3-103(A), and 5-107(C) (amended 1980). For a critique of these (and other) ethical guidelines as obstacles to reputation-building, see Larry Ribstein, *Ethical Rules, Agency Costs, and Law Firm Structure*, 84 VA. L. REV. 1707 (1998).

first inquire whether the consequent deterrence effects are likely to outweigh the monitoring effects. Should this tradeoff cut in the other direction, then not only might a strict fiduciary standard be inadvisable, but it may even be optimal to dilute—perhaps significantly—the relative bite of fiduciary duties within such organizations.¹¹

Widely-held firms (such as public corporations), in contrast, generally do not—or at least need not—manifest the strategic tension described above. Indeed, the principal beneficiaries of fiduciary duties in widely-held firms are by definition not managers, but rather third-parties (such as shareholders¹²) who are generally not members of the productive team. As such, it is the shareholders (or more often their elected representatives on the board of directors) who possess the greatest incentives to monitor managerial opportunism. Managers meanwhile, largely dispossessed of the financial incentives to monitor, experience solely the deterrence effect upon an enhancement of their fiduciary obligations.¹³ The issue of which strategic effect dominates therefore plays a relatively insignificant role within the widely-held firm.¹⁴

This insight, which has been largely neglected in the corporations literature,¹⁵ poses interesting consequences from both statutory and doctrinal perspectives. Indeed, my

11. The intuition behind this argument bears tangential resemblance to the “multitasking” literature in economics, which posits that high-powered incentive contracts may be an undesirable way to solve moral hazard problems, particularly when an agent divides her time between multiple productive activities and only a subset of those activities yields a verifiable output. Such arguments have been used, for example, to critique the use of merit pay for teachers based on students’ standardized test scores, for fear that teachers would rationally substitute away from covering difficult-to-test skills (such as poetry appreciation), and into more testable skills (such as algebra). See Bengt Holmstrom & Paul Milgrom, *The Firm as an Incentive System*, 84 AM. ECON. REV. 972 (1994); Bengt Holmstrom & Paul Milgrom, *Multi-project Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design*, 7 J.L. ECON. & ORG. 524 (1991).

12. One might, of course, posit that the “shareholder primacy” view of fiduciary duties is indefensible, and that the legitimate beneficiaries of fiduciary duties should include other non-managerial constituencies. See, e.g., *Unocal Corp. v. Mesa Petroleum*, 493 A.2d 946, 955 (Del. 1985) (allowing directors to take into account the impact of a tender offer on non-shareholder constituencies in formulating defensive strategies). Nothing in this article turns on a shareholder-primacy view, however. In fact, in what follows, I adopt a joint-welfare measure in defining an “optimal” level of fiduciary duties. What is critical, however, is that the principal beneficiaries of fiduciary duties in widely-held firms be distinct from the members of the productive team.

13. It is, of course, possible for publicly-held firms to structure the compensation packages of corporate managers in a way that encourages mutual monitoring. At the same time, however, doing so is but one of many options for a publicly-held firm. In a closely-held firm, the option does not exist.

14. There may be other strategic issues relevant to intra-firm policing. For example, a potential defendant might be inclined to expend wasteful effort on defensive (or “paper-shredding”) activities so as to reduce the possibility of a successful suit. I do not touch on such effects in this article, however, on the theory that they would be equally applicable in both closely- and widely-held firms.

15. See, e.g., Claire Moore Dickerson, *Is It Appropriate to Appropriate Corporate Concepts: Fiduciary Duties and the Revised Uniform Partnership Act*, 64 U. COLO. L. REV. 111, 116 (1993) (arguing that fiduciary duties “serve to guide the parties to a standard of behavior that reduces the need to monitor,” but generally omitting considerations of the incentive to monitor (emphasis added)); Larry Mitchell, *The Death of Fiduciary Duties in Close Corporations*, 138 U. PA. L. REV. 1675, 1991 (1990) (arguing that the business judgment rule is unnecessary in close corporations because of the relative ease of intra-firm monitoring, but also omitting considerations of incentives to monitor). In some ways, the widely-held firm accomplishes many of the same effects as does “decoupling” compensatory from punitive damages. See A. Mitchell Polinsky & Yeon-Koo Che, *Decoupling Liability: Optimal Incentives for Care and Litigation*, 22 RAND J. ECON. 562, 563 (1991) (arguing that decoupling compensatory from punitive damages may facilitate the pursuit of optimal deterrence goals without encouraging excessive amounts of litigation). Much of the early literature on team production notes the moral hazard problems in closely-held firms, but neglects the potentially adverse effects of monitoring

analysis suggests that the participants in *some* closely-held firms (*i.e.*, those dominated by deterrence effects) are well-served by a strict fiduciary governance structure, while others (*i.e.*, those dominated by monitoring effects) are better served by relaxed standards.¹⁶ From a statutory perspective, this observation provides a rationale for maintaining heterogeneity among business organization statutes, thereby affording firms the advantages of regulatory self-selection. But absent such statutory heterogeneity, my argument suggests that courts would be well-advised to take intra-firm monitoring incentives into account when prescribing the applicable quantum of fiduciary obligation in a given case.¹⁷

The remainder of this Article contains four parts. Part II briefly describes the existing legal and institutional milieu that surrounds the relationship between fiduciary duties and organizational structure, exposing the rough contours of the debate that continues to engulf the case law and the business governance literature. Part III, which represents the core of the Article, analyzes a simple game-theoretic example of team production. Using this example, I demonstrate how an enhanced fiduciary duty within closely-held firms can (though need not always) detract from a team's overall productivity, and I explain why this concern is largely absent within widely-held organizations. This part concludes by exploring the robustness of the example in light of seven plausible variations on its assumptions.¹⁸ Part IV gives some preliminary thoughts on the legal implications of this analysis, exploring how statutory authority and/or doctrine might best accommodate my principal thesis. Finally, Part V presents concluding remarks.

II. THE LEGAL MILIEU

Before plunging into specifics, it is perhaps prudent to situate my argument within the larger legal debate over the relationship between fiduciary obligation and ownership structure. This Part attempts to do so by concentrating on three central observations. First, while fiduciary duties transcend all business organization forms, the application of such duties has been neither uniform nor consistent. Second, this lack of uniformity has spawned both judicial and academic debates about whether and how organizational form should affect the content of fiduciary obligations. Finally, the participants in this debate have ended up largely at analytical loggerheads—one that a team-production approach may help to inform.

It is perhaps most appropriate to begin an account of the evolution of fiduciary obligations within partnerships. Indeed, partnership law (unlike its younger statutory cousins) is an artifact of the common law, albeit one that is now largely codified in every state. Moreover, it was here where Benjamin Cardozo left his now-infamous doctrinal

incentives. *See, e.g.*, Arleen Leibowitz & Robert Tollison, *Free Riding, Shirking and Team Production in Legal Partnerships*, 18 ECON. INQUIRY 380, 383 (1980); Fred S. McChesney, *Team Production, Monitoring and Profit-Sharing in Law Firms: An Alternative Hypothesis*, 11 J. LEGAL STUD. 379 (1982) (concentrating on billing patterns and compensation).

16. *See infra* Part III.

17. *See infra* Part IV.

18. These variations consider the effects of (1) verifiable inputs; (2) prevention; (3) severe free riding; (4) deep pockets; (5) non-team beneficiaries; (6) coordination failures; and (7) repeat play. *See infra* Part III.

epitaph, in *Meinhard v. Salmon*,¹⁹ likening a fiduciary to a trustee, and imposing a duty that required "uncompromising rigidity" and the "punctilio of an honor the most sensitive" as the standard for fiduciary comportment.²⁰ Cardozo's approach, like that of numerous judges and theorists who both preceded and followed him,²¹ conceived of fiduciary obligations as originating from fundamental moral precepts that justified an immutable check on market behavior—a view largely inherited from the English ecclesiastical and equity courts.²² As this doctrinal view evolved over time, courts began routinely to hold that a partner's fiduciary duty extended not only to the partnership entity, but also to each partner individually.²³ Some legal scholars have since attempted to augment this approach with economic justifications, asserting that strict standards of comportment are necessary to induce participants to enter into an arrangement of power and vulnerability.²⁴

Be that as it may, recent years have produced both doctrinal and statutory innovations that have chipped away at this ancestral mantle of uncompromising honor. The Revised Uniform Partnership Act (RUPA),²⁵ now statutory authority in twenty-one states (and counting),²⁶ has contributed significantly to this trend. The RUPA expressly

19. 164 N.E. 545 (N.Y. 1928). Formally, *Meinhard* involved a "joint venture" rather than a "general partnership." However, most jurisdictions have long viewed joint ventures as little more than a species of partnership organized for a specified transaction (or series thereof), and have accordingly expanded the above reasoning more generally to cover partnerships *writ large*. See generally SCOTT ROWLEY, 2 ROWLEY ON PARTNERSHIP §§ 52.1-52.62 (2d ed. 1960).

20. *Meinhard*, 164 N.E. at 546.

21. E.g., 1 AUSTIN SCOTT, THE LAW OF TRUSTS 38-39 (2d ed. 1956).

22. See, e.g., Tamar Frankel, *Fiduciary Law*, 71 CAL. L. REV. 795, 830 (1983).

23. See, e.g., Allan W. Vestal, *Fundamental Contractarian Error in the Revised Uniform Partnership Act of 1992*, 73 B.U. L. REV. 523, 524-27 (1993) (describing the fiduciary obligations of partners *inter se*). In a recent article, Larry Ribstein questions the popularized history of partnership fiduciary obligations, arguing that "waivers" of fiduciary duty have always been enforced by courts. Larry Ribstein, *Fiduciary Duty Contracts in Unincorporated Firms*, 54 WASH. & LEE L. REV. 537, 570-85 (1997). The merits of this claim ultimately depend on one's jurisprudential interpretation; but even if it is true, it says little about the historical content of fiduciary duties as a *default matter*. Moreover, because fiduciary duties are probably the most difficult to provide for with express contract terms, the content of default rules can often be extremely important. See *infra* text accompanying notes 125-135.

24. E.g., Frankel, *supra* note 22, at 830.

25. REVISED UNIFORM PARTNERSHIP ACT (1996).

26. These states are: Alabama, ALA. CODE §§ 10-8A-101 to 10-8A-1109 (Supp. 1998); Arizona, ARIZ. REV. STAT. §§ 29-1001 to 29-1111 (1998); California, CAL. CORP. CODE §§ 16100 to 16962 (West Supp. 1999); Colorado, COLO. REV. STAT. ANN. §§ 7-64-101 to 7-64-1206 (West 1998); Connecticut, CONN. GEN. STAT. §§ 34-300 to 34-434 (1999); Florida, FLA. STAT. ch. 620.81001 to 620.91 (1997 & Supp. 1998); Idaho, IDAHO CODE §§ 53-3-101 to 53-3-1205 (1998); Iowa, IOWA CODE §§ 486A.101 to 486A.1302 (1999); Maryland, MD. CODE ANN., CORPS & ASS'NS. §§ 9A-101 to 9A-1205 (Supp. 1998); Minnesota, MINN. STAT. §§ 323A.1-01 to 323A.12-03 (Supp. 1997); Montana, MONT. CODE ANN. §§ 35-10-101 to 35-10-644 (1997); Nebraska, NEB. REV. STAT. §§ 67-401 to 67-467 (Supp. 1998); New Mexico, N.M. STAT. ANN. §§ 54-1A-101 to 54-1A-1007 (Michie Supp. 1998); North Dakota, N.D. CENT CODE §§ 45-13-01 to 45-21-08 (Supp. 1999); Oklahoma, OKLA. STAT. tit. 54, §§ 1-100 to 1-1207 (Supp. 1998); Oregon, OR. REV. STAT. §§ 67.005 to 67.810 (1997); Texas, TEX. REV. CIV. STAT. ANN. art. 6132b-1.01 to 6132b-10.04 (West 1970 & Supp. 1998); Vermont, VT. STAT. ANN. tit. 11, §§ 3201 to 3313 (Supp. 1998); Virginia, VA. CODE ANN. §§ 50-73.79 to 50-73.149 (Michie Supp. 1998); West Virginia, W. VA. CODE §§ 47B-1-1 to 47B-11-5 (1998); and Wyoming, WYO. STAT. ANN. §§ 17-21-101 to 17-21-1003 (Michie 1999). In addition to these states, both the District of Columbia, D.C. CODE ANN. §§ 41-151.1 to 41-162.3 (1998) and the U.S. Virgin Islands, V.I. CODE ANN. tit. 26, §§ 1 to 274 (Supp. 1999), have adopted the RUPA.

confines a partner's duty of loyalty to three particularized manifestations: (1) accounting for profits derived from partnership business; (2) refraining from dealing with the partnership as an adverse party without consent; and (3) refraining from competing with the partnership before dissolution.²⁷ Moreover, it makes clear that a partner is *not* the functional equivalent of a trustee, and consequently she does not necessarily run afoul of her fiduciary duties simply by engaging in actions that create a private benefit.²⁸ Third, the RUPA explicitly imports a weaker contractual standard of "good faith and fair dealing" by which to judge a partner's discharge of her fiduciary duties (although it then proceeds to muddy the waters considerably by shrouding this obligation in more traditional fiduciary garb²⁹). Finally, and perhaps most importantly, the RUPA partially relaxes the immutability of fiduciary duties, recognizing a limited power of the partnership agreement to prescribe standards for measuring compliance with fiduciary duties in particular activities.³⁰ This trend is reflected in recent case law. For example, it is now quite unremarkable for courts to accord substantial teleological deference to controlling factions within a partnership who invoke a provision in a partnership agreement to expel one of their counterparts.³¹

At the same time, however, this gradual relaxation of traditional fiduciary duties within partnerships has not gone unqualified. One can still to this day find numerous examples in which modern courts appear to hearken back (at least rhetorically) to the strict standards enunciated in *Meinhard*.³² Furthermore, the RUPA also recognizes a fiduciary duty of care—a concept that was absent within the old Uniform Partnership Act—which proscribes the grossly negligent, reckless, or intentional misconduct of a partner.³³ The Act also prohibits partnership agreements from either waiving fiduciary duties *writ large*, or attempting to soften fiduciary duties in a way deemed to be manifestly unreasonable³⁴—a constraint that is somewhat more onerous than that

27. REVISED UNIFORM PARTNERSHIP ACT § 404(b)(1)-(3).

28. REVISED UNIFORM PARTNERSHIP ACT § 404(e) and cmt. 5.

29. REVISED UNIFORM PARTNERSHIP ACT § 404(d) and cmt. 5. See also Larry Ribstein, *The Revised Uniform Partnership Act: Not Ready for Prime Time*, 49 BUS. LAW. 45, 55-57 (1993) (criticizing the confusion stemming from the RUPA's contortion of contract duties).

