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SEC ENFORCEMENT HEURISTICS: AN EMPIRICAL INQUIRY

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ABSTRACT

This Article examines the overlap between SEC securities enforcement actions and private securities fraud class actions. We begin with an overview of data concerning all SEC enforcement actions from 1997 to 2002. We find that the volume of SEC enforcement proceedings is relatively modest. We next examine the scope of the recently enacted "Fair Fund" provision that authorizes the SEC to designate civil penalties it recovers from defendants to benefit defrauded private investors. We conclude that this provision offers only limited potential relief for private investors. We complete this Part of the Article with an analysis of the serious resource limitations faced by the SEC.

The second portion of the Article contains an empirical analysis of the determinants of SEC enforcement actions and the overlap of private fraud suits and SEC enforcement proceedings. Using bivariate analysis, we find that (1) private suits with parallel SEC actions settle for significantly more than private suits without such proceedings; (2) SEC enforcement actions target significantly smaller companies than private actions alone; (3) private cases with parallel SEC actions take substantially less time to settle than other private cases; and (4) private cases with parallel SEC actions have significantly longer class periods than other private actions. Finally, we create a model for estimating

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damages to compare settlement ratios in cases with parallel SEC actions to those in private actions. We find that one-fourth of all the private class action settlements occurring in suits that yield less than 10 percent of provable losses are settled for less than 2 percent of provable losses, but that there are no private actions with parallel SEC suits with such small settlements.

In the final Part of the Article, we conduct a multivariate regression analysis of the determinants of when SEC enforcement actions are filed. We find that the most highly significant determinant of SEC actions is financial distress. Estimated losses do not appear to be a statistically significant factor in the SEC's decision to file these suits.

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INTRODUCTION

A public-private partnership for the enforcement of the securities laws is now entering its eighth decade. Since the inception of the federal securities laws, the government's broad enforcement authority has been complemented by private causes of action. The Federal Securities Act of 1933¹ underscores the importance of full disclosure for the public offerings of securities by conferring an investor-friendly cause of action on those who purchase securities of offerings whose registration statement is materially misleading.²

^{1. 15} U.S.C. § 77a (2000).

^{2.} Section 11 of the Securities Act of 1933, 15 U.S.C. § 77k, by imposing absolute liability on the security's issuer and liability upon certain parties who fail to establish their "due diligence" defense if the registration statement contains a material misrepresentation, can easily be seen as having been drafted to assure compliance with the disclosure requirements of the Act. This compliance orientation is further underscored by the absence of requiring a recovering plaintiff to read, rely on, or even receive the defective registration statement, except when the plaintiff acquired the security after the issuer had released financial statements

When Congress returned in 1934 to complete the federal disclosure tapestry, it created express private causes of action for misleading reports filed with the Securities and Exchange Commission (SEC) as part of the newly enacted continuous disclosure requirements, provided private recoveries for market manipulation, and authorized suits on behalf of reporting companies for short-swing profits garnered by certain insiders.

In the second decade of the young securities laws' lives, the courts concluded that even the express causes of action were not sufficient protection for investors. Beginning with *Kardon v. National Gypsum Co.*, courts recognized a range of implied private causes of action for individuals harmed as a consequence of another's violation of the securities laws. The highpoint of this development was *J.I. Case v. Borak*, where the Warren Court embraced the flattering, if not romantic, vision of the plaintiff as a "private attorney general" who provides the invaluable service of supplementing the SEC's own enforcement efforts.

covering a twelve-month period that did not commence until after the registration statement had become effective. The express cause of action in section 12(a)(1), 15 U.S.C. § 77l(a)(1), which authorizes rescission of securities offered in violation of the Act's registration requirements, similarly can be seen as designed to assure compliance with the registration requirements. And, section 12(a)(2), 15 U.S.C. § 77l(a)(2), as now limited to public offerings of securities, see Gustafson v. Alloyd Co., 513 U.S. 561, 584 (1995) (defining the word "prospectus" as used in the statute as "a document that describes a public offering of securities by an issuer or controlling shareholder"), provides a cause of action against those who cannot establish that they did not know and could not have known through the exercise of reasonable care of the untruth of his statement. Thus, section 12(a)(2) has the indirect effect of assuring that those involved in the distribution of a security are conversant with the information contained in the registration statement even though the purchasing investor is not.

