
SECURITIES LITIGATION AS A COORDINATION PROBLEM

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INTRODUCTION

Though Congress enacted § 10(b) of the Securities Exchange Act of 1934¹ both to compensate defrauded investors and to deter fraudulent uses of the securities markets,² many commentators have argued that the Act is justified only to the extent that it serves the latter function. The transactions costs involved in litigation render courts notoriously inefficient in compensating injured parties,³ and because diversified investors should benefit from manipulated stock prices as often as they are harmed by them, court-ordered relief is arguably unnecessary in the first instance. Moreover, because the corporate entity and its shareholders, not the

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1. 15 U.S.C. § 78j(b) (2006) (“It shall be unlawful for any person, directly or indirectly . . . to use or employ, in connection with the purchase or sale of any security . . . any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the [Securities and Exchange] Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.”).

2. See, e.g., *Randall v. Loftsgaarden*, 478 U.S. 647, 664 (1986) (reflecting a decision that was also meant to “ensure full disclosure of information,” a deterrence-related goal). The SEC enacted Rule 10b-5, 17 C.F.R. § 240.10b-5 (2007), to implement 10b-5. History surrounding the adoption of Rule 10b-5 is rather scant. The SEC drafted the rule after its lawyers learned that the president of a Boston company was issuing pessimistic statements about his company’s earnings to purchase its stock on the cheap. Milton V. Freeman, *Administrative Procedures*, 22 BUS. LAW. 891, 922 (1967). Although the Securities Act of 1933 prohibited fraudulent sales of securities, the SEC lacked a regulatory means to prosecute fraudulent purchases. To remove this “loophole,” *Employment of Manipulative and Deceptive Devices*, Exchange Act Release No. 3230, 7 Fed. Reg. 3804 (May 21, 1942), available at 1942 WL 34443, the SEC passed Rule 10b-5 under the Securities Exchange Act of 1934 with no discussion save for Commissioner Sumner Pike’s question, “Well, we are against fraud, aren’t we?” Freeman, *supra*, at 922.

3. See STEVEN SHAVELL, *FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW* 281 (2004) (concluding the administrative costs of settled and litigated claims approach or exceed the amounts that victims receive).

culpable individuals, generally absorb the vast majority of costs associated with suits, verdicts, and settlements, securities litigation produces more redistribution than restitution: shareholders who happen to avoid losses from manipulated stock prices subsidize those who are less fortunate.⁴

The deterrence rationale, however, is not so easily dismissed. Though securities fraud may not directly harm investors, it creates undesirable systemic effects in the form of externalities. Price manipulation, for example, has clear, detrimental effects on the ways in which securities markets allocate capital. And prominent, Enron-like instances of fraud may reduce investors' confidence in the market⁵ and damage the efficiency of incentive structures that often govern takeovers and executive compensation.⁶ The desirability of the current system of securities regulation thus depends on whether the incremental deterrent of § 10(b)'s private right of action exceeds the costs of such litigation on businesses, which include not only losses associated with defending against and settling frivolous litigation, but also the disruption of normal business practices.

Economic theory provides a starting point in determining whether the deterrent effect of litigation is sufficient to render private enforcement of § 10(b) desirable. Theoretically, the optimal penalty for a disfavored activity should equal the social harm of that behavior discounted by its probability of detection.⁷ When penalties—broadly conceived to include civil

4. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, *Optimal Damages in Securities Cases*, 52 U. CHI. L. REV. 611, 639 (1985) (describing the problem of “matched gains and losses,” in which “[s]ome investors gain, others lose, and the gains and losses are approximately equal”). It is important to note, however, these reforms are not necessarily desirable with respect to 1933 Act litigation; in the context of IPOs, the “winner” from an artificially enhanced stock price is the corporation itself rather than innocent shareholders.

5. But see Lynn A. Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH. L. REV. 613, 637 (1988) (proposing that stock prices play less of a role in allocating capital than commonly believed); Lawrence H. Summers, *Does the Stock Market Rationally Reflect Fundamental Values?*, 41 J. FIN. 591, 592 (1986) (questioning theoretical and empirical underpinnings of the Efficient Markets Hypothesis).

6. Cf. John C. Coffee, Jr., *Reforming the Securities Class Action: An Essay on Deterrence and its Implementation*, 106 COLUM. L. REV. 1534, 1565-66 (2006) (discussing misallocation of capital). Some scholars also argue that securities litigation itself creates positive externalities when it acts “as an ex-post mechanism to discipline managers of companies with relatively weak ex-ante corporate governance control.” Stephen J. Choi, *The Evidence on Securities Class Actions*, 57 VAND. L. REV. 1465, 1484 (2004). Other scholars, however, contend that enhancing shareholder rights so that shareholders themselves act as a greater check on management can achieve the same effect. See, e.g., Lucian A. Bebchuk, *Letting Shareholders Set the Rules*, 119 HARV. L. REV. 1784, 1784-85 (2006) (advocating providing shareholders with power to initiate “rules-of-the-game decisions”).

7. See Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968) (applying an economic analysis example to determine optimal resource

damages, criminal sanctions, and various other negative repercussions—are calibrated to reach this value, rational actors will lack incentives to engage in the disfavored activity and will efficaciously “internalize the costs as well as the benefits of their actions.”⁸ Overly lenient penalties result in excessive securities fraud, while excessive penalties will over-deter, perhaps discouraging socially-beneficial activity like the disclosure of business-related information.

A number of recent cases and reforms reflect an attempt to tweak the variables in this equation to create a more efficient system of securities regulation—to produce an optimal penalty by decreasing the size of awards or the ease with which private litigants may prosecute (or “detect”) 10b-5 claims. One example is *Stoneridge Investment Partners, LLC v. Scientific-Atlanta, Inc.*,⁹ in which the Court held that Scientific-Atlanta and Motorola were not secondarily liable for misrepresentations that Charter made to its investors.¹⁰ In effectively eliminating scheme liability,¹¹ *Stoneridge* can be seen as reducing the expected “penalty” for securities fraud by shaping the doctrine to limit the prosecution, or detection, of securities fraud. *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*,¹² which held that competing inferences must be taken into account when determining whether the plaintiff has adequately pled scienter, functions similarly.¹³ By raising the pleading standards, the Court risked leaving some additional amount of securities fraud unpunished (and therefore “undetected”).¹⁴

allocation in crime prevention); Coffee, *supra* note 6, at 1565–66 (noting the difficulties in determining social harm).

8. Janet Cooper Alexander, *Rethinking Damages in Securities Class Actions*, 48 STAN. L. REV. 1487, 1493 (1996). Section 28(a) of the Exchange Act prohibits punitive damages. See *Green v. Wolf Corp.*, 406 F.2d 291, 302 (2d Cir. 1968) (“[P]unitive damages may not be recovered in actions under Rule 10b-5 and § 10(b) of the 1934 Act because § 28(a) of that act limits recovery in private suits for damages to ‘actual damages.’” (citation omitted)). Thus, compensatory damages alone must satisfy this requirement to produce an optimal penalty. This task seems impossible, as compensatory damages are not adjusted to reflect the probability of detection and are necessarily smaller than net social loss because they do not account for externalities. But such an argument would also presume that investor losses proxy damages, which is inaccurate. See *infra* Part I.A (demonstrating that damages generally are larger than investor losses).

9. 128 S. Ct. 761 (2008).

10. *Id.* at 769.

11. Whether *Stoneridge* actually ended the scheme liability debate is questionable. Instead of extending the categorical rejection of aiding and abetting liability under Rule 10b-5 found in *Central Bank of Denver v. First Interstate Bank of Denver*, 511 U.S. 164 (1994), the *Stoneridge* Court rejected liability on the basis that the plaintiff investors’ reliance on Scientific-Atlanta and Motorola’s actions was “too remote.” 128 S. Ct. at 769. This “remoteness” question is one of fact, and a number of similar cases consequently might make their way to juries, forcing potentially coercive settlements.

12. 127 S. Ct. 2499 (2007).

13. *Id.* at 2505.

14. Given that the Private Securities Litigation Reform Act (PSLRA) stays discovery

Another approach can be seen in § 21D(e) of the PSLRA, which caps per-share damages at the average trading price during the “ninety-day period beginning on the date on which the information correcting the misstatement or omission that is the basis for the action is disseminated to the market.”¹⁵ This provision, which aims to prevent “excessive” recoveries in situations where stock prices overreact to the disclosure of fraud, reduces the size of damages in any given suit, and thereby decreases the expected penalty for engaging in securities fraud.

These approaches are, however, fundamentally inadequate in that they use a measure of damages (losses to shareholders from stock drops) unrelated to the actual social harm of securities fraud (capital misallocation). This process is flawed to the extent that courts are playing with variables that defy quantification and comparison. Though they wax poetic about the vexatious nature of class actions,¹⁶ courts and policymakers have little empirical basis to conclude, for example, that securities class actions over-deter when they include secondarily-involved entities as defendants or are filed without strong and detailed scienter allegations.

Given these difficulties, this Comment attempts to use market mechanisms to gain better insight into the design of optimal legal structures. To proceed in this direction, it views securities litigation in terms of contract, that is, by asking what shareholders might agree to ex ante with respect to securities fraud. Shareholders should have the best incentives to minimize net social losses from such fraud, as they experience harm from both the inefficiencies that flow from capital misallocation and the detrimental effects of over-deterrence on business. In the end, this approach is similarly indeterminate because shareholders, like courts,

while a motion to dismiss is pending, Private Securities Litigation Reform Act of 1995, 15 U.S.C. 78u-4(b)(3)(B) (2000), plaintiffs may be unable to uncover evidence of securities fraud in cases where they otherwise would have been able to do so. Congressional debates over the PSLRA not surprisingly characterized the legislation as a means to reduce frivolous lawsuits. See Choi, *supra* note 6, at 1477–99 (surveying academic studies that demonstrate the difficulty in measuring whether a lawsuit is frivolous or meritorious); Richard M. Phillips & Gilbert C. Miller, *The Private Securities Litigation Reform Act of 1995: Rebalancing Litigation Risks and Rewards for Class Action Plaintiffs, Defendants and Lawyers*, 51 BUS. LAW. 1009, 1018-27 (1996) (discussing legislative history of the PSLRA).

15. 15 U.S.C. § 78u-4(e) (2006).

16. See, e.g., *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Dabit*, 547 U.S. 71, 86 (2006) (describing the special risk of “vexatious litigation” inherent in 10b-5 class actions); see also *Cent. Bank of Denver*, 511 U.S. at 189 (discussing the “ripple effects” of such litigation); *Santa Fe Indus., Inc. v. Green*, 430 U.S. 462, 478-79 (1977) (adding further that federal securities laws could interfere with state corporate law); *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 739 (1975) (“There has been widespread recognition that litigation under Rule 10b-5 presents a danger of vexatiousness different in degree and in kind from that which accompanies litigation in general.”).

cannot determine accurately the magnitude of relevant externalities, but it nevertheless provides an alternate framework to evaluate the current scheme of privately (and publicly) enforcing § 10(b). Ironically, this approach suggests that, while securities class actions are intended to protect investors, shareholders would likely outlaw their use were they able to collaborate *ex ante*.

The remainder of this Comment proceeds as follows. Part I discusses shareholders' incentives to bring suit for violations of Rule 10b-5. Under an approach that does not consider the negative externalities caused by securities fraud, shareholders would be better off if they agreed not to file securities class actions. Such cooperation, however, will never materialize because of hold-out problems, and the resulting scenario thus parallels the basic prisoners' dilemma. Part II reintroduces the consideration of deterrence, and concludes that, despite the presence of serious externalities to securities fraud, current doctrine may very well be undesirably harsh and result in over-deterrence. Part III examines current judicial reactions to the shortcomings of securities litigation and presents proposals for reform. These proposals are informed by the inefficiency that shareholder coordination problems produce and attempt to generate law that facilitates the optimal level of enforcement. In particular, Part III argues that policymakers should replace Rule 10b-5's private right of action with a more vigorous public enforcement regime, or facilitate shareholder pre-commitment strategies. Part IV briefly concludes.

I. SHAREHOLDERS' INCENTIVES TO SUE

This Part examines diversified shareholders' incentives to bring securities class actions to address violations of the 1934 Act. It assumes that shareholders are self-interested and rational,¹⁷ and does not consider the negative externalities on capital allocation and incentive mechanisms associated with securities fraud. Although the latter assumption renders the discussion incomplete, it is not unrealistic in that individual shareholders are myopic and unable to account for externalities in their decision-making.¹⁸

17. *But see* Robert Prentice, *Whither Securities Regulation? Some Behavioral Observations Regarding Proposals for Its Future*, 51 DUKE L.J. 1397, 1432 (2002) (criticizing rational actor models as applied to institutional investors); Stephen J. Choi & Adam C. Pritchard, *Behavioral Economics and the SEC 7-13* (Univ. of Cal., Berkeley Sch. of Law Pub. Law & Legal Theory Research Paper No. 115, 2003), available at <http://ssrn.com/abstract=500203> (discussing various investor biases that cause irrational behavior, such as availability bias, hindsight bias, and the endowment effect).

18. *See generally* SANJAI BHAGAT & RICHARD H. JEFFERIS, JR., *THE ECONOMETRICS OF CORPORATE GOVERNANCE STUDIES* 24 (2005) (comparing the greater influence and information access of large shareholders to the passivity and myopia of small shareholders).

Acting individually, shareholders have overwhelming incentives to file suit in response to stock drops; even if diversification makes their recovery undesirable in the long run, shareholders rationally will want to recover as much as possible in the short term. But while shareholders' individual incentives favor suit in all circumstances, their collective interests may differ. This Part analyzes these divergences, which inform a quasi-contractual analysis of shareholder litigation—that is, an analysis of how shareholders would craft § 10(b) enforcement if they were able to negotiate collectively *ex ante*. Subpart A shows that, because stock price manipulation should benefit such investors as often as it harms them, the private right of action under § 10(b) lacks a compensatory rationale.¹⁹ Subpart B then asks whether shareholders would still bring securities class actions if they were able to contract as a group. It concludes that investors are subject to a classic prisoners' dilemma: externalities excluded, shareholders would be better off if they contracted to prohibit Rule 10b-5 suits, but such an outcome will never emerge because of coordination problems and hold-outs in particular.

A. *Compensatory Rationales for Shareholder Litigation*

Unlike traditional torts such as battery or intentional infliction of emotional distress, securities fraud does not by itself produce direct social harm.²⁰ Every transaction that damages an investor as a result of a misrepresentation or omission will produce a windfall of equal value to the opposing party in the transaction.²¹ Consequently, and as many scholars have noted, individual and net social harms that exclude externalities approximate zero.²² Victims of securities fraud, unlike traditional tort

19. At best, then, § 10(b) operates to create private attorneys general to enforce the securities laws, although the damages it generates are generally much larger than penalties imposed by similar schemes. See Cornerstone Research, 2007: A Year in Review 14–15 (2008), available at <http://securities.cornerstone.com/pdfs/YIR2007.pdf> (comparing the size and prevalence of settlements and verdicts across securities class actions).