30. REVISED UNIFORM PARTNERSHIP ACT § 404(d) and cmt. 5.

31. See, e.g., *Bohatch v. Butler & Binion*, 977 S.W.2d 543 (Tex. 1998) (holding that the expulsion of a partner for engaging in whistle-blowing activities does not constitute a breach of fiduciary duty); *Beasley v. Cadwalader, Wickersham & Taft*, No. CL-94-8646 "AJ", 1996 WL 438777 (Fla. Cir. Ct. July 23, 1996) (ruling that partners breached their fiduciary duty by expelling a branch office partner when no expulsion provision existed in the partnership agreement); *Lawlis v. Knightlinger & Gray*, 562 N.E.2d 435 (Ind. App. 1990) (approving expulsion of a partner for alcoholism); *Holman v. Coie*, 522 P.2d 515, 523-24 (Wash. App. 1974) (allowing expulsion of a partner for engaging in political speech). An application of my central thesis to *Bohatch* can be found *infra* Part IV.

32. A recent Lexis search reveals that there are approximately 900 federal and state cases that cite the famous paragraph from *Meinhard*, and its popularity (at least for rhetorical value) apparently continues. See, e.g., *NCAS Realty Mgmt. Corp. v. National Corp.*, 143 F.3d 38 (2d Cir. 1998) ("A partner, as a fiduciary, is held to higher standards than those of the marketplace. 'Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior'." (citing *Meinhard*)).

33. REVISED UNIFORM PARTNERSHIP ACT § 404(c). The section also proscribes knowing violation of the law. *Id.*

34. See generally Allen W. Vestal, *Choice of Law and the Fiduciary Duties of Partners Under the Revised Uniform Partnership Act*, 79 IOWA L. REV. 219, 232 (1994).

imposed on corporations.³⁵ Perhaps reflecting this doctrinal ambivalence, academic commentators have exhibited substantial discord in recent years over whether recent trends in fiduciary duty standards within partnerships are justifiable on normative grounds.³⁶

In contrast to the strict fiduciary duties historically imposed on partners, managers of public corporations have tended to face a somewhat more relaxed set of fiduciary duties.³⁷ Most corporate statutes, while facially prohibiting self-dealing by officers and directors, proceed almost immediately to supply numerous exceptions (both procedural and substantive) that will cleanse a self-interested transaction. Delaware's statute on self-dealing,³⁸ for example, allows an interested transaction to occur under three distinct circumstances: (1) disclosure and approval by disinterested directors; (2) disclosure and approval by disinterested shareholders;³⁹ or (3) approval by directors or shareholders (whether interested or not) and fairness of the transaction to the corporation.⁴⁰ Moreover, the duty of loyalty appears to be largely ineffectual when the alleged self-serving behavior involves predominantly intangible perquisites.⁴¹ Finally, in order to seek redress from purported violations, shareholders are often required to bring derivative actions, a process made extremely difficult by procedural obstacles such as demand requirements and the deference given to special litigation committees (which often act as gatekeepers against such suits).⁴²

The fiduciary duty of care within public corporations is arguably even more marginalized, largely swallowed up by two significant exceptions. The powerful "business judgment rule" essentially acts as a legal presumption that corporate fiduciaries have exercised requisite skill in carrying out their appointed duties—a presumption that

35. Delaware's corporate law, for example, allows a charter to include a provision that would exonerate directors and officers who breach their fiduciary duty of care. See DEL. CODE ANN. tit. 8, § 102(b)(7) (1991); see also Eric Talley, *Turning Servile Opportunities to Gold: A Strategic Analysis of the Corporate Opportunities Doctrine*, 108 YALE L.J. 277, 287 n.20 (1998) (enumerating similar exoneration statutes in other states).

36. Compare Allan Vestal, *Fundamental Contractarian Error in the Revised Uniform Partnership Act of 1992*, 73 B.U. L. REV. 523, 525 (1993) (harshly critiquing the relaxation of the duty of loyalty in the RUPA), with Ribstein, *supra* note 29, at 52-55 (criticizing the RUPA's articulation of the duty of loyalty both for its excessive strictness and for its contractual immutability).

37. ROBERT CLARK, *CORPORATE LAW* 798-800 (1986).

38. DEL. CODE ANN. tit. 8, § 144 (1991).

39. While section 144(a)(2) appears on its face not to require a disinterested vote, Delaware courts have interpreted it as articulating *necessary* rather than sufficient conditions for cleansing; as such, defendants must be able to demonstrate fairness when the outcome of the shareholder vote is largely determined by the votes of interested shareholders. See *Fliegler v. Lawrence*, 361 A.2d 218 (Del. 1976).

40. DEL. CODE ANN. tit. 8, § 144(a)(1)-(3) (1991).

41. See, e.g., *Shlensky v. Wrigley*, 237 N.E.2d 776 (Ill. App. Ct. 1968) (affirming the dismissal of a duty-of-loyalty challenge by a Chicago Cubs shareholder of the president and majority shareholder's refusal to install lights at Wrigley field); CLARK, *supra* note 37, at 146-47; Blair & Stout, *supra* note 2, at 299-304, *reprinted in* 24 J. CORP. L. 751, 787-90 (1999).

42. See, e.g., *Heineman v. Datapoint Corp.*, 611 A.2d 950 (Del. 1992); *Zapata Corp. v. Maldonado*, 430 A.2d 779 (Del. 1981). Moreover, in some jurisdictions, a shareholder-plaintiff in a derivative suit must sometimes post security for reasonable expenses, including attorneys' fees, of the company in defending the suit. See MODEL BUS. CORP. ACT § 7.46(2) (1979).

can be overcome only by a showing of managerial recklessness, fraud, or waste.⁴³ Additionally, many states now have so-called "exoneration statutes," which either permit (or sometimes mandate) liability limits and/or indemnification for a fiduciary's violation of her duty of care.⁴⁴ The power of these exceptions is reflected in considerable case law, in which courts adamantly refrain from scrutinizing a fiduciary's exercise of judgment, even in the face of considerable evidence that such actions were almost certainly misguided.⁴⁵

The historical discontinuity in fiduciary duty law between partnerships and public corporations has made the close corporation a troublesome battleground for courts and commentators. Often dubbed "incorporated partnerships," close corporations share a number of the same structural characteristics with their unincorporated counterparts. As with partnerships, it is not uncommon for all (or most) shareholders in a close corporation to exercise managerial duties at the firm.⁴⁶ Moreover, the residual claimants in both organizations lack access to thick capital markets to sell their shares. This deficiency both makes it more costly for dissatisfied owners to exit, and it impedes the prospect of outside monitoring through the market for corporate control—a non-trivial source of discipline for managers in public corporations.⁴⁷ These similarities have not gone unnoticed by a number of courts, who have advocated treating corporate fiduciaries in closely-held firms using the same approach as employed towards partnerships.⁴⁸ Some within the academy have concurred, arguing that the partnership analogy is sufficiently

43. See ANTONIO BERNARDO ET AL., A THEORY OF LEGAL PRESUMPTIONS (USC Olin Working Paper #99-8, 1999) (available at <http://papers.ssrn.com/paper.taf?abstract_id=161189>) (summarizing doctrine and demonstrating that the business judgment rule may be justified if costs imposed by litigation outweigh the marginal benefits from enhanced managerial effort).

44. The exoneration statute in Delaware, for example, permits a charter to limit or eliminate a director's personal liability from a breach of the fiduciary duty of *care*, but it specifically excepts all duty-of-loyalty violations (including the taking of corporate opportunities). DEL. CODE ANN. tit. 8, § 102(b)(7) (1996). A majority of other states have similar limitations. See Talley, *supra* note 35, at 287 n.20 (enumerating statutes).

45. *E.g.*, Kamin v. American Express Co., 383 N.Y.S.2d 807 (N.Y. Sup. Ct. 1976), *aff'd*, 387 N.Y.S.2d 993 (N.Y. App. Div. 1976) (holding that the business judgment rule protects a decision by directors of defendant corporation to pay an in-kind dividend consisting of depressed-value securities to shareholders, rather than selling such securities at an approximate tax savings to the corporation of \$8 million, because the in-kind distribution would allow the directors to avoid recording the capital loss in the firm's accounting statements).

46. See, *e.g.*, Lawrence E. Mitchell, *The Death of Fiduciary Duties in Close Corporations*, 138 U. PA. L. REV. 1675, 1690 (1990) (noting the "significant stock ownership by close corporation management"); Lawrence E. Mitchell, *Professional Responsibility and the Close Corporation: Toward a Realistic Ethic*, 74 CORNELL L. REV. 466, 476-77 (1989) (enumerating a host of factors indicative of a close corporation, including "a substantial identity of ownership and management").

47. See John C. Coates IV, *Measuring the Domain of Mediating Hierarchy: How Contestable Are US Public Corporations*, 24 J. CORP. LAW 837 (1999).

48. Donahue v. Rodd Electrotype Co., 328 N.E.2d 505, 515-16 (Mass. 1975) (stating that shareholders of close corporations "must discharge their management and stockholder responsibilities in conformity with [a] strict good faith standard," in contrast to directors and shareholders of widely-held corporations, who are subject to a "somewhat less stringent standard of fiduciary duty"); *cf.* Wilkes v. Springside Nursing Home, Inc., 353 N.E.2d 657, 661 (Mass. 1976) (likening the fiduciary duties of close-corporation shareholders to those of general partners, but qualifying the duty with a balancing test that hinges on whether the complained-of act can be justified on the grounds of serving a "legitimate business purpose").

strong to warrant the weakening of a number of the legal defenses afforded to fiduciaries of public corporations, such as the business judgment rule.⁴⁹

On the other hand, not all courts and commentators have been equally infatuated with the partnership metaphor. Delaware, for example, remains somewhat agnostic about the wholesale importation of fiduciary duties from partnership law when a close corporation has not clearly manifested a desire to be governed by such obligations.⁵⁰ Moreover, many critics maintain that the analogy misses a number of practical differences between partnerships and close corporations (such as participation/withdrawal rules, relationship-specific investments, and information asymmetries) that might have a substantive effect on the optimal content of fiduciary obligations.⁵¹ Perhaps more pointedly, some argue, the procedurally-costly decision to incorporate may signal an express desire of a firm's participants to be subjected to more permissive fiduciary duties, notwithstanding the other legal consequences of that choice (such as tax treatment and limited liability rights).⁵²

It is here where the debate over the relationship between fiduciary duties and ownership structure largely resides. Recent statutory innovations, such as limited liability companies, limited liability partnerships, and limited liability limited partnerships, have done little to broker a peace. If anything, the lack of a well-developed fiduciary duty doctrine within such forms has simply added fuel to an already caustic fire.⁵³ This continuing discord is undoubtedly due to a number of factors, not the least of which is a

49. See, e.g., Hetherington & Dooley, *supra* note 2, at 2 (arguing that a close corporation is the "functional equivalent" of a partnership, and advocating the creation of a "put" option for dissatisfied shareholders in a close corporation); Mahoney, *supra* note 2, at 6-18 (arguing same); F. Hodge O'Neal, *Preventative Law: Tailoring the Corporate Form of Business to Ensure Fair Treatment of All*, 49 MISS. L.J. 529, 533 (noting that the purpose of forming a close corporation stems solely from a desire for limited liability or other considerations distinct from fiduciary obligations. Blair and Stout briefly consider the famous holding in *Dodge v. Ford*, 170 N.W. 668 (Mich. 1919), that a director and controlling shareholder, Henry Ford, could not legitimately refuse a demand from minority shareholders that the corporation distribute its profits in dividends rather than reinvesting it in new corporate projects. Blair & Stout, *supra* note 2, at 301-302, reprinted in 24 J. CORP. L. 751, 788-89 (1999). The authors argue that the court's lack of deference to Ford's business judgment in this case was perhaps justified because the firm was a close corporation. *Id.* at 302, reprinted in 24 J. CORP. L. 751, 788-89.

50. *Nixon v. Blackwell*, 626 A.2d 1366, 1380 (Del. 1993) (rejecting the adoption of ad hoc rules for minority shareholders' rights in close corporations absent express provisions in the charter supporting such rules).

51. See Edward Rock & Michael Wachter, *Waiting for the Omlet to Set: Match-Specific Assets and Minority Oppression in the Close Corporation*, 24 J. CORP. L. (1999).

52. EASTERBROOK & FISCHER, *supra* note 4, at 250 (criticizing other commentators who presume that these other legal consequences are the sole driving forces behind incorporation).

