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IN SHAREHOLDER INTERESTS?

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Abstract

Shareholder suits are the primary mechanism for enforcing the fiduciary duties of corporate officers and directors as well as an important device for enforcing disclosure obligations under the federal securities statutes. Yet, there has been little investigation of the fundamental relationship of shareholder suits to shareholder welfare. We undertake such an inquiry in this article, with particular attention to derivative suits against corporate managers.

The central contribution of the article is to develop a model contrasting circumstances when derivative suits tend to increase corporate value with when the immediate incentives of self-interested shareholders will lead them to bring derivative suits. We find that a shareholder's interest in bringing a derivative suit can diverge from the corporation's interest in either direction. On one hand, a shareholder may rationally decide not to sue when willingness to do so would raise corporate value. On the other hand, a shareholder may elect to bring a derivative suit when doing so will be likely to lower corporate value.

Although these distortions in shareholder incentives are established in the context of our model, the article demonstrates that a wide array of institutional and legal factors going beyond the model do not qualitatively alter the distortions that we identify. In particular, the legal regime currently governing derivative suits fails to correct shareholder incentives to bring suit. Moreover, the same distortions that affect decisions to bring derivative suits also influence shareholder incentives to bring most major varieties of shareholder class actions.

Drawing on the analysis of the model, however, it is possible to formulate legal rules to mitigate the distorted litigation incentives that we identify. To this end, the article proposes revised rules for awarding attorney fees and for screening derivative suits under the legal requirement that shareholders make demand on the board of directors before bringing suit.

I. Introduction

Shareholder suits are the primary mechanism for enforcing the fiduciary duties of corporate managers.¹ Such suits often allege that an officer or director has breached his duty of loyalty: that is, that the manager has effectively "cheated" the company by, for example, self-dealing, accepting kickbacks, appropriating a corporate opportunity, wasting corporate assets, or entrenching his position to avoid removal. Less frequently (because the odds of success are lower), shareholder suits assert a corporate injury resulting from a breach of the duty of care:

¹We focus here on American law. Many foreign jurisdictions also allow shareholder suits against corporate officers and directors. For example, most common law jurisdictions and Japan permit derivative suits. E.g., Palmer's Company Law 976-86 (24th ed. 1987) (Great Britain); B. Welling, Corporate Law in Canada 502-517 (1984) (Canada); H. Shimizu, Derivative Suit: Japan and the U.S. (unpublished paper, Harvard Law School, 1991). In addition, many civil law jurisdictions allow other forms of suit in exceptional cases. See K. Hopt, Directors Duties to Shareholders, Employees, and Other Creditors: A View from the Continent, in E. McKendrick, ed., Commercial Aspects of Trusts and Fiduciary Obligations 129-130 (1992) (surveying actions). For example, French shareholders may enforce management liabilities through the action social, and 10% or more of German shareholders may formally demand that the corporation's supervisory board undertake such actions. Grossfeld, Management and Control of Marketable Share Companies in International Encyclopedia of Comparative Law, Vol. XIII, at 108-111 (1973). Nevertheless, shareholder suits are far more important in America than elsewhere, in part for procedural reasons and in part because American provisions for compensating plaintiffs' legal costs are generous by international standards. See TAN 26-27 *infra* (U.S. contingency fee rules); Ramsay, Corporate Governance, Shareholder Litigation and the Prospects for a Statutory Derivative Action, 15 U. South Wales L. J. 149, 163-164 (1992).

that is, a manager's negligent -- or grossly negligent -- failure to exercise appropriate business judgment.

The procedural form of the shareholder suit depends on whether managers are said to have harmed the corporation or its shareholders in the first instance. In the usual case where the injury is corporate -- as, for example, where directors are accused of self dealing -- a shareholder must sue "derivatively" on behalf of the corporation. If the derivative suit succeeds, any recoveries go to the corporation, while the plaintiff-shareholder (or his attorney) receives legal fees from the company that typically exceed the out-of-pocket costs of prosecuting the suit. Sometimes, however, shareholders are said to be injured directly by a manager's breach of duty -- as, for example, where directors are alleged to have wrongfully approved the sale of the company at an unfair price. In this case, a public shareholder can sue directly as the named plaintiff on behalf of the shareholder class, and any recoveries will go to the plaintiff class directly rather than to the corporation.²

²The boundary between derivative and direct claims follows a hazy legal distinction between separate "corporate" and "shareholder" interests. Typical direct actions for fiduciary breach involve shareholder voting rights, dividend policy, or transactions that cash out public shareholders. See American Law Institute, Principles of Corporate Governance: Analysis and Recommendations § 7.01, Comment c (Proposed Final Draft, March 31, 1992) [hereinafter ALI Principles]. Most other claims of fiduciary breach (i.e., most claims) are derivative. This distinction has practical import because derivative actions face more rigorous screening than direct actions. See Part IV infra.

Note, however, that direct shareholder actions may also be brought against managers for violations of the disclosure requirements of the federal securities statutes. Indeed, the same disputed transaction often supports a derivative suit for

The legal regimes that currently govern both forms of shareholder suits are widely discussed and frequently criticized in the legal literature. Many authors explore the related problems of frivolous shareholder suits ("strike suits") and of sweetheart settlements between plaintiffs' attorneys and corporate defendants that disregard the interests of the corporation and the shareholder body as a whole.³ Partly in response to these problems, commentators also address the comparative competence of courts and corporate boards to screen shareholder suits.⁴ Finally, there is a promising new literature

breach of fiduciary duty and a shareholder class action alleging related disclosure violations.

³Professor John Coffee is the most prominent analyst of these issues and the complex agency problems that arise in shareholder litigation. See Coffee, The Regulation of Entrepreneurial Litigation: Balancing Fairness and Efficiency in Large Class Actions, 54 U. Chi. L. Rev. 877 (1987); Coffee, Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions, 86 Colum. L. Rev. 669 (1986); Coffee, The Unfaithful Champion: The Plaintiff as Monitor in Shareholder Litigation, 48 L. & Contemp. Probs. 5 (Summer 1985). Several commentators have made innovative recent contributions to this literature as well. See Alexander, Do the Merits Matter? A Study of Settlements in Securities Class Actions, 43 Stan. L. Rev. 497 (1991); Macey & Miller, The Plaintiffs' Attorney's Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform, 58 Chicago L. Rev. 1 (1991).

⁴E.g., Coffee & Schwartz, The Survival of the Derivative Suit: An Evaluation and a Proposal for Legislative Reform, 81 Colum. L. Rev. 261 (1981); Dent, The Power of Directors to Terminate Shareholder Litigation: The Death of the Derivative Suit? 75 Northwestern L. Rev. 96 (1980). Much of the controversy surrounding the successive revisions of the provisions of the ALI Corporate Governance Project dealing with derivative suits turns on the relative merits of courts and boards as evaluators of suits. See, e.g., Dooley & Veasey, The Role of the Board in Derivative Litigation: Delaware Law and the Current ALI Proposals Compared, 44 Bus. Law. 503 (1989).

on the empirical effects of such suits on corporate performance.⁵

Somewhat surprisingly, however, there has been little investigation of the fundamental relationship of shareholder suits to shareholder welfare. Shareholder suits are generally acknowledged to generate both significant corporate costs and potential benefits. Yet, except in the context of discussing fee awards to plaintiffs' attorneys, almost no one has explored how in theory these opposing effects should compare.⁶

We undertake such an inquiry here, with particular attention to derivative suits against corporate managers. The central contribution of our article is to develop a model contrasting the circumstances when derivative suits tend to increase corporate value with when the immediate incentives of self-interested shareholders will lead them to bring derivative suits. We find

⁵Professor Roberta Romano's recent investigations are the most sophisticated suits to date. See Romano, The Shareholder Suit: Litigation without Foundation?, 7 J. L. Econ. & Org. 56 (1991); Romano, Corporate Governance in the Aftermath of the Insurance Crisis, 39 Emory L. J. 1155 (1990). Other studies examine the effects of shareholder litigation on share prices. See Jangigian & Bolster, The Elimination of Director Liability and Stockholder Returns: An Empirical Investigation, 13 J. Fin. Res. 53 (1990); Cross, Davidson, & Thornton, The Impact of Directors and Officers' Liability Suits on Firm Value, 56 J. Risk & Ins. 128 (1989); Fischel & Bradley, The Role of Liability Rules and the Derivative Suit in Corporate Law: A Theoretical and Empirical Analysis, 71 Cornell L. Rev. 261 (1986). See also Garth, Nagel, & Plager, Empirical Research and the Shareholder Derivative Suit: Toward a Better-Informed Debate, 48 J. L. & Contemp. Probs. 147 (1985) (reviewing pre-1985 empirical work).

⁶Two exceptions, discussed infra note 7, are Conard, Winnowing Derivative Suits Through Attorneys Fees, 47 J. L. & Contemporary Problems 269 (1984); and Goetz, A Verdict on Corporate Liability and the Derivative Suit: Not Proven, 71 Cornell L. Rev. 344 (1986).

that a shareholder's interest in bringing a derivative suit can diverge from the corporation's interest in either direction. On one hand, a shareholder may rationally decide not to sue when willingness to do so would raise corporate value. This can occur because, even though suit is discouraged by an expected recovery that is small relative to litigation costs, the prospect of suit would have served to deter costly misconduct.⁷ On the other hand, a shareholder may elect to bring a derivative suit when this will be likely to lower corporate value. The reason, in essence, is that the expected recovery that motivates suit may be only an apparent gain for the corporation: it will be offset, at least in part, by increases in liability insurance premia, indemnification payments paid by the corporation on managers' behalf, and managerial compensation.⁸ Indeed, for these reasons, we demonstrate that under a broad class of regimes for allocating the costs and benefits of derivative suits among shareholders -- including the typical American contingent fee regime -- shareholder incentives to sue may be either excessive or

⁷Professors A. F. Conard, *supra* note 6, and Charles Goetz, *supra* note 6, make a similar point: they recognize that deterrence of managerial misbehavior does not lead shareholders to bring suit. As their primary concerns are different from ours, however, these authors do not develop the relationship between shareholder incentives and deterrence, nor how shareholder suits affect corporate value by influencing salary and liability insurance expenses (to be explained shortly).

⁸Professor Dale Oesterle has previously suggested the illusory character of corporate recoveries funded by indemnification or insurance. Oesterle, Limits on a Corporation's Protection of its Directors and Officers from Personal Liability, 1983 Wisc. L. Rev. 513, 570-572 (1983).

insufficient, relative to the criterion of maximizing corporate value.⁹

In our analysis, we deliberately leave open the identity of the shareholder plaintiffs who decide whether to bring suit. Ordinary shareholders might initiate suits under some legal regimes. By contrast, attorneys (with shareholders in tow) initiate most suits under the existing regime, primarily to claim legal fees in the event of a settlement or favorable outcome. No matter how disparate the motivations of these two classes of actors are in other respects, both are shareholder plaintiffs in our analysis because both may face qualitatively similar distortions in their incentives to bring suit as measured by the yardstick of increasing corporate value.¹⁰

Our model is discussed in Part II of the article and formally presented in an Appendix. In Part III we briefly examine several extensions of and qualifications to the model. In Part IV we turn to a consideration of the legal regimes that actually regulate derivative suits in most jurisdictions. Here

⁹Closely related misalignments of incentives to bring suit in the context of torts are emphasized in Shavell, The Social versus the Private Incentive to Bring Suit in a Costly Legal System, 11 J. Leg. Stud. 333 (1982).

¹⁰Whether ordinary investors or entrepreneurial attorneys control shareholder litigation clearly affects shareholder welfare in important ways that we do not analyze in this article: for example, by shaping the disposition of plaintiffs to bring frivolous litigation or accept sweetheart settlements. Such agency problems in shareholder litigation have been widely discussed elsewhere. See note 3 *supra* (collecting sources). But here we address different -- and it seems to us, logically prior -- distortions affecting decisions to bring shareholder suits.

we argue that a variety of regulatory devices -- notably, relying on the corporate board, the trial court, or the corporate charter to screen derivative suits -- cannot, as they are presently administered, fully correct the distorted litigation incentives identified in our model. In Part V we demonstrate that our basic results apply not only to derivative actions against managers but also to many kinds of shareholder class actions, including suits against controlling shareholders. Finally, in Part VI we assess the practicality of reforms that might improve shareholder incentives to bring suit.

II. A Model of Derivative Suits Against Corporate Managers

We investigate when derivative suits against managers would be expected to increase corporate value in the model described in this Part. We then show that even though shareholders' goal is taken to be maximization of corporate value, their direct incentives to bring derivative suits may not advance corporate value. As we will see, the essential reason for this conclusion is that the decision whether or not to sue is by its nature made only after a wrongful act has been committed, not before.