20. A number of courts have noted the dissimilarities between securities fraud and the early torts from which its elements derive. See, e.g., *Blue Chip Stamps*, 421 U.S. at 744–45 (“[T]he typical fact situation in which the classic tort of misrepresentation and deceit evolved was light years away from the world of commercial transactions to which Rule 10b-5 is applicable In today’s universe of transactions governed by the 1934 Act, privity of dealing or even personal contact between potential defendant and potential plaintiff is the exception and not the rule.”).

21. Easterbrook & Fischel, *supra* note 4, at 639–40.

22. See, e.g., Coffee, *supra* note 6, at 1535–36 (“All this rhetoric, however, misses the fundamental problem: As presently constituted, securities class actions produce wealth transfers among shareholders that neither compensate nor deter.”); see also Alexander, *supra* note 8, at 1496 (“The net social cost, as measured solely by trading gains and losses, arguably is zero.”).

plaintiffs, can protect themselves if they diversify their investments such that they are as likely to receive a windfall as a loss.²³ In the long-run, a fully-diversified investor should benefit if he or she purchases at a normal price and then sells at an inflated price as often as he or she is damaged by engaging in the opposite transaction.

Moreover, because “individual defendants almost never contribute personally to settlements,”²⁴ securities litigation amounts to an expensive redistribution of wealth among innocent shareholders. Judge Henry Friendly recognized this problem in *SEC v. Texas Gulf Sulphur Co.*²⁵ when he noted that expansive 10b-5 liability can “lead to large judgments, payable in the last analysis by innocent investors, for the benefit of speculators and their lawyers.”²⁶ The court in *In re California Micro Devices Securities Litigation*²⁷ concluded similarly when it rejected a proposed settlement that would have compensated putative class members by issuing new shares. Quoting a letter from Professor Joseph Grundfest, Judge Walker noted that the agreement would “dilute the equity interests” of current shareholders by a percentage equal to that awarded to the plaintiffs.²⁸ Accordingly, “with respect to such shareholders the proposed settlement [would] charge [an attorney’s] fee of 20.5 percent for shifting economic value from one pocket to the other.”²⁹ Regardless of whether a settlement awards shares or money damages, the same deficiency is present in each instance: shareholders end up footing the bill.

This circular, redistributive function both weakens the deterrent effect of securities litigation³⁰ and also creates a system that resembles an inefficient form of investors’ insurance.³¹ While the costs of

23. See, e.g., Alexander, *supra* note 8, at 1502 (“An investor who is completely diversified will be fully compensated for its trading losses that are due to securities fraud by windfalls on other transactions. Such investors have no need for further compensation obtained through litigation.”).

24. *Id.* at 1499; see Bernard Black, Brian Cheffins & Michael Klausner, *Outside Director Liability*, 58 STAN. L. REV. 1055 (2006) (discussing the frequency with which courts tend to hold outside directors liable in securities litigation).

25. 401 F.2d 833, 867 (2d Cir. 1968).

26. *Id.*

27. 168 F.R.D. 257 (N.D. Cal. 1996).

28. *Id.* at 271.

29. *Id.*; see Alexander, *supra* note 8, at 1504–05 (noting that shareholders in *California Micro Devices* objected to the settlement because it did not require officers or directors to contribute); cf. G. Chin Chao, *Securities Class Actions and Due Process*, 1996 COLUM. BUS. L. REV. 547, 548–49 (1996) (discussing several instances in which courts have rejected class settlements).

30. See *infra* Part I.B (discussing shareholder coordination problems).

31. The Court has noted frequently that the purpose of 10b-5 is “not to provide investors with broad insurance against market losses, but to protect them against those economic losses that misrepresentations actually cause.” *Dura Pharms., Inc. v. Broudo*, 544 U.S. 336, 345 (2005); see also *Basic v. Levinson*, 485 U.S. 224, 252 (1988) (White, J.,

diversification are relatively low, if existent, the transactions costs required to compensate “damaged” investors through the legal system are quite high. Professor Richard Booth, for example, estimates that the “deadweight loss” from “attorney fees and other expenses . . . average[s] about 20 percent of awards.”³² But this number is likely to dramatically underestimate actual costs. Transactions costs include not only law firms’ increasing fee requests (the plaintiffs’ lawyers in the Enron litigation recently requested \$688 million in fees)³³ and the disruption that securities litigation creates for businesses,³⁴ but also the tax dollars that the legal system requires to operate and the costs associated with the delivery of awards.³⁵ Professor Steven Shavell estimates that “administrative costs, averaged over settled and litigated claims, approach or exceed the amounts received by victims. That is, for every dollar received by a victim, a dollar or more is spent delivering the dollar to him.”³⁶ Rule 10b-5 class actions are unlikely to be an exception to this reality.

dissenting) (arguing that Rule 10b-5 should not be an insurance policy for investors); *AUSA Life Ins. Co. v. Ernst & Young*, 206 F.3d 202, 234 (2d Cir. 2000) (“The securities laws are, of course, not an insurance policy against all losses by investors”); *Chemical Bank v. Arthur Andersen & Co.*, 726 F.2d 930, 943 (2d Cir. 1984) (asserting that Rule 10b-5 aims to ensure that buyers actually receive what they believe they are buying, and to prevent buyer deception from short-changing sellers); *Huddleston v. Herman & MacLean*, 640 F.2d 534, 549 (5th Cir. 1981) (insisting that, without a requirement to show causation, Rule 10b-5 would simply insure shares bought in reliance upon material misrepresentations). However, the court’s logic is questionable when considering that securities fraud does not damage diversified investors. Although doctrines like causation and reliance limit the number of instances that may activate 10b-5’s compensatory function, the doctrine inherently acts as an insurer against short-term losses in situations where it applies.

32. Richard A. Booth, *Taking Certification Seriously—Why There Is No Such Thing as an Adequate Representative in a Securities Fraud Class Action* (Villanova Law Pub. Law & Legal Theory, Working Paper Series, Paper No. 2008-07, 2007), available at <http://ssrn.com/abstract=1026768>.

33. See Kristen Hays, *Fees for Law Firm Debated*, HOUS. CHRON., Mar. 1, 2008, at 3 (reporting the \$336 million fee award in the WorldCom case).

34. See Marilyn F. Johnson, Karen K. Nelson & A.C. Pritchard, *In re Silicon Graphics Inc.: Shareholder Wealth Effects Resulting from the Interpretation of the Private Securities Litigation Reform Act’s Pleading Standard*, 73 S. CAL. L. REV. 773, 783 (2000) (“Beyond the cost in executives’ time, the mere existence of the class action may disrupt relationships with suppliers and customers, who may be somewhat leery of dealing with a party accused of fraud. The Supreme Court has recognized that securities fraud suits pose ‘the threat of extensive discovery and disruption of normal business activities.’”) (quoting *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 742–43 (1975)).

35. Indeed, Professor Alexander predicts that, in some cases, as much as half of the value of a settlement may “drop[] on the floor for lawyers to pick up.” Alexander, *supra* note 8, at 1503.

36. SHAVELL, *supra* note 3, at 281.

B. Shareholder Coordination Problems

If securities class actions are simply a form of redistribution with transactions costs conceivably as high as 50%,³⁷ then why are Americans so litigious? Given that diversified, repeat investors will gain from securities litigation only as often as they lose, why do such investors still bring suits?

In *California Micro Devices*, the Northern District of California rejected a proposed settlement that would have issued equity interests to the plaintiff class, noting that “at some point a settlement . . . will become a net loss for equity class members, even if they participate fully in [it], since a considerable portion of the settlement proceeds will be paid to class counsel, to say nothing of the fees paid to defense counsel.”³⁸ In other words, class members who still held equity in the defendant corporation actually might have lost from settlements, if the proportionate costs of the settlement or verdict to the corporation—which includes monies paid to the plaintiff class, attorney’s fees, and other costs that stem from the disruptive effect of litigation on business practices—diluted the value of their equity interests in the corporation. Although *California Micro Devices* specified the aforementioned argument to equity-holding class members only, the argument easily extrapolates to shareholders as a whole. Accounting for diversification has the same effect as assuming that every shareholder holds equity in the affected corporation; diversification, by definition, makes shareholders as likely to “pay” a settlement as they are to benefit from it. In a letter submitted on behalf of Bank of America and Wells Fargo—two class members that opposed the settlement in *California Micro Devices*—Professor Grundfest explained this effect and noted why plaintiffs might have supported a sub-optimal settlement:

While a member of the class may today benefit from a settlement, the same investor may tomorrow find herself diluted in another lawsuit when she is not a member of the plaintiff class. *In the aggregate*, shareholders might rationally prefer to reject all such settlements, and thereby save the attorneys’ fees generated by the transfer of assets from one pocket to another. However, once such a settlement is offered, the only rational shareholder response may be to accept the proposed settlement because shareholders facing an opportunity to collect a real and present settlement cannot bind shareholders facing analogous settlements in cases yet to be filed to reject those proposed settlements. The settlement proposal facing shareholders in this proceeding may

37. *See id.* (arguing that administrative costs threaten to consume victims’ damages awards).

38. *In re California Micro Devices Sec. Litig.*, 168 F.R.D. 257, 272 (N.D. Cal. 1996).

thus create a form of “prisoners dilemma” in which the rational non-cooperative response is to accept the settlement, whereas the individually and socially superior cooperative result would be to reject it.³⁹

Professor Grundfest’s articulation of the prisoners’ dilemma offers one explanation for the frequency of securities litigation. Even if it is in both parties’ best interests not to sue, each party’s dominant strategy is to maximize its own short-term recovery through a suit.⁴⁰

A brief example helps explain the workings of this dilemma in a more generalized context.⁴¹ Assume that a group of investors, A, owns all of company X’s stock, 100 shares overall. At point 1, assume that X releases fraudulent earnings estimates that cause its stock price to double from \$10 a share to \$20 a share. At point 2, A sells 10 shares to B, another group of investors, at this inflated price. At point 3, X releases a corrective

39. *Id.* at 271 (emphasis in original).

40. Judge Easterbrook provides the following classic explanation of the prisoners’ dilemma:

Two prisoners, unable to confer with one another, must decide whether to take the prosecutor’s offer: confess, inculcate the other, and serve a year in jail, or keep silent and serve five years. If the prisoners could make a (binding) bargain with each other, they would keep silent and both would go free. But they can’t communicate, and each fears that the other will talk. So both confess.

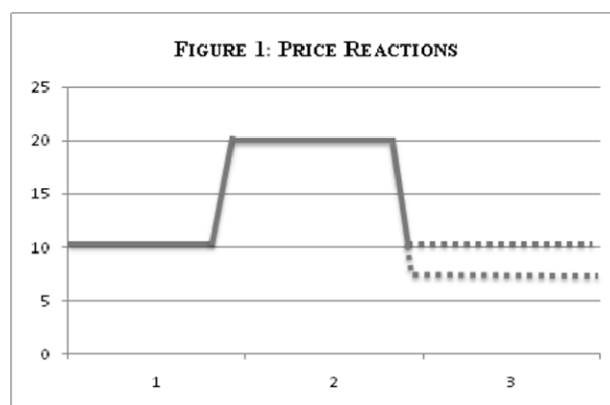
Page v. United States, 884 F.2d 300, 301 (7th Cir. 1989). Another example of the prisoners’ dilemma uses values to demonstrate how the dilemma leads to non-optimal outcomes. PETER C. ORDESHOOK, *GAME THEORY AND POLITICAL THEORY: AN INTRODUCTION* 206–08 (Cambridge Univ. Press 1986). All two-person prisoners’ dilemmas share three defining characteristics:

(1) [E]ach person has a dominant strategy; (2) if each person uses his dominant strategy, then the final outcome is Pareto-inferior, in that both persons can find some other outcome that they jointly and unanimously prefer; and (3) that their strategies are dominant means that even if the players can communicate beforehand and agree to avoid the Pareto-inferior outcome, if they cannot somehow make a binding agreement, then each person ultimately will defect from it.

Id. at 207. Although the previous example may seem stylized, “[t]he prisoners’ dilemma is a powerful model of politics, and people have used it to gain further insights into political processes, including wars, the formation and maintenance of interest groups as well as their failure to form or be maintained, and political participation.” *Id.* at 220–21; *see also id.* at 221–33 (modeling those contexts as the prisoners’ dilemma). Courts have used this theoretic perspective to shed light on situations that range from cigarette advertising, *see Schwab v. Philip Morris USA, Inc.*, 449 F. Supp. 2d 992 (E.D.N.Y. 2006) (involving claims that a cigarette manufacturer falsely advertised “light” cigarettes as safer), to tender offers; *see also Minstar Acquiring Corp. v. AMF, Inc.*, 621 F. Supp. 1252 (S.D.N.Y. 1985) (involving a corporation that, as a way to deter hostile tender offers, planned to take defensive measures that would seriously harm the company if faced with an unfriendly bid).

41. *See infra* app. I (illustrating the prisoners’ dilemma algebraically).

disclosure that causes the stock price to return to \$10 a share. B has thus lost \$100, so it agrees to pay an attorney a 30% contingency fee and announces that it will file a class action under Rule 10b-5.



The price of X decreases to \$9 a share after the market impounds this information into the stock price. Figure 1 reflects these price changes. The price decline from \$10 to \$9 reflects a pro rata drop in market capitalization equal to the value of B's lawsuit (\$100). Empirical research supports the validity of the assumption that stock prices fall in response to securities litigation because shareholders end up footing the bill.⁴² The magnitude of the drop, however, is difficult to ascertain and depends on the market's perception of multiple factors, such as the size of the claim, the likelihood of its success, costs to the business that must respond to the litigation, and attorney's fees.⁴³ An increase in the magnitude of the price decline does not alter the outcome of the game.⁴⁴

B has two options: sue or not sue. Table 1 shows the payouts to A

42. Such a reaction is predictable. See Alexander, *supra* note 8, at 1525 (“[A] firm’s settlement payment reduces the value of all outstanding shares pro rata.”); Choi, *supra* note 6, at 1501 (discussing studies of price declines in response to securities class actions); Coffee, *supra* note 6, at 1537 (“This explanation, that the burden of securities legislation falls perversely on the victim, also better explains those stock price event studies that report that the subject company’s stock price typically falls when a securities class action is filed.”); see also *supra* Part I.A (discussing the redistributive effects and transactions costs that accompany securities litigation).

43. See Booth, *supra* note 32, at 3 (“[T]he prospect of payout by the defendant company causes its stock price to fall more than it otherwise would—even in a perfectly efficient market—and triggers a positive feedback mechanism that has the effect of magnifying the potential payout.”).