53. See Terry A. O'Neill, *Reasonable Expectations in Families, Businesses, and Family Businesses: A Comment on Rollock*, 73 IND. L.J. 589, 596 n.36 (1998) ("The scope and nature of fiduciary duties concerning joint owners of partnerships, limited partnerships, and limited liability companies have been highly controversial recently."). The statutory texts are similarly of little help. The Delaware Limited Liability Company Act, for example, goes to great pains to describe how members of an LLC can contract around fiduciary duties, but says nothing about whether such duties are, as a default matter, similar to those in other organizational forms. DEL. CODE ANN. tit. 6, § 18-1101 (b), (c)(2) (1993). Moreover, there is a paucity of case law for prescribing the applicable standards of fiduciary obligations in LLCs. See, e.g., LARRY RIBSTEIN & PETER LETSOU, BUSINESS ASSOCIATIONS § 9.08[C] (1996) (noting the absence of doctrine in this area).

profound disagreement over the fundamental purpose of fiduciary duties.⁵⁴ But even so, other characteristics of the debate are equally unsettling. Those advocating the partnership analogy to close corporations, for example, must contend with a significant challenge of explaining why existing *statutory* heterogeneity seems to have given rise to *behavioral* heterogeneity. In other words, if certain types of governance structures were unambiguously conducive to wasteful, managerial rent-seeking, then why haven't most or all managers pushed their firms in that direction? Similarly, those who advocate the merits of regulatory self-selection have largely failed to explain precisely what factors would drive some closely-held firms to favor strict fiduciary standards while others would favor weaker ones.

A team-production approach, however, may lend analytical insights that help resolve these questions. The next part focuses on one such insight, arguing that a team-production perspective reveals an underappreciated distinction between widely- and closely-held organizational structures. In widely-held firms, the monitoring of management can be conducted by a separate third-party "hierarchy" (such as a board of directors), whose primary purpose is to keep tabs on managerial misconduct. Within closely-held firms, however, this monitoring task frequently comes from one source: the managers themselves, monitoring one another. The consequences of these distinct intra-firm monitoring structures, I shall argue, holds important consequences for both statutory design and doctrinal application.

III. MONITORING, DETERRENCE, AND FIDUCIARY DUTIES: AN EXAMPLE

In this part, I endeavor to illustrate my principal argument more formally, analyzing a stylized numerical example of team production within two different governance regimes. Under the first regime, team members play dual roles as both productive contributors and mutual monitors; under the second, an intervening hierarchy takes on all monitoring duties within the firm, leaving other team members to engage solely in productive activities. As a general matter, the former of these structures is intended to be representative of a closely-held firm—such as a close corporation or general partnership—in which the putative "owners" of the firm also tend to play an important role in productive decisions. Correspondingly, the latter of these governance structures is more analogous to a paradigmatic public corporation, in which shareholders play little or no role in productive activities, but act (individually or through their board of directors) as auditors or monitors of management.⁵⁵ I will use this analysis to demonstrate that rigorous fiduciary duties, while perhaps justifiable on independent grounds, can pose unique problems for closely-held firms by creating inefficient incentives to substitute monitoring activities for productive effort.

54. For a taste, compare EASTERBROOK & FISCHER, *supra* note 4, with PROGRESSIVE CORPORATE LAW (Lawrence Mitchell, ed. 1995).

55. To be sure, this distinction is an aggregate one, and many other permutations exist. For instance, although U.S. public corporations are characterized by diffuse ownership structures, there are numerous public corporations in which a control share is nonetheless owned by a member of management. Conversely, within some close corporations and partnerships, management does not have a significant ownership share. See R. LA PORTA ET AL., CORPORATE OWNERSHIP AROUND THE WORLD (National Bureau of Econ. Research Working Paper No. 6625, 1998).

Before beginning, however, I caution the reader that the analysis presented below is admittedly stylized, designed to isolate the interaction between fiduciary duties and governance form in a static setting. While certainly helpful for developing intuitions, models such as these probably fail to capture at least some of the complexity and nuance that pervade real-world situations. Consequently, one might be able to generate variations in which monitoring costs, while present, are insufficiently compelling to justify the distinction in fiduciary law that I highlight below. Indeed, after walking the reader through the basic numerical example, I shall explicitly analyze seven such variations.⁵⁶ Nevertheless, the tradeoff between monitoring and productive activities is, I believe, endemic to close governance structures, and is therefore almost always a legitimate consideration in the design of fiduciary duties (even if not ultimately a determinative consideration in every instance).

A. Framework

Consider a productive enterprise (“the firm”) that requires a team for the completion of a revenue-generating project. Although the precise nature of the project is not of particular relevance, suppose for concreteness that it involves the production and sale of a single idiosyncratic good, which is both specialized and difficult to manufacture. As a consequence of the relatively small market and the firm’s capacity constraint, the firm will sell either zero or one item. Should the firm succeed at making a sale, it will reap a payoff of \$100. If not, the project yields nothing.

The prospect of a successful sale hinges, in part, on the efforts of a two-person productive team within the firm, whose members are denoted, respectively, as “Player A” and “Player B.”⁵⁷ Each player is risk-neutral and possesses limited wealth (normalized arbitrarily to be zero⁵⁸). Moreover, each player is assumed to make an unmonitored choice about whether to expend “high” or “low” effort in productive activities. Encouraging high effort by the team members is important because it enhances the likelihood the project succeeds (*i.e.*, a sale is made).⁵⁹ Accordingly, the likelihood of a

56. See *infra* Part III.D.

57. The assumption of two players is a simplifying one, and can be generalized to “n” players. The analysis draws much of its inspiration—as most of the team production literature—from Alchian and Demsetz’s notable early insights. See Armen Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777 (1972).

58. I shall comment on the effects of relaxing this assumption *infra* Part III.D.

59. The alert reader will note that I refer to “effort”—a term more consistent with duties of care than duties of loyalty (which call for terms such as “self-denial” or “finest loyalty”). I do so predominantly to maintain consistency with the literature on moral hazard, or “hidden actions.” See, e.g., Bengt Holmstrom, *Moral Hazard in Teams*, 13 BELL J. ECON. 324 (1982) (using the same terminology). From a technical perspective, failure to expend effort is indistinguishable from re-directing hard assets away from the firm and to one’s individual account. In this analytic respect, a moral-hazard model does not distinguish between “shirking” and “stealing,” even though fiduciary duty law does attempt to do so. Though I do not attempt to make any meaningful distinction between these actions here, there is a live enterprise among corporations scholars generating explanations as to why these two problems are (or should be seen as) distinct. Compare Robert Cooter & Bradley J. Freedman, *The Fiduciary Relationship: Its Economic Character and Legal Consequences*, 66 N.Y.U. L. REV. 1045 (1991) (rooting the distinction in the differing probabilities of detection for misconduct), with Jennifer Arlen et al., *Endowment Effects and Fiduciary Duties: An Experimental Analysis* (1999) (unpublished manuscript, on file with author) (using experimental approaches to test for the importance of the distinction in cognitive and behavioral phenomena).

success (and thus a payoff of \$100 for the firm) is a function of the players' effort level, as illustrated in Table 1 below. As the table illustrates, high effort by both parties leads to a successful sale 80% of the time. Low effort by both leads to a 50% success rate. And finally, if one player expends high effort but the other expends low effort, the likelihood of success is 70%.

		<i>Player B</i>	
		High Effort	Low Effort
<i>Player A</i>	High Effort	80%	70%
	Low Effort	70%	50%

TABLE 1: LIKELIHOOD OF PROJECT SUCCESS AS FUNCTION OF PLAYERS' EFFORT

Hard work, however, does not come cheaply. In particular, while it is costless for a player to expend a low effort, high effort imposes a non-monetary cost on her, which I shall assume (somewhat arbitrarily) to be \$8.⁶⁰ It is this personal cost of effort that animates the chief incentive problem in this model: for while the costs of effort are borne privately, A and B may not be able to appropriate the full value of their contributions. Moreover, the beneficiaries of A's and B's effort depend, in part, on the ownership structure of the firm. Thus, for example, if A and B were in a general partnership, they would (at least as a default matter) split the profits of the firm evenly.⁶¹ Alternatively, if A and B managed the firm on behalf of a third party, their payoffs would consist of their expected wages from the firm, with the third party claiming any residual surplus. This observation suggests that the players might choose to withhold high effort in some circumstances, even though joint expenditure of high effort would be the socially efficient choice.⁶²

As an initial matter, each player's actual choice of effort is private information. However, it may be possible for others to detect whether an agent withholds effort by monitoring her behavior. Explicitly, suppose that there exists a good (but not perfect) monitoring technology which, if utilized, can detect a player expending low effort four-out-of-five times (*i.e.*, a low-effort player will be "caught" 80% of the time). The

60. This assumption is "somewhat" arbitrary, because in order for collective action problems to be present, the private cost of high effort must lie somewhere between the private benefits and the joint benefits of increased effort (a condition that is satisfied here so long as private costs of high effort are less than \$10). Note that the assumption that low effort costs the agent nothing is without loss of generality. The key from an agency-costs perspective is the *cost differential* between expending high effort and low effort, a difference that obviously exists here.

61. See UNIFORM PARTNERSHIP ACT § 18(a) (1914); REVISED UNIFORM PARTNERSHIP ACT § 401(b) (1996).

62. To see this, simply note that the expected profits of the firm if both players expend high effort are \$80, less the \$16 in joint effort costs, for a social net surplus of \$64. In contrast, if only one party expends high effort, the expected net social surplus is \$62 = (\$70 - \$8). Finally, if neither expends high effort, the expected net social surplus is \$50.

monitoring technology entails no false positives: should a player expend high effort, she will never be erroneously detected as shirking.⁶³ Moreover, it is assumed that detection by the monitor is verifiable in court (and therefore potentially the basis of a subsequent action for breach of fiduciary duty).

The identity of the monitor (should any monitoring occur) once again depends on the ownership structure of the firm. If the firm is closely-held, then any monitoring of the players' actions must necessarily come from A and B themselves, monitoring one another. If, however, the firm is organized such that there is a third party capable of monitoring the players (such as shareholders or their representatives in a public corporation), I shall assume that the third party is the sole monitor.⁶⁴ Like effort, monitoring is costly: I assume that the monitor (whoever she may be) must incur a private cost of \$8 for each player she decides to scrutinize.⁶⁵

Having described the fundamentals of the game, it is now possible to consider explicitly the role of fiduciary duty law. As noted in the previous Part, the role of *monitor* is nearly always concomitant with the identity of the *beneficiary* of a fiduciary duty. Indeed, partners—who must presumably monitor one another—also owe fiduciary duties both to the partnership and to one another. Managers in a public corporation—who are presumably monitored by shareholders and/or boards—owe fiduciary duties to the corporation, and, at least derivatively, to the shareholders. In an attempt to reflect this practical reality, then, I shall assume that the monitor, should she detect low effort by a player, has the unique legal standing to bring an action against the shirking player for breach of fiduciary duty. (Note that because the monitoring technology entails no false positives, all such cases that are brought are legitimate).

Because my ultimate enterprise is to formulate normative arguments about the optimal “strength” of fiduciary duty law within a team-production environment, it is necessary to represent the law in a way that allows variations in its substantive “bite.” To this end, I assume that if a player is successfully sued for breaching her fiduciary duty, she must disgorge to the plaintiff *a fraction of her gross payoff from the game*, denoted by the Greek letter θ . I shall assume that θ must fall somewhere between zero and one.

63. This assumption may be relaxed, but doing so provides few insights and distracts from analytical clarity.

64. Other permutations are of course possible in a public corporation. Indeed, the third party might engage in monitoring and also give the other parties incentives to monitor one another. As the reader shall see, however, in those situations where monitoring effects predominate, the existence of the third party is critical *precisely because* she can divest the agents of their incentives to monitor excessively. Moreover, because it is predominantly the shareholders that benefit from fiduciary duties in public corporations, the incentive of the shareholders to monitor managers is, as a default matter, greater than the incentives of managers to monitor one another.

65. The costs of monitoring and effort are assumed equal simply for convenience. It is possible to generalize to other monitoring cost values without substantially affecting the qualitative arguments presented below. I shall take up the possibility of varying monitoring costs *infra* Part III.D. In some situations, of course, one might argue that monitoring and productive effort are complements rather than substitutes, and that it is essentially costless to monitor when one is expending productive effort. In such situations, the tradeoff between monitoring and productivity is clearly absent. Such pure complementarity, however, seems unlikely in most organizations. Indeed, although there may be some basic elements of effort (such as keeping long hours in the office) that enhance one's monitoring capabilities, other elements of productive effort require sustained attention from the individual team member—attention that is compromised if she is also keeping tabs on the activities of her counterparts at the firm.

The interpretation of θ is quite simple—it is a measure of the relative strength of fiduciary duty law.⁶⁶ For instance, $\theta=0$ denotes a duty that is utterly toothless, in which a player who is caught withholding effort need not disgorge any of her private payoff to the aggrieved plaintiff. Conversely, $\theta=1$ denotes a rigorous doctrine, in which a detected shirker must always disgorge her private payoff, leaving her with nothing. (The reader should note, of course, that one could entertain the possibility of an even *more* stringent fiduciary duty rule, specifying $\theta>1$, representing punitive damages in addition to complete disgorgement. However, because the agent's wealth is limited—and in fact normalized at zero—punitive damages would be unrecoverable, and such a rule would have the same strategic and substantive effect as a complete disgorgement rule of $\theta=1$).⁶⁷

For methodological consistency, I shall adhere in what follows to a modified version of contractarianism, defining a legal rule to be "optimal" if it maximizes the expected joint welfare of all the firm's participants, implicitly asserting that joint-wealth maximization is the most plausible outcome of bargaining among the firm's constituents in the absence of transaction and bonding costs.⁶⁸ My principal thesis, however, is not exclusively wedded to this particular normative metric. On the contrary, my argument is solely about incentive structure; as such, it holds relevance for virtually any view of the firm positing that fiduciary duties represent an incentive device for deterring individuals from pursuing their own ends at the expense of other constituencies.⁶⁹

That said, it is now possible to begin analyzing the role of fiduciary duty law in creating—and sometimes confounding—value-increasing investments of effort, and how such effects vary according to the underlying governance structure. Accordingly, the following two subsections examine the role of fiduciary law within (i) a closely-held structure, such as a general partnership, where participants must monitor one another; and (ii) a widely-held structure, in which a third-party hierarch is predominantly responsible for monitoring team members.