- 3. See Securities Exchange Act of 1934 § 18(a), 15 U.S.C. § 78r(a) (2000) (requiring reliance by the plaintiff and imposing liability if the defendant fails to establish that she acted in "good faith and had no knowledge" that the filed report was materially misleading).
- 4. See id. § 9(e), 15 U.S.C. § 78i (providing private action for certain statutorily proscribed forms of manipulation as well as transactions proscribed in the SEC's rules).
- 5. See id. § 16(b), 15 U.S.C. § 78p(b) (stating, unlike other provisions authorizing private actions, that the SEC has no authority to obtain disgorgement of short-swing profits, although it does have authority to assure compliance with section 16(a)'s reporting provisions).
 - 6. 73 F. Supp. 798 (E.D. Pa. 1947).
- 7. See id. at 800 ("[A]lthough not expressly provided for in the Statute, a remedy by civil action to enforce [duties and liabilities created by the Act is] available to the plaintiffs.").
 - 8. 377 U.S. 426 (1964).
- 9. See id. at 432 ("Private enforcement of the proxy rules provides a necessary supplement to SEC action."). For the history of the private attorney general model, see generally Jeremy A. Rabkin, *The Secret Life of the Private Attorney General*, 61 LAW & CONTEMP. PROBS. 179 (Winter 1998).

The luster that the private attorney general enjoyed, however, was short-lived. The Supreme Court's rhetoric shifted with the tide of judicial conservatism, so that beginning in 1975, the Court examined questions posed by private litigation through a lens that magnified concerns for "vexatious litigation." Though private suits under the securities laws continued to multiply, and thereby provided the plaintiffs' bar with the good life, securities class actions and their lawyers were not favored species. Commentators questioned the incentives that surrounded the initiation and conduct of securities class actions. This pervasive cynicism led ultimately to the enactment

^{10.} See, e.g., Central Bank of Denver v. First Interstate Bank of Denver, 511 U.S. 164, 189 (1994) (recognizing potentially negative effects on secondary actors, newer and smaller companies, and investors themselves as a result of securities litigation); Blue Chip Stamps v. Manor Drug Stores, 421 U.S. 723, 743 (1975) (upholding lower court's earlier embrace of the purchaser-seller requirement out of "fear of vexatious litigation . . . [because the absence of such a requirement] would throw open to the trier of fact many rather hazy issues of historical fact the proof of which depended almost entirely on oral testimony").

^{11.} Part of the debate that led to Congress in 1995 reforming the procedures for the conduct of securities class actions was awareness of, and resulting concern about, the growth in the number of securities class actions. This data was collected in the Senate and House hearings that preceded the enactment of the Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737 (codified in scattered sections of 15 U.S.C.). See Securities Litigation Reform: Hearings Before the Subcomm. on Telecomms. & Fin. of the House Comm. on Energy & Commerce, 103d Cong. (1994) (collecting testimony and evidence about the growth of securities class actions); Private Litigation Under the Federal Securities Laws: Hearings Before the Subcomm. on Sec. of the S. Comm. on Banking, Hous., & Urban Affairs, 103d Cong. (1993) [hereinafter Private Litigation Hearings] (same). The far larger concern, however, was the belief that private suits recover very small amounts for the class and are, therefore, beneficial only to the lawyers who prosecute the suits. See Janet Cooper Alexander, Do the Merits Matter? A Study of Settlements in Securities Class Actions, 43 STAN. L. REV. 497, 516-17 (1991) (doubting that merits mattered in light of the fact that in the small sample of settlements examined, almost all appeared to settle within a reasonably tight range of 20-27 percent of the allowable recovery); Joseph A. Grundfest, Why Disimply?, 108 HARV. L. REV. 727, 742-43 (1995) (reviewing a sample of settlements in which 23 percent of the settlements were for less than \$2 million, suggesting that the suits held only a nuisance value). For a more positive view of this data, see James D. Cox, Making Securities Fraud Class Actions Virtuous, 39 ARIZ. L. REV. 497, 499-508 (1997).