We should also emphasize at the outset that the analysis in this Part concerns the rational behavior of shareholders in the world of the model. When we state that they will behave in a particular way or when we make a judgment about the desirability or lack thereof of an outcome, we will be referring in strict logic only to the model. The model we assume to be one in which

the corporation is in business for a single period, at the end of which misconduct may or may not be discovered (we discuss multiperiod models in Part III).

A. The Costs and Benefits of Derivative Suits to the Corporation

Whatever the nature of derivative claims, bringing suit can increase corporate value in two ways. First, successful suits may confer monetary benefits on shareholders: corporations may recover damages from errant managers for past harms and undo or avert corrupt transactions. Second, suit -- or, more precisely, the prospect of suit -- can add to corporate value by deterring wrongdoing.¹¹

Derivative suits also impose two costs on corporations, however. First, they generate litigation costs. A corporation and its shareholders together must pay both for defending and prosecuting derivative suits -- in time and energy as well as dollars.¹² Second, derivative suits can raise the expenses that

¹¹We do not include here the possible value of suit at one corporation in deterring misconduct at other corporations. Such "spillover effects," if they occur, do not benefit firms where suit is brought. Moreover, we question the mechanism for deterrence spillover below. See note 53 *infra*. We also exclude the contribution of shareholder suits to articulating legal norms. Again, individual firms do not capture this benefit, and -- as the vast majority of suits settle or are dismissed -- it is unlikely to arise often in any case. See note 12 *infra*.

¹²See Coffee, The Unfaithful Champion, *supra* note 3, at 17-18 (describing costs). Even if shareholder suits settle, as most do, litigation costs are large. Professor Romano's mixed sample of 128 resolved shareholder suits resulted in settlement rates of 66% and 79% for derivative suits and class actions respectively, with plaintiff fee awards averaging \$1.45 million in monetary settlements (24% of the average settlement fund) and \$287,000 in nonmonetary settlements. Romano, The Shareholder Suit, *supra* note 5, at 63 & 70. Average fee awards were much higher for

corporations incur in order to attract managers. In theory, a manager's total return from his job must equal some "reservation" level for him to be willing to work for the corporation. Hence, if managers face a risk of suit, they must be supplied with adequate liability insurance or their salaries must be raised by an offsetting amount for them to stay on the job. Moreover, if the threat of a derivative suit deters misconduct from which a manager would otherwise benefit, his salary must in principle be raised accordingly. Of course, actual adjustments of salary for this reason may not often occur in real markets for managerial services.¹³ But it will be clarifying here to suppose that the salaries of managers fully adjust to the anticipated effects of derivative suits.¹⁴

post-1983 settlements. Id. at 69 (Table 4). Moreover, the financial costs of defense appeared to equal or exceed plaintiffs' fee awards in these cases. Id. at 65. Finally, since fees were awarded in 60% of the cases, shareholders paid -- through the intermediary of the corporation's insurer -- both plaintiff and defense costs in most suits.

¹³See our discussion in Part III.

¹⁴Note that if director and officer ("D & O") insurance is considered to be an element of managers' effective compensation (because premia are paid by the corporation), then managers' compensation packages typical do reflect the bulk of their expected liability costs -- at least to the extent that these costs can be estimated by insurers. See note 28 *infra*. Nothing in our analysis of legal policy turns on our model's assumption that salary costs fully anticipate the expected effects of shareholder litigation -- and we illustrate this in a series of supplementary examples in notes 15, 16, 18, 19, 22, 24, & 25 below, where it is supposed that salaries do not reflect illicit gains from misconduct. Nevertheless, this assumption helps to illuminate actual behavior, since firms do in fact pay much of their managers' expected liability costs by subsidizing D & O insurance. We address the policy implications of settlement and insurance practices at TAN 76-77 *infra*.

B. When Derivative Suits Increase Corporate Value

To determine when the bringing of derivative suits will increase corporate value, it is useful to consider a hypothetical breach of fiduciary duty. Suppose that managers in an industry have an ownership interest in supply companies that attempt to overcharge corporations for their products. Specifically, suppose that a manager's authorized overcharges will cost a corporation \$3,000,000, of which \$1,000,000 will be earned by the manager as co-owner of the supplier. Suppose further that the going reservation salary for managers is \$2,000,000.

If no derivative suits are brought, a typical manager will anticipate earning \$1,000,000 from self-dealing and accordingly will be willing to accept a salary of only \$1,000,000 (rather than \$2,000,000). On these assumptions, a corporation will incur \$4,000,000 in total manager-related costs: a \$3,000,000 loss on the purchase of overpriced products and a \$1,000,000 salary.¹⁵

By contrast, if derivative suits are brought and succeed in deterring managers from self-dealing transactions, then corporations will be better off. Corporations will not suffer \$3,000,000 losses from purchases of overpriced products, but will

¹⁵We remind the reader that we are maintaining the assumption in the text of this part that salaries fully reflect anticipated illicit benefits. If, as we acknowledge in Part III, this assumption may be too strong for misconduct as bald as self-dealing, then the corporation will incur up to \$5,000,000 in total manager-related costs when no derivative suits are brought: a \$3,000,000 loss on overpriced products and a salary cost of \$2,000,000. (If the misconduct were systematic indulgence in wasteful perks, for instance, then the notion that salaries would reflect misconduct may be easier to accept.)

have to pay managers \$2,000,000 in salary. Thus, a corporation's total manager-related costs will be \$2,000,000, rather than \$4,000,000.¹⁶

The reason that corporations will be better off if misconduct is deterred is that the \$3,000,000 losses that they thereby avoid exceed the \$1,000,000 increase in salary that they must pay. To express the point somewhat differently, it is inefficient for corporations to pay managers \$1,000,000 by allowing them to engage in self-dealing because that costs the firm \$3,000,000 more in overcharges; it is cheaper for the firm to pay \$1,000,000 directly in salary and to deter self-dealing. Note too that when deterrence is successful, there is no actual derivative litigation (assuming that suits are brought only in response to misconduct).

If, finally, derivative suits are brought but do not deter misconduct, corporations may or may not be better off. For example, suppose that misconduct is detected with a probability of 50% and that, if misconduct is detected, a suit is certain to succeed. Suppose too that when a suit succeeds, an offending manager will pay damages of \$500,000 and the overcharge will be undone, saving the corporation \$3,000,000 (and denying the

¹⁶Of course, if managers' salaries do not reflect gains from self-dealing, then their salaries will be \$2,000,000 whether or not they are deterred. Hence, if derivative suits are brought, a corporation's total manager-related costs will be \$2,000,000 rather than \$5,000,000; and the corporation will save \$3,000,000, the entire amount of the overcharge.

manager his \$1,000,000).¹⁷ In this case, managers will not be deterred: a manager's expected gain from self-dealing will be $.5 \times \$1,000,000$ or \$500,000, whereas his expected penalty will be less, namely $0.5 \times \$500,000 = \$250,000$.

How does suit affect corporate value in this case where misconduct is not deterred? If suit is brought, then with a probability of 50%, the corporation reverses a \$3,000,000 loss and collects \$500,000 in damages, which yields an expected gain of $0.5 \times \$3,500,000$ or \$1,750,000. But managers' salaries must be raised by \$750,000 to offset their loss of \$500,000 in expected gains from self-dealing and their expected liability of \$250,000.¹⁸ Hence, the net expected gain to the corporation from suit is not \$1,750,000, but only \$1,000,000, exclusive of litigation costs. It follows that if expected litigation costs are less than \$1,000,000 -- which is to say, if actual litigation costs are less than \$2,000,000 -- suit raises corporate value, but not otherwise.¹⁹ In general, suit that does not deter is

¹⁷In effect, this hypothetical requires managers who are sued to pay \$500,000 in punitive damages. Punitive damages as such are seldom awarded in derivative suits or securities class actions. But it is realistic to assume a punitive element nonetheless (here the \$500,000 award), either because courts favor injured corporations in calculating compensatory damages, or because successful suits may result in informal sanctions such as injury to reputation or loss of position.

¹⁸Managers' salaries (or liability insurance premia) would be raised by only \$250,000 if they reflect just expected liability, not gains from self-dealing.

¹⁹If, as in the previous note, salaries rise by only \$250,000, the net expected gain to the corporation from suit is \$1,500,000. Thus, if expected litigation costs are less than \$1,500,000, suit raises corporate value.

worthwhile for the corporation if, but only if, expected litigation costs are less than expected recoveries net of expected liabilities of managers, which equal the increase in their salaries (or liability insurance premia). The important point here is that a part of the recoveries of the corporation, namely, the liability of the manager, is not a gain to the corporation because they raise its costs.

C. When Will Suits Actually Be Brought?

Having discussed when derivative suits increase corporate value, and thus when shareholders should prefer derivative suits to be brought, we now examine in the world of the model when shareholders (or their representatives) will decide to bring suits under the relevant compensation rule, the rule that allocates the costs and benefits of a suit for a shareholder who brings it. A shareholder's decision whether to bring a derivative suit will depend *only* on his own costs and benefits under the applicable plaintiff compensation rule. In particular, his decision about suit will not reflect future deterrence benefits of suit, for there will be none -- recall the model is a single-period model²⁰ -- nor, obviously, will his decision about suit be made in order to deter conduct the misconduct that did occur -- for it is in the past.

²⁰We will argue in Part III that shareholders will also be unlikely to base decisions to bring suit on future deterrence benefits in multiperiod settings. The essential reason is that potential wrongdoers are unlikely to see a suit arising from one instance of misconduct as logically related to the likelihood of suit for future misconduct.

1. A Benchmark Regime of Pro Rata Allocation of Legal Costs

Consider first a simple benchmark regime for the allocation of legal costs. (We will be able to understand actual regimes more easily once we analyze this regime.) Specifically, suppose that the corporation bears the costs of defending a derivative suit, and that a shareholder pays a fraction of the costs of bringing a suit equal to his ownership interest in the corporation. In this case a shareholder will decide to sue if and only if the corporation's expected recovery exceeds the total litigation costs of defending and prosecuting a suit. This is so because the shareholder both pays litigation costs and enjoys the corporation's net gains from litigation in proportion to his ownership interest. For instance, in an elaboration of our earlier hypothetical, consider a shareholder who owns 1/100 of the shares, where the cost of suit is \$800,000, the cost of defense \$500,000, and the value of recovery \$3,500,000. The cost to the shareholder of suit is 1/100 of \$800,000 or \$8,000. The benefit to the shareholders is 1/100 of the net benefit to the corporation, or $1/100 \times \$3,500,000 - 1/100 \times \$500,000 = \$30,000$. Thus, the net benefit to the shareholder is \$22,000, or exactly 1/100 of the corporation's recoveries of \$3,500,000 less the total legal costs of \$1,300,000. Hence, it is indeed the case that in this benchmark regime suit is brought when and only when recovery exceeds total litigation costs.²¹ Note also that this

²¹This benchmark regime is not entirely hypothetical, since an important judicial test for determining when derivative suits should be permitted to proceed mimics the shareholder's calculus

is exactly the criterion on which a sole owner would base a decision whether to sue.

However, this decision criterion of shareholders -- sue only when the expected recovery exceeds total litigation costs -- does not result in shareholder willingness to bring suit when and only when it would increase corporate value, as identified in the preceding section B. First, shareholders might lack an incentive to sue even though the prospect of suit would increase corporate value. This will be the case whenever shareholder willingness to bring suit would deter misconduct yet suit will not be brought because the expected recovery is less than the litigation costs. In our example, suppose that misconduct is always detected so that, were shareholders standing ready to bring suit, misconduct would be deterred: a manager contemplating misconduct would then anticipate that he would never gain \$1,000,000 from overcharges and would have to pay \$500,000 in damages, so would refrain from self dealing. Deterrence of misconduct would increase corporate value by \$2,000,000, as we explained before.²² But suit would not be brought by shareholders (and, knowing this, managers would not be deterred) if total litigation costs exceed the recovery of \$3,500,000.

Why do shareholders sometimes fail to sue when the prospect of suit would increase corporate value through deterrence? The

under the benchmark regime. See Part IV.B. *infra* (Joy v. North test).