B. Closely-Held Structure

Consider a regime in which A and B are organized as a closely-held firm. A hallmark of such a structure is the dual role played by the participants: they are the

66. The alert reader might object to this definition of fiduciary duty law, arguing that complete disgorgement of a fiduciary's gain is always the presumptive remedy for breaching one's fiduciary duty. The model is capable of accommodating such an interpretation, however. In order to do so, simply reinterpret θ to denote the probability that the fiduciary is found liable, with the presumptive remedy being the fiduciary's private payoff during that period. Because both parties are assumed to be risk-neutral, this description is substantively identical to that in the text.

67. I take up the possible effects of relaxing the wealth constraint *infra* Part III.D. The reader should also notice that the value of θ as defined reflects the *actual* damages that the defendant must pay to the plaintiff, as opposed to the putative damages paid to the company, out of which the defendant could make a *pro-rata* claim. See, e.g., *Meehan v. Shaughnessy*, 535 N.E.2d 1255 (Mass. 1989) (applying such a rule in the context of a partnership dissolution). It would be entirely possible to express damages in terms of this latter formulation, but doing so adds further confusion to the analysis without providing significant insights.

68. See Talley, *supra* note 35, at 316-22 (discussing the appropriate maximand for the firm, and arguing that absent significant *ex ante* bonding costs, a joint-wealth objective is probably the most defensible).

69. As noted, *supra* note 9, the normative view of fiduciary duties as an incentive device appears in both contractarian and communitarian corporations scholarship.

principal contributors to the firm's productive tasks, and they also share equally in the surplus generated by the firm, thus making them the sole monitors of one another.

Within this environment, then, each player must form strategy according to *three mutually exclusive* actions (or "pure strategies") that she might pursue.⁷⁰ First, she might spend her time exerting high effort in bringing about the project's success (hereinafter denoted as "High Effort"). Alternatively, she might decide to spend her time monitoring her partner's activities, endeavoring to expose whether her counterpart is withholding effort ("Monitor"). Finally, she might decide neither to expend high effort herself nor to monitor her counterpart, but rather simply to expend a low level of effort ("Low Effort"). Recall from above that only if a player chooses "High Effort" does the likely success of the project increase as described in Table 1.⁷¹ Consequently, at least from the standpoint of the project's success rate, the pure strategy "Monitor" has the same effect as does "Low Effort." Moreover, both "Effort" and "Monitor" are expensive strategies, imposing a non-monetary cost equivalent to \$8 on a player who employs them. In contrast, the "Low Effort" strategy represents the analytic baseline and imposes no such costs.

Because A and B are, by definition, the sole residual claimants of any net surplus generated by the project, their private payoffs are easy to describe. Each payoff consists of three possible components. First, should the project prove successful, each player will receive a one-half share of the firm's payoff, or \$50.⁷² Second, any player who chooses either to exert effort or to monitor will incur a certain non-monetary cost of \$8. Finally, in the event that one player chooses to monitor while her counterpart chooses to do nothing, there is a four-out-of-five chance that the latter will be detected, and must disgorge a θ -fraction of her \$50 participation should the project be a success. Using these payoffs, it is possible to assemble a "hybridized" normal-form of this game, illustrating the *expected* payoffs of the parties from each possible pure strategy profile, illustrated in Figure 1.⁷³

70. It is worth pointing out that while each of these posited actions is assumed *mutually exclusive*, the players are *not* restricted to selecting one of these actions with certainty. Rather, the equilibria analyzed below also admit so-called "mixed strategy" profiles, in which a player adopts a strategy that randomizes between two or more pure strategies. A probabilistic strategy such as this is conceptually similar to a behavior in which one divides her time between the various pure strategies. See *infra* note 75.

71. See *supra* text accompanying notes 57-60.

72. As noted above, I shall assume that the firm's distributions as a general matter are governed by the default rules that apply to partnerships. As such, each partner receives a one-half-share of any surplus generated.

73. It is important to note that this normal-form representation is "hybridized" because it includes only the *expected* payoffs of the parties, and not their actual payoffs. Thus, for example, consider the expected payoffs in the cell from the Figure corresponding to the expenditure of "High Effort," by both parties. In such a situation, neither party will actually ever receive a payoff of \$32 (as depicted in the Figure), but rather that is the payoff each can expect to receive *on average*. Explicitly, because both players expend high effort, the probability that the project is a success is 0.8. This implies that 20% of the time the project will prove unsuccessful, and each party's payoff will be equal to -\$8, corresponding to the (unrequited) cost of enhanced effort. On the other hand, 80% of the time, the project will be successful, and the players will split the \$100 payoff, thereby leaving each with a payoff of \$50-\$8=\$42 (subtracting out the cost of high effort). In sum, then, the *average* each player can expect from this pure strategy profile is $(0.2)(-\$8) + (0.8)(\$42) = \$32$. The fact that this normal form expresses *expected* and not *actual* payoffs is important, particularly if one wishes to analyze the repeat play of this game. In such a dynamic setting, it may be impossible to ensure in a given round whether the other player has withheld effort contrary to some posited dynamic norm of behavior. For further comments on this point, see Part III.D., *infra*.

		<i>Player B</i>		
		<i>High Effort</i>	<i>Monitor</i>	<i>Low Effort</i>
<i>Player A</i>	<i>High Effort</i>	\$32, \$32	\$27, \$27	\$27, \$35
	<i>Monitor</i>	\$27, \$27	\$17, \$17	\$17+200, \$25-200
	<i>Low Effort</i>	\$35, \$27	\$25-200, \$17+200	\$25, \$25

FIGURE 1: HYBRIDIZED NORMAL FORM OF PRODUCTION GAME

Having pieced together the parties' respective payoffs from each possible pure-strategy action, it is now possible to describe the behavior that would plausibly emerge from rational play within this strategic setting. Note, however, that because the legal policy parameter (θ) is embedded in the payoff matrix illustrated above, the equilibria from this game may change as one varies the underlying legal rule. Consequently, it is convenient to subdivide the range of θ into three "regions" of severity (corresponding respectively to weak, moderate, and strong fiduciary duties).

1. Region 1: "Weak" Fiduciary Duties ($0 \leq \theta \leq 1/2$)

Consider first a situation in which fiduciary law is relatively weak. Specifically, suppose that the law mandates that if a player is detected withholding effort, she must disgorge, at most, half of her contingent share in the project's success to the other party (and perhaps as little as nothing). With such a low-powered incentive structure, it seems unlikely that any value of θ in this region would be capable of inducing maximal effort by the parties. This surmise turns out to be correct. In this region, there are three distinct Nash equilibria,⁷⁴ two of them in pure strategies and a third in so-called "mixed

All other cell values in the Figure are (for the most part) computed in a similar fashion to that described above, and their derivations are therefore omitted. However, because of its slightly more algebraic form, it may be helpful to describe the formulation of the players' payoffs when one player chooses "Monitor" and the other chooses "Low Effort." Consider, for instance, the bottom-center cell of the Figure, corresponding to a "Low Effort" action by Player A and a "Monitor" action by Player B. In this cell, because neither player is expending high effort, the probability that the project is a success is 0.5. Accordingly, both A and B can expect to receive a \$50 share in profits half of the time. In addition, player B is expending monitoring effort, which costs her \$8 with certainty. Finally, because Player B is monitoring the behavior of Player A, and because Player A is withholding effort, there is an 80% chance that B will detect A's actions, in which case A must disgorge to B \$500 whenever the project is a success. Collecting all of these terms, Player A's payoff is equal to $(0.5)(\$50) - (0.8)(0.5)(\$500) = \$25-200$, and Player B's payoff is equal to $(0.5)(\$50) - \$8 + (0.8)(0.5)(\$500) = \$17+200$.

74. A Nash equilibrium is a set of strategies for each player which, if adopted by each, is self-enforcing. That is, no player has an affirmative incentive to deviate from her prescribed strategy so long as the other players employ their prescribed strategies. See Eric Talley, *Interdisciplinary Gap-Filling: Game Theory and the Law*, 22 J. L. & SOC. INQ. 1055, 1059 (1997).

strategies.”⁷⁵ None of them, however, is able to induce socially efficient levels of effort.⁷⁶

Let us begin with the two pure-strategy equilibria, each of which call for one of the players to expend high effort and for the other player to expend low effort. These equilibria correspond to the lower-left and upper-right cells in Figure 1. To understand why these are in fact equilibria, let us focus on the lower-left cell, which calls for low effort by player A and high effort by player B—a profile that yields expected payoffs of \$35 and \$27 for A and B, respectively. Consider the incentives of each player, *assuming* that the other player has adopted the strategy specified by the posited equilibrium. Player A, presuming that Player B will expend high effort, has two alternatives to doing nothing. First, she might choose to expend high effort herself, incurring an \$8 effort cost and increasing the expected *joint* payoff of the project by \$10.⁷⁷ However, because Player A would have to split this joint gain with her counterpart, she would actually *lose* \$3 on average from working hard, and thus her expected payoff will decrease from \$35 to \$32. Alternatively, Player A could choose to monitor Player B’s actions. Such a choice, however, would be even more foolhardy, since A will expend \$8 monitoring a player who she knows (by hypothesis) is expending productive effort—a wasteful expenditure that only reduces A’s expected payoff from \$35 to \$27. Consequently, if A presumes that B is expending effort, A’s best option is to do nothing.

Now consider Player B’s options, under the hypothesis that Player A is expending low effort. Player B also has two alternatives to expending high effort. First he might choose to expend low effort as well, thereby saving \$8, but decreasing the *joint* payoff of the project by \$20; but since Player B stands to lose half of this joint reduction in the joint payoff (or \$10), withholding effort would have the net effect of reducing his expected payoff from \$27 to \$25, and it is therefore unattractive to him. Alternatively, Player B could choose to monitor Player A’s actions, redirecting his \$8 in effort expense towards monitoring. Once again, foregoing productive effort would result in an expected personal loss to B of \$10 (and an expected joint loss of \$20); however, monitoring affords B the prospect of detecting A’s shirking and recovering a θ -fraction of A’s share in a successful project—a prospect that would result in an expected gain for Player B equal to 20θ .⁷⁸ So long as the expected benefits of monitoring are less than the expected costs therefrom (*i.e.*, $20\theta \leq \$10$), B would prefer expending effort to monitoring, thereby ensuring that B’s best response to A’s action is to expend effort. Equivalently, then, the lower-left cell

75. A “mixed strategy equilibrium” is one in which a player randomizes in equilibrium over various pure strategy actions, never predictably choosing one of them with certainty. In the famous “Rock-Paper-Scissors” game, for instance, the only equilibrium is one with mixed strategies, in which each player randomizes among the three available actions.

76. This should not come as a surprise. Indeed, it is generally impossible to induce optimal effort within teams if one is constrained to “budget balancing” mechanisms (*i.e.*, organizational structures in which all the gains and loss from the venture are jointly captured by the team members). *See, e.g.*, Holmstrom, *supra* note 59, at 325-27. As such, it will turn out that *no* value of θ is able to induce first-best effort levels by team members if the parties are wealth-constrained. *See infra* Part III.D.

77. More specifically, she would increase the likelihood of a \$100 joint payoff by 10%—from 70% to 80% (remember that Player B is already assumed to be expending high effort)—which translates into an expected increase of \$10.

78. *See supra* note 73.

in Figure 1 corresponds with a pure-strategy equilibrium of the game so long as $\theta \leq 1/2$.⁷⁹

In addition to these two pure-strategy equilibria, Region 1 supports a third, mixed-strategy equilibrium, which prescribes that both players randomize between high and low effort levels. Explicitly, it calls for each player to expend high effort with probability 0.4, and low effort with probability 0.6. Neither party within this equilibrium engages in monitoring of her counterpart.⁸⁰ There are a few interesting features of this equilibrium that bear pointing out. First, it is relatively unpredictable, leaving uncertain from the ex ante perspective whether both players will expend high effort, whether one will, or whether neither will. Second, the mixed-strategy equilibrium is the only "symmetric" equilibrium within this region, mandating an identical strategy for each player and generating an identical expected payoff for each player of \$29.⁸¹ Finally, in spite of the aesthetic appeal of symmetry, the mixed-strategy equilibrium gives rise to a *lower* expected joint surplus (\$58) than that generated by either of the asymmetric pure-strategy equilibrium (\$62).

It is important to note that the multiplicity of equilibria in this region make it difficult to predict with certainty exactly how rational players would behave in this game. Indeed, this is a problem that is often endemic to game-theoretic approaches, particularly in the context of private information. However, there may be a number of reasons to believe that parties in a commercial setting would end up playing one of the (more efficient) asymmetric equilibria. For instance, if the partnership requires any set-up costs, and A and B both recognize the greater surplus generated by the pure-strategy equilibria, then they may be able to agree on playing one of these equilibria, but mandating that the party who is advantaged in that equilibrium pay the lion's share of the set-up costs. Alternatively, even in the absence of set-up costs, the parties might commit to one of the pure-strategy equilibria, and then reduce slightly the advantaged party's contingent share in the surplus.⁸² Finally, even without an explicit agreement to play one of the pure-strategy equilibria, an implicit agreement may emerge as a result of social norms within the relevant industry.⁸³ Thus, the analysis that follows will generally presume that the two pure-strategy profiles are the most plausible outcomes of this game in Region 1.