44. See *infra* app. I (demonstrating the opposite result—that increasing the magnitude of the price drop intensifies the prisoners’ dilemma).

and B based on B's decision. If B sues, A ends up with 90 shares valued at \$9 each and worth \$810 total, while B gets 10 shares worth \$90 total and a lawsuit worth \$70 (\$100 in damages, but with a 30% contingency fee). If B declines to sue, the stock price remains at \$10 and the market will not discount the price of X's shares because it does not anticipate a suit. In such a situation, A retains 90 shares worth \$10 each, and B has 10 shares worth \$100 total, but no lawsuit. Under these facts, B obviously will sue, as doing so increases his payout by \$60.

	A	B
B Sues	\$810	\$160
B Does not Sue	\$900	\$100

Does accounting for diversification change this result? Assume that, just as A owned the entirety of X and sold shares to B after X misrepresented its earnings estimates, B owns the entirety of a second company, Y, and does the same to A. That is, B sells shares of Y to A after Y materially misrepresented its earnings to the market. Assume that, like X, Y has 100 outstanding shares worth \$10 each, and that Y also misrepresents its earnings such that the price of its stock increases to \$20. B then sells 10 shares to A at this price and, after Y restates its earnings, A has the option to file a lawsuit. Given that this example models perfect diversification, the payouts are the same as shown in Table 1, although the parties are reversed. Table 2 reflects the outcome.

	A	B
A Sues	\$160	\$810
A Does not Sue	\$100	\$900

Table 3 displays the result when these two situations are combined, that is, when both A and B have the option to sue. If both parties sue, then each will receive the payout of suing (\$160) and owning shares of a company being sued (\$810), for a total of \$970. If one sues but the other does not, the suing company will receive \$1060 in total. This payout is higher than if both sue. For instance, if A sued but B did not, then A's 90 X shares would remain at \$10 per share instead of \$9 per share; because B is not suing, X's stock is not affected beyond its return to a non-inflated price. Finally, if neither party sues, each will have \$1000. In that instance, A would have 10 shares in Y worth \$10 each and 90 shares in X worth \$10

each, while B would have the same total amount with the opposite distribution of shares.

	B Sues	B Does Not Sue
A Sues	(970, 970)	(1060, 910)
A Does Not Sue	(910, 1060)	(1000, 1000)

Table 3 clearly demonstrates the dilemma. Although the optimal outcome for the two parties is for neither to sue (this produces \$2000 of value, \$30 more than if one of the two parties sued and \$60 more than if both parties sued), both A and B's dominant strategy is to sue. A's best strategy is to sue and to hope that B will not reciprocate, and vice-versa.

The two parties might be able to solve this dilemma by communicating, but this likely is impossible for modern shareholders, who are often so dispersed that communication is prohibitively expensive. And even if shareholders could express to each other a desire to avoid suit, the size of the class and the possibility of hold-outs would make consummating an enforceable arrangement unlikely. As a result, shareholders resemble the classic, isolated prisoners in the original dilemma, and, as in that game, the outcome of securities litigation is thus Pareto-inferior.

By no means does the prisoners' dilemma describe perfectly the real world of securities litigation. Most importantly, the temporal condition is only imperfectly satisfied. Unlike two segregated prisoners subject to interrogation, shareholders accrue 10b-5 claims and thus face decisions to sue at different times.⁴⁵ (The impossibility of cooperation or coordination among shareholders, however, mitigates this imperfection.)⁴⁶ Still, the previous analysis shows that shareholders might desire a world without securities litigation, but such an outcome will never emerge. Thus, this

45. Some scholars attempt to differentiate this example due to the lack of formalized institutional constraints. See Daniel H. Cole & Peter Z. Grossman, *Institutions Matter! Why the Herder Problem is Not a Prisoners' Dilemma*, 66 THEORY & DECISION, (forthcoming 2009), available at <http://ssrn.com/abstract=1114541> (arguing that institutional impediments to communication and cooperation in the standard Prisoners' Dilemma ensure a dominant strategy of defection, while these circumstances are absent in the Herder Problem). For a caution against excessive use of the prisoners' dilemmas to model social behavior, see also Martin Shubik, *Game Theory, Behavior, and the Paradox of the Prisoners' Dilemma: Three Solutions*, 14 J. CONFLICT RESOL. 181, 181 (1970) ("The very simplicity of this game is a danger. Analogies [sic] between it and human affairs are best employed to study their inadequacies and to pinpoint what has been left out rather than to claim how much of the world can be packed into a 2 x 2 matrix.").

46. See generally Frank H. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89, 98-101 (1985) (discussing shareholder coordination and incentive problems).

analysis provides insight into a collective action problem⁴⁷ that plagues securities litigation: even if a critical mass of investors stopped suing, the minority would still have incentives to defect and reap the profits of suit. Shareholders who have already accrued a right of action against a company for a 10b-5 violation have incentives to sue and hope that their counterparties refrain from doing the same. But even then, shareholders realistically cannot bind themselves to any particular solution. Contractual agreements between shareholders as a whole are obviously infeasible because of collective action problems and the extreme transactions costs that would accompany an effort to organize and negotiate collectively.⁴⁸

II. MEASURING SOCIAL OPTIMALITY: CONSIDERATION OF EXTERNALITIES

Although shareholder coordination is impossible, the law arguably ought to approximate the bargains that society would strike were “all [its] members . . . somehow [to] be assembled.”⁴⁹ Hypothetically speaking, if investors could execute a fully-specified contract about when and to what extent they would bring securities class actions, to what terms would they agree?⁵⁰ The *California Micro Devices* court noted that, viewed *ex ante*,

47. See MICHAEL TAYLOR, *THE POSSIBILITY OF COOPERATION* 3 (Cambridge Univ. Press 1987) (defining collective action problems as inclusive of prisoners’ dilemma games and related to situations where “rational egoists are unlikely to succeed in cooperating to promote their common interests”).

48. Cf. Jonathan R. Macey & Geoffrey P. Miller, *Good Finance, Bad Economics: An Analysis of Fraud-on-the-Market Theory*, 42 STAN. L. REV. 1059, 1068-69 (1990) (“This analytic method often is described as the ‘hypothetical bargain’ approach. Under this approach . . . courts would evaluate whether the managers’ actions were consistent with the terms of a hypothetical fully specified, contingent contract that informed, value-maximizing investors would have agreed to *ex ante*.”). For a discussion of the hypothetical bargaining approach in relation to opting-out of fiduciary duties and other issues of corporate law, compare Jonathan R. Macey, *Courts and Corporations: A Comment on Coffee*, 89 COLUM. L. REV. 1692 (1989) (defending the *ex ante* contracting approach) with John C. Coffee, *The Mandatory/Enabling Balance in Corporate Law: An Essay on the Judicial Role*, 89 COLUM. L. REV. 1618, 1624–25, 1679 (1989) (critiquing the hypothetical bargaining approach and noting that it “invites the court to engage in an extraordinary range of judicial speculations about what maximizes shareholder value”).

49. Richard Posner, *Epstein’s Tort Theory: A Critique*, 8 J. LEGAL STUD. 457, 460 (1979) (discussing whether society would impose *ex ante* a duty to rescue if such contracts were possible).

50. The answer to this question partly depends on assumptions about the participants. Research in behavioral economics suggests that “[p]eople tend to focus on what is immediately before them, ignoring secondary effects that they could easily imagine.” Jonathan Baron & Edward J. McCaffery, *Starving the Beast: The Political Psychology of Budget Deficits*, in FISCAL CHALLENGES: AN INTERDISCIPLINARY APPROACH TO BUDGET POLICY 221, 224 (Elizabeth Garrett, Elizabeth A. Graddy & Howell E. Jackson, eds., 2008). Thus, the mass of shareholders might ignore long-term problems, such as the

repeat investors should *not* necessarily want to maximize their recovery in any given case:

When an institutional investor's transactions are viewed in the aggregate, the institutional or repeat investor can be seen as an equity shareholder in the markets as a whole, and accordingly can be expected to value a settlement for its effect on the larger market. Given this longer-term perspective, it seems likely that an institutional investor's first priority will not be to maximize recovery in any given case, since the recovery maximized in one case may simply be lost in a settlement paid out by a company in which the institution owns shares in another case.⁵¹

The court's argument, that institutional investors will demand settlements only to the extent necessary to deter fraud, presents some interesting questions. Should the court have limited its reasoning to institutional investors when "the most popular mutual fund in the world" is an index of the S&P 500?⁵² If common investors diversify, would they also litigate only to the extent that deterrence requires? What would the court make of the fact that so many institutional investors fail to bring claims at all?⁵³ Are such actors implicitly concluding that such litigation does not produce any non-compensatory benefit?

This Part attempts to shed some light on the question of whether positive externalities to suits might justify the private enforcement of § 10(b). Subpart A briefly considers whether there might be benefits associated with compensation, and Subpart B discusses whether deterrence justifies securities litigation as currently practiced or otherwise. Although a definitive conclusion as to whether the deterrent effect of securities class actions is cost-justified falls beyond the scope of this Comment, several anecdotal factors suggest that the current securities regime over-deters fraud. Furthermore, in light of cheaper alternatives, such as enhanced enforcement efforts by the SEC, it is possible that the class action mechanism is undesirable.

misallocation of capital that results from undeterred securities fraud, and instead exclusively focus on short-term issues, such as transactions costs that stem from litigation. If this cognitive shortcoming characterized negotiations, they would almost definitely prohibit securities litigation. Yet, courts that employ an ex ante contract approach likely assume that participants are fully rational; to do otherwise would invite sub-optimal results.

51. *In re California Micro Devices Sec. Litig.*, 168 F.R.D. 257, 272 (N.D. Cal. 1996).

52. See James K. Glassman, *Exchange-Traded Funds*, WASH. POST, Apr. 11, 2004, at F1 (referring to the Vanguard 500-stock index fund).

53. See Gilles, *infra* note 168 (referring to the prevalence of class action waivers that apply to shareholders who purchase common stock).

A. *Externalities Related to Compensating Shareholders*

Is there some inherent value to compensation? If anything, compensation through securities class actions may be socially harmful. As previously discussed, litigation is an extremely inefficient form of redistribution,⁵⁴ and alternatives such as insurance or governmental redistribution are substantially cheaper.⁵⁵ The prevalence of securities litigation thus creates substantial transactions costs, and these costs have redistributive effects that are not necessarily benign. This section first argues that securities litigation fails to provide an effective compensatory mechanism on its own terms, and then discusses the adverse effects from redistribution among shareholders.

1. Practical Difficulties of Compensation

Even setting aside its larger theoretical problems, the compensatory rationale fails on its own terms: actual damages are difficult to estimate, and average recoveries are miniscule compared to even plaintiff-friendly estimates of shareholder losses.

Practical limitations on litigants' abilities to estimate damages accurately render the compensatory value of securities class actions unclear. The amount of damages in any given case is surprisingly uncertain, as calculations inevitably rely on statistical models that introduce "a fatal amount of uncertainty" in even the best circumstances.⁵⁶ Generally, the first step to estimate damages is to predict per-share losses that result from the defendant's misrepresentation or omission. Parties commonly use event studies to make these predictions, but even these relatively non-controversial econometric tools rely on various economic assumptions that, when slightly altered, can produce greatly divergent

54. See *supra* Parts I.A and II.A (explaining that litigants have little to gain from securities litigation because it is not cost-effective).

55. See generally SHAVELL, *supra* note 3, at 281 (noting the excessively high administrative costs of litigation); Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667 (1994) (noting same).

56. Alexander, *supra* note 8, at 1492 (noting the difficulties in restructuring the exact damages for each of the shares). For a general discussion of various methodologies that courts use to calculate damages, see Edward S. Adams & David E. Runkle, *Solving a Profound Flaw in Fraud-on-the-Market Theory: Utilizing a Derivative of Arbitrage Pricing Theory to Measure Rule 10b-5 Damages*, 145 U. PA. L. REV. 1097 (1997) (stating that the Capital Asset-Pricing Model does not apply to measuring damages in Rule 10b-5 suits); John Finnerty & George Pushner, *An Improved Two-Trader Model for Measuring Damages in Securities Fraud Actions*, 8 STAN. J.L. BUS. & FIN. 213 (2003) (listing various factors that a court must consider to calculate damages in Rule 10b-5 suits).

results.⁵⁷ Furthermore, Professor Alexander notes that event studies “do[] not, and perhaps cannot, disaggregate the market’s reaction to the effect of the information itself on the firm’s value from the litigation-related components of the reaction to the disclosure” and thus are likely to “systematically overstate[] the class’s damages.”⁵⁸

The second step to calculate damages is to estimate the number of shares in the plaintiff class, or the number of traders that the misrepresentation or omission in question harmed. Because it would be impracticable to reconstruct a share-by-share trading history,⁵⁹ parties again employ statistical models, which they must tailor to the specifics of the market and discount to account for trading by “in-and-out” investors (who both purchased and sold during the class period and thus were not damaged)⁶⁰ and “out-and-in” investors (who purchased before the misrepresentation or omission but sold during the class period). Whether trading models can account for these two categories of traders “depend[s] critically on empirical assumptions about trading patterns” that “are subject to considerable doubt,”⁶¹ and thus produce estimates that dramatically under or overstate the actual aggregate class damages.⁶² Accordingly, “[b]ecause we have no reliable way of calculating what the appropriate amount of compensation should be, we are unable to judge whether class action litigation does a good job of delivering it.”⁶³

Another often-overlooked difficulty is the actual delivery of funds to harmed investors. Although plaintiffs must expend resources to notify class members of the settlement, because “[t]here is presently no reasonably practical way to identify individually the members of the class—the persons who bought (or sold) shares during the class period,”

57. See Alexander, *supra* note 8, at 1491–92 (explaining that an event study depends upon many debatable factual assumptions); see also Jon Koslow, Note, *Estimating Aggregate Damages in Class-Action Litigation Under Rule 10b-5 for Purposes of Settlement*, 59 FORDHAM L. REV. 811, 842 (1991) (“[I]t is important to recognize the complications and limitations in formulating damages estimates based on market behavior Different reasonable assumptions may occasionally lead to widely varying results.”).

58. Janet Cooper Alexander, *The Value of Bad News in Securities Class Actions*, 41 UCLA L. REV. 1421, 1427 (1994).

59. See Alexander, *supra* note 8, at 1492 (noting such reconstruction would be infeasible not only because of its cost, but also because of the large numbers of shares that brokers hold in street name).

60. See *Dura Pharms., Inc. v. Broudo*, 544 U.S. 336 (2005) (“An inflated purchase price will not by itself constitute or proximately cause the relevant economic loss [T]he inflated purchase payment is offset by ownership of a share that at that instant possesses equivalent value.” (emphasis removed)).

61. Alexander, *supra* note 8, at 1492.

62. *Id.* at 1492–93 (“It is possible that the most widely used model overstates actual aggregate class damages by 100 percent or more, even in a relatively short class period.”).