^{12.} The classic work on this topic is John C. Coffee, Jr., Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions, 86 COLUM. L. REV. 669 (1986). See generally Alexander, supra note 11, at 516–17 (concluding that lawsuits settle for approximately the same percentage of the harm alleged to have been suffered, and thus merits of suits appear to have little impact on the conduct of litigation); John C. Coffee, Jr., Rescuing the Private Attorney General: Why the Model of the Lawyer as Bounty Hunter Is Not Working, 42 MD. L. REV. 215, 229 (1983) ("[T]he incentives today held out to the private attorney general are both inadequate and counterproductive in terms of the social interests that private enforcement of law is intended to serve."); Cox, supra note 11, at 523–24 (calling for greater activism in reviewing settlements on the part of class action courts to improve the incentives for conduct of suits); Jonathan R. Macey

of the Private Securities Litigation Reform Act of 1995 (PSLRA).¹³ The PSLRA's most forceful blow to the securities class action is the combination of the Act's tightened pleading requirements and its bar to discovery until the defendants' motions to dismiss have been resolved.¹⁴ There reforms were prompted by the classic "strike suit" concerns that have long dominated the debate over representative suit litigation.¹⁵

Thus, there are two very different perspectives of the role of private suits in the enforcement of the securities laws: one perspective enlists plaintiffs as private attorneys general, and the other perspective paints the same plaintiffs as vexatious litigants. This Article sheds new light on a fundamental question of the debate

& Geoffrey P. Miller, The Plaintiffs' Attorney's Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform, 58 U. CHI. L. REV. 1, 105–16 (1991) (arguing that incentives under the current regime are too weak for optimal prosecution of securities claims and proposing that suits be auctioned to provide greater owner-incentives to assure better decisions regarding whether to prosecute and settle suits); Judith Resnik, Money Matters: Judicial Market Interventions Creating Subsidies and Awarding Fees and Costs in Individual and Aggregate Litigation, 148 U. PA. L. REV. 2119, 2177–90 (2000) (suggesting methods to increase transparency in fee awards/arrangements so as to provide better supervision of class counsel and ultimately improved results for prosecution of suits).

- 13. Pub. L. No. 194-67, 109 Stat. 737 (codified in scattered sections of 15 U.S.C.).
- 14. Exchange Act section 21D(b)(2) provides that when scienter is required in private securities litigation the plaintiff must "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u-4(b)(2) (2000). The bar to discovery appears in both section 27(b)(1) of the Securities Act of 1933, 15 U.S.C. § 77z-1(b)(1) (2000), and section 21D(b)(3)(B) of the Exchange Act, 15 U.S.C. § 78u-4(b)(3)(B).
- 15. The hearings that preceded the enactment of the PSLRA were filled with testimony and studies supporting the position that securities suits commonly followed a drop of 10 percent or more in a securities price and that most suits were settled within the boundaries of an available, albeit small, insurance policy. See, e.g., Private Litigation Hearings, supra note 11, at 10, 12 (statement of Edward R. McCraken, President and CEO of Silicon Graphics, Inc.) (testifying that a lawsuit was filed several weeks after Silicon Graphics, Inc.'s 10 percent drop in stock price that resulted from the company's lower than expected earnings); FREDERICK C. DUNBAR & VINITA M. JUNEJA, RECENT TRENDS II: WHAT EXPLAINS SETTLEMENTS IN SHAREHOLDER ACTIONS? 739 (noting that many settlements are around \$2 million or less, the estimated amount of insurance). Much of the rhetoric that attended the enactment of the PSLRA was set in place by the timely article of Professor Alexander. Alexander, supra note 11. The synthesis of these reports appears in STAFF OF SENATE SUBCOMM. ON SEC. OF THE COMM. ON BANKING, HOUS., & URBAN AFFAIRS, 103D CONG., REPORT ON PRIVATE SECURITIES LITIGATION 166, 321-31 (1994). For a penetrating analysis of such data, see Joel Seligman, Commentary, The Merits Do Matter: A Comment on Professor Grundfest's Disimplying Private Rights of Action Under the Federal Securities Laws: The Commission's Authority, 108 HARV. L. REV. 438, 448–57 (1994); see also Cox, supra note 11, at 499–508 (asserting that the amounts used to represent recoverable damages in statistical studies are flawed by the models used to estimate them).