²²Deterrence would increase corporate value by \$3,000,000 in the case where salaries do not reflect gains from self-dealing.

explanation is that when a shareholder decides whether or not to bring suit, it is, as observed above, simply too late to deter unwanted behavior. At the moment of decision, the benefits of suit are seen as the net recovery: the \$3,500,000 in the example, net of litigation costs.²³

Second, and conversely, shareholders might have an incentive to bring suit even though a suit would decrease corporate value. This will be true whenever shareholder willingness to bring suit will neither deter misconduct nor result in sufficient recovery to increase corporate value, but where recovery is nevertheless higher than litigation costs. In our example, suppose, as previously discussed in section B, that the probability of detecting self dealing is 50%, and that in this event managers would pay damages of \$500,000 and lose their \$1,000,000 gains from self dealing if they were sued. Suppose further that total litigation costs are \$2,500,000. Then suit would certainly be brought by a shareholder since the total recovery from suit would be \$3,500,000. Yet suit would lower corporate value: it would result in expected recoveries of $0.5 \times \$3,500,000 = \$1,750,000$; but increase salaries by \$750,000 and impose expected litigation

²³More can be said about the contrast between the shareholder's decision to sue and the decision that would maximize corporate value. Recall that if the prospect of suit deters misconduct, the corporation saves \$3,000,000 and all litigation costs (as no suits are actually brought) but must pay its managers a higher salary. Thus, not only the deterrence benefit but also the offsetting salary cost are important factors that determine when deterrence increases corporate value. These factors are obviously quite different from the considerations that bear on the shareholder's decision whether to bring suit.

costs of $0.5 \times \$2,500,000 = \$1,250,000$, for a total of \$2,000,000 in expected costs.²⁴ In this instance, the source of the problem for the corporation is that part of the recovery is from the manager: the \$500,000 damages and the \$1,000,000 that he would have kept from overcharges.²⁵ While this \$1,500,000 is an incentive toward suit, in fact it does not help the corporation because, as the manager anticipates having to surrender this amount, he receives an offsetting addition to his compensation. In a sense, the problem with suit is again due to its timing: when a shareholder decides whether or not to bring suit, managers' salaries have already been negotiated.

2. A Contingent Fee Regime for Allocating Costs and Benefits

Thus far we have shown that shareholders face distorted litigation incentives under the hypothetical benchmark regime. It should be evident on reflection that similar distortions arise under other simple regimes for allocating the costs and benefits of derivative suits. Consider a second case -- a contingent fee regime -- that approximates the prevailing method of compensating

²⁴A similar example can be constructed in the case where salaries do not reflect gains from self-dealing. Modify the example in text by assuming that total litigation costs are \$3,250,000. Then suit would still be brought, as total recovery is larger, \$3,500,000. But suit would again lower corporate value: it would result in expected recoveries of \$1,750,000, whereas it would increase salaries by \$250,000 and expected litigation costs by \$1,625,000, for a total of \$1,875,000.

²⁵Of course, in the case where salaries do not reflect gains from self-dealing, it is only the \$500,000 in damages that is the source of the problem for the corporation.

shareholder-plaintiffs.²⁶ Under this regime, the corporation pays to defend against a derivative suit, while the shareholder-plaintiff pays to prosecute the suit and receives as compensation a fixed proportion (say, 20%) of the value that the suit confers on the corporation.

It can easily be demonstrated that this contingent fee regime, like the benchmark regime, may distort shareholder incentives to sue relative to the criterion of increasing corporate value. First, contingent fees can fail to induce suits that would deter misconduct and thus raise corporate value. In our example, we noted before that a prospective suit would always deter self dealing that is certain to be detected, since a manager who stood to gain \$1,000,000 by self dealing in the example would not be able to enjoy this sum and also would pay damages of \$500,000 if suit were brought. Yet suit would not be brought under the contingent fee regime if, for instance, the plaintiff's litigation costs were, say, \$900,000, the contingency

²⁶All jurisdictions award contingent attorney fees in derivative suits and class actions. In derivative suits, fees are awarded if a suit confers a "substantial benefit" on the corporation, which may take the form of monetary recovery or structural relief (such as an agreement to add outside directors to the corporate board). ALI Principles, supra note 2, at §7.17, Comment a. Settlements routinely purport to confer such a benefit, and thus routinely produce fee awards. The amount of the fee in most jurisdictions is based either on a percentage-of-the-recovery formula (assuming a monetary recovery results) or on the amount of time reasonably devoted by the plaintiff attorney (the so-called "lodestar" formula). *Id.* In practice, both formulas seem to produce similar fee awards (between 20% and 30% of recoveries) in most cases. See Romano, Shareholder Suit, supra note 5, at 63 n.14; Alexander, supra note 3, at 541; Mowrey, Attorney Fees in Securities Class Actions and Derivative Suits, 3 J. Corp. L. 267, 343-348 (1978).

percentage of damages was 20%, and the shareholder owned 1% of the corporation. For then the shareholder's cost of bringing suit would be \$900,000 plus (an implicit) 1% of the corporation's defense costs, but his gain would be only $0.2 \times \$3,500,000$, or \$700,000, plus 1% of the corporation's gain of $0.8 \times \$3,500,000$, or \$28,000, which is only \$728,000.

Second, contingent fees can also induce suits that would decrease corporate value. To illustrate, consider our example when the probability of detecting self dealing is 50% -- implying that misconduct is not deterred -- and total litigation costs are \$2,500,000. We demonstrated that suit lowers corporate value in this case because it results in expected litigation costs plus an increase in corporate salaries of \$2,000,000, yet it yields expected recoveries of only \$1,750,000. Nevertheless, it is perfectly conceivable that suit would be brought under a contingency arrangement. If the contingency percentage is 20%, the plaintiff's cost of suit is \$500,000 (and defense costs are \$2,000,000, so the total litigation costs are indeed \$2,500,000), and the shareholder owns 1% of the corporation, then the cost of the suit to the shareholder is \$500,000 plus $0.01 \times \$2,000,000$, or \$520,000, whereas his benefit is his expected fee of $0.2 \times \$3,500,000$ -- or \$700,000 -- plus 1% of the corporation's gain of $0.8 \times \$3,500,000$, adding to \$728,000 once again.²⁷

²⁷The dollar figures in these examples are obviously chosen for expository convenience rather than descriptive realism. If it seems implausible that a corporation might choose to litigate an action, rather than settle it, when defense costs totalled \$2,000,000 and the potential recovery was only \$3,500,000, the

III. Generalizations and Extensions

The preceding discussion of the divergence between shareholders' incentives to bring derivative suits and the litigation criteria that would maximize corporate value raises a variety of issues about the underlying rationale for our conclusions and their generality.

One issue concerns how far recoveries from managers are actually anticipated and offset by increases in manager-related corporate expenses in the form of liability insurance premia and salary. Liability insurers absorb most out-of-pocket losses in shareholder suits,²⁸ which strongly implies that corporations pay

hypothetical can be made more realistic simply by reducing the corporation's defense costs and raising the manager's gain from self dealing by an offsetting amount. The result in the text stands as long as the corporation's total expected costs -- in salary increases and litigation expenses -- remains at \$2,000,000, in contrast to the corporation's expected recoveries of \$1,750,000.

In addition, it should be apparent that the distorted litigation incentives illustrated by these two examples do not depend on the particular contingency percentage chosen. A percentage higher than 20% would result in more value-increasing and more value-decreasing suits; a lower percentage would have the opposite effect. But regardless of the percentage selected, the possibility of discouraging value-increasing actions and inducing value-decreasing ones would remain.

²⁸Almost all public companies purchase standard D & O policies in two parts: one part to insure themselves against losses arising from indemnifiable expenses, and a second to insure their managers against non-indemnifiable liability costs. See Romano, Aftermath, supra note 5, at 1157-59. As a legal matter, the only personal liability costs that cannot be offset (by indemnification, insurance, or both) are those resulting from a formal adjudication of breach of duty of loyalty. See Coffee, Unfaithful Champion, supra note 3, at 19-20. But since almost all recoveries in shareholder suits derive from settlements reached prior to an adjudication on the merits (even in duty of loyalty cases), insurers typically fund recoveries and "financial penalties are virtually never imposed on managers." Romano,

indirectly for much of the expected cost of their managers' liability.²⁹ If the insurance premia paid by corporations roughly mirror the liability expenses of insurers, corporations cannot gain in any systematic sense when they recover from liability insurers.³⁰ And, obviously, corporations cannot gain when they must indemnify the liability expenses of their managers, even if they are insured against such indemnification

Shareholder Suit, supra note 5, at 84. Accord Alexander, supra note 3, at 550 (insurers provide 50%-80% of settlement funds in securities class actions). Thus, D & O insurance is the most straightforward mechanism for supplementing managers' compensation to offset liability. Indeed, one survey of large industrial and service corporations indicated that 88% of CEOs would not serve without D & O insurance coverage. Id. (citing 1988 Hendrick & Struggles annual survey of CEOs). Note too that managers' salaries appear to be unaffected by increases in D & O insurance premia. Romano, Shareholder Suit, supra note 5, at 84.

²⁹Precisely because shareholder suits are rarely adjudicated and insurers pay most settlement costs, both legal and contractual limitations on insurable misconduct appear to have remarkably little bite. Nevertheless, insurance is not only available but nearly universal. Professor Alexander argues that D & O insurers have become highly successful in anticipating "non-merits-related" settlement costs, and simply pass these costs back to their corporate customers in the form of premia. Alexander, supra note 3, at 563-64.

³⁰Actual or potential litigation can substantially increase D & O insurance premia for particular corporations. Oesterle, supra note 8, at 563. Our own informal inquiries indicate that such increases are negotiated and vary with the circumstances of the litigation. More generally, evidence that increased liability raises insurance costs is apparent in the dramatic increases in premia that followed the doubling of shareholder suits between 1974-1984. See Romano, Aftermath, supra note 5 at 1157-59. Note also that to the extent that insurers cannot anticipate firm-specific liability costs, some firms gain and others lose from insured recoveries. But as shareholders are unlikely to know more than insurers about expected liability costs, whether a corporation wins or loses ex post in the insurance lottery has no bearing on shareholder valuation of expected corporate recoveries ex ante. For further discussion see note 77 infra.

costs.

Of course, insurance cannot cushion managers against all losses from suit, nor can it reimburse the illicit gains that managers forgo under threat of suit. The remaining question, then, is whether managers' salaries increase by the expected value of these uninsurable losses. We can envision that managers who expect to spend time and energy defending themselves (and their reputations) in derivative suits would want some increase in salary as compensation. But the notion that salaries will rise to compensate managers for corrupt gains that they are denied by the threat of suit strikes us as unlikely. There are several grounds for skepticism going beyond our model. First, in fact, only a minority of managers may be of the type that would engage in intentional misconduct. Were these managers actually to bargain about benefits from misconduct that they would enjoy in the absence of the threat of derivative suits, they would only reveal their dishonesty, and thus invite unwelcome scrutiny or dismissal. Second, explicit bargaining about the benefits from misconduct might reflect badly on the corporation if, as seems likely, shareholders were to suspect the firm of tolerating immoral behavior that ought to be pursued with vigor instead. Consequently, the firm might avoid bargaining about gains from misconduct. Third, opportunities for misconduct may be episodic, low probability events. If so, managers who are not risk neutral would attach only small value to such opportunities. For example, the value a manager would attach to a 2% chance of

making an extra \$100,000 through misconduct might be only several hundred dollars, significantly less than its expected value of \$2,000. Hence, even full salary adjustments to such opportunities would be small relative to their expected value. Together, we suspect, these three factors will ordinarily prevent salaries from rising to offset the expected value of uninsured recoveries against managers. Thus, contrary to the case in our model, a corporation's direct recovery from its managers should be counted as a gain to the corporation to the degree that salaries do not reflect recoveries.