63. *Id.* at 1501.

only a small percentage of the class actually recovers.⁶⁴ Professor Alexander suggests that a large number of shareholders, “representing as many as forty percent of the shares in the class,” generally fail to file claims.⁶⁵ This not only calls the general compensatory efficacy of securities class actions into question, but also suggests that such litigation may most benefit sophisticated investors who are more likely to be aware of compensatory funds.

2. Negative Effects of Redistribution

Although the 1934 Act intends to protect retail investors,⁶⁶ it actually may benefit sophisticated investors to a much greater extent. Small retail investors tend to trade less frequently than sophisticated ones, given that smaller investors generally face higher brokerage fees and have less information on which to base trades.⁶⁷ Consequently, they are more likely than sophisticated investors to adopt “buy and hold” strategies and thus to have bought before the beginning of the class period.⁶⁸ Accordingly, securities class actions are more likely to transfer wealth from these small investors to their more sophisticated, institutional counterparts, which—given their trading practices—are more likely members of the plaintiff class. Professor Coffee argues that this produces an ironic result: “[T]he clear winner under such a system is the more rapidly trading, undiversified investor—which is the profile of the contemporary hedge fund. The clearest loser is the small investor who buys and holds for retirement—exactly the profile of the American retail investor.”⁶⁹

Professor Janet Alexander also argues that securities litigation transfers wealth to institutional investors for a second reason: institutional investors are more likely to diversify than retail investors.⁷⁰ This may be true at the margins, especially if unsophisticated investors tend to think mistakenly that they are diversified when they are not, whether because their portfolio is biased toward a particular industry or otherwise. Still, the magnitude of this effect probably is relatively low for two reasons. First, the ease of investing in highly diversified mutual funds and the dramatic decreases in brokerage fees over the past decade likely have increased the

64. *Id.*

65. *Id.*

66. DONNA M. NAGY, RICHARD W. PAINTER & MARGARET V. SACHS, *SECURITIES LITIGATION AND ENFORCEMENT* 2–3 (West Publishing Co. 2nd ed. 2007) (characterizing the securities legislation of the 1930’s as a response to rampant fraud).

67. See Finnerty & Pushner, *supra* note 56.

68. Coffee, *supra* note 6, at 1560–61.

69. *Id.* at 1560.

70. See Alexander, *supra* note 8, at 1502 (“[R]ecoveries from class action litigation represent a windfall to large investors.”).

diversification of even the most unsophisticated investors. Second, diversifying is relatively easy; studies suggest that a shareholder may need as few as only twenty different stocks to achieve the full benefits of a fully diversified portfolio.⁷¹

B. Externalities Related to the Deterrence of Securities Fraud

In light of the questionable compensatory value of securities class actions, securities litigation is desirable mainly to the extent that it produces a genuine deterrent effect. Deterrence is desirable not because securities fraud directly harms investors (diversification resolves this concern), but because such fraud produces negative externalities: it reduces investors' confidence in the economy; creates inaccurate pricing signals, facilitating the misallocation of capital;⁷² and reduces the efficiency of incentive structures that govern, for example, takeovers and executive compensation.⁷³ Because of these externalities, the question is not whether the law should deter securities fraud, but simply how the law should do so. But, despite the seeming appeal of securities litigation in this capacity, the current regime's efficacy is questionable for two reasons. First, securities class actions are an incomplete deterrent, and second, evidence suggests that the current system might over-deter.

1. Gaps in Deterrence

Although the negative externalities of securities fraud demand a response, private enforcement of Rule 10b-5 may not be the best or even an effective means of deterrence. In this capacity, securities class actions are of questionable value because they cannot reach certain activities and generally fail to influence the most culpable individuals.

71. See SUK H. KIM, SEUNG H. KIM & KENNETH A. KIM, GLOBAL CORPORATE FINANCE 396 (Blackwell Publ'g 5th ed. 2002) ("As an investor increases the number of securities in a portfolio, the portfolio's risk declines rapidly at first, then slowly approaches the systematic risk of the market However, the addition of more securities beyond 20 or 30 reduces risk very little.").

72. See, e.g., Coffee, *supra* note 6, at 1565 (arguing that, while impossible to quantify, scandals such as WorldCom and Enron had the cumulative effect of shaking investor confidence). But see Stout, *supra* note 5, at 637 (arguing that stock prices play less of a role in allocating capital than commonly believed); Summers, *supra* note 5, at 598 (same).

73. See, e.g., Coffee, *supra* note 6, at 1565-66. Some scholars also argue that securities litigation itself creates positive externalities when it acts "as an ex-post mechanism to discipline managers of companies with relatively weak ex-ante corporate governance control." Choi, *supra* note 6, at 1484. Yet, other scholars contend that enhancing shareholder rights so that shareholders themselves act as a great check on management achieves the same effect. See, e.g., Bebchuk, *supra* note 6, at 1784-85 (discussing reforms to increase shareholder oversight of corporate governance).

a. Thresholds for Litigation

Fraud by small issuers is practically immune to private enforcement of Rule 10b-5. Plaintiffs' firms will file class actions only when the expected fee award, discounted by the probability of failure, is greater than their anticipated expenses. As a result, plaintiffs' firms will lack incentives to bring suits where a fraud produces only a small drop in a stock's price or a company has a relatively low market capitalization.⁷⁴ Although the precise threshold of immunity is fluid and difficult to ascertain, given that immunity depends on variables like the size of damages, the probability of success, and attorneys' estimates of the amount of work necessary to litigate the case, most scholars agree that "smaller sized offerings hardly ever experience a securities-fraud suit."⁷⁵ The Private Securities Litigation Reform Act's (PSLRA's) heightened pleading standards and stay on discovery also will likely raise this threshold.⁷⁶

To some extent, this type of fraud is admittedly less worrisome; by definition, it is small. But, when aggregated, such fraud "may be nonetheless significant" and "may result in investors requiring unduly high discounts to purchase such shares, hurting the ability of newer companies to turn to the capital markets for financing."⁷⁷ Furthermore, the perception of fraud among even small companies still may subvert the 1934 Act's goal of preserving investors' confidence in the markets.

b. Deterrence of Individuals

Most importantly, securities class actions lack the ability to deter the most culpable parties—the individuals who are actually responsible for making the misrepresentation or omission at issue. Courts force such defendants to contribute personally to settlements only in the rarest of

74. Coffee, *supra* note 6, at 1543 ("[T]he conventional wisdom has long been that companies with small market capitalizations are less likely to be sued in securities class actions.").

75. James Bohn & Stephen Choi, *Fraud in the New-Issues Market: Empirical Evidence on Securities Class Actions*, 144 U. PA. L. REV. 903, 936 (1996); see Coffee, *supra* note 6, at 1543–44 (discussing research related to this form of immunity).

76. See Choi, *supra* note 6, at 1499 (speculating that the heightened standards prevent attorneys from bringing suit when they otherwise would do so). Professors Stephen M. Bainbridge and G. Mitu Gulati also predict that certain heuristics such as "puffery" and "bespeaks caution" create enclaves of immunity where the court tolerates some low-level fraudulent behavior to simplify its decision-making. See Stephen M. Bainbridge & G. Mitu Gulati, *How Do Judges Maximize? (The Same Way Everybody Else Does—Boundedly): Rules of Thumb in Securities Fraud Opinions*, 51 EMORY L.J. 83, 119–26 (2002) (noting the effectiveness of puffery and the lack of judicial expertise regarding financial market dynamics).

77. Choi, *supra* note 6, at 1474.

circumstances, and the threat of litigation accordingly is an imperfect deterrent.⁷⁸ One study that examined cases filed between 1980 and 2004 uncovered only “about a dozen instances since 1980” in which courts awarded “out-of-pocket liability for outside directors.”⁷⁹ Professor Coffee analyzed this and other studies, and concluded that “[t]he reality is that corporate insiders are sued in order for the plaintiffs to gain access to their insurance, but their personal liability appears not to be seriously pursued.”⁸⁰ Moreover, access to insurance itself is unlikely to modify behavior; given that corporations pay for Directors’ and Officers’ (D&O) insurance, one cannot expect that the threat of increased premiums after a settlement will restrain corporate officers.⁸¹

Another explanation for the lack of personal liability stems from the principal-agent problems that trouble insurer-insured and corporate relationships.⁸² The two actors that one might expect would provide oversight—insurance companies and boards of directors—lack adequate incentives and abilities to perform in this capacity. The fundamental problem is that officers have overwhelming incentives to settle because, if found liable, they may consequently lose their insurance coverage.⁸³ Insurers could oppose settlements when they predict that a court would find

78. See *supra* text accompanying notes 15–32 (discussing the expense of shareholder litigation and the distribution of the court awarded liabilities). According to Professor Coffee, instances of personal liability usually involve “special facts” where either the defendant corporation has become judgment-proof, the individual defendants face criminal liability, or the individual defendants’ D&O insurance is inadequate or has been rescinded. Coffee, *supra* note 6, at 1551.

79. Black et al., *supra* note 24, at 1138–39.

80. Coffee, *supra* note 6, at 1551. Individuals undoubtedly face non-pecuniary costs of litigation, such as damage to reputation, that produce deterrent effects. But, officers’ ability to settle without admitting liability minimizes these effects.

81. See Alexander, *supra* note 8, at 1498 (stating that the culpable individuals hardly ever contribute to a settlement because insurance typically pays over half of the amount). Nevertheless, while the threat of increased premiums might not sway corporate officers, the threat of termination may be more persuasive. Research indicates that the incidence of securities litigation makes CEO turnover more likely, but Professor Coffee argues that “this risk, by itself, would seldom constitute a deterrent threat capable of offsetting the potentially enormous financial gains to insiders from inflating the firm’s stock price.” Coffee, *supra* note 6, at 1554.

82. See Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 308 (1976) (discussing agency costs in the context of the firm); see also Elliott J. Weiss & John S. Beckerman, *Let the Money Do the Monitoring: How Institutional Investors Can Reduce Agency Costs in Securities Class Actions*, 104 YALE L.J. 2053 (1995) (discussing agency costs as applied to securities actions).

83. D&O insurance contracts often exclude cases in which the insured commits actual fraud. See Janet Cooper Alexander, *Do the Merits Matter? A Study of Settlements in Securities Class Actions*, 43 STAN. L. REV. 497, 549–57 (1991) (criticizing this situation as one that creates incentives for frivolous litigation).

the insured liable; after all, insurance companies are well-situated to absorb the risk of trial and theoretically should litigate cases if doing so would be cost-justified. “Yet securities class actions do not go to trial, settlements may not reflect the merits, and insurance companies fund such settlements.”⁸⁴ Professor Alexander presents several reasons why insurers generally fund even potentially non-meritorious settlements: they may fear liability for a bad faith refusal to settle,⁸⁵ they may be incapable of gauging the merits of any given case,⁸⁶ or they simply may be able to incorporate the cost of settling even a large number of non-meritorious claims into their premiums.⁸⁷

Theoretically, the board of directors also should be able to oversee the use of corporate funds in settlements. The board, however, rarely acts in this fashion. More frequently, the board indemnifies corporate officials rather than attempts to ensure that such individuals pay as much of the settlement as possible.⁸⁸ Board members are likely to be sympathetic to the implicated officers and may themselves be defendants in the suit.⁸⁹ Furthermore, regardless of whether they are sued, board members “have little capacity (and perhaps even less incentive) to monitor the complex details and complicated procedures of securities litigation.”⁹⁰

Even without the effects of indemnification and insurance, the system still may fail to deter individual defendants. One such deterrence failure is the “final-period” problem that occurs “as the manager faces the prospect of job loss.”⁹¹ Once a manager expects to be fired, his or her “incentives

84. *Id.* at 561.

85. Professor Alexander explains the risks associated with an insurer’s refusal to settle as follows:

If an insurer refuses a settlement offer within policy limits and a later trial results in a judgment greater than the proposed settlement, the insurer may be held liable for the entire amount of the judgment Since the amount of the potential judgment in securities class actions is normally far greater than the face amount of any applicable insurance, the large sums involved provide an incentive for the insurer to settle, just as for the parties.

Id. at 561–62.

86. *Id.* at 562–63.

87. *Id.* at 563–64.

88. Public policy does not allow indemnification of individuals who actually violate securities laws, *see* *Globus v. Law Research Serv., Inc.*, 418 F.2d 1276 (2d Cir. 1969) (holding indemnity agreement unenforceable where shareholder action charged individuals with securities violations), but corporate officers can sidestep this exception easily if they settle in a way that does not admit liability. Because plaintiffs have no particular interest in the source of settlement funds, they will be indifferent to admissions or denials of liability.

89. *See* *Coffee*, *supra* note 6, at 1567 (“[Board members] may have been sued in the past, giving them a closer identification with the interests of the officer-defendants than with those of the shareholders.”).

90. *Id.* at 1566–67.

91. *Id.* at 1554 n.79; *see* Jennifer H. Arlen & William J. Carney, *Vicarious Liability*

are no longer aligned with those of the shareholders, and the manager cannot be as easily deterred by future private sanctions or reputational loss.”⁹² Assuming, as is likely, that a company employs intentional misrepresentations and omissions when it experiences turmoil, and an officers’ job is thus in jeopardy, the final period problem severely limits effective deterrence. Simply put, when an officer anticipates termination, he or she will be more likely to roll the dice and hope to gain time to “turn the company around” by, for example, disclosing misrepresentative earnings information or engaging in accounting tricks.⁹³ Moreover, such individuals often are over-optimistic regarding their chances of success.⁹⁴

2. Over-Deterrence

One would expect an optimal deterrent to consist of a penalty or an award of damages equal to the net social harm of the undesirable activity multiplied by its probability of detection.⁹⁵ The net social harm of securities fraud, however, consists only of externalities;⁹⁶ because every victimized trader’s loss is a windfall for the trader who engaged in the opposite transaction, the net social harm of a misrepresentation or

for *Fraud on Securities Markets: Theory and Evidence*, 1992 U. ILL. L. REV. 691 (1992) (providing a more thorough discussion of final period problems).

92. Coffee, *supra* note 6, at 1554 n.79. Melvin Eisenberg explains further the issues that concern boards of directors:

Boards typically meet only six to twelve times a year. The complex business of a publicly held corporation cannot be managed with such a limited investment of time. Boards include persons who either are not managers at all or are managers whose experience lies in different businesses. The complex businesses of a publicly held corporation cannot be managed by such persons.

Melvin A. Eisenberg, *The Board of Directors and Internal Control*, 19 CARDOZO L. REV. 237, 237 (1997).

93. See Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1538–39 (1998) (relying on behavioral economics to predict that bounded rationality and willpower may lead individuals to ignore deterrence, as traditional economic reasoning predicts); see also Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. REV. 377 (1994–1995) (highlighting general flaws in tort law as an optimal deterrent).