79. A virtually identical analysis applies to the other pure strategy equilibrium, represented by the upper-right cell of Figure 1, and is therefore omitted.

80. To see why this is an equilibrium, consider Player A's choice, conditional on Player B randomizing in the prescribed fashion (and remembering that $\theta \leq 1/2$). Using the values illustrated in Figure 1, it is clear that if Player A expends high effort, her expected payoff is $(\$32)(0.4) + (\$27)(0.6) = \$29$. Should Player A expend low effort, her expected payoff is $(\$35)(0.4) + (\$25)(0.6) = \$29$. Finally, should Player A spend her time monitoring, her expected payoff is $(\$27)(0.4) + (\$17 + 20\theta)(0.6) = \$21 + 12\theta \leq \27 , quite obviously less than the \$29 she would receive with either of the other two strategies. Thus, if Player B is randomizing in the prescribed way, then Player A is indifferent between high effort and low effort, but is strictly opposed to monitoring. This implies that Player A would be willing to randomize between high and low effort with probabilities 0.4 and 0.6, respectively. An identical analysis applies to Player B.

81. For explanation of this result, see *supra* note 80.

82. For example, the parties could agree up-front that only Player B will expend high effort, but that in compensation for her burden, she will receive approximately 55.7% of the project's total payoff, with Player A receiving the remaining 44.3%. Under such an agreement, each player will receive an expected net payoff of approximately \$31.

83. For example, if the players were to interact within this context on a repeat basis, they might reach an implicit understanding that one of them would work during one period, and another would work the next. Such

2. Region 2: "Moderate" Fiduciary Duties ($1/2 < \theta \leq 2/3$)

Now consider a situation in which fiduciary law is slightly more rigorous, mandating that if a party is detected withholding effort, she must disgorge more than half, but at most two-thirds of her contingent share to the other party. In such a situation, quite obviously, the incentives for parties to monitor and punish shirking are stronger than they were in Region 1. One might conjecture, then, that the higher-powered monitoring incentives in Region 2 would induce greater aggregate efforts on behalf of the parties, and thus greater expected joint welfare. This conjecture, however, turns out to be erroneous. Instead (and somewhat ironically), a moderate fiduciary duty in this region *actually detracts* from the effort levels expended by the players in equilibrium, reducing the maximum attainable level of social surplus.

In order to understand why, it is perhaps most helpful to recollect the analysis of Region 1, which supported two pure-strategy equilibria, each mandating that one player would expend low effort while the other expended high effort. Recall that in order to confirm the existence of such an equilibrium, one had to verify that the party expending high effort—knowing that her counterpart was shirking—was not overly tempted either to expend less effort as well, or, alternatively, to begin monitoring. This latter temptation to monitor, however, is a direct function of the strength of fiduciary duty law: for if the prospect of recovering damages through monitoring and suit grew too attractive (*i.e.*, if $\theta > 1/2$), then the effort-expending player would have a positive incentive to redirect her attention away from effort and toward monitoring her co-venturer. It is exactly this condition that is violated in Region 2. In other words, a stronger fiduciary duty law renders each of these pure strategy equilibria unattainable by giving the high-effort expending player incentives to substitute out of productive activities and into redistributional monitoring activities. Consequently, neither of the pure-strategy equilibria persist within Region 2.

It turns out that the only Nash equilibrium that persists in this region is the same mixed-strategy equilibrium described above,⁸⁴ which calls for each party to expend effort with probability 0.4 and to do nothing with probability 0.6. Interestingly, just as before, neither party ever engages in monitoring her counterpart within this equilibrium. Evidently, the moderate strength of fiduciary duties in the region is enough to destroy the viability of the pure-strategy equilibria, but insufficient to induce greater monitoring and effort levels in the sole remaining (but also less efficient) mixed-strategy equilibrium.⁸⁵ As above, the mixed strategy equilibrium gives rise to an expected joint surplus \$58. In this region, however, this is the only plausible outcome that emerges from rational play.

repeat interaction is the defining characteristic of social norms. See, e.g., Symposium, *Law, Economics, & Norms*, 144 U. PA. L. REV. 1643 (1996). I shall return to the notion of norms within a repeat play setting *infra* Part III.D.

84. See *supra* text accompanying notes 80-81.

85. Recall from note 80, *supra*, that within the posited mixed strategy equilibrium, monitoring yielded an expected payoff of \$21+120, and thus falls short of the \$29 expected payoff of the other two strategies so long as $\theta < 2/3$.

3. Region 3: "Strong" Fiduciary Duties ($2/3 < \theta \leq 1$)

Finally, consider a situation in which fiduciary law is genuinely rigorous, mandating that if a party is detected withholding effort, she must disgorge more than two-thirds, and potentially all of her contingent share to the other party. In this region, the incentives for parties to monitor and sanction shirking are maximal. Thus, if there is any chance for strong fiduciary duties to play an efficiency-enhancing deterrence role, this is the one. As it turns out, fiduciary duties within this region can play such a role, but one that ultimately falls short of (in this particular case) generating enough social wealth to surpass the most efficient outcomes from Region 1.

Note first that just as before, Region 3 is unable to support either of the asymmetric, pure-strategy equilibria that existed in Region 1. In particular, because the prospect of monitoring and subsequent legal action is sufficiently tempting (i.e., $\theta > 2/3 > 1/2$), neither party will be content to expend high effort, rather than monitor, if she knows with certainty that her counterpart is withholding effort.

As such, the only Nash equilibrium in this region continues to be in mixed strategies. Unlike the mixed-strategy equilibria analyzed for other regions, however (in which neither party monitored), here the equilibrium calls for the players to randomize among *all three* pure strategies. Although the exact randomization probabilities vary with θ ,⁸⁶ they do so in rather predictable ways. As θ increases from $2/3$ to 1 , the equilibrium probability that each player monitors her counterpart steadily grows, from zero to 0.05 . Moreover, this increased monitoring activity carries with it a deterrent effect: over this same interval, the fear of increased monitoring induces each player to increase the probability of expending high effort, from 0.4 to 0.6 . Finally (and logically), the probability that each agent expends low effort *decreases* over this interval from 0.6 to 0.35 . All tolled, this equilibrium yields an expected level of joint welfare that varies between \$58 and \$60, distributed evenly between the players.⁸⁷

Figure 2 juxtaposes the conclusions from Regions 1, 2, and 3, illustrating the maximum attainable level of expected joint welfare as each party's legal duty varies from its most toothless ($\theta=0$) to its most rigorous ($\theta=1$) possible state. As Figure 2 demonstrates, a weak fiduciary duty (embodied in Region 1) is capable of supporting a relatively high joint payoff of \$62, a byproduct of the viability of the two asymmetric, pure-strategy equilibria. As one moves toward a more moderate fiduciary duty (embodied in Region 2), however, the pure-strategy equilibria cease to exist, and the maximal attainable welfare drops precipitously to \$58, corresponding to the unique mixed-strategy equilibrium where players randomize between high and low effort. Finally, as the content of fiduciary duties grows strongest (embodied in Region 3), the unique equilibrium mandates randomization over all the potential strategies, thereby introducing some deterrent effects and achieving an expected joint welfare ranging between \$58 (for θ near $2/3$) and \$60 (as θ approaches 1).

86. The unique mixed strategy equilibrium in Region 3 calls for each player to mix among {High Effort, Monitor, Low Effort} with probabilities $\{1-2/(5\theta), (3\theta-2)/(20\theta^2), (5\theta+2)/(20\theta^2)\}$. To see that this is indeed an equilibrium, one need simply confirm that if one player plays this strategy, then the other player's expected payoff from each of her pure strategies is invariant and equal to $\$(32-2/\theta)$.

87. In particular, summing the payoffs specified in note 86, *supra*, the expected social welfare in Region 3 is equal to $\$(64-4/\theta)$, reaching a *local* maximum of \$60 as θ approaches 1 .

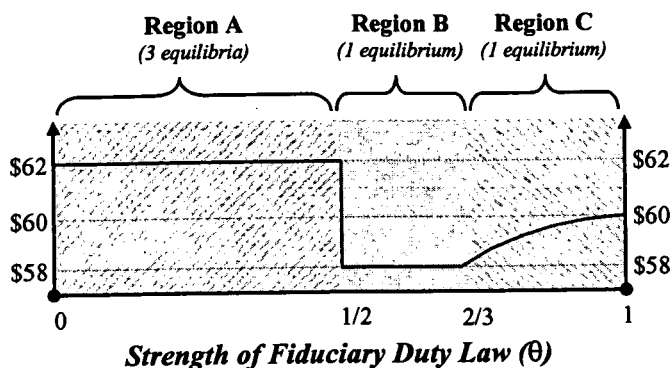


FIGURE 2: MAXIMUM ATTAINABLE LEVEL OF JOINT EXPECTED WELFARE AS FIDUCIARY DUTY LAW VARIES

It is evident from Figure 2 that strengthening the applicable fiduciary duty *can* play an efficiency-enhancing role on the margin, since it enhances incentives for players to monitor each other in equilibrium within Region 3, thereby creating a deterrent to misconduct. Nonetheless, as Figure 2 demonstrates, such benefits may be unable to eclipse the joint gains generated by either of the pure-strategy equilibria from Region 1—equilibria that are viable only under the very weakest forms of fiduciary duty. An affirmative way to state this point is as follows: *Strengthening fiduciary duties within closely-held organizations can lead to two conflicting effects: (a) an efficiency-enhancing deterrence effect, stemming from one's enhanced fear of monitoring by her counterparts; and (b) an efficiency-reducing monitoring effect, stemming from one's incentive to forego productive tasks in order to spend more time monitoring her counterparts. An enhanced fiduciary duty is justified on efficiency grounds when and only when the deterrence effect overshadows the monitoring effect. By corollary, should the monitoring effect outweigh the deterrence effect, it may be optimal to dilute—or perhaps even eliminate—the practical bite of fiduciary duties.*

It is important to keep in mind that the argument made above has utilized a particular numerical example. As I will demonstrate below, it is possible to vary this example in a way so that either the deterrence effect or the monitoring effect would dominate.⁸⁸ Nevertheless, because there are no *a priori* reasons to believe that one effect will predominate in all situations, and because the tradeoff appears endemic to the closely-held organizational structure, the arguments above present a consideration that should generally be accounted for in crafting and applying fiduciary duty law.

C. Widely-Held Structure

In contrast to the analysis from the previous subsection, productive teams within widely-held firms need not manifest the same fundamental tradeoff between deterrence and monitoring effects. Indeed, with the widely-held structure comes the imposition of a

88. See *infra* Part III.D.

third party "hierarchy" who, as the principal beneficiary of fiduciary duties, is also the presumptive monitor of managerial opportunism. Within most settings, this third-party hierarchy represents public shareholders, as they are the residual claimants on the productive enterprise. For the purposes of my argument, however, this player could be anyone who is not a team member, including lenders, customers, the surrounding community, or a combination thereof.⁸⁹

The existence of a shareholder has three effects on the incentive structure of the numerical example. First, it facilitates decoupling of business revenues from the payoffs of the team. One of the problems in the closely-held organization is that it is a "budget-balancing" system: the parties' total gross payoff from the project must always be equal to the revenues the project generated. With an intervening hierarchy, however, the aggregate wages paid to the team members need not correspond systematically to the revenues of the project. Second, because of the decoupling of project revenues from wages, the principal is able to craft for the players "incentive pay," promising a high wage in the event the project proves successful, and a low wage (or nothing) if the project fails. Unlike the previous case, in which the players were always presumed to split the \$100 revenues, here the hierarchy has significantly greater freedom to fine-tune the contingent rewards of the parties (either upward or downward). Finally, and most importantly, the interjection of a hierarchy divorces incentives to monitor from incentives to expend effort. As such, team members are no longer required to wear two hats, and thus are not exposed to the countervailing temptations that plagued the analysis above. Moreover, the hierarchy takes on a specialized role of monitor, and is also undistracted by other incentives.

The numerical example above, therefore, if analyzed within a widely-held context, tends to behave in a significantly different fashion. Because of space and time constraints, I shall not attempt to walk the reader through yet another arduous exercise in computing equilibrium strategy profiles—indeed, the possibilities of both incentive pay and monitoring would lead to a rather complicated analysis with numerous permutations. Nevertheless, with the same set of parameter values,⁹⁰ a uniform conclusion appears to obtain: strong fiduciary duties (*i.e.*, large values of θ) are never harmful, and are sometimes helpful to stem intra-team opportunism. In technical terms, then, the maximum attainable level of social welfare increases (weakly) in θ .

Despite these differences, there may be a number of other reasons (emanating from outside the framework) why strong fiduciary duties might still be inadvisable in at least some public corporations. Some small-stakes shareholders, for example, might wish to use their status as beneficiaries inefficiently to hold up the firm, or will pass up valuable outside opportunities to monitor. Moreover, public corporations often have many more

89. Rank-and-file employees, however, are not possibilities, since they are often team members themselves. Note, of course, that in most cases, the rules of legal standing for derivative and other suits suggest that the shareholders are the presumptive monitors. Indeed, shareholders have the unique ability to sue the corporation derivatively. See CLARK, *supra* note 37, at 639-40.

90. For instance, it is assumed that the hierarchy ("H") is the sole monitor of the team members, who also pays wages to Players A and B. Just as before, it is assumed that if H detects one of the team members withholding effort, fiduciary law requires that party to disgorge a θ -fraction of her wage to Player H, where $0 \leq \theta \leq 1$. Effort is assumed once again to cost \$8 to the players, and it also costs H \$8 for each player that she decides to monitor.

relevant constituencies and according shareholders too many rights might lead to additional influence costs that disadvantage these other constituencies.⁹¹ Finally, the role of thick capital markets may provide exit options and external discipline, thereby rendering the necessity of resorting to fiduciary law superfluous.⁹² Nevertheless, concerns over intra-team monitoring appear not to play as significant a role in widely-held firms as they do in their closely-held counterparts.