surrounding which of these two visions of the private securities class action has more validity. We explore how important and concomitant are private securities class action suits to the enforcement of the securities laws. This Article also provides another useful insight on an even broader topic: how well the SEC carries out its mission of protecting investors through the enforcement actions it initiates. We not only provide data comparing the profile of suits prosecuted by the SEC with those brought by private parties, but we also analyze whether the SEC enforcement actions appear targeted at those violations that have caused the most significant harm to investors. We therefore provide information useful in evaluating the conduct of both private and public efforts against securities law violators.

Part I of this Article reviews data regarding the enforcement procedures pursued by the SEC in carrying out its mandate of investor protection. The data reveal that, even though the SEC's administrative enforcement powers were greatly augmented in 1990, resort to its historic enforcement powers in the federal courts continues to be an integral and numerically significant part of its arsenal to combat financial reporting violations. Part II examines the potential impact of the recently enacted Fair Fund provision, which authorizes the SEC to designate that civil penalties recovered from a defendant will be added to any sum that the defendant is required to disgorge for the benefit of investors. We conclude that the Fair Fund provision, although a desirable legislative development, is limited in several different ways that will, in a good many instances, prevent it from providing total restitution to investors harmed as consequence of a violation. The serious resource limitations faced by the SEC are the subject of Part III; this condition resonates with the thesis underlying the private attorney general metaphor. Even though the SEC has recently received an unparalleled funding increase, 16 we conclude in Part III that its resources will continue to be seriously constrained. Part IV examines several issues that have been raised concerning private attorneys general including whether they yield large recoveries relative to the losses suffered by members of the class, whether they target small vulnerable companies, and their

^{16.} See U.S. SEC. & EXCH. COMM'N. ANN. REP. tbl. 17 (2002) (detailing budget estimates and appropriations 1998–2002); U.S. SEC. & EXCH. COMM'N., SEC BUDGET HISTORY VS. ACTUAL EXPENSES, at http://www.sec.gov/foia/docs/budgetact.htm (last visited Oct. 22, 2003) (on file with the *Duke Law Journal*) (setting forth fifteen years of budgetary information beginning with 1990 budget authority of about \$167 million and ending with the president's request for 2004 of \$842 million, the latter nearly double the SEC's budget in 2001).

correlation with SEC enforcement. In Part V, we conduct our empirical analysis, focusing on whether there is significant overlap between SEC enforcement actions and securities class actions, and whether private settlements are "better" when there has been a collateral SEC action. We also examine other differences that exist between cases the SEC prosecutes and those pursued only by the private attorney general. Our conclusions assess the criteria the SEC uses to guide its decisions to undertake an enforcement action for fraudulent reporting.

Because so much of the data and analysis in this Article focuses on social welfare implications of how the SEC directs its enforcement efforts, a logical threshold question, albeit one that some may consider heretical, or simply silly, is why the SEC has an enforcement role at all. Why did Congress not instead empower the SEC with only rulemaking authority and the general authority to review disclosures, leaving private parties to pursue violations of the agency's directives? The answer to this question can be found on many fronts.