94. Generally, individuals are unrealistically optimistic about their chances of success. Thus, corporate managers might overestimate their chances to “get away” with a misrepresentation or omission. This bias explains, for example, why individuals predict that they are “above average” drivers, or why couples report numbers over 100% when asked what percentage of the domestic work they do. Cass R. Sunstein, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175, 1182–84 (1997).

95. See *supra* text accompanying note 7 (noting challenges with defining the contours of harm from securities fraud).

96. See James D. Cox, *Making Securities Fraud Class Actions Virtuous*, 39 ARIZ. L. REV. 497 (1997) (providing a broader discussion of such externalities and the additional rationales for stringent regulation).

omission, by itself, is zero.⁹⁷ Accordingly, whether the current system generates a desirable level of deterrence depends on the size of estimated penalties relative to the size of security fraud's externalities. If the size of expected penalties dwarfs such externalities, the result is over-deterrence.⁹⁸ This section discusses evidence that supports the current scheme's tendency to over-deter rather than under-deter and then discusses the potential costs of such excess deterrence.

a. Incidence of Over-Deterrence

It is likely impossible, and in any event beyond the scope of this Comment, to estimate the precise monetary penalties that optimally would deter securities fraud. Nevertheless, some evidence suggests that the pendulum has shifted closer to over- than under-deterrence. Though settlements have increased in average size in recent years,⁹⁹ many factors aside from private enforcement of 10b-5 also deter fraudulent behavior. The most obvious examples are enforcement by public agencies and self-regulatory organizations (SROs), such as the NYSE. According to data compiled by Professor Howell Jackson in 2004, the SEC imposed \$3.1 billion in civil penalties, and state agencies imposed an additional \$931 million.¹⁰⁰ The NASD and NYSE also levied \$697 million in penalties, which resulted in overall public sanctions in excess of \$4.7 billion in 2004 alone.¹⁰¹ Although these amounts are small in comparison to the payments attributable to class actions (\$5.5 billion in 2004),¹⁰² public enforcement nevertheless provides a vigorous deterrent.

Aside from the threat of SEC investigation and penalties, firms also internalize the risk of criminal prosecution by the DOJ and states, potential liability through piggyback suits such as those under ERISA or derivative claims, the risk of takeovers or proxy contests by dissatisfied shareholders,

97. See *supra* Part I.A (explaining compensatory rationales for shareholder litigation).

98. Professor Alexander explains:

[C]ompensating [individual class members] for their market losses does not produce optimal deterrence. If defendants actually had to pay such gigantic damages, there would seem to be overdeterrence in virtually every case. Aggregate class trading losses are probably greater than either the true net social cost of the violation or the benefits received by the violator, both of which are speculative in nature and difficult to calculate.

Alexander, *supra* note 8, at 1498.

99. See Cornerstone Research, *supra* note 19 (discussing the current rise in securities litigation and the increased Disclosure Dollar Losses in 2007).

100. Howell E. Jackson, *Regulatory Intensity in the Regulation of Capital Markets: A Preliminary Comparison of Canadian and U.S. Approaches* 113 tbl.14 (2006), available at [http://www.tfmsl.ca/docs/V6\(2\)%20Jackson.pdf](http://www.tfmsl.ca/docs/V6(2)%20Jackson.pdf).

101. *Id.*

102. *Id.*

and the severe damage to reputation that accompanies litigation and investigation.¹⁰³ And corporate officers are unlikely to miss the correlation between the incidence of securities litigation and CEO turnover.¹⁰⁴

In addition to alternate means of deterrence (which might be increased in a first-best world),¹⁰⁵ some anecdotal evidence suggests that current methods of private enforcement simply are too extreme. To the extent that they exist, strike suits constitute a potentially unnecessary deterrent because they tax innocent conduct at a rate equal to their nuisance value. Also, regardless of the actual frequency of such “frivolous” litigation, evidence suggests that corporate officers think it is commonplace, and “[t]hese beliefs, however erroneous, may lead to over-deterrence.”¹⁰⁶ These perceptions, though perhaps inaccurate, are easy to understand. Despite the PSLRA’s heightened pleading standards,¹⁰⁷ the number of securities suits filed each year has generally increased. From 1991 to 1995, when Congress passed the PSLRA, an average of 197.4 suits was filed per year, but the average jumped to 242.75 for 1996 through 2007.¹⁰⁸

103. *But see* Prentice, *supra* note 17, at 1427-28 (discussing research that suggests concerns about damage to reputation are insufficient deterrents).

104. *See* Philip E. Strahan, *Securities Class Actions, Corporate Governance and Managerial Agency Problems* (Nat’l Bureau of Econ. Research, Working Paper No. 10,4356, 1998), available at <http://ssrn.com/abstract=104356> (pointing to a sharp increase in CEO turnover after class action filings).

105. *See infra* Part III (reviewing reforms that aim to approximate shareholders’ ex ante interests).

106. *See* Alexander, *supra* note 8, at 1495 (explaining that corporate managers overestimate the probability of being sued and do not believe that juries will decide cases rationally). A possible explanation for this overestimation is the availability heuristic, which is—in its most basic form—people’s tendency to overestimate the frequency of events that they read about in newspapers. *See* Jolls et al., *supra* note 93, at 1519 (describing how “Availability Entrepreneurs” exploit the availability heuristic). Over-optimism, however, is a potentially contrary influence. *See* Sunstein, *supra* note 94, at 9 (predicting that over-optimism may lead people to take harmful risks due to an unrealistic feeling of immunity). Determining which of these influences dominates is an empirical question.

107. Easterbrook & Fischel explain the heightened pleadings standard as follows:

The interaction of the scienter requirement with the damages rule should get rid of excessive (or, what is the same thing, inaccurate) enforcement If the scienter rule does not filter out dubious cases, on the other hand—if it turns out always to be possible to find some culpable omission when things go bad—then loss-based damages are far too high, and it is necessary to put a more modest remedy in their place.

Easterbrook & Fischel, *supra* note 4, at 644.

108. Stephanie Plancich, Brian Saxton & Svetlana Starykh, *Recent Trends in Shareholder Class Actions: Filings Return to 2005 Levels as Subprime Cases Take Off; Average Settlements Hit New High 2* (Nat’l Bureau of Econ. Research, New York, N.Y., 2007) [hereinafter NERA] (describing recent trends in shareholder class actions). Although the number of suits that plaintiffs filed was rather low in 2005 and 2006 (205 and 131, respectively), the number of filings has increased again. *See* Cornerstone

Although this data may simply reflect other variables, such as an increase in the actual amount of fraud, it helps to explain why businesses perceive such a threat from securities class actions despite favorable legal changes like the PSLRA.

An empirical study of stock price reactions to *In re Silicon Graphics Inc.*,¹⁰⁹ which heightened pleading standards for scienter in the Ninth Circuit, similarly supports these conclusions and the over-deterrence hypothesis. The study, conducted by professors Marilyn F. Johnson, Karen K. Nelson, and A.C. Pritchard, found that the stock prices of companies with a high probability of being sued reacted positively to the decision.¹¹⁰ The fact that shareholders perceive restrictions on Rule 10b-5 litigation positively suggests that the current enforcement regime reduces shareholder value.

b. Costs of Over-Deterrence

Because securities fraud does not produce any social value,¹¹¹ one might initially assume that such fraud cannot be “over-deterred.” But, deterrence has a price, and the current system of criminal, public, and expansive private enforcement may have grown such that the marginal costs of additional deterrence far surpass its benefit. Excessive deterrence has two types of costs.

First, to the extent that over-deterrence increases the ease with which plaintiffs’ attorneys can bring non-meritorious suits,¹¹² it acts as a tax on normal business activities and ultimately reduces shareholder returns. If the system aimed deterrence perfectly such that it targeted only actual instances of fraud, it would minimize the taxing effect. But rule 10b-5

Research, *supra* note 19, at 6 (explaining the modest number of filings in recent years with unusually low volatility in the stock market).

109. 183 F.3d 970 (9th Cir. 1999).

110. See Johnson et al., *supra* note 34 (explaining the Supreme Court’s view that securities litigation may be disruptive to business); see also Frederick C. Dunbar & Dana Heller, *Fraud on the Market Meets Behavioral Finance*, 31 DEL. J. CORP. L. 455, 529–30 (2006) (discussing the Johnson et al. study).

111. *But see* Macey & Miller, *supra* note 48 (concluding that corporations can use misrepresentations and omissions in certain circumstances strategically to increase shareholder value).

112. See sources cited *infra* note 114 (characterizing most securities fraud cases as frivolous); Patrick M. Garry et al., *The Irrationality of Shareholder Class Action Suits: A Proposal for Reform*, 49 S.D. L. REV. 275 (2004) (arguing that securities class actions fail to deter fraud and result in non-meritorious litigation); Donald C. Langevoort, *Capping Damages for Open-Market Securities Fraud*, 38 ARIZ. L. REV. 639, 650–53 (1996) (discussing non-merit based pressures to settle). Judge Henry Friendly also expressed concern that class action litigation facilitates “blackmail settlements.” HENRY J. FRIENDLY, *FEDERAL JURISDICTION: A GENERAL VIEW* 120 (Columbia Univ. Press 1973).

lacks this surgical precision. Despite attempts to screen out frivolous litigation by, for example, heightening pleading standards for scienter,¹¹³ securities class actions remain relatively blunt instruments. Studies suggest that plaintiffs frequently file suits in response to large stock drops with the hopes to extract a settlement,¹¹⁴ and courts have acknowledged that the nuisance value of these suits often forces defendants to settle.¹¹⁵ Accordingly, by causing excessive non-meritorious litigation, the current environment may unnecessarily increase costs for business and shareholders, especially with recent increases in the size of settlements.¹¹⁶

These increased costs also may reduce the attractiveness of U.S. capital markets to foreign issuers. The Committee on Capital Markets Regulation compiled evidence that suggests this effect already exists: in recent years, the U.S. share of IPOs and secondary offerings has decreased as a percentage of total value; the U.S. share of global IPOs (offerings of firms that list on exchanges both in their home country and outside of it) has decreased; foreign issuers have increased their use of private rule 144A markets relative to public market usage; and foreign companies have increased de-listings from the NYSE dramatically in recent years.¹¹⁷ Although many factors other than securities litigation may fuel these changes, “[f]oreign companies commonly cite the U.S. enforcement system as the most important reason why they do not want to list in the U.S.

113. See, e.g., *Tellabs v. Makor Issues & Rights, Ltd.*, 127 S. Ct. 2499 (2007) (holding that courts must take opposing inferences into account to determine whether plaintiffs have pled a strong inference of scienter).

114. See, e.g., Choi, *supra* note 6, at 1476–99 (discussing empirical literature); see also Bohn & Choi, *supra* note 75, at 979 (“Empirical results show that most securities-fraud class actions are, in fact, frivolous.”).

115. See *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 741 (1975) (“[T]o the extent that [securities litigation] permits a plaintiff with a largely groundless claim to simply take up the time of a number of other people, with the right to do so representing an *in terrorem* increment of the settlement value . . . it is a social cost rather than a benefit.”); *Oscar Private Equity Invs. v. Allegiance Telecom, Inc.*, 487 F.3d 261 (5th Cir. 2007) (requiring plaintiffs to prove that defendants’ alleged misrepresentations proximately caused their economic loss to qualify for certification); *Parnes v. Gateway*, 122 F.3d 539, 549 (8th Cir. 1997) (noting that heightened pleading standards intended to “deter[] the use of complaints as a pretext for fishing expeditions of unknown wrongs designed to compel in *terrorem* settlements”); see also Lucian Arye Bebchuk, *Suing Solely To Extract a Settlement Offer*, 17 J. LEGAL STUD. 437 (1988) (offering a more general discussion of the incentives to initiate frivolous suits).

116. See Cornerstone Research, *supra* note 19 (reviewing the size and prevalence of settlements and verdicts in securities class actions).

117. See Comm. on Capital Mkt. Reg., *The Competitive Position of the U.S. Public Equity Market 5* (2007) (summarizing competitiveness measures); see also *id.* at 22 (explaining that, although de-listings from the NYSE are disconcerting for any reason, they may be in part attributable to more lenient SEC deregistration rules that became effective in June 2007).

market.”¹¹⁸

Second, over-deterrence also can have detrimental effects on pricing signals, which reduces the stock market’s efficiency in allocating capital. Corporate officers who fear strike suits or that an irrational jury will find them liable face incentives to make as few statements as possible to the market.¹¹⁹ The result is that, especially with regard to the dissemination of optimistic information, 10b-5 class actions “deter not only fraud but also the provision of beneficial information.”¹²⁰ The PSLRA’s safe harbor for forward-looking information intended to counteract this effect, but it is an imperfect solution; as long as plaintiffs can survive a motion to dismiss, they can still extract a settlement.¹²¹ Given that shareholders are better situated to absorb risk than corporate officers (shareholders are, after all, buying risk), it makes little sense to have a system that creates incentives for managerial over-caution.¹²²

III. APPROXIMATING SHAREHOLDERS’ EX ANTE INTERESTS

Courts have generally attempted to reform § 10(b) actions to deter non-meritorious litigation rather than to effectuate shareholders’ ex ante interests. Two trends that demonstrate this strategy are reforms that favor early disposal and reforms that limit secondary liability.

First, courts and the PSLRA have tweaked pleading standards for § 10(b) cases to increase defendants’ ability to prevail on motions for summary judgment. In *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*,¹²³ for example, Justice Ginsburg noted that “[p]rivate securities fraud actions . . . can be employed abusively to impose substantial costs on companies and individuals whose conduct conforms to the law,”¹²⁴ and the Court held that

118. Comm. on Capital Mkt. Reg., Interim Report of the Committee on Capital Markets Regulation 11 (2006), available at http://www.capmktreg.org/pdfs/11.30Committee_Interim_ReportREV2.pdf.

119. Liability for material omissions, however, creates the opposite incentive to some extent.

120. Dunbar & Heller, *supra* note 110, at 528.

121. *But see* Marilyn F. Johnson, Ron Kasznik & Karen K. Nelson, *The Impact of Securities Litigation Reform on the Disclosure of Forward-Looking Information by High Technology Firms*, 39 J. ACCT. RES. 297, 323 (2001) (finding an increase in the number of forecasts following the PSLRA).

122. *See* Easterbrook & Fischel, *supra* note 4, at 640 (explaining that moving risk to a less risk-averse group can produce economic gains). Shareholders’ advantage in holding risk partially explains deference to managers in other contexts as well, such as the business judgment rule and corporations’ ability to amend their charters to waive duty of care liability under Delaware law. *See* DEL. CODE ANN. Tit. 8 § 102(b)(2003) (listing the required elements of a certificate of incorporation).

123. 127 S. Ct. 2499 (2007).