D. Variations, Limitations, and Caveats

Thus far, I have illustrated my principal argument using a single numerical example. Although such devices make for great pedagogy, one must be careful not to overstate the generality of the insights they produce. Consequently, this section attempts to explore the robustness of my principal argument, subjecting it to seven plausible variations in the example's assumptions. While most of these variations appear to have little effect on the tradeoff between deterrence and monitoring effects, some are capable of reversing the ultimate direction of this tradeoff. This last observation, then, suggests that the problem of intra-team monitoring costs may vary across firms, and thus a heterogeneous regulatory approach towards closely-held firms is perhaps warranted.

1. Verifiable Investments

Consider first what might happen to the example if the actions of each party were relatively cheap to verify. In other words, suppose that the monitoring technology described above were completely accurate and inexpensive to invoke. This variation is equivalent to assuming either that problems of opportunism are largely transparent, or, alternatively, that monitoring is essentially costless when one is working hard. Not surprisingly, in such situations the trade-off between monitoring and deterrence effects vanishes within a closely-held firm.⁹³ Indeed, when monitoring no longer carries an opportunity cost, team members are free both to monitor one another's effort *and* to expend effort simultaneously. Significantly, however, this variation need not inexorably imply the advisability of strong fiduciary duties. If a manager's actions are completely transparent, even relatively mild fiduciary duties can deter managerial opportunism.

Symmetrically, one might conceive of a variation in which the monitoring technology is *worse* than in the studied example, either because detection is less

91. Blair & Stout, *supra* note 2, posit that the multiple-constituency problem in public corporations may be the reason for the relatively large constraints placed on shareholders who file fiduciary duty actions. *Id.* at 297-306, *reprinted in* 24 J. CORP. L. 751, 785-91 (1999). Their analysis, however, leaves rather open-ended the question of how, in the absence of shareholder vigilance, managers will have the appropriate incentives to behave. *Id.* at 283-285, *reprinted in* 24 J. CORP. L. 751, 775-76 (1999) (arguing that reputational concerns, altruism, and norms of behavior serve the principal roles of disciplining management).

92. This argument, while quite popular, is also somewhat tenuous. Indeed, while capital markets probably do help mediate the necessity of resorting to litigation, this does not necessarily create an independent efficiency argument against strict fiduciary duties in public corporations. Rather, it simply makes a prediction that any inefficiencies, if they exist, will be reflected in the firm's share price.

93. Indeed, in many situations, the participants in a closely-held firm may face low monitoring costs on the margin *precisely because* they are part of the production team, and are thus already in a position to observe some of their counterparts' behavior incidentally.

trustworthy⁹⁴ or because monitoring costs are large. Not surprisingly, this variation would tend to *strengthen* my central argument. To take an extreme case, suppose that monitoring became so inaccurate that a monitoring party would detect cheating 80% of the time *regardless* of whether her counterpart expended low effort. In such a situation, the deterrence effect would completely disappear, since one's probability of being detected (and found liable) does not depend on whether she expends effort. On the other hand, the monitoring effect is alive and well: by spending all one's time monitoring, one may be able to extract a portion of her counterpart's payoff 80% of the time. In such a situation, a strict fiduciary duty could lead to a situation where both parties engage solely in nonproductive monitoring.

2. Prevention

The form of monitoring analyzed above falls under the loose definition of "detection":⁹⁵ A player who chooses to monitor her counterpart will (with some probability) become informed of the latter's misfeasance, but only after the transgression has already occurred. In many settings, however, this may not be the only form of monitoring protocol available. Most notably, it seems plausible that individuals could also engage in so-called "prevention," which operates at the *ex ante* stage as a form of early detection.⁹⁶ Significantly, preventative monitoring allows (at least in theory) for the implementation of measures that obviate misfeasance before it occurs. As such, prevention has two alternative implications for my analysis. First, if it represents a less costly method of monitoring than detection, then the analysis above would overstate the extent to which monitoring costs are important. But second, even if prevention represents a more costly form of monitoring, parties may nonetheless utilize it if their expected payoffs from *ex post* detection were sufficiently small. In this latter case, preventative monitoring might confound the policy-maker's attempt to encourage productive effort by reducing θ for firms dominated by the monitoring effect.⁹⁷

Although preventative monitoring is probably an important consideration generally, it need not change the instant analysis as appreciably as one might guess. From a practical standpoint, prevention can be accomplished by one of two methods: either (i) prohibiting team members altogether from engaging in discretionary activities; or (ii) allowing such activities, but subjecting them to extremely close real-time scrutiny. The first option effectively subverts the very purpose of team production, and thus appears somewhat inapposite to the motivating pretext of this Article. The second option may be more plausible; but if so, the added vigilance it necessitates may render it a more costly mechanism than the alternative of *ex post* detection.

94. Recall that the earlier example assumed an 80% detection rate with no false positives. One could reduce this detection rate or add the possibility that a hard-working agent will be erroneously detected as shirking.

95. Jennifer Arlen & Reinier Kraakman, *Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes*, 72 N.Y.U. L. REV. 687, 701-02 (1997); A. Mitchell Polinsky & Steven Shavell, *Should Employees Be Subject to Fines and Imprisonment Given the Existence of Corporate Liability?*, 13 INT'L REV. L. & ECON. 239, 241-42 (1993).

96. Arlen & Kraakman, *supra* note 95, at 701.

97. See *supra* Figure 2 and accompanying text.

That being said, there remains the possibility that reducing the payoffs associated with detection (θ) might lead parties not to step up their productive efforts (as the analysis above suggested), but rather to substitute inefficiently into more costly preventative activities. But even here, a number of conceptual problems remain. Most explicitly, it is unclear precisely how one's discovery of her counterpart's mischievous intentions, standing alone, prevents much of anything. To take an extreme example, suppose that the damages rule governing fiduciary duty lawsuits were $\theta=0$ (\$0 damages), and that Player A had discovered, using preventative monitoring techniques, that her counterpart intended to shirk. Suppose further that Player B, when confronted with A's discovery, nonetheless announces that he intends to shirk anyway. What is A's recourse? Assuming that physical intimidation is not possible, she may be limited to threatening legal action if B carries out his stated intentions.⁹⁸ But if such suits were subject to the same damages rule that governs *ex post* detection (*i.e.*, $\theta=0$) then A's threat would not be particularly daunting. In such an instance, it seems highly likely that the costly strategy of preventative monitoring would be decidedly less attractive to A than either *ex post* detection or increased productive effort.

3. Severe Free-Riding

One canonical feature of the example analyzed above was that it involved free riding by the team players. Indeed, as the analysis within Region 1 illustrates, it may be an equilibrium for one party to expend effort while the other coasts. Nevertheless, the free-riding problem could be even more severe than portrayed above. Consider, for example, altering the probabilities given in Table 1 so that the probability of a success went from 50% (if neither party contributed effort) to 60% (if one of them did) to 70% (if both did). In such a situation, one's marginal expected gain from expending effort is only \$5, regardless of the other player's action. Consequently, it is never worthwhile (in the absence of large damages) for either party to contribute effort. With severe free-riding problems like this, it is more likely that stronger fiduciary duties can play a beneficial role. In particular, an increase in θ may engender at least some equilibrium effort. At the same time, however, the fundamental tradeoff between deterrence and monitoring effects persists, at least *on the margin*. Although strong fiduciary duties would be optimal for this particular variation, one can construct other variations involving severe free riding in which the tradeoff still militates against the strongest fiduciary duties. As such, this variation does not create a general license to ignore intra-firm monitoring concerns.

4. Deep Pockets

Because the numerical example normalized each player's wealth to be zero, the maximum extractable penalty for detected misfeasance was necessarily equal to the party's gross payoff (if any) from the game. Relaxing the parties' wealth constraint would permit legal rules that forced detected shirkers to pay punitive damages in excess of their private payoffs from the project. The threat of such added sanctions, as one would expect,

98. Another possibility is that Player A can threaten to use extra-legal reputational punishments and social norms to deter Player B. Such a possibility, however, applies equally well to detection and prevention, and I therefore address it separately *infra* Part III.D.7.

can enhance the deterrence effect by increasing the expected costs of opportunism. In terms of Figure 2, above, this would have the effect of expanding Region 3 rightward, enhancing the joint-welfare effects of a strict fiduciary duty rule. As it turns out, sufficient slack in the parties' wealth constraints has precisely this effect in the numerical example above. In particular, if the parties held private wealth of approximately \$38 each, then the equilibrium payoffs in Region 3 will surpass those in Region 1, thereby making strong fiduciary duties optimal. Moreover, as one slackens the players' wealth constraints more and more, the equilibrium outcome would tend incrementally (or "asymptotically") to the first-best outcome of \$64.

Once again, however, there are at least two limitations to the ultimate power of this proposed variation. First, and most fundamentally, it requires that the parties possess sufficient wealth to make the threat of punitive damages credible. Certainly, such a condition may hold for some closely-held firms, particularly if the firm does not distribute a significant portion of its earnings from period to period. However, it is not difficult to find examples where liquidity-constrained partners or managers necessitate regular disbursements, and are essentially judgment proof beyond the value of their ownership stake in the firm. Second, just as in the previous variation, the marginal tradeoff between deterrence and monitoring persists, a fact that may truncate (in some situations) the gains one might generate from enhanced fiduciary obligations.

5. Non-Team Beneficiaries

Recall from the previous subsections that both players A and B were assumed necessary for production at the firm. Indeed, even if one or both of them expended low effort, their presence in the production process was nonetheless critical to generating any payoff whatsoever. Many disputes within closely-held firms, however, involve a non-productive owner. For example, the well-known Massachusetts case of *Donahue v. Rodd Electrotypes Co.*⁹⁹—largely credited with introducing the "partnership analogy" to close corporations—involved a plaintiff who was the widow and heir of a deceased shareholder, but played no role in the productive team.¹⁰⁰ Quite clearly, Mrs. Donahue's monitoring of others' actions at the firm did not cause her to substitute away from productive duties—for she had no such duties.¹⁰¹

The possibility of non-productive beneficiaries represents an important limitation to my central thesis. Indeed, in many ways such actors represent the very "third party hierarch" posited to exist characterize a public corporation—a party capable of monitoring without having to sacrifice productive effort. Such individuals, then, may have a stronger claim as fiduciary beneficiaries than do their productive counterparts. Nevertheless, there are a few caveats that deserve mention here. First, it is important to be clear that a "non-productive" beneficiary is not necessarily equivalent to a "minority" or "non-controlling" shareholder. To the contrary, the original example would be just as valid if, for example, player A owned 51% of the returns (and votes) and player B owned

99. 328 N.E.2d 505 (Mass. 1975).

100. *Id.* at 586.

101. *Id.* Indeed, even in *Meinhard v. Salmon*, 164 N.E. 545 (N.Y. 1928), the plaintiff took on the role of a "silent partner," whose active role in the productive enterprise was extremely limited. *Id.* at 546-47.

49%.¹⁰² The critical difference comes when a shareholder (minority or majority) is completely outside the productive process. In such situations, a higher standard of fiduciary duty may be justified.¹⁰³ Second, it may be important to consider whether non-productive beneficiaries in closely-held firms are as effective in monitoring management as is a specialized hierarch in a widely-held firm. If such non-productive individuals' access is limited to extremely uninformative or expensive monitoring technologies, then their case for heightened beneficiary status begins to dwindle.

6. Multiple Equilibria

Recall from Figure 2 that the equilibrium dominance of weak fiduciary duties in Region 1 is predicated, in part, on an assumption that the parties could coordinate on the equilibrium to be played, and that they would systematically rule out any that fail to maximize expected joint surplus. Making this assumption facilitated the assertion that either of the two pure-strategy equilibria were the most plausible outcomes in that region. However, the problem of multiple equilibria may be more troublesome than this assumption implicitly asserts. Indeed, some corporations scholars have noted the non-trivial problems imposed by coordination failures within organizations.¹⁰⁴ If one presumes that the parties would be unable to coordinate efficiently within this region, they may end up playing the third, mixed-strategy equilibrium profile,¹⁰⁵ which mandated that each player randomize between expending effort and doing nothing. Recall that this equilibrium was identical to the one in Region 2, and it tied for the lowest expected social welfare (\$58). Thus, if one is convinced that such coordination failures will occur *and* that the law can play no role in effecting coordination among the parties, then it may be best to sacrifice some potential efficiency gains by choosing a legal rule that supports the most efficient unique equilibrium, represented by the strongest fiduciary duty in Region 3.

This criticism, while valid, tends simultaneously to undercut its own persuasiveness. Indeed, the principal problem with multiple equilibria is that there is no good reason to believe that one equilibrium will be played instead of another. But even so, the assertion that players will fail to coordinate (when the stakes from doing so are high) may need as much, if not more, justification than the assertion that they will. Moreover, the criticism is perhaps too quick to dismiss the ability of legal rules to play an important coordinating role. Consider, for example, the doctrine announced in *National Biscuit Co. v. Stroud*,¹⁰⁶ a partnership case holding that in a two-person partnership, either partner has authority to

102. By the same token, minority/minority status is not material to the text's defense of the *Donahue* outcome. Under a team-production approach, Mrs. Donahue should benefit from heightened fiduciary duties even if she were the 51% owner of the firm.

103. I do not contend, of course, that minority/majority concerns are irrelevant from a fiduciary duty perspective. On the contrary, there are a number of contexts, such as corporate freeze-outs and non-pro rata disbursements, in which minority shareholders are at substantial risk. See Rock & Wachter, *supra* note 51, at 921-24. However, from the specific standpoint of monitoring-effort tradeoffs, minority status appears to be somewhat less important than whether a fiduciary beneficiary is also a team member.