A second issue worth noting is the extent to which suit would result in future deterrence benefits that shareholders would take into account when contemplating suit. There were no future deterrence benefits in our model, recall, because we assumed that the corporation was in business only for one period. If we go beyond the model and recognize the possibility of future managerial misconduct, must we alter our conclusion that there are no future deterrence benefits from suit? The answer is not straightforward. On one hand, a manager contemplating whether he will be sued for future misconduct may well rationally believe that only the future costs and benefits of suit will govern shareholders' future decisions about suit -- not the occurrence or nonoccurrence of suit today. If so, suit today will have no future deterrence benefits. On the other hand, a manager might believe that a future decision about suit will reflect not only the costs and benefits of suit at that time, but also the desire

of shareholders to maintain their corporation's reputation for bringing suit whenever there is misconduct (presuming it has such a reputation). If so, failure to sue today could damage this reputation and thus sacrifice future deterrence. Even if a litigious reputation will yield future deterrence gains, however, shareholders will not consider past opportunities to deter in deciding whether to sue today. For this reason, the chief qualitative conclusion from our model still stands. Because the reputational mechanism (presuming that it functions) requires shareholders to invest in suit to earn future gains, it misses past opportunities to deter misconduct that a prior commitment to bring suit might have captured. Thus, not even the possible returns from a litigious reputation can fully align shareholder incentives to sue today with the litigation policy that would maximize deterrence gains.³¹

³¹The distinction between past deterrence gains (which can only be captured through a prior commitment to bring suit) and future deterrence gains (which might be captured by a reputation for bringing suit) can be described alternatively as a distinction between less and more costly commitment devices. To see why, consider the following hypothetical. Suppose that managers have a 10% probability of discovering a self-dealing opportunity in each period, but that self-dealing could be deterred by the threat of suit. An optimal litigation policy would always dictate suit against self-dealing managers in order to deter misconduct costlessly and absolutely. By contrast, without a pre-existing commitment to sue, shareholders who were sensitive to reputational effects would only sue self-dealing managers today if the present value of future deterrence gains exceeded the net cost of suit. Since these future gains might not be realized for many periods and would have to be discounted accordingly, shareholders would not sue today -- and managers therefore would not be deterred today -- unless the corporate losses from self-dealing were very large. The lesson, once again, is that because suit is costly -- and because only future deterrence benefits result from suits brought to maintain a

This leads us to consider the issue of commitment to a policy of suit. Suppose shareholders could costlessly commit themselves to sue in certain named circumstances, such as when suit would deter misconduct. Informed shareholders with only investment interests at stake would then willingly commit themselves in advance to sue when and only when an action would increase in corporate value. But without leadership from the board of directors and a low-cost way to bind all shareholders to the new litigation policy, shareholders obviously could not make such a commitment. Even in the absence of legal impediments, it would be precluded by the costs of collective action, imperfect information, and the natural inclination of most shareholders to focus on immediate monetary benefits from suit.³²

The ability of boards of directors to commit themselves to a policy of suit is somewhat different. Boards of directors play an important screening role in derivative litigation in many jurisdictions (as we discuss in Part IV below). Moreover, it is plausible that boards, or at least some boards, are loyal to shareholder interests, and wish to exercise their discretion over

litigious reputation -- shareholder incentives diverge from the optimal litigation policy, even when the reputational mechanism works perfectly.

³²Further, under the contingent fee rule that now prevails, the shareholder-attorney teams most likely to bring suit would have no interest in subscribing to a value-maximizing litigation policy, since their own interests lie in obtaining fee awards. Professor Goetz optimistically speculates that the contingent fee rule may provide a beneficial commitment to suit that shareholders themselves could not agree upon. Goetz, *supra* note 6, at 348. But we have already demonstrated that such optimism is unwarranted. See TAN 26-27 *supra*.

derivative litigation accordingly.³³ Yet, existing law would not seem to allow the obvious device of a charter provision committing boards to categorically reject value decreasing actions and reward value increasing litigation.³⁴ (We return to this possibility in Part VI below.) In the absence of a charter provision, loyal boards might still establish a reputation for facilitating value increasing litigation, after which they would have a reputational commitment to abide by their litigation policy. We are skeptical, however, about how effective such reputational bonding would be, given that boards are unable to bind the votes or assure the loyalty of successor boards.³⁵ In short, while loyal boards might in theory develop better litigation incentives than shareholder-plaintiffs, their

³³We do not address the controversial issue of how loyal to shareholder interests boards of directors can be expected to be in the context of derivative litigation. See note 3 *supra*.

³⁴Charter provisions altering the contours of manager liability are presently adopted pursuant to express statutory authorization. See TAN 54 *infra*. (discussing Del. G. Corp. L. § 102(b)(7)). Of course, disinterested boards can provide limited protection from litigation in other ways: for example, by authorizing or ratifying suspect transactions. But case-by-case ratification is no different in principle from screening derivative suits directly; it cannot establish a litigation commitment except through the reputational mechanism described above. In addition, whether disinterested directors could protect an obviously unfair transaction by ratifying it solely to thwart value decreasing law suits is, to say the least, an open question.

³⁵Another reason for skepticism is that shareholders must understand the board's purpose if the board is to retain shareholder support when it acts in ways that appear to be against shareholder interests (such as when the board allows a derivative suit for which expected recovery is less than litigation costs).

incentives are unlikely to differ in fact from those of shareholder plaintiffs.

An additional issue raised by our discussion of distorted shareholder incentives to bring derivative suits is whether there exists any simple regime that can correct shareholder incentive problems. Consider the family of compensation rules that reward shareholder-plaintiffs on the basis of corporate recoveries and litigation costs. No such rule can always avoid distorting shareholder litigation incentives. The reason is that any such rule omits consideration of factors that bear importantly on whether a derivative suit is value increasing, namely managers' personal gain from misconduct, managers' expected loss from suit, and the probability of detecting misconduct. Any rule that is constructed without reference to these factors relevant to deterrence cannot possibly elicit value increasing litigation decisions from plaintiffs in all circumstances.³⁶ This is not to say, of course, that there are no differences among simple plaintiff compensation regimes. Over a particular set of corporate situations, a contingent fee regime may outperform the benchmark regime (or vice versa), or a contingent fee regime

³⁶In Part V, *infra*, we consider the possibility of a plaintiff compensation rule based on all factors bearing on the value of derivative litigation -- thus including in the rule factors determining whether suit would deter and how it would affect managerial salaries. Such a rule could clearly be designed to induce suit if and only if suit would enhance corporate value, since it would take all relevant factors into account.

paying a small amount may outperform one paying generously.³⁷ But such variations in relative performance will depend on the characteristics of the particular suits at hand, they will not be general.

Finally, other issues raised by our discussion concern various simplifying assumptions which we do not believe are important to our main results. For instance, if the model were extended to permit settlements (a high proportion of derivative suits settle³⁸), the conclusions would remain qualitatively unaltered. The terms of settlement would reflect the same factors that motivate plaintiffs to bring suits in the first instance: litigation costs, potential recoveries, and the probability of prevailing. Hence the incentive to bring derivative suits would be similar to what we described, and would deviate from the optimal in much the same fashion.³⁹ Similarly,

³⁷See note 27 *supra*.

³⁸Professor Romano reports that roughly two-thirds of her sample of shareholder suits settled, and virtually all of the remaining third ended in dismissal or a judgment for the defendants. Romano, Shareholder Suit, *supra* note 5, at 60. Cf. note 12 *supra* (summarizing Romano's findings).

³⁹Again, we refer here to an extension of our model. A full account of institutional factors bearing on the settlement of shareholder suits would also consider distortions in litigation decision that go beyond our model, such as the settlement value of frivolous suits and the risk of collusive settlements between managers and plaintiffs' attorneys. See note 3 *supra* (citing articles). Indeed, Professor Janet Cooper Alexander has argued that the ensemble of institutional distortions is so powerful that the merits of securities class actions do not shape terms of settlement at all. See Alexander, *supra* note 3. As we focus on a logically distinct set of distortions in shareholder litigation, we do not provide a full account of the settlement process. We do believe, however, that a clear policy of

treating the penalty for misconduct or the potential corporate recovery as variables within the model (for example, by allowing courts to impose punitive damages) would also fail to correct plaintiffs' litigation incentives. To be sure, in a world without legal error or judgment proof managers, draconian sanctions could deter all breaches of fiduciary duty and the optimal plaintiff compensation rule would be simple indeed: a sum large enough to induce all plaintiffs to bring suit where there was misconduct, which would never in fact arise. But in our world where legal error occurs and manager assets are limited, such total deterrence is impossible. In this world, not every derivative suit should be brought, and our analysis is necessary for determining when suits are valuable and when they are not.⁴⁰

IV. Screening Derivative Suits

Thus far we have analyzed shareholder incentives to bring

increasing corporate value can mitigate distorted litigation incentives, whatever their source. See note 81 *infra* (discussing reform proposals).

⁴⁰This is not to endorse judicial reluctance to award punitive damages in cases of corporate fiduciary breach. See note 17 *supra*. We take no position on optimal damage awards in this article. Our only point here is that optimal damages, whatever they may be, are unlikely to be large enough to deter all misconduct, thus dispensing with the possibility of value-decreasing suits. On a more practical level, judicial reluctance to award punitive damages in derivative suits may be understandable under the existing regime in which most suits settle, and settlement payments are generally funded by corporations themselves or by insurers that pass back settlement costs in the form of insurance premia. See note 28 *supra*.

derivative suits. We have not yet mentioned an important element of the regulatory framework, the set of legal "screens" determining whether derivative suits proceed or are dismissed to plaintiff's disadvantage at early stages of litigation. Such screens -- which range from provisions in corporate charters to case-by-case evaluation by courts and boards of directors -- interact with the plaintiff payout rules to shape the population of successful derivative suits.⁴¹ Thus, the question arises: how far do these screens alter or offset the distorted litigation incentives analyzed in Part II? The short answer is, not very much. To see why, it is necessary to take a closer look at derivative suit practices.

A. Screening at the Demand Stage

In all jurisdictions, derivative suits are subject to a so-called demand requirement, which requires would-be plaintiffs to choose between petitioning the corporation's board of directors to bring suit or, alternatively, persuading a court that demand is unnecessary under the law of the jurisdiction.⁴² The demand

⁴¹With the exception of charter provisions, which can insulate managers against some shareholder class actions, the specialized screens addressed in this Part pertain to derivative suits alone, and not to class actions.

⁴²This describes the law of virtually all states today. See ALI Principles, supra note 2, at § 7.03, Comment a. By contrast, recent efforts to reform the law of derivative suits generally require all plaintiffs to make demand, but relax somewhat the circumstances in which courts may permit suits to proceed if demand is rejected by the board. Thus, the Revised Model Business Corporation Act [hereinafter R.M.B.C.A.] provides that all derivative plaintiffs must make demand before bringing suit, but that suit may be commenced after demand is rejected if the alleged facts establish that (1) a majority of the board is not

requirement functions to preserve the board of directors' control over what is nominally the corporation's own cause of action. If a plaintiff chooses to make demand, the board must then evaluate the action and decide whether to permit suit, reject suit, or assume control of the litigation itself. A suit that the board rejects is over before it is begun in many jurisdictions.⁴³

Many commentators argue that allowing corporate boards to screen suits in this fashion injects a powerful anti-plaintiff bias into the derivative mechanism because even independent directors are reluctant to permit suits against senior managers.⁴⁴ For present purposes, however, the issue of such "structural bias" on the part of the board is secondary. The analysis of Part II indicates that even a loyal board whose sole

independent, or (2) that the board failed to conduct a "reasonable inquiry" in good faith into the substance of the proposed suit. See R.M.B.C.A. §§ 7.42-7.44 (1991). The proposed ALI procedure is similar, except that it is weighted against dismissal of actions alleging breach of duty of loyalty. ALI Principles, supra note 2, at §§ 7.03 & 7.08-7.10.

⁴³The law varies by jurisdiction. See D. Demott, Shareholder Derivative Actions: Law and Practice, § 5.03 (1987) (surveying jurisdictions). Delaware, the leading jurisdiction, views the demand requirement as a grant of power to the board to exercise its business judgment to dismiss suits that are not in the interest of the corporation. *Id.* Delaware law provides little room for plaintiffs to allege that a demand, once made, was "wrongfully refused" by the board, because by making a demand plaintiffs are deemed to waive their rights to challenge the impartiality of the board. *Levine v. Smith*, 591 A.2d 194, 212 (1991). As a consequence, Delaware practitioners avoid making demand, leaving most derivative suits to be screened by the Court of Chancery. By contrast, the R.M.B.C.A. and ALI impose a universal demand requirement that would assure that most suits are screened by both boards and courts. See note 42 supra.

⁴⁴See, e.g., Dent, supra note 4.

objective is to maximize shareholder welfare is likely to face distorted incentives in screening derivative suits -- indeed, precisely the same distorted incentives as those faced by the shareholder plaintiff under the benchmark compensation regime -- because such a board will naturally evaluate the derivative suit on an ex post basis, that is, in terms of only the net expected recovery from the suit.⁴⁵ (The ironic corollary is that we cannot be certain that a loyal board makes better decisions than a biased board that reflexively rejects all demands.)

In addition, because boards of directors seldom accept suits on demand, trial courts also play an important screening role at the demand stage by certifying some suits as "demand excused," and therefore beyond the board's power to dismiss. The screening criteria used by the courts, however, bear only a modest relationship to the value of derivative actions. The most frequent justification for excusing demand is evidence that the board is financially interested in the litigation or dominated by a party with interests adverse to those of other shareholders.⁴⁶ Here, demand is excused to control biased decisionmaking by the board. This enhances the legitimacy of the demand doctrine, but it does not obviously correct the distorted incentives identified in our model. Instead, it merely removes the board as a screen,

⁴⁵See Part II.D. *supra*. Recall also the difficulty that a loyal board would have, at least in the absence of a charter amendment, in committing to a policy of permitting suit when and only when suit would increase corporate value.