124. *Id.* at 2505.

it must weigh opposing inferences when determining whether plaintiffs adequately pled a “strong inference” of scienter.¹²⁵ Other courts have limited plaintiffs’ access to the class mechanism to achieve a similar effect. Although the Supreme Court prohibited “conduct[ing] a preliminary inquiry into the merits of a suit in order to determine whether it may be maintained as a class action” in *Eisen v. Carlisle & Jacquelin*,¹²⁶ it softened this stance in subsequent years. In *General Telephone Co. of Southwest v. Falcon*,¹²⁷ the Court noted that “sometimes it may be necessary for the court to probe behind the pleadings before coming to rest on the certification question.”¹²⁸ Later, in *Amchem Products, Inc. v. Windsor*,¹²⁹ it held that courts must take a “close look at the case before it is accepted as a class action.”¹³⁰ “[A] majority of courts of appeals that have addressed this issue” have sided with *Falcon* and *Amchem* rather than *Eisen*, holding that “a district court is not limited to the allegations raised in the complaint, and should instead make whatever legal and factual inquiries are necessary to an informed determination of the certification issues.”¹³¹ These decisions reflect courts’ concerns about the power of class certification, combined with the fact that, “[i]f it were appropriate for a court simply to accept the

125. See *id.* (“The Act requires plaintiffs to state with particularity both the facts constituting the alleged violation, and the facts evidencing scienter, *i.e.*, the defendant’s intention ‘to deceive, manipulate, or defraud.’”).

126. 417 U.S. 156, 177 (1974).

127. 457 U.S. 147 (1982).

128. *Id.* at 160.

129. 521 U.S. 591 (1997).

130. *Id.* at 615 (quoting Benjamin Kaplan, *Continuing Work of the Civil Committee: 1966 Amendments of the Federal Rules of Civil Procedure (I)*, 81 HARV. L. REV. 356, 390 (1967)).

131. *In re PolyMedica Corp. Sec. Litig.*, 432 F.3d 1, 5 (1st Cir. 2005); see also *In re New Motor Vehicles Canadian Exp. Antitrust Litig.*, 522 F.3d 6, 24 (1st Cir. 2008) (reviewing various circuits’ approaches to determining relevant criteria under rule 23); *In re Initial Pub. Offering Sec. Litig.*, 471 F.3d 24, 41 (2d Cir. 2006) (requiring a “definitive assessment of Rule 23 requirements”); *In re Xcelera.com Sec. Litig.*, 430 F.3d 503, 511 (1st Cir. 2005) (discussing the level of inquiry); *PolyMedica*, 432 F.3d at 6 (stating the court’s “preference for the majority view”); *Unger v. Amedisys Inc.*, 401 F.3d 316, 321 (5th Cir. 2005) (noting that, while certification hearings “should not be mini-trials on the merits . . . [a]t the same time, however, ‘[g]oing beyond the pleadings is necessary, as a court must understand the claims, defenses, relevant facts, and applicable substantive law in order to make a meaningful determination of the certification issues.’” (quoting *Castano v. Am. Tobacco Co.*, 84 F.3d 734, 744 (5th Cir. 1996))); *West v. Prudential Sec., Inc.*, 282 F.3d 935, 938 (7th Cir. 2002) (“Tough questions [at the class-certification stage] must be faced and squarely decided, if necessary by holding evidentiary hearings and choosing between competing perspectives.”); *Johnston v. HBO Film Mgmt., Inc.*, 265 F.3d 178, 189 (3rd Cir. 2001) (“[N]ot only was it appropriate, but also necessary, for the district court to examine the factual record underlying plaintiffs’ allegations in making its certification decision.”); see also Robert G. Bone & David S. Evans, *Class Certification and the Substantive Merits*, 51 DUKE L.J. 1251, 1269 (2002) (defending vigorous class certification standards).

allegations of a complaint at face value . . . , every complaint asserting the requirements of rule 23(a) and (b) would automatically lead to a certification order.”¹³²

Courts’ treatment of secondary liability also exemplifies attempts by judges to tweak securities litigation and increase the scheme’s efficiency. In *Central Bank v. First Interstate Bank*,¹³³ the Court held that there was no private right of action against aiding and abetting a §10(b) violation,¹³⁴ but the Court left an important loophole: it noted that courts still might hold secondary actors liable if the plaintiff satisfied standard elements of *primary* liability.¹³⁵ Capitalizing on this exception,¹³⁶ some lower courts

132. *Gariety v. Grant Thornton, LLP*, 368 F.3d 356, 365 (4th Cir. 2004). The Fifth Circuit took this trend to a new extreme in *Oscar Private Equity Investments v. Allegiance Telecom*, 487 F.3d 261 (5th Cir. 2007). There, the court held that “loss causation must be established at the class certification stage by a preponderance of all admissible evidence,” and vacated a lower’s court decision to certify a class where the plaintiffs had not presented event studies to link the decline in stock price to a particular misrepresentation, as opposed to an unrelated news story or industry-wide factors. *Id.* at 269. The court explained that it “require[d] plaintiffs to establish loss causation in order to trigger the fraud-on-the-market presumption.” *Id.* at 265. This reflected an explicit desire to limit coercive class actions and, in particular, the fraud-on-the-market doctrine, when it stated: “We cannot ignore the *in terrorem* power of certification, continuing to abide the practice of withholding until ‘trial’ a merit inquiry central to the certification decision.” *Id.* at 267. Judge Higginbotham further reinforced this point by stating that “a district court’s certification order often bestows upon plaintiffs extraordinary leverage, and its bite should dictate the process that precedes it.” *Id.*; *see id.* at 262 (characterizing as “lethal force” the result that fairness requires in light of certifications). *Oscar* and other recent Fifth Circuit decisions promise to increase the costs of bringing securities fraud claims. *See Regents of the Univ. of Cal. v. Credit Suisse First Boston*, 482 F.3d 372, 379 (5th Cir. 2007) (“As we have recognized, class certification may be the backbreaking decision that places ‘insurmountable pressure’ on a defendant to settle.” (*citing Castano*, 84 F.3d at 746)); *Unger v. Amedisys Inc.*, 401 F.3d 316, 322 (5th Cir. 2005) (defending “rigorous” standards of proof because, “given the realities of litigation costs, [class] certification can compel settlements without trial”). *Oscar* requires plaintiffs to hire experts to demonstrate loss causation, probably through econometric means. Whether this will deter a significant amount of less-meritorious litigation, however, remains to be seen. *See* Larry E. Ribstein, *Fraud on a Noisy Market* (Univ. of Ill. Law & Econ. Working Paper No. 39, 2005), available at <http://ssrn.com/abstract=803064> (discussing instances in which Congress and the courts have expressed dissatisfaction with the fraud-on-the-market theory).

133. 511 U.S. 164 (1994).

134. *Id.* at 191 (“Because the text of § 10(b) does not prohibit aiding and abetting, we hold that a private plaintiff may not maintain an aiding and abetting suit under § 10(b).”).

135. *See id.* (noting that secondary actors in the securities markets are not always free from liability just because they did not aid or abet under § 10(b), as “[a]ny person or entity . . . may be liable as a primary violator under 10b-5, assuming *all* of the requirements for primary liability under Rule 10b-5 are met.”).

136. Lower courts frequently expressed confusion regarding the intended breadth of this exception. *See, e.g., In re Lernout & Hauspie Sec. Litig.*, 236 F. Supp. 2d 161, 171–72 (D. Mass. 2003) (“But while it is well-established that § 10(b) and Rule 10b-5 cover fraudulent schemes . . . the Supreme Court has never addressed the extent to which § 10(b) and Rule 10b-5 proscribe participation in such schemes.”).

established various scheme liability doctrines that imposed liability on secondary actors if they were “substantially involved in making the misstatements.”¹³⁷ For example, the court in *In re Lernout & Hauspie Securities Litigation*¹³⁸ upheld claims against a venture capital firm, an insurer, and the insurer’s CEO because they were integral participants in the fraud, despite the fact that they did not actually make any misstatements to the market.¹³⁹ *Stoneridge Investment Partners, LLC v. ScientificAtlanta, Inc.*,¹⁴⁰ however, promises to change the future treatment of similar cases. In *Stoneridge*, the Supreme Court held that secondary actors may be found liable only if plaintiffs strictly relied on their actions to purchase or sell securities, and, in so doing, the Court stated explicitly that scheme liability “does not answer the objection that petitioner did not in fact rely upon respondents’ own deceptive conduct.”¹⁴¹ While the holding in *Stoneridge* did not reject scheme liability,¹⁴² it nevertheless represents a continuing trend in which the Court’s expressed fear of coercive settlements and subsequent harm to capital markets fuels its efforts to limit the breadth of the 10b-5 right of action.

This ad hoc approach to limiting 10b-5 liability is desirable to the extent that it reduces the “tax” on doing business imposed by non-meritorious litigation, but piecemeal reforms will never resolve the underlying prisoners’ dilemma. Individuals always will have incentives to sue so long as plaintiffs’ lawyers will take their cases, and the result may very well be suboptimal from a social welfare perspective. Accordingly, the optimal solution is to replace the current scheme of 10b-5 liability with a scheme that shareholders would desire ex ante.

This Part suggests solutions derived from responses to the prisoners’ dilemma. Theorists generally state four ways to resolve the prisoners’ dilemma: (1) facilitate cooperation; (2) iterate the game such that cooperative, tit-for-tat strategies may emerge; (3) alter the payouts by state action; or (4) form binding pre-commitment strategies.¹⁴³ The first two possibilities do not suit the present context; despite the prevalence of

137. Taavi Annus, Note, *Scheme Liability Under Section 10(b) of the Securities Exchange Act of 1934*, 72 MO. L. REV. 855, 861 (2007); *see id.* at 859-63 (describing the three predominant scheme liability tests as the “bright line” test, the “substantial participation” test, and the “creation of misrepresentation” test); Nicholas Fortune Schanbaum, Note, *Scheme Liability: Rule 10b-5(a) and Secondary Actor Liability After Central Bank*, 26 REV. LITIG. 183 (2007) (explaining both primary and secondary liability schemes).

138. 208 F. Supp. 2d 74 (D. Mass. 2002).

139. *See id.* at 77, 84-86.

140. 128 S. Ct. 761 (2008).

141. *Id.* at 771.

142. *See supra* text accompanying note 11 (discussing whether *Stoneridge* ended the debate over scheme liability).

143. *See generally* ORDESHOOK, *supra* note 40 (explaining the prisoners’ dilemma).

institutional investors, cooperation among shareholders is likely cost-prohibitive, and each individual investor is unlikely to face a sufficiently large number of iterations of the game to allow cooperation through tit-for-tat strategies.¹⁴⁴ The latter two options, however, present interesting possibilities for reform. This Part proposes that the best option to resolve this dilemma is state action, followed by a second-best alternative of shareholder agreements to submit to non-class binding arbitration.¹⁴⁵

A. *Public Enforcement*

“The logic of the prisoners’ dilemma provides probably the most widely accepted, and certainly the most coherent, justifying theory of the state available today.”¹⁴⁶ State action can reduce undesirable ex post incentives to sue in two ways: first, the state could pass “legislation that coerces players to cooperate by sanctioning defection,”¹⁴⁷ and, second, the state could remove the private right of action under 10b-5 to simply eliminate the game altogether. The former option would use the state to alter the terms of the dilemma, and perhaps tax returns from such litigation at a rate high enough to discourage its incidence. But, this would simply enact a less parsimonious version of the latter option to revert to exclusively public enforcement of Rule 10b-5. Accordingly, this section discusses the latter solution, which mirrors a pre-commitment device to the extent that the state would remove the private right of action under 10b-5 and “bind” shareholders to their preferred outcome. Ironically, a commitment to exclusively public enforcement involves a *reversal* of state action,¹⁴⁸ but it would resolve the basic coordination problem that underlies securities litigation; in essence, eliminating the private right of action would require all shareholders to choose to “cooperate” (not sue) and thus

144. See ROBERT AXELROD, *THE EVOLUTION OF CORPORATION* 13-14 (Basic Books 1984) (providing the seminal description of the tit-for-tat strategy and its optimality); see also Charles Lipson, Book Review, *The Evolution of Cooperation*, by Robert Axelrod, 81 A.J.I.L. 470 (1987) (commenting on the tit-for-tat strategy).

145. This Comment presents these two possibilities only to spur discussion, not to represent them as the exclusive or even the most desirable options.

146. John M. Orbell & L. A. Wilson, *Institutional Solutions to the N-Prisoners’ Dilemma*, 72 AM. POL. SCI. REV. 411, 411 (1978).

147. Susan Block-Lieb, *Congress’ Temptation to Defect: A Political and Economic Theory of Legislative Resolutions to Financial Common Pool Problems*, 39 ARIZ. L. REV. 801, 819 (1997); see also *id.* at 818 (“When self-interested players cannot resolve these collective action problems on their own, they may look to the State for help.”).

148. Presumptively, Congress would have the authority to reverse state action. *But see* Joseph A. Grundfest, *Why Disimply?*, 108 HARV. L. REV. 727 (1995) (discussing the SEC’s ability to remove the 10b-5 private of action); Joseph A. Grundfest, *Disimplying Private Rights of Action Under the Federal Securities Laws: The Commission’s Authority*, 107 HARV. L. REV. 961 (1994) (discussing same).

resolve the dilemma.

One way public enforcement might reduce coordination problems is to eliminate the incentives for non-meritorious litigation. The SEC has no reason to pursue strike suits for the simple reason that its attorneys do not receive contingency fees. Excluding non-pecuniary benefits associated with winning big cases, attorneys' compensation probably would remain the same, regardless of the frequency, magnitude, or success of SEC investigations. Accordingly, state action can better align incentives and account for the negative externalities of non-cooperation, such as the harms to business that result from excessive litigation. "Just as some means of coordinating their behavior can get the two prisoners the lowest total years behind bars, so . . . can the state coordinate individual behavior to produce an 'optimal' level of negative and positive externalities."¹⁴⁹

Dis-implying the private right of action under § 10(b) is not as radical as it might seem. First, the courts already left certain areas—such as § 17(a) of the Exchange Act¹⁵⁰ and prosecution of individuals who aid and abet a § 10(b) violation¹⁵¹—exclusively in the SEC's control, that is, without a private right of action. Second, any proposal to enforce § 10(b) through public mechanisms naturally would include increased enforcement efforts by the SEC and the DOJ.¹⁵² Because "private litigation in the United States often follows on the heels of public sanctions," the lost deterrent might be more duplicative than necessary.¹⁵³

Additionally, as a practical matter, the SEC is better-situated to investigate securities fraud effectively and can do so at a lower cost than the plaintiffs' bar. The SEC has enormous investigatory powers:¹⁵⁴ it can

149. Orbell & Wilson, *supra* note 146, at 412.

150. 15 U.S.C. § 78(a) (1988); see *In re Wash. Pub. Power Supply Sys. Sec. Litig.*, 19 F.3d 1291 (9th Cir. 1994) (holding that only the Commission may enforce § 17(a) of the Exchange Act). Several other sections of the Exchange Act also do not have private rights of action. See *Spicer v. Chi. Bd. Options Exch. Inc.*, 977 F.2d 255, 256 (7th Cir. 1992) (stating § 6(b) has no private right of action); *In re Penn Cent. Sec. Litig.*, 494 F.2d 528, 540–41 (3d Cir. 1974) (stating § 13(a) has no private right of action); *Ciro Inc. v. Gold*, 816 F. Supp. 253, 269–70 (D. Del. 1993) (stating § 14(c) has no private right of action); see generally Grundfest, *Disimplying Private Rights*, *supra* note 148, at n.75 (noting that the Supreme Court has found no private right of action under § 17a of the Exchange Act, 15 U.S.C. § 78(a) (1988), or under § 206 of the Investment Advisors Act of 1940, as amended, 15 U.S.C. § 80b-6 (1988)).