104. See William Bratton, *Game Theory and the Restoration of Honor to Corporate Law's Fiduciary Duty of Loyalty*, in *PROGRESSIVE CORPORATE LAW* 140, 154 (Larry Mitchell ed., 1995).

105. See *supra* Part III.B.

106. 106 S.E.2d 692 (N.C. 1959).

continue making purchases on behalf of the partnership with traditional trading partners.¹⁰⁷ Applied to this example, a rule like that in *National Biscuit* might mandate that if the parties had settled on a work-effort equilibrium in some initial period, the same equilibrium would be applicable in the next period. Such coordination rules tend to play themselves out best in dynamic settings, a consideration to which I now turn.

7. Repeat Play

Finally, it is important to recognize that the numerical example from the text analyzes a static, one-shot game. Although some business relationships exhibit similarly short durations, many persist over time, affording the opportunity for reputations and norms to develop, forces that can act outside the confines of legal rules to transform individual behavior.¹⁰⁸ How, then, would the example above present itself if the parties similarly interacted on a dynamic basis?

Before attempting to answer this question, it is important to note that dynamic concerns within game theory often pose more problems than they solve. Indeed, a repeat-game context usually exacerbates problems of multiple equilibria, thereby diminishing even further game theory's predictive powers. Moreover, without a unified, predictive theory of how reputations or norms develop (which, for the most part, does not yet exist¹⁰⁹), there is little to placate the problem of nonfalsifiability.

Nevertheless, one can still conduct a meaningful discussion of what strategic norms are *possible* (as opposed to *probable*) within a dynamic setting—a discussion that produces some interesting results.¹¹⁰ Perhaps the most straightforward consideration concerns what happens when team production is repeated a finite number of times. Such contexts seem appropriate for many business organizations, such as joint ventures and limited liability companies, whose presumptive life is often finite. Moreover, even for many corporations, whose life is presumed infinite, the anticipated interactions of some team-players may be finite.¹¹¹ It turns out, both here and generally, that finite repetition among rational players produces substantially the same equilibrium behavior as does a static environment. Indeed, once the parties arrive at the "last" period of play, they would behave as if it were a static game. Working backwards, then, during the second-to-last period of the game, both players—predicting their endgame behavior—would realize that any attempt to build a reputation for use in the last period would be futile, and they therefore would resign themselves once again to behaving as if it were a static game. This

107. *Id.* at 695.

108. Bratton, *supra* note 104, at 155-58, offers an account of the duty of loyalty within a repeat-game context, as a norm of trust and honor.

109. See, e.g., Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 354 (1997) (arguing that the "appropriate" theory of norms is heavily context-specific).

110. The burgeoning norms literature has attempted to characterize the plausibility of a posited norm using many approaches, ranging from repeat play (which I employ here), to evolutionary behavior, to endogenous preferences. See, e.g., Randal C. Picker, *Simple Games in a Complex World: A Generative Approach to the Adoption of Norms*, 64 U. CHI. L. REV. 1225 (1997) (reviewing the literature and exploring computer simulations of evolutionary norms for a specific game).

111. Consider, for example, venture capitalists, who tend to retain control of an acquired firm for a short (and often loosely pre-determined) period of time. See, e.g., Bernard S. Black & Ronald J. Gilson, *Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets*, 47 J. FIN. ECON. 243, 243-46 (1998).

inductive process ends up “unraveling” the game all the way back to the first period, so that the best the players can accomplish in a finitely-repeated game is to play out a series static equilibria.¹¹² As such, when the dynamic interaction of the players is limited to finite duration, the repeat-play variation has no appreciable effect on the analysis.¹¹³

When rational players interact on an infinitely-repeated basis, however, new equilibria sometimes emerge—equilibria which might fairly be interpreted as “norms” of behavior (though not necessarily extra-legal ones¹¹⁴). The most interesting of such equilibria typically prescribe that the players adopt a set of “cooperative” strategies that *would not* constitute equilibria of a static game, repeating them indefinitely until a verifiable signal indicates a defection by one/both of the players. Should such a signal occur, the typical equilibrium would prescribe that the players revert to a “punishment scheme,” which most generally involves playing out a static equilibrium of the game forever. If the players are sufficiently patient, and the punishment scheme sufficiently unattractive, then the posited cooperative strategies will constitute a type of dynamic norm.

Turning our attention to the example in the text, consider the effects of indefinite interactions within the closely-held context analyzed in Part III.B. Perhaps the first natural question to ask is whether infinitely-repeated play can support the *most* efficient cooperative strategy profile: exclusive expenditure of productive effort by both parties in each period (which would yield an expected per-round payoff of \$32 for each individual). Unfortunately, if the players have private information about their actions (as here), and if they discount future payoffs at all, such an outcome is simply *not* sustainable. The intuition for this argument is as follows. As noted above, in order to support a set of cooperative strategies, it is necessary for the players to utilize some verifiable signal about prior defections to trigger a subsequent punishment scheme. If both players always exert effort, however, then neither can engage in the monitoring activity that would provide such a signal directly. Consequently, to trigger any punishment scheme, either (1) the parties would have to resort to an indirect signal of past shirking (such as a string of unsuccessful outcomes for some finite number of rounds), or (2) they would have to spend some fraction of their time monitoring each other.

Neither of these two approaches, it turns out, can sustain a fully-efficient dynamic norm. The first—using indirect public signals—is particularly unavailing in this game, for

112. Interestingly, however, the necessity of repeating static equilibrium outcomes does not preclude the choice of a *different equilibrium in each period*. Thus, for example, the players in a closely-held firm who are subjected to a “weak” fiduciary law (Region 1) may be able to coordinate on a dynamic equilibrium prescribing that they alternate playing the two asymmetric pure-strategy equilibria. Such a norm lead to a roughly fair average division of the productive rents from the firm.

113. One caveat to this conclusion is the possible existence of so-called “irrational” behavior. If there exists a small possibility each of the players has a habitual taste for working hard, then each party may have an incentive to behave “as if” she were one of these players in the initial periods of a finitely-repeated game, in order to cash in on that reputation in later periods. See David Kreps et al., *Rational Cooperation in the Finitely Repeated Prisoners’ Dilemma*, 27 J. ECON. THEORY 245 (1982). In this particular context, however, such behavior is even harder to support, since there is no perfectly-reliable signal as to whether a player expended effort in the previous period.

114. As was illustrated above, the content of the underlying legal rule can profoundly affect the one-shot game, which in turn can affect the feasible punishment schemes that enforce a dynamic norm of behavior. See *supra* Part III.C.

at least two reasons. First, because an unsuccessful outcome can always occur regardless of the players' effort, such an approach would have the unappealing quality of eventually invoking the punishment scheme even if neither party shirked.¹¹⁵ But moreover, a noisy proxy for past defections would not permit the identification of which player defected from the norm; thus, the resultant punishment scheme would have to punish both players symmetrically, further compromising its deterrent capacity.¹¹⁶

The second approach—where some monitoring occurs in equilibrium—also falls short of efficiency for an obvious reason: the players must spend some fraction of their time engaging in non-productive activity. Nevertheless, this approach *may* be somewhat more availing, in that it sometimes reveals the *precise* identity of a shirker. When such identification is possible, it may be feasible to encourage a fair amount of effort by threatening an ominous punishment for detected shirkers. In turn, this implies that *ceteris paribus*, a cooperative norm is easiest to enforce when the consequence of defection is to play out indefinitely *the most unattractive one-shot equilibrium for a detected deviator*.¹¹⁷ As demonstrated above, the content of fiduciary duties (*i.e.*, the value of θ) plays a central role in determining the payoffs from such one-shot equilibria.¹¹⁸ Accordingly, the enforcement of a cooperative dynamic norm hinges, in part, on determining which of the feasible one-shot equilibria from Part III.B. exhibits the greatest deterrent threat, maximally penalizing a shirker while minimally penalizing the more diligent worker.¹¹⁹

115. Recall from Table 1, *supra*, that even when both players work hard, the probability of a bad outcome is still 20%. Thus, for example, if the punishment scheme were triggered by, say, low outcomes in two consecutive periods, it is more than 10% likely that the punishment scheme will have begun by the end of the fourth round.

116. See, *e.g.*, DREW FUDENBERG & JEAN TIROLE, *GAME THEORY* 193-96 (1991); Dilip Abreu et al., *Toward a Theory of Discounted Repeated Games with Imperfect Monitoring*, 58 *ECONOMETRICA* 1041 (1990) (demonstrating that the admissible continuation strategies in such games to have a discontinuous "bang-bang" property); Michihiro Kandori, *The Use of Information in Repeated Games with Imperfect Monitoring*, 59 *REV. ECON. STUD.* 581 (1992) (demonstrating that the admissible set of payoffs are an increasing function of the informativeness of each period's outcome); Roy Radner et al., *An Example of a Repeated Partnership Game with Discounting and with Uniformly Inefficient Equilibria*, 53 *REV. ECON. STUD.* 59 (1986) (also demonstrating the general infeasibility of first-best efficient norms in a similar context to that analyzed here).

117. By "easiest to enforce," I am referring the punishment scheme that will induce cooperation for the largest range of potential discount rates. In general, game theory mandates that a punishment scheme will render a cooperative norm enforceable only if players are sufficiently "patient" (*i.e.*, their discount rates are sufficiently low). Abreu et al., *supra* note 116, at 1053. Choosing the most unattractive punishment ensures the enforceability of a cooperative norm for the highest possible degree of impatience.

118. See *supra* Part III.B.

119. See Abreu et al., *supra* note 116, at 1054-55 (demonstrating that the punishment strategy in such games must be at the extreme values of the possible payoff set—in this case the point that minimizes the deviator's payoff once detected).

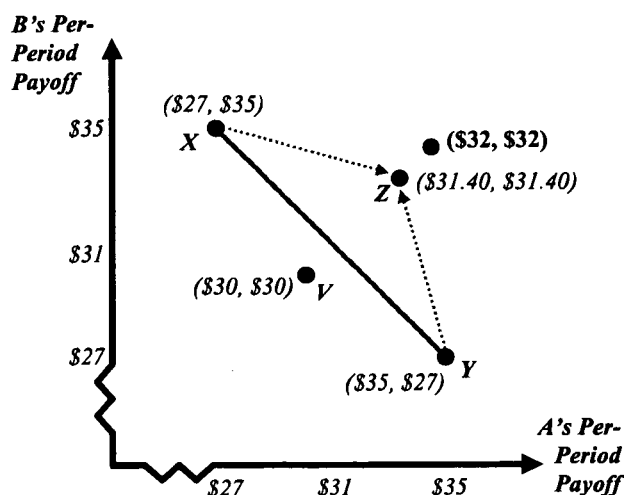


FIGURE 3: SUSTAINABLE PER-PERIOD PAYOFFS UNDER INFINITELY-REPEATED PLAY

To see how this reasoning plays out in the context of the instant example, consider first a value of $\theta=1$ within Region 3, corresponding to total disgorgement of a fiduciary's payoffs. Recall that the unique one-shot equilibrium here was in mixed strategies, and yielded an expected payoff of approximately \$30 for each player. As suggested by the above discussion, this static equilibrium—repeated indefinitely—does not represent a particularly effective punishment scheme, since it is both relatively mild and it punishes both players symmetrically. In fact, it turns out that it is impossible to support *any* cooperative norm that outperforms a simple repetition of the one-shot equilibrium *ad infinitum*. This impossibility is illustrated in Figure 3, which illustrates the per-period expected payoffs that are sustainable under infinitely-repeated play. (The figure presupposes throughout that players discount future payoffs at the rate of 5%). The expected payoffs from the one-shot game in Region 3 are represented by point *V*, at which each party receives an expected per-period payoff of \$30. As it turns out, point *V* is also the best per-period payoff one can accomplish through any infinitely-repeated norm.

In contrast, consider the effects of a small value of $\theta=0$ within Region 1, which supported three distinct one-shot equilibria. Importantly, unlike in other regions, here the two asymmetric pure-strategy equilibria can constitute post-detection punishment schemes. One could, for instance, require a detected shirker to assume the Sisyphean role as the sole contributor of effort for every period thereafter. Moreover, such a scheme would constitute an excellent deterrence device, since it gives detected deviators a payoff of \$27 and the non-deviator a payoff of \$35 each period. (These respective payoffs are represented by points *X* and *Y* in Figure 3). Here then, it turns out that it is possible to support a dynamic norm at point *Z*, which improves on the static outcome by giving each player an expected per period payoff of \$31.40, an expected social gain of \$0.80 over either of the asymmetric equilibria in that Region. Clearly, such equilibrium payoffs come much closer to first-best (falling \$1.20 short) than do their attainable counterparts in Region 3 (at Point *V*, which falls \$4.00 short).

Although this analysis is quite cursory, it holds at least two important lessons. First, it strongly suggests that the content of the legal rule, by affecting the plausible equilibria of a one-shot game, can indeed play an important role in determining the viability of cooperative norms. Second, and probably more importantly, it implies that dynamic play need not reverse the conclusions derived for the one-shot game, and in fact may strengthen them.

IV. LEGAL IMPLICATIONS

The central thesis of this Article—that fiduciary duties can impose unique strategic costs on team members within closely held firms—is not simply a conceptual curiosity. Indeed, a number implications for law logically flow from this observation. In this Part, I will concentrate on two. First, the above analysis suggests that it may be advisable for statutory business law to permit closely-held firms to “opt into” their most appropriate fiduciary protections, and for courts to honor this choice. Second, if such statutory permutations are inadvisable or infeasible, then judges, when adjudicating such cases within closely-held firms, would be well-advised to take team-production considerations into account.