⁴⁶See ALI Principles, *supra* note 2, at § 7.03, Comment d.

leaving the selection of suits entirely to the regime for compensating plaintiffs -- that is, to the contingent fee regime.

A second criterion that the Delaware courts, at least, employ in excusing demand appears to relate to the quality of the suit: that is, to the probability that a suit can succeed on its merits. Recent Delaware doctrine, although murky, arguably establishes a threshold quality level above which a suit can escape board screening, notwithstanding the absence of obvious bias on the part of the board.⁴⁷ Such a quality screen (if this is indeed the effect of Delaware doctrine) finds some support in our model, since -- all else equal -- a suit that is more likely to succeed is also more likely to increase corporate value, either as a deterrent or as a vehicle for recovery. In particular, on the assumption that the Delaware standard is used only to exclude strike suits that exploit asymmetrical litigation

⁴⁷In its most recent incarnation, the Delaware test for excusing demand is disjunctive. The trial court must ask: "(1) whether threshold presumptions of director disinterest or independence are rebutted by well-pleaded facts, and, if not (2) whether the complaint pleads particularized facts sufficient to create a reasonable doubt that the challenged transaction was the product of a valid exercise of business judgment." *Levine v. Smith*, 591 A.2d 194, 205 (1991). Demand is excused if either prong of this test is met. But the second prong of the test is particularly noteworthy because it refers not to the board's capacity to consider demand but to the circumstances of the alleged misconduct (the "challenged transaction"). A plausible interpretation, adopted by some trial courts, is that demand may well be excused when plaintiff's allegations establish likely misconduct on their face. See *ALI Principles*, supra note 2, at § 7.03, Reporter's Note 5 (collecting cases). This is in effect a quality screen even if, as Chancellor Allen has argued, it is justified by the doubt that yesterday's misconduct casts on the screening capacity of today's board. See *Abajian v. Kennedy*, 1192 WL 8794, *11 n.3 (Del. Ch. 1992).

costs or the risk of legal error to extract settlements, this doctrine is clearly beneficial. Such suits cannot contribute to corporate value and can only generate litigation costs. Thus, eliminating these suits improves litigation incentives, even if it still permits value decreasing but meritorious suits to be brought.⁴⁸

B. Screening at the Special Litigation Committee Stage

The demand stage is not the only point in the litigation process at which a derivative suit may be excluded. Many jurisdictions also permit screening even after demand is excused if a so-called special litigation committee of independent directors petitions the court to dismiss a suit. In most of these jurisdictions, however, it is the court rather than the committee or the board that ultimately decides whether a suit will be permitted to continue at the special litigation committee stage.

The caselaw offers two classic decision rules for a court to follow in passing on a committee's motion to dismiss derivative litigation. The first, formulated by Judge Ralph Winter, is a detailed ex post cost-benefit analysis of precisely the sort that a shareholder would make under our benchmark regime, i.e.,

⁴⁸In fact, the Delaware doctrine probably cuts deeper than simply excluding frivolous suits. An informal survey of Delaware Chancery Court rulings over the past year yields only one example out of five demand-excused cases in which demand was excused without a showing of reasonable doubt about the disinterestedness of the board. See *Andreae v. Andreae*, 1992 WL 43924, *4 (Del. Ch. 1992). Thus, the net effect of Delaware's demand excused test may be less straightforward than a simple quality screen.

balancing the expected value of recovery against the legal costs of continuing the suit.⁴⁹ Commentators have endorsed this rule for its relative clarity and apparent coincidence with shareholder interests.⁵⁰ But, of course, as we have explained in Part II, the Winter rule only reflects shareholder interests on an ex post basis. From the perspective of increasing corporate value, it is subject to the same distortions as the shareholder's litigation decision under the benchmark compensation regime.

The second rule, adopted by the Delaware supreme court, allows judges to consider not only the ex post value of a suit but also matters of public policy, which presumably include a suit's potential deterrent value.⁵¹ In principle, the Delaware

⁴⁹Joy v. North, 692 F.2d 880, 892 (2d Cir. 1982). Judge Winter framed the test as follows: "Where the court determines that the likely recoverable damages discounted by the probability of a finding of liability are less than the costs to the corporation of continuing the action, it should dismiss the case." Id. Much of the attraction of the Joy test lies in Judge Winter's painstaking inventory of the ex post costs and benefits associated with derivative actions.

⁵⁰See Macey & Miller, *supra* note 3, at 39-40 (apparently endorsing the Winter rule). Professor Joel Seligman also adopted a "refined" version of the Winter rule in passing on derivative litigation under a unique Michigan statute permitting a court to vest screening authority in a "disinterested person." See Seligman, The Disinterested Person: An Alternative Approach to Derivative Litigation, 55 L. & Contemp. Problems 401, 410-414 (1992).

⁵¹Zapata Corp. v. Maldonado, 430 A.2d 779, 789 (1981). The Zapata opinion rejects the conventional view that a derivative action can be treated as a simple matter of business judgment by the board (or by a court), much as the board might consider a corporate investment project or other business opportunity. Id. Our analysis obviously supports Zapata here: a derivative suit is unlike an investment project because it cannot be valued solely on the basis of its ex post costs and benefits. Yet, Zapata does not appear to rely on our argument to support its

rule might do better than the Winter rule by not excluding suits with obvious deterrent value simply because their expected recovery is small. Even if judges estimate the deterrence benefit of a suit solely in terms of the harmfulness of managerial misconduct -- as we suspect often happens -- introducing deterrence into the judicial calculus is a step in the right direction. It stops well short of optimal screening, however, because the value of the deterrence benefit conferred by suit depends on the prospects for deterrence as well as the magnitude of the harm that deterrence might avert. Thus, explicit legal weighting of the deterrence objective still distorts the litigation decision insofar as it fails to consider the likelihood of deterrence.^{52 53}

conclusion but rather on the different (and somewhat puzzling) claim that there are (unspecified) positive externalities associated with derivative litigation, quite apart from the interests of the corporation. See note 53 *infra* (examining the claim of a positive "deterrence externality" associated with derivative suits).

⁵²Moreover, the second rule also omits consideration of the effect of derivative suit on the corporate wage and liability insurance bill.

⁵³Another feature of the legal treatment of the deterrence concept deserves mention here. A widespread but puzzling assumption that seems implicit in Zapata, see note 51 *supra*, and explicit in the ALI Principles, is that a derivative suit can generate a net social benefit, by deterring misconduct elsewhere, even though it imposes a net cost on the corporation whose managers are sued. See ALI Principles, *supra* note 2, Part VII, Intro. Note, Rept.'s Note 2.

This assumption seems to rely on two claims that we find puzzling: (1) that a successful suit at one firm somehow raises the probability of similar suits elsewhere; and (2) that a value decreasing suit at one firm may be value increasing elsewhere. The first of these claims seems implausible on its face, at least after the first or second suit against a novel form of

C. Screening by Charter Provision and/or Statutory Exclusion

Finally, there is also a third form of legal screen on derivative suits in many jurisdictions: corporate charter provisions or statutory exclusions that discourage plaintiffs from bringing certain suits -- primarily suits to recover monetary damages from managers for breach of the duty of care.⁵⁴ At first glance, such blanket screening based on the substantive character of alleged wrongdoing would seem to be unrelated to the ex ante criteria for bringing suit indicated by our model. In fact, however, there is a case for excluding duty

misconduct. (Perhaps what is actually meant, however, is not that a suit somewhere raises the probability of a suit elsewhere, but merely that it gives information about that probability to uninformed managers elsewhere.) The second claim seems equally implausible, as long as the private benefit of suit to a particular corporation is understood on an ex ante basis. Put differently, an identical suit cannot be value decreasing at one firm and value increasing elsewhere. Here, we suspect that proponents of the "deterrence externality" erroneously consider only ex post recoveries when valuing a suit's "private" benefit but include ex ante deterrence gains when valuing its "social" benefits. At least some language in the ALI Principles points in this direction. See id., Rept.'s Note 3.

⁵⁴For example, a recent addition to the Delaware statute permits corporations to adopt charter amendments eliminating the personal liability of directors "to the corporation or its shareholders for monetary damages" for most breaches of the duty of care. Del. Gen. Corp. L. § 102(b)(7) (1991). Other states have gone further by denying shareholders standing to bring actions for breach of duty of care. For empirical studies suggesting that these liability limits have had little effect on corporate value, see Janjigian & Bolster, *supra* note 5, and Romano, Insurance Crisis, *supra* note 5. But see Bradley & Schipiani, The Economic Importance of the Business Judgment Rule: An Empirical Investigation of the Trans Union Decision and Subsequent Delaware Legislation, in A. Sametz (ed.), The Battle For Corporate Control, Ch. 7 (1991) (finding passage of § 102(b)(7) lowered the value of Delaware corporations). Bradley & Schipiani's analysis is critiqued by Allen, *id.* Ch. 9, and Gilson, *id.* Ch. 10.

of care actions based on the assumptions of our model and the additional (not implausible) conjecture that the risk of legal error is far greater in duty of care actions alleging (gross) negligence than in duty of loyalty actions accusing managers of explicit cheating.⁵⁵

A large risk of legal error obscures the connection between liability and managerial behavior, and thus may mean that duty of care actions will confer little deterrent benefit.⁵⁶ And if these actions do not deter negligent conduct, it follows that they are likely to cost corporations more -- in indemnity payments, insurance premia, and possibly even salaries -- than the amount of their recoveries. The reason is, as our model states, that managers will wish to be compensated ex ante for

⁵⁵This conjecture is frequently made. E.g., Demsetz, A Commentary on Liability Rules and the Derivative Suit in Corporate Law, 71 Cornell L. Rev. 352, 356 (1986); F. Easterbrook & D. Fischel, The Economic Structure of Corporate Law 103 (1991). The reason for expecting a large risk of legal error in duty of care suits is closely linked to the justification for the business judgment defense: when business decisions go awry, courts find it difficult to distinguish between bad luck and bad judgment. See R. Gilson, Executive Compensation and Corporate Governance: An Academic Perspective 26 (unpublished paper, Nov. 1992). By contrast, management decisions in duty of loyalty cases, if shown to involve opportunities for personal gain at corporate expense, are a priori less likely to be innocent. We are grateful to Professor Ronald Gilson for discussions on this point.

⁵⁶Duty of care actions might also fail to deter because managers can be insured or indemnified for all liabilities arising from such actions. See note 28 supra. Yet how much this matters is an open question. On one hand, duty of care actions presumably impose non-monetary costs on defendants, such as injury to reputation. On the other hand, almost all non-frivolous shareholder suits settle, and are thus insurable in fact -- even when they allege misconduct that, if actually established, would not be insurable. See id.

their expected liability. This means that value paid by the corporation in the form of indemnity rights and insurance premia is likely to equal the corporation's expected recoveries from managers before considering litigation costs. But since the corporation bears litigation costs, the corporation is therefore likely to pay more ex ante than it can expect to recover in these actions.⁵⁷

Perversely, then, a blanket restriction on the permissible subject matter of derivative suits may come closer to embodying the lessons of our model than any of the more particularized forms of screening now employed by boards and courts. This is not to say, however, that we wholeheartedly endorse a ban on duty of care suits. The assumption that error risks are very large in these actions remains a conjecture. Moreover, it is surely wrong for some duty of care actions, even if it is correct for many others. Thus, there is little risk of error in passing on the care of a director who completely fails to inform himself about a patently disastrous transaction, even if adjudicating the director's care in approving such a transaction poses a significant risk of error. It follows that a blanket ban on duty

⁵⁷Whether the corporation recovers more ex post than it has paid ex ante depends largely on the accuracy with which insurers anticipate liability risks. See note 30 supra. Note, however, that, even in the absence of deterrence, a real expected gain to the corporation results when a duty of care action thwarts a prospective harm, such as a hastily-approved merger. In this case, the corporation recovers a benefit for which it has not paid beforehand. This observation supports Delaware's decision to retain equitable relief in duty of care actions against directors, even while permitting corporations to eliminate monetary liability in such actions. See note 54 supra.

of care suits can find support in our analysis only as a crude corrective to distorted shareholder litigation incentives.