151. See *Stoneridge Inv. Partners v. Scientific-Atlanta, Inc.*, 128 S. Ct. 761, 772 (2008) (noting that the PSLRA allows "the SEC to enforce aiding and abetting liability," but does not imply a private right of action for the same).

152. If nothing else, this probably is true for political reasons.

153. Howell E. Jackson, *The Impact of Enforcement: A Reflection*, 156 U. PA. L. REV. 400, 407 (2008); see James D. Cox & Randall S. Thomas, *SEC Enforcement Heuristics: An Empirical Inquiry*, 53 DUKE L.J. 737, 763 (2003) (examining the overlap between SEC securities enforcement and private securities fraud class actions).

154. See generally *SEC v. Brigadoon Scotch Distrib. Co.*, 480 F.2d 1047, 1052–53 (2d

subpoena documents and examine witnesses with fewer procedural obstacles than private litigants; it can secure cooperation in even informal investigations by offering a carrot of secrecy; and it can threaten uncooperative firms with civil penalties, criminal sanctions, or “any equitable relief that may be appropriate or necessary for the benefit of investors.”¹⁵⁵ Moreover, public agencies critically deter fraud in the “gaps” where private rights of action fail, such as when the value of a lawsuit is too low to encourage a plaintiffs’ lawyer to sue.¹⁵⁶

There are, however, a number of counterarguments against public enforcement. One downside of an enhanced SEC role is that it relies on the state to determine the optimal level of deterrence. While the state is superior to the market in making deterrence calculations when significant externalities are present, the SEC might regulate too aggressively in a world without private rights of action, i.e., it would terrorize corporations and interfere in common business operations.¹⁵⁷ To some extent, this possibility is simply a risk worth taking. The system already over-deters firms, and the SEC’s incentives would be better aligned at least to prosecute fraud rather than to extract settlements. Additionally, while courts generally defer to the SEC’s investigatory powers, this deference has not been absolute. For example, in *SEC v. Wheeling-Pittsburgh Steel Corp.*,¹⁵⁸ the court second-guessed an SEC investigation when the investigation was clearly politically motivated.¹⁵⁹

A second counterargument is that SEC penalties are too insignificant to deter large corporations or compensate investors. One might imagine, however, that the government would increase penalties for securities fraud in a world without private enforcement. Indeed, shareholders likely would

Cir. 1973) (emphasizing the SEC’s freedom to conduct investigations).

155. See NAGY ET AL., *supra* note 66, at 642–47, 673–74 (discussing tools at the SEC’s disposal to conduct effective investigations). Sarbanes Oxley also authorizes the SEC to pursue court-ordered temporary asset freezes to prevent suspect corporations from distributing remaining assets to shareholders or officers. See *id.* at 674 (explaining that the purpose of the asset freeze is to prevent “extraordinary payments” to directors, officers, agents or employees). For a discussion of available remedies, see *id.* at 675–78 (summarizing the statutory authority that grants both administrative and judicial relief to the SEC).

156. *Id.* at 636–37; Cox & Thomas, *supra* note 153, at 743–44; see Howell E. Jackson & Mark J. Roe, Public Enforcement of Securities Laws: Preliminary Evidence (July 25, 2007) (unpublished manuscript, on file with The Harvard Law Sch. Eur. Corp. Governance Inst.), available at <http://ssrn.com/abstract=1003177> (discussing the strengths of public regulation relative to private regulation in an international context).

157. This fear relates to the nirvana fallacy, or the tendency to ignore the shortcomings of governmental intervention. Cf. Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 12 J.L. & ECON. 1, 2–4 (1969).

158. 648 F.2d 118 (3d Cir. 1981).

159. See *id.* This case, however, was an “exceptional decision” and clearly a minority outcome. NAGY ET AL., *supra* note 66, at 640.

lobby for such reforms if they were necessary for optimal deterrence. Additionally, although the compensatory value of securities class actions admittedly is greater than that of SEC enforcement, such value is of little necessity and further of little practical value. According to the National Economic Research Associates (NERA), the average size of settlements increased from \$17.6 million, when measured from 1996 through 2001, to \$40.2 million from 2002 through 2007.¹⁶⁰ Median investor losses also increased quite dramatically in the past decade, from \$66 million in 1996, to \$333, \$407, and \$310 million in 2005, 2006, and 2007, respectively.¹⁶¹ In line with these trends, the ratio of settlements to median investor losses attributable to declines in stock price declined from 7.2% in 1996, to 3.4% in 2001, and 3.1%, 2.1%, and 2.4% in 2005, 2006, and 2007, respectively.¹⁶² Given that these numbers reflect a relatively diminutive value and do not account for “plaintiffs’ attorneys’ fees and expenses, defense counsels’ fees and expenses, Directors’ and Officers’ (D&O) insurance premiums, and the possible costs of disruption, stigma, and adverse publicity,”¹⁶³ Professor John Coffee speculates that “it is an open question as to whether the typical securities class action settlement actually produces any net recovery, particularly to diversified shareholders.”¹⁶⁴ Further support for this conclusion is that institutional investors frequently fail to file claims.¹⁶⁵

160. NERA, *supra* note 108, at 1. These values include “mega-settlements” of over \$1 billion, which tend to be outliers, but have occurred with greater frequency in recent years. Excluding these values, the averages drop to \$11.5 million from 1996 through 2001, and \$24.4 million from 2002 through 2007. *Id.*

161. *Id.* at 14–15. Although the seemingly low size of settlements in relation to median investor losses suggests that the current system under-deters, this is not necessarily the case. Settlements do not account for other impacts on businesses, such as costs of litigation and damage to reputation. As Part I.A discusses *supra*, the actual “damages” in these cases is zero given that a seller gains for every buyer that loses, and vice-versa. Thus, the ratio of average settlements to median investor losses is an inappropriate anchor with which to gauge deterrence.

162. NERA, *supra* note 108, at 14. NERA, however, likely underestimates these ratios substantially. Because it defines “investor losses” based merely on stock price declines, it includes losses from various non-fraud-related factors, such as industry-wide problems. See Coffee, *supra* note 6, at 1545 (exploring options to impose penalties of securities class actions on truly culpable parties).

163. Coffee, *supra* note 6, at 1546.

164. *Id.* at 1547.

165. See Choi, *supra* note 6, at 1503 (discussing the American experience of securities private class actions). See generally James D. Cox & Randall S. Thomas, *Letting Billions Slip Through Your Fingers: Empirical Evidence and Legal Implications of the Failure of Financial Institutions To Participate in Securities Class Action Settlements*, 58 STAN. L. REV. 411, 413 (2005) (discussing the results of an extensive investigation about the frequency with which financial institutions submit claims in settled securities class actions); James D. Cox & Randall S. Thomas, *Leaving Money on the Table: Do Institutional Investors Fail to File Claims in Securities Class Action?*, 80 WASH. U. L.Q. 855, 855–65

B. Pre-Commitment Strategies

The high degree of uncertainty regarding the necessary level of deterrence suggests that securities laws should give shareholders greater freedom to contract. Based on this rationale, an alternative system would allow shareholders to commit themselves to binding arbitration clauses and thus waive their ability to bring class actions (i.e., collective action waivers). Such reform might be possible without SEC or Congressional action; shareholders might simply vote to amend their corporate charter to include such a waiver.¹⁶⁶ Other contexts, such as credit card contracts,¹⁶⁷ frequently use similar arbitration clauses, and Professor Myriam Gilles notes that current waivers are “not a distant leap from a doctrine holding that a collective action waiver ‘travels with the stock,’ as part of the basket of rights purchased by the shareholder in the open market when he purchases a company’s common stock.”¹⁶⁸ Although shareholders lack a clear, easily-modifiable contractual relationship with the corporation in which they hold stock, “[a]ll that really matters to the court is that the consumer acts (or refrains from acting) while on notice that the terms and conditions established by the [company] include arbitration.”¹⁶⁹ Professor Gilles speculates that such notice might easily be provided by, for example, a legend on the security that indicates the class action waiver, actual notice from brokers, a NASDAQ website, or constructive notice from amendments to the corporate charter itself.¹⁷⁰

Still, such waivers would face two substantial legal obstacles. First, some jurisdictions, such as California¹⁷¹ and the Eleventh Circuit¹⁷² in

(2002) (examining whether financial institutions fail to submit claims for their losses in settled securities class actions). *But see* Joseph A. Grundfest & Michael A. Perino, *The Pentium Papers: A Case Study of Collective Institutional Investor Activism in Litigation*, 38 ARIZ. L. REV. 559, 561 (1996) (noting that institutional investors participate in securities litigation, although their participation is informal).

166. Although shareholders *as a whole* cannot organize effectively to coordinate their positions on securities litigation, coordination on a smaller scale—such as between shareholders of only one corporation—is possible.

167. *See* Myriam Gilles, *Opting Out of Liability: The Forthcoming, Near-Total Demise of the Modern Class Action*, 104 MICH. L. REV. 373, 396–97 (2005) (noting the inclusion of collective action waivers in small-merchant contracts by American Express). In August 2005, shareholders actually filed a class action against several major U.S. credit card-issuing banks and alleged that the defendants secretly and collusively met to impose class action waivers. *Id.* at 398–99.

168. *Id.* at 425.

169. *Id.* at 423.

170. *Id.* at 424.

171. *See, e.g.,* Discover Bank v. Superior Court, 113 P.3d 1100, 1109 (Cal. 2005) (holding collective actions waivers unconscionable where the dispute involved minimal damages and the party with superior bargaining power cheated consumers out of small individual sums of money); Szetela v. Discover Bank, 118 Cal. Rptr. 2d 862, 864 (Cal. Ct.

particular, have held collective actions waivers unconscionable under certain circumstances. Unconscionability, however, is a fact-specific inquiry, and most of these adverse cases are distinguishable from the present situation. Most importantly, cases that find unconscionability usually involve consumer contracts, which unlike shares, are adhesive in nature.¹⁷³ Individuals who purchase shares are more likely sophisticated and less likely to need judicial protection; securities simply involve a lesser risk of exploitation. Affected individuals have alternate options in which to invest,¹⁷⁴ and regardless, the vast majority of courts generally reject unconscionability claims even in the more sympathetic context of consumer contracts.¹⁷⁵

The second potential obstacle is that such arbitration may be inconsistent with shareholders' statutory rights under the 1933 and 1934 Acts, and the SEC's related policy against arbitration of such shareholder disputes.¹⁷⁶ Yet, courts may conclude that collective action waivers in the context of arbitration are enforceable. As the Supreme Court has often noted, the Federal Arbitration Act¹⁷⁷ establishes a strong presumption that arbitration agreements are enforceable,¹⁷⁸ and, in this context, the court is

App. 2002) (holding credit card company's provision against class actions procedurally and substantively unconscionable).

172. See, e.g., *Dale v. Comcast Corp.*, 498 F.3d 1216 (11th Cir. 2007) (holding arbitration agreement between provider and subscribers precluding class actions substantively unconscionable).

173. See Lindsay R. Androski, *A Contested Merger: The Intersection of Class Actions and Mandatory Arbitration Clauses*, 2003 U. CHI. LEGAL F. 631, 654–60 (2005) (exploring situations where plaintiffs seek lawsuits despite a mandatory arbitration clause in their contracts).

174. Cf. *id.* at 655 (arguing that freedom of contract allows parties to determine whether a given investment is favorable to them, and if not, to decline the transaction).

175. See Gilles, *supra* note 167, at 140–47 (summarizing the two waves of unconscionability claims); Hans Smit, *Class Actions and Their Waiver in Arbitration*, 15 AM. REV. INT'L ARB. 199, 202–03 (2004) (examining the prospects of class action arbitrations); J. Maria Glover, Note, *Beyond Unconscionability: Class Action Waivers and Mandatory Arbitration Agreements*, 59 VAND. L. REV. 1735, 1737, 1751–53 (2006) (urging a re-examination of class action waivers); see also Richard A. Nagareda, *Aggregation and its Discontents: Class Settlement Pressure, Class-Wide Arbitration, and CAFA*, 106 COLUM. L. REV. 1872, 1898–1902 (2006) (examining the distortion effect that a decision to afford or withhold aggregate treatment may have on the underlying substantive law and remedial scheme).

176. See *Green Tree Fin. Corp.-Ala. v. Randolph*, 531 U.S. 79, 90 (2000) (“Even claims arising under a statute designed to further important social policies may be arbitrated because ‘so long as the prospective litigant effectively may vindicate [his or her] statutory cause of action in the arbitral forum,’ the statute serves its functions.” (quoting *Gilmer v. Interstate/Johnson Lane Corp.*, 500 U.S. 20, 28 (1991))).

177. Codified at 9 U.S.C. §§ 1–16 (2000) (amended 2002).

178. See, e.g., *Dean Witter Reynolds Inc. v. Byrd*, 470 U.S. 213, 221 (1985) (“The preeminent concern of Congress in passing the Act was to enforce private agreements into

likely to find that arbitration itself does not alter substantive rights. Indeed, both arbitration and class actions solely are procedural devices: “By agreeing to arbitrate a statutory claim, a party does not forgo the substantive rights afforded by the statute; it only submits to their resolution in an arbitral, rather than a judicial, forum.”¹⁷⁹

Accordingly, courts have upheld waivers of a number of procedural rights, from the right to a jury trial¹⁸⁰ to the right to punitive damages.¹⁸¹ Following this reasoning, a number of courts have held that “[a]rbitration clauses are not unenforceable simply because they might render a class action unavailable.”¹⁸² Further, although the Court found that the inability to bring a claim because of high legal fees rendered an arbitration clause illegal in *Green Tree Financial Corp.-Alabama v. Randolph*,¹⁸³ corporations can resolve this concern easily if they offer to reimburse successful plaintiffs’ arbitration fees when claims are below a certain amount.