One answer to why the SEC has enforcement authority is that of path dependency. When Congress enacted the securities laws, class action procedures were not as developed as they are today. The harm of financial frauds leading up to the market collapse of the Great Depression was seen by the New Deal Congress through its political lens as most significantly impacting the small investor. ¹⁷ There did not then exist the experience, as there is today, with class action procedures, not to mention a well-funded private plaintiffs' bar, to empower the small investor with the means not only to recoup her losses, but also protect herself against any ongoing violations. No assurance, therefore, existed in the contemporary legal landscape that private suits, which had been generously provided in both the Securities Act and the Securities Exchange Act, would provide sufficient recompense or deterrence for those harmed by securities violations. Hence, within the legal landscape that existed in 1933 and 1934, Congress chose a fork in the road that included both private and public enforcement. It granted the agency the authority to proceed administratively and judicially to address violations committed, as well as those about to be committed, while providing private suits in selective areas.

^{17.} See, e.g., H.R. REP. No. 73-85 (1933) (lamenting that the 1929 market collapse reeked havoc on thousands of individual investors who lost their life savings because they had succumbed to the high-pressure selling efforts of those promising easy wealth).

More significantly, numerous regulatory provisions of the securities laws create problems that prevent the meaningful pursuit of violations by private plaintiffs. In many cases, the loss suffered by the plaintiff or even a group of plaintiffs may not rise to a sufficient level to attract the interest of the entrepreneurial plaintiffs' attorney. And, the expected gains of the suit may be heavily discounted by both the plaintiff and his attorney, due to problematic elements such as establishing or even pleading key elements of the case. 18 The plaintiff may, not withstanding a clear violation, face causation or standing requirements.¹⁹ Or, the violation may not have been discovered within the applicable limitations period.²⁰ It can also be the case that the violation is simply of the type for which no private action exists. The net capital requirements of brokers,²¹ the requirement of reliable internal controls and records,²² and compliance with independence requirements of auditors and audit committee members²³ are examples of such provisions. The absence of a private

^{18.} Even before securities class action pleading requirements were tightened significantly by the PSLRA, pleading scienter on the part of the defendant was still a challenge for the plaintiff under the particularity requirement of FED. R. CIV. P. 9(b). See, e.g., Ross v. A.H. Robins Co., 607 F.2d 545, 558 (2d Cir. 1979) (dismissing action for failure of plaintiff to allege facts that defendant was aware of serious health risks posed by the company's major product when touting to investors the product's effectiveness).

^{19.} Thus, after recognizing in *Newton v. Merrill Lynch*, 135 F.3d 266 (3d Cir. 1998) (en banc), that brokers breach their disclosure obligations to their customers when executing trades at the national best bid and offer price with knowledge that reasonable efforts would likely achieve an even better price for the customer, *id.* at 274–75, the suit was ultimately dismissed because individual issues of causation were believed to overwhelm the common questions of law and fact across the class' members, Newton v. Merrill Lynch, 259 F.3d 154, 193 (3d Cir. 2001).

^{20.} The SEC faces no limitations period, SEC v. Rind, 991 F.2d 1486, 1491–93 (9th Cir. 1993), except to the extent any part of the relief sought constitutes a fine, penalty or forfeiture. *Id.* at 1492–93; *see also* Johnson v. SEC, 87 F.3d 484, 488 (D.C. Cir. 1996) (recognizing a five-year limitation period for penalties imposed as punishment by the government "which go[] beyond remedying the damage caused to the harmed parties by the defendant's action").