V. Other Classes of Shareholder Suits

Thus far we have examined what is generally taken to be the most prominent class of shareholder suits, namely, derivative actions against corporate officers and directors. As we noted at the outset, however, other classes of shareholder suits are also important.⁵⁸ First, in some circumstances shareholders may bring class actions to enforce the fiduciary duties of officers and directors, and so avoid most of the screening procedures sketched in Part III.⁵⁹ Second, shareholders may bring class actions against both the corporation and its officers and directors to enforce disclosure obligations arising under the federal securities laws.⁶⁰ Third, minority shareholders may sue controlling shareholders, in either derivative or class actions, alleging breach of fiduciary duty or violations of the securities laws. In this part, we demonstrate that our main results are not

⁵⁸Indeed, in Professor Romano's sample, the average recovery in derivative suits with a monetary settlement (\$6,000,000) was about half that in shareholder class actions (\$11,000,000). Romano, Shareholder Suit, supra note 5, at 61.

⁵⁹See note 2 supra (distinguishing direct and derivative actions). Because shareholder class actions are direct suits, corporate boards have no authority to request their dismissal.

⁶⁰One common basis for such actions is Rule 10b-5, which permits actions by investors trading in the wake of corporate misrepresentations or omissions. SEC Rule 10b-5, 17 C.F.R. § 240.10b-5 (1990). Another is Rule 14a-9, which bars misrepresentations and omissions in proxy materials. SEC Rule 14a-9, 17 C.F.R. § 240.14a-9 (1990).

unique to derivative suits but extend to most other classes of shareholder litigation as well.

A. Class Actions Alleging Fiduciary Breach

Our analysis extends most obviously to shareholder class actions alleging that managers have directly injured shareholders by breaching their fiduciary duties.⁶¹ The major legal distinctions between such actions and derivative suits (i.e., the absence of procedural screens and the right of shareholders to recover directly) are irrelevant to our conclusions. As in the case of derivative suits, shareholders would want such class actions to be brought when and only when they will increase the value of shareholdings, as measured by deterrence benefits plus expected recoveries minus litigation expenses and ex ante salary and insurance adjustments. But shareholders will instead tend to bring class actions on the basis of only expected recoveries net of litigation costs.⁶²

B. Class Actions Alleging Securities Violations

A shift in the legal theory of shareholder suits against managers -- from a fiduciary claim to an alleged violation of the securities acts -- has no implications for our analysis. Thus, shareholder class actions asserting securities law violations are

⁶¹The classic example is *Smith v. Van Gorkom*, 488 A.2d 858 (Del. S. Ct. 1985), which held an entire corporate board personally liable for gross negligence in considering a merger proposal.

⁶²The problem of distorted incentives to bring class actions may be worse than that for derivative suits because in a class action, unlike a derivative action, there is no opportunity for the board to exclude value decreasing actions.

also subject to the distorted incentives identified in our model. This point is particularly obvious when all shareholders are potential members of the plaintiff class: for example, when the corporation and its directors have distributed misleading proxy materials prior to a merger vote in violation of SEC Rule 14a-9.⁶³ Presumably, shareholders wish such actions to be brought when and only when they will increase the value of shareholdings. Just as in the case of actions alleging fiduciary breach, however, shareholder incentives to sue will be keyed to ex post recoveries, and will not reflect either the deterrence benefits or the ex ante salary costs of suit.

The same logic applies to shareholder actions charging that the corporation and its managers caused trading losses by issuing misleading information (i.e., committed a "fraud on the market" in violation of SEC Rule 10b-5).⁶⁴ On an ex post basis, such suits only benefit investors who have traded on distorted market prices (as opposed to all shareholders), and they are obviously motivated by the prospect of obtaining large recoveries for these traders and their attorneys. Yet this incentive to sue is

⁶³17 C.F.R. § 270.14a-9 (1990)

⁶⁴The best known example involves a misrepresentation of good news that was arguably intended to benefit the corporation and its non-trading shareholders. See *Basic Inc. v. Levinson*, 485 U.S. 978 (1988) (class action against corporation and its directors for falsely denying merger negotiations). But the overwhelming majority of cases involve managers who lie out of self-interest about bad news that might put their own positions at risk. See Arlen & Carney, Vicarious Liability for Fraud on Securities Markets, 1992 U. Ill. L. Rev. 691, 724-27 (1992) (surveying 111 fraud-on-the-market cases).

clearly distorted because it neglects the corporate cost of suit that all shareholders bear ex ante. Before a misrepresentation is discovered, all shareholders -- including the purchasers or sellers of shares who later learn of their injury -- would prefer suit to be brought when and only when its deterrence value exceeds its corporate costs.⁶⁵ That this may not happen much of the time is graphically indicated by fraud-on-the-market cases in which the sole defendant is the corporation itself.⁶⁶ Because these suits abandon even the pretense of deterring managers, they are unlikely to accomplish more from an ex ante perspective than impose litigation costs on the corporation and its shareholders.⁶⁷

C. Shareholder Actions Against Controlling Shareholders

⁶⁵By hypothesis, purchasers and sellers of shares do not know, at the moment of transacting, whether they are transacting at a distorted market price. At this moment, then, they will prefer to permit only suits that add value for all shareholders, in order to obtain the top price for their shares -- or the top value for their price, respectively.

⁶⁶Professors Arlen and Carney report that corporate issuers were the sole defendants in 9% of their sample of 111 cases. Arlen & Carney, *supra* note 64, at 727. Of course, the distinction between corporate and individual defendants is artificial to the extent that recoveries from managers are, in reality, insurance settlements that are indirectly funded by corporations. See note 28 *supra*.

⁶⁷While it might be argued that corporate liability deters misrepresentations by managers indirectly (by encouraging private disciplinary measures), the case for such "gatekeeper" enforcement seems weak here. Like illicit self-dealing, market fraud usually benefits managers at the expense of investors and the corporation. *Id.* at 727. Thus, it seems far more likely to be deterred by sanctioning managers directly than by imposing additional costs on corporations and their shareholders. Professors Arlen and Carney develop this point forcefully. See *id.* at 704-717.

Lastly, suits brought by minority shareholders against controlling shareholders are also subject to distorted incentives. Just as in other classes of shareholder litigation, minority shareholders considering suit against a control group are likely to rely solely on net expected recoveries in deciding whether to sue. They will thus overlook ex ante gains from deterring behavior that lowers the value of their shareholdings as well as litigation costs that they do not bear. In addition, minority shareholders will overlook the ex ante costs of suit. Of course, suits against control groups may not impose costs on the corporation in the form of salary adjustments. But these suits will have an analogous negative effect on share value by making shares less valuable to investors who expect with some probability to become members of a control group.

Specifically, we examine (in Note 6 of the Appendix) how minority shareholders may either bring a value decreasing suit or fail to bring a value increasing suit, on the simplifying assumption that all shareholders face identical prospects of organizing a control group able to extract private gains from the corporation. In this case, all shareholders would agree ex ante that suits against control groups should be brought if and only if they would tend to increase share value. But shareholders who find themselves in the minority position ex post will sometimes fail to bring suit against control groups when this would increase share value (because suit would spur deterrence), and sometimes will bring suit even though this will engender

decreased share value (because the recoveries they obtain are offset by lowered share value due to reduced profits for control groups).

In the real world, of course, shareholders generally do not face equal prospects of joining a control group. Nevertheless, it should be apparent on reflection that similar ex ante costs and benefits of suit arise, even for shareholders who expect never to participate directly in the diversionary gains of a control group. This is obvious with respect to the ex ante benefit of suit, deterring diversion by a control group. To at least some extent, it is also evident with regard to the ex ante cost of suit, since the prospective gains and losses of the control group will inevitably affect demand for all shares in the corporation -- and thus, through the market, affect the value of non-controlling shares as well.

D. Summary

This discussion demonstrates that the distortion in litigation incentives that we analyze is not a special characteristic of derivative suits against corporate managers. Rather, it is an endemic feature of all shareholder litigation against corporations, managers, and controlling shareholders, in which there is a relationship between the parties that, ex ante, shifts the costs of prospective liability, in whole or in part, from defendants to plaintiffs prior to suit.⁶⁸

⁶⁸A different scenario is presented by class actions following public offerings of securities. This popular genre of suit accuses corporate issuers (and often their managers,

VI. The Prospects for Reform

In this Part, we explore a legal regime that would in principle improve shareholder incentives to bring suit and address several problems in administering this regime. Although our focus here -- as in Parts II and III -- is on derivative suits to simplify exposition, the strategies that we address might also be adapted to other classes of shareholder suits.

A. Compensating Plaintiffs for Increasing Corporate Value

Consider first the introduction of a plaintiff compensation rule that would lead shareholders to sue if and only if suit would increase corporate value. Unlike the rules considered in Part II, this rule would fully reflect the deterrence benefits

underwriters, and accountants) of making misrepresentations while issuing new securities. Imposing liability here, as for most other classes of securities fraud, should in theory reduce the information costs of investors, and thus increase the net value of securities. See Gilson & Kraakman, The Mechanisms of Market Efficiency, 70 Va. L. Rev. 549, 605 (1984). Nevertheless, shareholders face distorted incentives to bring such suits once again, because they (and their attorneys) are likely to consider only ex post net recoveries in deciding to sue, while neglecting the deterrent benefits and ex ante costs of suit.

Unlike the shareholder actions considered in text, however, value-decreasing suits against new issuers are more likely to impose costs on the issuers than on the purchasers of securities. Issuers feel the ex ante effects of distorted litigation incentives (such as higher underwriting fees and foregone deterrence benefits) before their securities are distributed; yet they cannot recoup these costs by raising securities prices because investors have many alternative investment opportunities. In theory, then, issuers should attempt to lower their cost of capital by binding the purchasers of their securities to bring suit when and only when suit is value-increasing (although any effort to do this would presumably run afoul of the relevant provisions of the securities acts, e.g., 15 U.S.C. § 77k (1990) (§11 of the 1933 Act)). Professor Alexander's study provides further discussion of the institutional context and agency problems attending suits against new issuers of securities. See Alexander, *supra* note 5.

and manager-related costs of liability. It could be adopted by statute or, with legislative leave, by amending the corporate charter. In theory, moreover, it would be easy to frame: courts would be instructed to award attorney fees to plaintiffs in shareholder suits only after determining (based on the analysis of Parts II and III) that these actions were likely to increase corporate value.⁶⁹ In principle, such a rule would attract only value increasing suits, even without screening by courts or corporate boards.

At first glance, such a plaintiff compensation rule might appear to be doomed by the difficulty of the courts' task of valuing shareholder suits. Shareholder litigation is already hard to value;⁷⁰ assessing its ex ante costs and benefits would seem to be harder still. On closer inspection, however, assessing the value of shareholder suits divides readily into component tasks that fall well within the scope of judicial competence. As an initial matter, there are two distinct grounds for awarding attorney fees under a value-based compensation rule, which arise because shareholder suits can increase corporate value by either deterring misconduct or generating net recoveries. Fee requests can therefore be analyzed sequentially.

⁶⁹In the case of a class action, the parallel threshold for a fee award would presumably be that the action was "investment value increasing" for the class members.

⁷⁰Derivative suits today must be valued after settlements and adjudications (to establish fee awards) and in passing on motions to dismiss by special litigation committees. On the difficulties of valuation in the latter context, see Seligman, *supra* note 50, at 410-414.