A. Statutory Law

A principal lesson of the analysis above is that it is largely impossible for one to diagnose, at least on *a priori* grounds, whether a randomly-selected firm will exhibit greater deterrence or monitoring effects. Indeed, which effect dominates ultimately comes down to a number of factors, such as deep pockets, non-team beneficiaries, and the prospects for repeat play, which may or may not individually be satisfied within different firms. If, however, the members of the productive team *are themselves* in a position to diagnose their organizational characteristics *ex ante*, then it seems likely that they would jointly prefer a governance structure that matches their organizational needs. As such, their choice of legal status would, under the right conditions, constitute a signal of their governance preferences. For instance, if Firm X begins productive operations without invoking any statutory formalities, then one might interpret this action to reveal a preference to be treated as a partnership, subject to strict fiduciary standards. If, on the other hand, the participants in Firm X make the costly choice of incorporation, they might signal a preference to be subjected to more lax fiduciary standards, similar to those of public corporations. In many ways, this description is not too far from the way things currently stand in most states.¹²⁰

There are, however, some important caveats to this line of reasoning. Most importantly, it presumes a credible integrity of both the strictness in fiduciary law among partnerships and a reciprocal permissiveness for close corporations (at least as default matters). Indeed, obligations of this sort are perhaps the most difficult and costly to memorialize in a partnership agreement, corporate charter, or analogous document.

120. Indeed, as vestiges of the common law, partnerships may come into being in the absence of any formalities; but the formation of a corporation requires the performance of a fairly well-specified set of formalities (such as organizational meetings, board election, the drafting of by-laws, and stock issuance). See EASTERBROOK & FISCHER, *supra* note 3, at 2-6.

Without a notorious mechanism permitting such inexpensive ex ante self-selection, the freedom to “contract out of the default rule” (to the extent that one exists) might represent little more than a Pyrrhic victory. Significantly, as the overview in Part II illustrated, the fiduciary contents of both partnership and close corporation law appear to be converging. On the one hand, the slackening of fiduciary standards within the RUPA¹²¹ suggests that partnership law has been creeping (or perhaps racing) in the direction of contractual and corporate principles.¹²² Symmetrically, the increasing popularity of the “partnership analogy”¹²³ in close corporations law has given rise to considerable momentum in the opposite direction. Should fiduciary duty law within these two statutory areas merge completely, the relatively inexpensive ability to “opt into” an off-the-rack set of fiduciary standards would likely be lost.

But even if the integrity between these two areas of law were to be maintained, two significant problems remain. First, incorporation tends to send a “noisy” signal about one’s organizational needs. In addition to fiduciary concerns, such an act could reveal a desire for (among other things) differing tax treatment, limited liability, or infinite duration.¹²⁴ Constraining one’s assessment to the binary choice between a general partnership and a close corporation thus creates an indeterminacy about a firm’s revealed preferences. The increasing roles played by limited partnerships, LLCs, LLPs, and other statutory permutations may help ease this signaling problem. But with fiduciary law in many of these areas still vastly underdeveloped,¹²⁵ it remains to be seen whether this added heterogeneity will prove helpful.

Second, the self-selection argument presumes both that team members will be able to identify their appropriate organizational characteristics ex ante, and that they will then proceed to implement the value-maximizing outcome. Both of these presumptions may, in some situations, be unfounded. Indeed, while the stylized “rational actor” is by definition not prone to errors, business decisions within most contexts are made amid profound risk and uncertainty—factors that have been long-known to generate cognitive pathologies in more “mortal” decision-makers.¹²⁶ If the members of closely-held firms are often similarly afflicted, their decision about organizational form may reveal little about their preference for fiduciary obligations. Moreover, even if team members could recognize the appropriate structure ex ante, their ultimate choice of organizational form may still be a product of collective negotiation. If significant transaction, information, or coordination costs undermine their endeavors to bargain, the outcome may also constitute a poor signal.¹²⁷

121. See *supra* note 27 and accompanying text.

122. See Deborah A. DeMott, *Beyond Metaphor: An Analysis of Fiduciary Obligation*, 1988 DUKE L.J. 897.

123. See *supra* text accompanying notes 46-53.

124. Easterbrook & Fischel, *supra* note 3, at 237-38.

125. For instance, as noted in Part II, the Delaware Limited Liability Company Act, while allowing for an LLC’s certificate of formation to alter fiduciary duties, leaves unspecified the exact content of these duties. See *supra* note 53. See also LARRY RIBSTIEN & PETER LETSOU, BUSINESS ASSOCIATIONS § 9.08[C] (1996) (noting the dearth of judicial opinions in this area).

126. For a good review, see the symposium papers published in 51 VAND. L.REV. 1495 (1998).

127. For an example of just such bargaining failure, see Jason Johnston, *Opting Out and Opting In: Bargaining for Fiduciary Duties in Corporate Ventures*, 70 WASH. U. L.Q. 291, 291-94 (1992) (arguing that if the participants have private information ex ante about their abilities to act opportunistically, then they may

Perhaps these limitations are significant enough—at least to some—to render the self-selection argument untrustworthy. If so, then there may be an alternative mechanism for taking team-production concerns into account: judges themselves.

B. Doctrine

Assuming (for argument's sake) that statutory self-selection is either unattractive or infeasible, it may be possible to incorporate team-production concerns into a unitary fiduciary law, but one animated by casuistry and fact-specific determinations. Indeed, by paying close attention to organizational details, a judge may be able to diagnose whether a closely-held firm is dominated by deterrence or monitoring effects. In particular, many of the variations explored at the end of Part III help to suggest just what effects might be important in making such a determination.

Consider, for instance, the existence of non-productive fiduciary beneficiaries, such as silent partners or non-managerial shareholders. As noted above,¹²⁸ such individuals need not sacrifice productive effort in order to monitor, and there may therefore be reason to accord them stronger fiduciary rights than their productive counterparts. It may be possible, then, for a court to account for team-production concerns by determining whether the instant plaintiff is also a member of the productive team, and selecting the appropriate standard accordingly. Such an approach, moreover, may also be of assistance in distinguishing a number of cases that seem to cut against the distinctions often asserted between partnerships and incorporated entities. For example, the recent Texas case of *Bohatch v. Butler & Binion*¹²⁹ took a rather weak stand on fiduciary duties when it refused to extend protection to a partner in a law-firm who was expelled for attempting to expose alleged practices of over-billing by one of her colleagues. Finding that whistleblowing retaliation did not constitute an "improper purpose" for invoking the expulsion provision in the partnership agreement, the court held that a partner could be expelled for "purely business reasons" without violating fiduciary duties. In contrast to *Bohatch* is the well-known Massachusetts case of *Donahue v. Rodd Electrotape*,¹³⁰ which employed a partnership analogy to impose a strict fiduciary duty within a close corporation. Specifically, *Donahue* held that the managers of a close corporation violated their fiduciary duties to a shareholder when they refused to extend the same attractive buy-out terms to her that they had to the former manager (who was their father) upon his retirement.¹³¹

Side-by-side, *Bohatch* and *Donohue* seem to articulate not only differing outcomes, but also divergent conceptions of fiduciary law. Moreover, these competing conceptions seem vaguely counter-intuitive, given that it was the *partnership* case that pronounced the weaker form of legal obligation. Nevertheless, if one takes into account the productive roles of the two respective plaintiffs, the outcomes (and the analyses) appear

behave strategically in bargaining, and the optimal form of fiduciary duties will not emerge). See also Thompson, *supra* note 2, at 699-702 (arguing that minority shareholders may not recognize the dangers of down-stream opportunism when entering the relationship).

128. See *supra* text accompanying notes 99-101.

129. 977 S.W.2d 543 (Tex. 1998).

130. 328 N.E.2d 505 (Mass. 1975) (discussed *supra* note 99).

131. *Id.* at 511.

more justifiable. Indeed, *Donahue* involved a plaintiff who played absolutely no productive role at the firm, having come into her ownership stake from her late spouse, a former productive team member.¹³² *Bohatch*, in contrast, involved a beneficiary who simultaneously engaged in productive activities at the firm, and she was in fact one of only three attorneys in the branch office where she worked. Moreover, it appears that the majority in *Bohatch* was not only aware of the potential problems with team-production concerns, but they predicated much of their opinion exclusively on the dangers presented by intra-team conflict:

We are sensitive to the concern expressed by the dissenting Justices that “retaliation against a partner who tries in good faith to correct or report perceived misconduct virtually assures that others will not take these appropriate steps in the future.” However, the dissenting Justices do not explain how the trust relationship necessary both for the firm’s existence and for representing clients can survive such serious accusations by one partner against another. The threat of tort liability for expulsion would tend to force partners to remain in untenable circumstance—suspicious of and angry with each other—to their own detriment and that of their clients whose matters are neglected by lawyers *distracted with intra-firm frictions*.¹³³

This passage almost certainly reflects a general, intuitive understanding of the governance problems presented when a firm’s fiduciaries wear the dual hats of producer and monitor. It is a doctrinal development that is perfectly consistent with (and indeed suggested by) the analysis set forth in Part III.¹³⁴

Just as in the non-productive beneficiary case, it may be possible for courts to use other factual premises in diagnosing fiduciary disputes within closely-held firms. As noted in Part III, the existence of deep pockets, the prevalence of severe free riding problems, and the history and future likelihood of repeat play might all constitute components of a unified fiduciary duty doctrine applied on a case-by-case basis. Moreover, such an approach to fiduciary duty doctrine has already garnered a fair amount of support, both among judges and within the academy.¹³⁵

Judge-made law, of course, is not without its own hazards. Most notably, ex post adjudication comes at a cost of greater litigation costs expended by the parties. Moreover,

132. *Id.* at 510 n.8.

133. *Bohatch*, 977 S.W.2d at 547 (emphasis added) (citation omitted).

134. To be sure, *Bohatch* involved other factors that might have cut the other way, even within a strict efficiency analysis. For example, Butler & Binion’s clients might have preferred the maintenance of strong whistle-blowing incentives if the costs of intra-firm monitoring could be recaptured by clients in the form of better legal representation or fee rebates. Nonetheless, this argument does not negate the existence of intra-team monitoring costs as an important factor worthy of consideration.

135. See, e.g., *Michaels v. Michaels*, 767 F.2d 1185, 1196-97 (7th Cir. 1985) (using a standardized objective doctrine to measure materiality of non-disclosures to shareholders, but advocating case-by-case tailoring of such standards); *Toner v. Baltimore Envelope Co.*, 498 S.W.2d 609 (Mo. App. 1990) (also advocating a single, tailored framework); *EASTERBROOK & FISCHER*, *supra* note 4, at 244 (citing *Michaels* approvingly, and noting the versatility of such an approach); *DeMott*, *supra* note 122, at 910 (arguing that the concept of fiduciary obligation “is inevitably tied to the particular context in which it arises”).

the outcomes meted out by courts may be difficult to predict from the merits of the case and therefore highly uncertain.¹³⁶ In addition, it is not obvious that judges will always be able to identify the facts relevant to team-production considerations. If such problems are sufficiently severe, it may be better to opt for statutory self-selection (notwithstanding its own apparent shortcomings). Such objections, however, while worthy of consideration, do not absolve us from requiring that *someone*—be it judges (acting ex post), the parties themselves (acting ex ante), or perhaps legislatures (seemingly always acting)—make these often important decisions. Moreover, it appears from the above discussion that judges *already are* doing so in some cases,¹³⁷ and probably cannot avoid having more of them land in their collective laps. Finally, absolute ex post judicial accuracy is often unnecessary to induce efficient upstream behavior, particularly if courts tend to get it right on average.¹³⁸ Consequently, the utility of intra-firm monitoring concerns for legal doctrine is difficult to ignore.

V. CONCLUDING REMARKS

Few concepts within business law have proven to be as simultaneously thought-provoking and frustrating as fiduciary obligations. Readily lending themselves to numerous positive and normative accounts, fiduciary duties lie at the core of most of the interesting and intractable debates within both case law and the organizational governance literature. This Article has attempted to contribute to those debates (and perhaps even problematize them). Focusing on the role of intra-firm monitoring costs within productive teams, I have argued that strict fiduciary duties in closely-held firms may have profound and unexpected effects, which in turn can undermine the putative purposes of such obligations. To be sure, I have focused predominantly on one such phenomenon, and other attempts may reveal even more important insights than those heralded here.¹³⁹ Be that as it may, the analysis above suggests that team-production concerns hold important implications for fiduciary law—lessons that deserve to be kept (to borrow a familiar refrain) at a higher level than that trodden by the crowd.

136. See, e.g., Franklin Gevurtz, *California's New Limited Liability Company Act: A Look at the Good, the Bad, and the Ambiguous*, 27 PAC. L.J. 261, 288 (1996) (noting that judicial intervention is subject to considerable arbitrariness); Larry Ribstein, *The Closely Held Firm: A View from the United States*, 19 MELB. U. L. REV. 950, 955 (1994) (arguing that such remedies create "a potential judicial 'wild card'").

137. See *supra* text accompanying notes 129-133.

138. See Mahoney, *supra* note 2; cf. Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 YALE L.J. 1027, 1072-82 (1995) (demonstrating that judicial inaccuracy may actually mitigate strategic concerns by channeling parties into efficient interim bargaining behavior such as renegotiation and settlement).

139. For example, the analysis above might have interesting applications if one introduced exit options on top of fiduciary duties. Mahoney, for example, *supra* note 2, at 16-21, conjectures that the apparent infrequency of contractual exit options in close corporations may be due to protections afforded by strong fiduciary duties. If such strong fiduciary duties impose costly incentives to monitor, however, then exit options might be a better mechanism for protecting minority interests.