Agreements to binding arbitration are only second-best solutions to the coordination problems that accompany securities class actions. Such agreements represent commitment strategies to reduce the cost of defecting rather than commitments to cooperate. Arbitration still would allow awards of compensatory damages when such transfers reduce net value for shareholders. But, arbitration at least would reduce transaction costs substantially, especially where the form of the agreement under

which parties had entered, and that concern requires that we rigorously enforce agreements to arbitrate, even if the result is ‘piecemeal’ litigation.”); *Moses H. Cone Mem’l Hosp. v. Mercury Constr. Corp.*, 460 U.S. 1, 24–25 (1983) (“The Arbitration Act establishes that, as a matter of federal law, any doubts concerning the scope of arbitrable issues should be resolved in favor of arbitration.”).

179. *Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth*, 473 U.S. 614, 628 (1985). See Androski, *supra* note 173, at 636 (exploring *Mitsubishi Motors Corp.*); Nagareda, *supra* note 175, at 1897 (“[N]either an arbitration clause in a private contract nor a class action in a court is supposed to have the capacity, in itself, to alter substantive rights conferred by legislation.”).

180. See Deborah Matties, *A Case for Judicial Self-Restraint in Interpreting Contractual Jury Trial Waivers in Federal Court*, 65 GEO. WASH. L. REV. 431 (1997) (discussing the waiver of the right to trial by jury).

181. See Smit, *supra* note 175, at 200 (highlighting contractual provisions that deny arbitrators the right to award punitive damages).

182. *Rains v. Found. Health Sys. Life & Health*, 23 P.3d 1249, 1253 (Colo. Ct. App. 2001). See Androski, *supra* note 173, at 638 (“A plaintiff’s right to litigate class action claims is waivable, even when that procedural right is expressly provided by statute.”).

183. 531 U.S. 79, 90 (2000). The Fourth Circuit defined the relevant inquiry for arbitration as follows: The appropriate inquiry is one that evaluates whether the arbitral forum in a particular case is an adequate and accessible substitute to litigation, i.e., a case-by-case analysis that focuses, among other things, upon . . . the expected cost differential between arbitration and litigation in court, and whether that cost differential is so substantial as to deter the bringing of claims. *Bradford v. Rockwell Semiconductor Sys., Inc.*, 238 F.3d 549, 556 (4th Cir. 2001).

consideration would waive collective action.¹⁸⁴ Most importantly, arbitration would limit the potential damages in any given case such that corporations would not experience the same *in terrorem* pressure to settle.¹⁸⁵ As a result, shareholders no longer would have incentives to bring non-meritorious litigation. While the aforementioned coordination problems still might encourage arbitration of claims where there should be none, arbitration would at least lower the costs of the dilemma substantially.

CONCLUSION

The rationales for securities class actions are questionable at best. Securities litigation merely redistributes wealth among innocent shareholders and fails to penalize the most culpable parties. Shareholders lose value as a whole because litigation reduces the prices of their shares and transfers a large amount of their wealth to lawyers. So why would rational, diversified shareholders continue to bring these suits? This Comment has attempted to answer this fundamental question by showing that coordination problems and the prisoners' dilemma in particular underlie and explain the frequency of 10b-5 class actions. Instead of simply trying to screen out "frivolous" litigation, the Court should consider broader, more radical solutions to respond to this dilemma. For example, the Court might eliminate the private right of action altogether or find ways to substantially reduce transaction costs to minimize the costs of the prisoners' dilemma.

APPENDIX I: TWO-PERSON PRISONERS' DILEMMA

This appendix presents and explains the two-person prisoners' dilemma model algebraically. The fully diversified model functions as follows: Assume that two groups of investors, A and B, own all of the shares (m total) of two companies, X and Y. At point one, each company releases fraudulent earnings estimates that cause their stock prices to increase from P_1 to P_2 . At point two, A sells n shares of X to B, and B sells

184. Such an agreement might need to prohibit class-wide arbitration explicitly to avoid creating the same problem under a different name. For a discussion of the problems with class arbitration, see Androski, *supra* note 173, at 645–46 (citing problems such as incomplete records, lack of legal explanations, and the difficulty to successfully challenge the arbitrator's decision).

185. See *id.* at 656 (noting that a large corporate defendant in the private arbitration setting "would feel less pressure to settle unnecessarily, as there is no risk of the negative media attention incurred through public access to proceedings and to official court records. Moreover, the substitution of a neutral arbitrator for a potentially hyper-sympathetic jury may reduce the risk of excessive damages awards").

the same number of shares of Y to A. At point three, X and Y release corrective disclosures, which cause the price of their stocks to lose the inflation that the earlier misrepresentation caused.

Now, A and B each have a legally cognizable 10b-5 claim, and, should they decide to sue, both may recover an amount equal to their damages discounted by legal fees. Their damages will equal the difference between the inflated price and the actual, non-inflated price ($P_2 - P_1$) multiplied by the number of affected shares (n). This amount also must be discounted by attorneys' fees equal to $c\%$ of the damages. Accordingly, the total recovery is: $(1-c)((n)(P_2 - P_1))$.

Assuming that the market is efficient, one can expect the price of the shares to impound information related to the lawsuit. For example, if both parties choose to sue, then the price per share will decline in anticipation of suit-related losses. One may model this as a decline in price from P_1 to P_3 . Thus, the magnitude of the decline is measurable and equals the pro rata drop in market capitalization, or, in other terms, the amount of damages for which each share theoretically would be responsible: $(1/m)((n)(P_2 - P_1))$. In reality, this is a severe underestimate that does not account for the costs of business disruption or even the company's own attorneys' fees. But, this does not change the outcome, and accounting for such expenses would only worsen the dilemma. If A or B chooses not to sue, however, we anticipate that the market would impound this information as well, and thus the price of the stock would return to P_1 , its original price.

For simplicity's sake, this model will continue with a slight change in terminology, given that the diversification assumption makes A and B's positions interchangeable. There are four possible positions which either A or B can hold:

1. *Victims Filing Suit (Plaintiffs)*. Victims who file suit end up with the aforementioned damage award of $(1-c)((n)(P_2 - P_1))$, plus the value of their shares, nP_1 , which we assume the plaintiff retains. If one alters this assumption such that the plaintiff sells its shares to the opposite party, the opposite party's shares would increase from $(m-n)$ to (m) , which counteracts the effect of the sale and does not change the result.

2. *Victims Not Filing Suit*. Victims who do not file suit will have only nP_3 , or the value of their remaining shares.

3. *Non-Plaintiff Shareholder in a Company Subject to Suit*. If, for example, Y's misrepresentation damages A and A sues, then B would be a non-plaintiff shareholder in a company (Y) subject to suit. In that situation, B would have $(m-n)$ shares, but at a lower price that reflects the lost value to the firm from the lawsuit ($n(P_2 - P_1)$). Accordingly, the total value would be: $P_1(m-n) - (n(P_2 - P_1))$.

4. *Non-Plaintiff Shareholder in a Company Not Being Sued*. If, for example, X's misrepresentation damages B, but B chooses not to sue, then

A will be a non-plaintiff shareholder in a company (X) that is not being sued. In such a situation, A would retain the value of its shares at the initial price, $P_1(m-n)$.

* * * *

The following tables summarize the variables and these results:

TABLE 1: VARIABLES	
<i>Variable</i>	<i>Description</i>
M	The total number of shares in companies X and Y
N	The number of shares purchased by A and B (and sold by the opposite)
P_1	The original price, $P_1 < P_2$
P_2	Price after being inflated by a misrepresentation
P_3	Price after a corrective disclosure, impounding the anticipated verdict, $P_1, P_2 > P_3$
C	The percentage contingency fee paid to plaintiffs' lawyers. $1 \geq c \geq 0$

TABLE 2: INDIVIDUAL OUTCOMES	
<i>Party</i>	<i>Recovery</i>
Victim, Filing Suit (Plaintiff)	$nP_1 - ((n/m)((n)(P_2 - P_1))) + (1-c)((n)(P_2 - P_1))$, or, simplified, $nP_3 + (1-c)((n)(P_2 - P_1))$
Victim not Filing Suit	nP_3
Non-Plaintiff Shareholder in a Sued Company	$P_1(m-n) - ((m-n)/m)(P_2 - P_1)$, or, simplified, $P_3(m-n)$
Non-Plaintiff Shareholder without Suit	$P_1(m-n)$

TABLE 3: THE PRISONERS' DILEMMA		
	<i>B Sues</i>	<i>B Does Not Sue</i>
<i>A Sues</i>	$(mP_3 + ((1-c)((n)(P_2 - P_1))), ((mP_3 + (1-c)((n)(P_2 - P_1)))$	$(nP_3 + (1-c)((n)(P_2 - P_1)) + P_1(m-n)), (nP_1 + P_3(m-n))$
<i>A Does Not Sue</i>	$(nP_1 + P_3(m-n)), (nP_3 + (1-c)((n)(P_2 - P_1)) + P_1(m-n))$	(mP_1, mP_1)

Although difficult to see without the aid of numbers, algebra reflects the dilemma. For a prisoners' dilemma to hold, $T > R > P > S$, where: T is

the temptation to defect, that is, the payoff for defecting when the opposite player cooperates; R is the reward for cooperating, mP_1 in this example; P is the payout when both players defect; and S is the payout for suckers (those who cooperate when their opposing players defect).¹⁸⁶

Table 4 displays the values of these variables:

TABLE 4: PAYOUTS	
<i>Party</i>	<i>Payout</i>
T	$nP_3 + ((1-c)((n)(P_2-P_1)) + P_1(m-n))$
R	mP_1
P	$((mP_3 + (1-c)((n)(P_2-P_1)))$
S	$nP_1 + P_3(m-n)$

Two critical variables are the recovery that a suit generates and the additional losses from the price declines that the suit triggers. The value of these two costs are $((1-c)(n)(P_2-P_1))$ and $((n/m)((n)(P_2-P_1)))$, respectively. Here, T is greater than R assuming that the recovery from suing, $((1-c)(n)(P_2-P_1))$, is greater than the value lost from holding sued shares, or $(n)(P_1-P_3)$. This necessarily is true because courts likely include the latter value in the former. R is greater than P if $m(P_1-P_3)$ is greater than the recovery from suit, $((1-c)(n)(P_2-P_1))$. This is also true because $m(P_1-P_3)$, by definition, equals $n(P_2-P_1)$. Because both values proxy the value of the lawsuit to the corporation, the former value is the same as the latter, except that it is not discounted by $(1-c)$. Finally, P is greater than S if the recovery from suit, $((1-c)(n)(P_2-P_1))$, is greater than $n(P_1-P_3)$, which represents the damage from sued shares. This also is true because the former value includes the latter.

Analytically speaking, these conclusions make sense: A party is best off if he or she can recover through securities class actions when his or her shares are damaged, but not pay the costs associated with such suits as an unaffected shareholder in a sued company. The next best option is to never sue. This way, a party does not incur any transaction fees. The third-best option is to sue and be sued, which characterizes the current legal environment. This is inferior to cooperation, however, because such shareholders will have to pay the transaction fees for others' suits, and will recover only as much as they lose because of diversification. Finally, the worst case scenario is to pay others' transaction fees, but never to recover for one's own damages.

A more realistic model for the aforementioned situation, however, might be the n-person prisoners' dilemma. This model defines algebraically the value of cooperation and defection for an unlimited number of persons,

186. AXELROD, *supra* note 144, at 206.

which allows one to apply this model to diversified shareholders who want to decide whether to participate in a securities class action.

The model defines “cooperation” as choosing to forgo litigation, and “defection” as filing such litigation. The model then sets the utilities associated with these two choices as follows: $C(x)$ is the utility of those who cooperate, and $D(x)$ is the utility of those who defect if x people cooperate. These variables relate such that when cooperation is less than universal—that is when k , a number fewer than N , people cooperate—the individual payoff of defecting will still be greater than cooperating. This is expressed as $D(k-1) > C(k)$, where $1 \leq k \leq N$. Additionally, universal cooperation pays everyone more than universal non-cooperation: $D(0) < C(N)$.¹⁸⁷ Accordingly, gain (g) equals “the added benefit to each participant for universal cooperation over universal noncooperation.”¹⁸⁸ The model describes temptation as “the incentive for each individual not to cooperate,” and defines temptation as $t = D(k-1) - C(k)$, where $1 \leq k \leq N$.¹⁸⁹ Thus, cooperation increases as g increases and as t decreases.¹⁹⁰

The n -person model relies on four central assumptions: (1) each of the N persons must choose between cooperation or defection; (2) the payoffs for both choices increase monotonically with the proportion of people who cooperate; (3) the defect choice always yields a more highly valued individual outcome than the cooperate choice; and (4) the outcome is higher if everyone chooses to cooperate than if everyone chooses to defect.¹⁹¹

Thinking of securities litigation along these four lines helps illustrate the problem. The securities litigation context would define cooperation as choosing not to bring a suit and defecting as bringing suit. Shareholders generally face these two choices; even if another party brings a class action, shareholders can still preserve their ability to “cooperate” if they opt out of the class. For example, the Supreme Court has noted that “due process require[s] that [a class] member ‘receive notice plus an opportunity to be heard and participate in the litigation,’ and . . . ‘at a minimum . . . an absent plaintiff [must] be provided with an opportunity to remove himself from the class.’”¹⁹² Moreover, the Federal Rules of Civil Procedure require that

187. See Phillip Bonachich et al., *Cooperation and Group Size in the N-Person Prisoners' Dilemma*, 20 J. CONFLICT RESOL. 687, 689 (1976) (explaining that non-cooperation creates a deficient equilibrium).

188. *Id.*, or $g = C(N) - D(0)$.

189. *Id.*

190. See *id.* at 690 (showing the results of higher cooperation).

191. Samuel S. Komorita, *A Model of the N-Person Dilemma-Type Game*, 12 J. EXPER. SOC. PSYCHOL. 357, 358 (1976); see Block-Lieb, *supra* note 147, at 811–15 (describing the differences between two-person and n -person prisoners' dilemmas).

192. *Ortiz v. Fibreboard Corp.*, 527 U.S. 815, 848 (1999) (quoting *Phillips Petroleum Co. v. Shutts*, 472 U.S. 797, 812 (1985)). See Theodore Eisenberg & Geoffrey Miller, *The*

notice be given in “a reasonable manner to all class members who would be bound by the proposal.”¹⁹³

The second through fourth conditions also apply to securities litigation. As greater numbers of people cooperate, the payouts to both choices increase because people spend fewer resources on transaction costs such as legal fees. Moreover, while each player can earn more by defecting (any given shareholder’s dominant strategy would be to file a class action and hope that others failed to do the same), shareholders would likely be better off overall if none of them chose to sue. This assumes, however, that there were no irresolvable under-deterrence problems. Again, this reasoning predicts that the amount of litigation will be too high, and perhaps represents a number of strike suits.

Role of Opt-Outs and Objectors in Class Action Litigation: Theoretical and Empirical Issues, 57 VAND. L. REV. 1529, 1534–36 (discussing the basis of class members’ opt-out abilities).

193. FED. R. CIV. P. 23(e)(1).