To simplify the analysis a court should first ask whether deterrence justifies a fee award, and only then -- if a deterrence rationale is lacking -- inquire into whether the suit's net recovery supports an award.⁷¹

1. Awarding fees on deterrence grounds

In considering whether to award fees on deterrence grounds (the first leg of the sequential analysis), a court should treat an affirmative decision to award fees as creating a judicial commitment to induce suit against similar misconduct in the future -- or, alternatively, as implementing a judicial commitment made in the past.⁷² Such a commitment would be worthwhile whenever the prospect of suit is likely to deter misconduct, since deterrence almost always increases corporate value under our analysis. Hence, to award or withhold fees on a deterrence rationale, courts need only make an up-or-down judgment about the likelihood of deterrence. Although this decision could not be made with mathematical precision, we expect

⁷¹In strict logic, a court might begin its analysis with either a suit's possible deterrent effects or its net recovery. As is discussed below, however, a finding of likely deterrent benefits does not require an explicit valuation of the suit, and is therefore somewhat less demanding than calculating the suit's net recovery

⁷²Whether a fee award creates or implements a commitment to induce suit depends on whether the courts have previously awarded fees in suits against similar misconduct. Presumably pressure to grant fees is greater when there is precedent for doing so. Against the backdrop of past fee awards, a decision to award fees again not only deters future misconduct but also pays for past deterrence and underwrites the broader credibility of judicial commitments. Cf. TAN 31 *supra* (distinguishing the benefits of making and enforcing shareholder commitments to sue).

that courts would learn over time that some types of suits -- even if uneconomic in the immediate sense that they fail to recover their costs -- ultimately result in beneficial deterrence of harmful misconduct. We presume that in evaluating a suit's deterrence prospects, a court would look chiefly to the penalties that it imposes on wrongdoers and the probability that shareholders could detect similar misconduct. Thus, settlements that impose no obvious costs on defending managers would be poor candidates for fee awards, as would be suits targeting misconduct that shareholders are inherently unlikely to detect.⁷³ By contrast, misconduct such as self-dealing that is widely known or can be discovered by close analysis of the public record (including SEC disclosure documents) is presumptively subject to detection and, therefore, to deterrence -- provided that suit

⁷³Much serious misconduct by corporate managers -- including bribery, kickbacks, and insider trading -- is inherently unlikely to be detected by shareholders acting alone. Shareholder suits involving these forms of wrongdoing often "piggyback" on governmental or internal corporate investigations. See, e.g., *Auerbach v. Bennett*, 393 N.E.2d 994 (N.Y. 1979) (derivative suit targeting corrupt practices follows internal corporate investigation). In these cases, the deterrence inquiry must ask whether the additional sanction imposed by a shareholder suit -- beyond the penalties that wrongdoers face from the original investigation -- substantially enhance the prospects for deterrence. When this seems unlikely, as when shareholder suits piggyback on criminal or SEC investigations, attorney fees can only be justified by positive net corporate recoveries. By contrast, shareholder suits against hard-to-detect misconduct may well deter misconduct (and hence merit fees on deterrence grounds) when punitive damages result or when -- in a reversal of the common pattern -- public enforcement proceedings follow in the wake of shareholder allegations.

imposes genuine penalties on the managers at fault.⁷⁴

After a judicial finding that a suit is likely to confer significant deterrent benefits, attorney fees would ordinarily follow without more. This is because the corporate gain from deterring recurrent misconduct would almost always exceed the cost of a judicial commitment to induce suit. Correlatively, in setting the amount of a plaintiff's fee award, a court would not need to value the full extent of the deterrent benefit (beyond determining that it exceeded the costs of the litigation at hand), since any fee large enough to induce suit against similar misconduct would suffice to generate the benefit. A sensible way to set fees in this case, then, would simply be to award plaintiff's attorney a reasonable return on the effort and cost required to bring suit. For this purpose, the familiar lodestar method of fee calculation (presently used to set fees in class actions for federal securities violations) would be an

⁷⁴Recall that most shareholder suits settle today, and that corporate recoveries from settlement are virtually always paid by insurers rather than defending managers. See note 28 *supra*. At first glance, requiring suits to penalize defending managers as a condition for deterrence-based fee awards might seem to discourage settlement needlessly, and to ignore the possibility that some suits deter by imposing invisible sanctions such as reputational injury. Notwithstanding these objections, however, conditioning fee awards on visible penalties makes sense for two reasons: first, it would lower litigation costs by discouraging some suits that cannot deter; and, second, it would discourage plaintiffs from dissipating the deterrent value of other suits in sweetheart settlements. Settlements would still occur under such a "visible penalty rule" when managers agreed to pay part of the settlement price or to accept an equivalent penalty. Nonetheless, this rule would significantly change settlement expectations on both sides of the corporate bar -- very much for the better, we predict.

appropriate measure of attorney fees.⁷⁵

2. Awarding fees on the basis of net recoveries

Even if a suit seemed unlikely to deter misconduct, a court would still award attorney fees under a value-based compensation rule upon finding that the suit produced a positive net recovery for the corporation. This inquiry, too, would not be burdensome for the court. A suit without deterrent value only benefits the corporation through its gross recovery, while its costs include both litigation expenses and increases in insurance or salary costs that are associated with managers' liability. Calculating the corporation's net recovery, then, is merely a matter of adjusting gross recovery downward to reflect the manager-related costs of liability and litigation expenses.

As a practical matter, the necessary adjustment of an action's gross recovery could proceed in two steps. The first step would be to subtract the manager-related costs of liability. In the world of our model (as described in Part II), salary increases, indemnification, or insurance fully offset managers' expected costs of liability. Hence, judgments against managers or their insurers should never qualify as corporate "benefits" for purposes of setting fee awards. Of course, this exclusion would be overbroad in the real world, where direct recoveries from managers are not anticipated by salary levels and,

⁷⁵see note 26 supra (explaining lodestar method of calculating attorney fees).

therefore, may be treated as true corporate benefits.⁷⁶ However, the same cannot be said for shareholder recoveries that are funded by insurers or, in cases of indemnification, by corporations themselves. A value-based compensation rule must therefore recognize that these recoveries impose real costs on corporations. In particular, as long as D & O insurance premia fairly reflect the expected payouts of insurers, the simplest way to recognize the corporate costs of liability insurance is to subtract all payments made by insurers from gross recoveries for purposes of making fee awards.⁷⁷ (In practice, this procedure would generally yield the same result as excluding all recoveries from managers and their insurers, since insurers fund most recoveries paid out in shareholder suits⁷⁸).

⁷⁶See our qualifications of the salary assumptions made in our model at TAN 28-30 supra.

⁷⁷In Professor Oesterle's phrase, corporate recoveries from insurers that are offset by increased insurance premia constitute a "farcical triangle." Oesterle, supra note 8, at 471. Although insurance premia may rise to reflect claims filed against a corporation's managers ex post, how accurately premia reflect liability risks ex ante is less certain. To the extent that premia do not reflect liability risks accurately, recoveries from insurers might indeed benefit some corporations ex post, at a commensurate cost to the entire pool of insured corporations. But the case for excluding insurance recoveries in valuing shareholder suits does not depend on how accurately insurance premia reflect firm-specific liability risks. Shareholders are unlikely to assess liability risks more accurately than insurers. Thus, when shareholders weigh insurance costs against expected recoveries ex ante, they will prefer to bar suits that cost the insurance pool more than they recover on behalf of individual corporations. Expected recoveries from these suits are more than offset by higher premia costs.

⁷⁸Even apart from the theoretical claim that salaries reflect liability ex ante, the evidence that insurers -- and not managers -- fund most recoveries graphically demonstrates that recovery

Lastly, after adjusting gross corporate recoveries to reflect insurance and indemnification costs, courts should then undertake the second step in calculating net recoveries by debiting all relevant litigation costs. These costs include not only corporate legal costs (and the expense of managers' time and effort devoted to defense) but also the cost of paying prospective fee awards to plaintiffs' attorneys. Plaintiffs' attorneys should receive fee awards (in the absence of deterrence) only if positive value remains after subtracting all litigation costs from adjusted corporate recoveries. When this condition is satisfied, the actual size of fees could be set either as a percentage of the adjusted corporate recovery or, following the lodestar formula, as a reasonable return on plaintiffs' investment in litigation.

B. Screening by Courts versus Boards

Although awarding attorney fees on the basis of a suit's actual contribution to corporate value would do much to improve the quality of shareholder litigation without more, an additional reform of the legal regime also seems advisable. Lawmakers might take a cue from existing practice by erecting a legal screen, akin to the demand requirement, at the outset of shareholder litigation. If such a screen were capably administered, it could reduce litigation costs on all sides by deflecting value-decreasing suits at an early stage -- including not only the

dollars are, for the most part, merely recycled corporate dollars. See note 28 *supra*.

frivolous suits that the demand requirement presumably excludes today, but also "meritorious" actions that happen to decrease corporate value. In particular, threshold screening might determine early on whether many suits do -- or do not -- offer prospective deterrence benefits.⁷⁹ As against these advantages, however, a value-based screen would pose the same institutional issue that is now raised by the demand requirement: Who should have final authority to screen suits, the corporate board or the trial court?

The functional argument for screening by the board -- or at least by a committee of independent directors advised by counsel -- is that such an internal procedure is likely to be cheaper and potentially better informed than judicial screening. In most respects, a board procedure would presumably resemble what boards must now do when they must consider a shareholder plaintiff's demand. The plaintiff would submit an account of the alleged misconduct together with an assessment of the value of his proposed suit. The board would then evaluate the suit itself, drawing on internal information to estimate such critical parameters as the salary cost of liability and the likelihood of

⁷⁹For example, a decisionmaker might be skeptical of complaints that failed to articulate specific allegations of misconduct or that attempted to "piggyback" on extraordinary investigations by third parties, since the wrongdoing alleged misconduct in these complaints would be presumptively difficult to detect or deter a second time. In this connection, it might be argued that Delaware's requirement that misconduct be pleaded "with specificity" in derivative actions serves to include suits with possible deterrence value as well as to exclude frivolous actions. See note 47 *supra* (Delaware's demand excused test).

detecting the kind of misconduct that is alleged. A loyal board performing such an inquiry under the terms of a strict commitment to permit only value increasing actions would at least avoid the fundamental distortions in litigation incentives set out in Part II.

By contrast, the arguments for placing the screening function in the hands of the court are much the same as those that are now employed against a strict demand requirement. First, boards are structurally biased against derivative suits and, as a consequence, would exclude valuable suits as well as value decreasing suits. Second, trial courts arguably are better placed than boards to estimate some of the parameters necessary for an assessment of litigation value including, for example, the probability that a proposed suit could succeed on the merits.⁸⁰

Beyond noting that some sort of screening, either by judges or boards, would be necessary to cull value decreasing suits, we do not express a view on which screening agent is preferable. It may well be that dividing the screening function between courts and boards, as many jurisdictions now do through the demand requirement, would be preferable to exclusive screening by either institution. To offer even an educated guess about the appropriate screening practice would require a comparative

⁸⁰As against these purported advantages of judicial screening, however, it could be argued that courts are subject to institutional biases of their own and that, whatever the balance of biases, judicial screening would be the more costly procedure by far because it would inevitably involve an adversarial hearing.

investigation of courts and boards that is beyond the scope of this article.⁸¹

C. A Further Note on the Difficulty of Valuing Suits

The reform regime that we have sketched in this Part closely parallels the one that already regulates derivative suits and might be adapted to many shareholder class actions. The only

⁸¹Note also that our proposed reforms do not preclude different measures aimed at ameliorating the agency problems in shareholder litigation, such as restructuring fee awards or even auctioning suits to the highest bidder. See, e.g., Macey & Miller, *supra* note 3; Thomas & Hanson, Auctioning Class Actions and Derivative Suits, 87 Nw. U. L. Rev. 423 (1993); Macey & Miller, Auction Class Actions and Derivative Suits: A Rejoinder, 87 Nw. U. L. Rev. 458 (1993). Our proposals do not directly address the well-known problems of attorney-shareholder and manager-shareholder conflicts of interest in shareholder litigation. See note 3 *supra* (collecting articles that document these problems). Conversely, we do address two basic incentive problems that would persist even if the traditional agency problems in shareholder litigation were resolved.

It remains to be asked, however, whether our proposals might indirectly mitigate intra-suit conflicts of interest -- by, for example, discouraging sweetheart settlements between plaintiffs' attorneys and managers. We predict that they would. As a general matter, requiring a checklist assessment of the value of suits before awarding attorney fees (as we propose) could only discourage value-decreasing settlements. Similarly, requiring managers to bear costs before assigning suits a deterrent value would discourage the premature settlement of value-increasing actions. See note 74 *supra*. Still more important, disqualifying recoveries that are ultimately funded by corporations or their insurers as a basis for fee awards would eliminate a major source of temptation in shareholder litigation -- temptation for plaintiffs' attorneys to bring frivolous litigation in order to extract easy settlements, and for managers to propose easy settlements of meritorious actions in order to avoid liability. Cf. Alexander, *supra* note 3, at 550 (the insurance and indemnification system may be the single most important factor in decoupling settlements from the merits of securities class actions). Finally, deploying all of these valuation principles not only in passing on fee awards but also, to the extent possible, in screening of suits at the outset, would save litigation costs as well as eliminate the opportunity to press for value-decreasing settlements in many cases.

real novelty in our proposal concerns the substantive standard at the core of the compensation rule and standing requirements: suits ought to be judged (and plaintiffs ought to be rewarded) on the basis of the value that they create for corporations rather than on the basis of their recoveries. As a practical matter, then, the merits of our twin proposals might seem to turn on how accurately courts, boards, and litigants can estimate the value of suits, as we have developed this concept.

But this assessment would put our proposals to too hard a test. Under our analysis, valuation is required for purposes of screening suits or awarding fees only when shareholder actions appear unlikely to deter misconduct. By definition, such suits do not confer hard-to-value deterrent benefits, and -- as we have suggested -- there is a simple method for registering their manager-related costs: namely, disqualifying payments by insurers as corporate benefits. By contrast, the important class of suits with genuine deterrent potential may not require explicit valuation at all, but only an up-or-down decision on their ability to deter. We know that this decision cannot be made with great accuracy -- perhaps not even with the level of accuracy that courts now achieve in estimating the potential recovery value of suits. Nevertheless, accuracy is not needed to justify reform. The choice is not between a more or less accurate measure of value, but between a distorted standard for evaluating shareholder suits and a true one. Surely the legal regime governing shareholder suits should not prescribe the wrong

standard, simply because the right one is hard to apply.

VII. Conclusion

Legal rules that compensate plaintiffs and their attorneys on the basis of recoveries from suits introduce a fundamental distortion in the decision to bring suit. In some cases, these rules create too weak an inducement to sue because they fail to reflect the deterrent benefits of a decision to bring suit. In other cases, these rules create too strong an incentive to sue because they fail to reflect the implicit costs, especially increases in liability insurance premia, imposed by prospective liability. At present, there is little in the legal regulation of shareholder suits to correct the distorted incentives created by plaintiff compensation rules. But law reform, in the guise of a new compensation rule and a new legal screen on shareholder suits, might do much to correct the distorted incentives that we identify.

Appendix

In this appendix, we state and analyze briefly the model of shareholder derivative suits discussed in the text (and sketch a model of shareholder control group suits in paragraph 6).

1. *Basic assumptions.* The risk-neutral manager of a corporation may decide to violate a duty and, if so, may be discovered. If he is discovered, risk-neutral shareholders may bring a shareholder suit. In a shareholder suit that succeeds, the corporation will obtain an award and the manager will lose an amount. The manager's expected net salary must equal his reservation salary (interpreted, for example, as his outside opportunity). Specifically, define the following notation.

- g = gain to the manager from violation of his duty;
- h = harm to the corporation if the manager violates his duty;
- p = probability that a violation is detected by shareholders;
- q = probability that a shareholder suit would succeed if brought;
- c_s = cost of bringing a suit;
- c_d = cost of defending against a suit;
- r = loss to the manager if he loses a suit;
- d = damage award obtained by corporation if a suit is won;
- v = value of corporation exclusive of the manager's salary, losses associated with violations of duty, and litigation costs;
- w^* = reservation salary of the manager;
- w = actual salary of the manager.

We make several assumptions and comments about these variables: (i) $g < h$, the gain to the manager from violation of a duty is less than the harm this causes to the corporation. (For instance, the manager may obtain a benefit when he orders the corporation to make a purchase that is exceeded by the loss the corporation suffers due to the purchase.) The quantity $h - g$ is the *inefficiency* created by a violation of duty. (ii) $g < r$, the gain to the manager is less than his loss if he loses a suit.

The justification for this assumption is that otherwise the manager would not be deterred from violating his duty even if he would be sued and lose with certainty. (The loss r may be interpreted as including the damage to reputation the manager suffers as well as the judgment he must pay if he loses a suit.) (iii) w plus expected gains from violations minus expected losses from losing suits just equal w^* . This is the assumption that the expected net salary equal the reservation salary.

We also assume that the object of shareholders is to maximize the net value of the corporation: the value of the corporation less any litigation expenses they themselves have to bear. To maximize net value, shareholder suit may be helpful.

2. *Effect of suit on managerial behavior and net corporate value.* Two situations are considered here: that where suit will not be brought if the manager commits a violation, and that where suit will be brought if he does so and is detected. The manager is presumed to know whether or not suits would be brought.

If shareholders will not bring suit, the manager obviously will commit a violation, so the total salary of the manager will be $w + g$. Since (by assumption (iii)) $w + g = w^*$, we have $w = w^* - g$. Hence, the value of the corporation will be

$$(1) \quad v - h - (w^* - g).$$

If shareholders will bring suits whenever the manager commits a violation and is detected, the manager will commit a violation if and only if⁸²

$$(2) \quad g > pqr.$$

If (2) does not hold, the manager will be deterred from committing a violation, so his salary will be w^* and the value of the corporation will be

$$(3) \quad v - w^*.$$

If (2) holds, the manager will commit a violation, suit will be brought with probability p and won by shareholders with probability q . Thus, the total salary of the manager will be $w + g - pqr = w^*$, so that $w = w^* - g + pqr$. Hence, the net value of the corporation will be

$$(4) \quad v - h - (w^* - g + pqr) + pqd - p(c_s + c_d).$$

The last term is explained by the fact that when suit is brought,

⁸²We do not comment on cases where the manager is indifferent for simplicity of exposition.

c_s is borne by the corporation and c_r by the shareholders.

3. *When suit increases and decreases net corporate value.* From what we have just observed, we can conclude several things. First, suit will raise net corporate value when the prospect of suit deters violations. When violations are deterred, that is, when (2) does not hold, the value of the corporation is $v - w^*$ rather than $v - h - (w^* - g) = v - w^* - (h - g)$. Thus, the increase in corporate value from deterrence equals $h - g$, the inefficiency caused by a violation. (The explanation is that when violations are deterred, the corporation prevents harm of h but has to raise the manager's salary by g , for a net gain of $h - g$.)

Second, suit also raises net corporate value even if violations are not deterred, provided that the expected recovery from suit exceeds the manager's expected loss plus total litigation costs. Specifically, suppose that (2) holds -- violations are not deterred -- and assume that net corporate value rises due to suit, that is, (4) exceeds (1). The condition that (4) exceeds (1) reduces to

$$(5) \quad qd > qr + c_r + c_s,$$

which demonstrates the claim. (The explanation is that the corporation gains qd from suit but loses not only because litigation costs must be incurred but also because the manager's salary must be raised by qr .)

Third, it follows from the preceding paragraph that suit lowers net corporate value when it does not deter violations and also fails to result in an expected recovery that exceeds the manager's expected loss plus total litigation costs.

4. *When suit will actually be brought.* We now examine when suit will actually be brought by shareholders. This depends on the incentives shareholders face at the point when they have detected a violation by a manager. We examine two cases.

(a) *Benchmark case: where shareholders pay their prorata fraction of litigation costs to bring suit.* In this regime, a shareholder owning fraction f of the corporation pays fc_r to bring suit (the other shareholders pay the balance). The shareholder obtains a benefit of $f(qd - c_s)$ from suit. Hence, a shareholder will bring suit if and only if $c_r < qd - c_s$ or, equivalently, if and only if the expected recovery exceeds total litigation costs,

$$(6) \quad qd > c_r + c_s.$$

This condition is different from those determining when suit increases net corporate value (which involve, among other

factors, deterrence and compensating adjustments to the manager's wage). In particular, *suit might not be brought when its prospect would deter violations and thus increase net corporate value.* This would occur when (6) does not hold and (2) does not hold. (That this is possible is obvious. When (2) does not hold, it is always possible to choose litigation costs high enough that (6) does not hold.) Also, *suit might be brought when this would lower net corporate value.* This would occur when (6) holds and (2) holds and (5) does not. (Suppose for example that $p = .5$, $q = .8$, $d = 300$, $r = 200$, $c_x + c_s = 200$, and $g = 150$.) If, however, *suit increases net corporate value when it does not deter violations, suit will be brought, for (5) implies (6).*

(b) *Contingency fees: where shareholders (and their lawyers) obtain a percentage α of the recovery d , but bear their litigation costs c_x .* Hence, a shareholder who owns fraction f of the corporation will bear total litigation costs of $c_x + fc_s$ and obtain an expected recovery of $q\alpha d + q(1 - \alpha)fd$, since the corporation obtains $(1 - \alpha)d$ if the suit is won. Accordingly, a shareholder will sue if and only if

$$(7) \quad q\alpha d + q(1 - \alpha)fd > c_x + fc_s.$$

This condition is, like (6), different from those determining when suit increases net corporate value. *Suit might not be brought when its prospect would deter violations and increase net corporate value.* This would occur when (7) does not hold and (2) does not hold. (That this is possible is obvious. When (2) does not hold, it is always possible to choose litigation costs high enough that (7) does not hold.) Also, *suit might be brought when this would lower net corporate value.* This would occur when (7) holds and (2) holds and (5) does not. (Suppose for example that $p = .5$, $q = .8$, $d = 300$, $r = 200$, $c_x = 40$, $c_s = 160$, $f = .01$, $g = 150$, and $\alpha = .3$.) Further, *suit might not be brought when this would raise net corporate value even though it does not deter violations.* This would occur when (7) does not hold and (2) and (5) hold. (Suppose that $p = .5$, $q = .8$, $d = 500$, $r = 180$, $c_x = 100$, $c_s = 100$, $f = .01$, $g = 150$, and $\alpha = .1$.)

5. *Remarks.* (a) One could introduce the possibility of erroneous convictions for violations into the model in the following way. Suppose that if the manager does not violate his duty, there is a probability p_e that he will be seen as having violated his duty and that he will then, if sued, be found liable with probability t . In this case (we omit details), suit will be less likely to raise corporate value, and when it does so, will raise it by a lesser degree. The reasons are as follows. First, deterrence will be diluted, for the manager will no longer definitely escape liability by not violating his duty. Second, there will be a greater frequency of suit, and thus more litigation costs generated. Third, the bringing of suits when

the manager did not commit a violation can only result in a decline in corporate value, assuming that the loss to the manager is at least equal to the recovery of the corporation.

(b) It should be clear from the logic of the analysis that there does not exist any simple scheme governing the bringing of shareholder suits -- one not taking into account the deterrence value of suits and their effect on managers' salaries -- that will result in their being brought if and only if this raises net corporate value.

6. *Shareholder suits against control groups.* The model examined above can be modified to allow study of shareholder suits against control groups rather than managers. For simplicity, suppose that there are n shareholders each holding $1/n$ of corporate value and that one randomly selected shareholder will constitute a control group with an opportunity to divert resources to itself. Let the variables be as defined before, except that here there is no manager (and thus no wage w or w^*), that g is now the diversionary gain to the control group from a violation, and that h is the harm to corporate value caused by a violation. Assume that the object of shareholders is to maximize their expected value.

Now let us sketch the analysis of this model. First, consider the effect of possible suit on control group behavior and expected shareholder value: If shareholders will not bring suit, then the control group will commit a violation. Specifically, if the control group does not commit a violation, the value of the firm will be v , so each share will be worth v/n . If the control group does commit a violation, it will obtain g for itself and cause harm h , so the share value will be $v/n - h/n - g/n$. Accordingly, the control group will commit a violation if $g + v/n - h/n - g/n > v/n$, or if $[(n-1)/n]g > h/n$, which we will assume holds. As each person has a $1/n$ chance of being in the control group and gaining g , the expected shareholder value is

$$(8) \quad (v/n - h/n - g/n) + g/n = v/n - h/n.$$

This makes sense because, although the diversion carried out by the control group is a mere transfer and does not hurt shareholders *ex ante*, it does cause a loss of corporate value of h . If shareholders will bring suits whenever the control group commits a violation and is detected, the control group may or may not be deterred (as will be described below). If the control group is deterred, the value of the firm will be v , so the share value will be v/n . If the control group is not deterred, expected shareholder value will be

$$(9) \quad v/n - h/n + pq(d - r)/n - p(c_s + c_o)/n.$$

The explanation is that the total value of the firm will be v less h (since there will be a violation) plus $pq_d - pqr$ (the firm will recover d and control group will lose r , with probability pq) minus expected litigation costs.

Next, consider when suit increases and when it decreases expected shareholder value. Expected value will be raised when the prospect of suit deters violations, for then expected value will be v/n rather than $v/n - h/n$. Suit may also raise expected value when violations are not deterred. In that case, suit raises value if (9) exceeds $v/n - h/n$, which is to say, if $qd > qr + c_\pi + c_\delta$, which is (5). The explanation is that the corporation gains qd from suit but loses not only because litigation costs must be incurred but also because the control group loses qr . If (5) does not hold and suit does not deter violations, suit will lower expected shareholder value.

Last, consider when suit will actually be brought, assuming the benchmark case, where shareholders each pay their prorata fraction of litigation costs to bring suit and benefit prorata as well. A shareholder will bring suit if and only if $c_\pi/n < (qd - c_\delta)/n$ or, equivalently, if and only if $qd > c_\pi + c_\delta$, which is (6). Now when will the prospect of suit deter? If the control group does not commit a violation, each share will be worth v/n . If the control group does commit a violation and will be sued with probability p , each share will be worth $1/n[v - h - g - p(c_\pi + c_\delta) + pqd]$; but in addition, the control group will obtain g and lose pqr . Hence, the control group will be deterred if

$$(10) \quad [(n-1)/n]g + pqd/n < pqr + p(c_\pi + c_\delta)/n + h/n.$$

It is clear that suit may not be brought when it would deter and raise expected shareholder value; that is, (6) may not hold even though (10) does hold. It is also apparent that suit might be brought when it would not raise expected value; in particular, (6) might hold even though (10) and (5) do not hold.