^{21.} The net capital rule, Securities Exchange Act Rule 15c3-1, 17 C.F.R. § 240.15c3-1 (2003), is designed to reduce the likelihood that brokers will fail due to their own trading behavior. Through a complicated set of requirements, the rule sets minimum levels of capital a broker must maintain. *See generally* Michael P. Jamroz, *The Net Capital Rule*, 47 BUS. LAW. 863 (1992) (examining the "basic structure of the Rule, describing its fundamental sections and underlying policy considerations").

^{22.} See Securities Exchange Act of 1934 § 13(b)(2), 15 U.S.C. § 78m(b)(2) (2000) (mandating that registered companies maintain adequate books and records and internal control procedures).

^{23.} See Sarbanes-Oxley Act of 2002 § 206, 15 U.S.C.A. § 78j-1(*I*) (West Supp. 2003) (mandating that auditor may not provide audit services to a registrant if one of its senior financial officers within one year was employed by the auditor and participated in the audit of

action may well be because the nature of the regulation is one that focuses not on investor protection as such, but rather on achieving desired efficiency or general confidence in the market. Violation of such a broadly based social objective is a poor candidate to isolate particular investor harm and, therefore, to equip the investor with a private enforcement remedy, let alone to exclude the SEC from enforcement. If the SEC then is to have an enforcement mission, why not allow its actions to cover those violations where there may also be private harms that arise from the violation. A related factor is the a priori concern that private actions may well be fortuitous, but that SEC actions may be more deliberate in their focus. As we will see in the data assembled in this Article, there is little overlap between private and SEC suits. This finding documents the a priori assumption that reliance solely on private enforcement will in turn depend on serious imperfections in the market for private suits, discussed next.

Having access to the federal fisc to fund its activities, as well as being the entity with whom many regulatory filings are made, are each equally compelling in placing the agency at the vortex of detecting and then prosecuting violations of the SEC's rules. These considerations need to be coupled with the weak incentives that accompany class actions generally, and securities actions in particular, that are well understood.²⁴ Although experience with the modern class action did not inform Congress' actions in the New Deal era of the securities laws, it certainly has been an important consideration for later Congresses. By amending the securities laws in 1984,²⁵ 1990,²⁶ and 2002,²⁷ Congress expanded significantly the SEC's enforcement arsenal, and in 1995 Congress undertook sweeping changes to address abuses of private securities class actions. Each initiative can be seen

the registrant and mandating complete independence of audit committee members of listed companies).

^{24.} See supra note 12.

^{25.} The Insider Trading Sanctions Act of 1984 amended the Exchange Act to authorize the SEC to impose a civil penalty of up to three times the amount of profits made or losses avoided by any person who violated the antifraud rules by inside trading or tipping. In 1988, Congress returned to this subject, among other steps, to impose control person responsibility for insider trading and tipping. See Securities Exchange Act § 21A(a)(1)–(2), 15 U.S.C. § 78u-1(a)(1)–(2) (originally enacted as Insider Trading and Securities Fraud Enforcement Act of 1988 § 3, 102 Stat. 4677, 4677–80) (authorizing judicial action by the SEC in response to insider trading and setting the maximum allowable penalty).

^{26.} Securities Enforcement and Penny Stock Reform Act of 1990, Pub. L. No. 101-429, 104 Stat. 931 (codified in scattered sections of 15 U.S.C.).

^{27.} Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (codified in scattered sections of 11, 15, 18, 28, and 29 U.S.C.A. (West Supp. 2003)).

as reflecting the national mood and the overall importance of strong resolute enforcement of the securities laws by the SEC.

For all the reasons identified above, it is important that the SEC discharge its enforcement responsibilities efficiently. Part I, examines the mechanisms the SEC has at hand to carryout its enforcement mission.

I. MECHANISMS TO FULFILL THE SEC'S ENFORCEMENT MANDATE

The SEC has broad authority to initiate enforcement actions when a violation of the securities laws has occurred, is occurring, or is about to occur.²⁸ With the enactment of the Securities Enforcement and Penny Stock Reform Act of 1990,²⁹ the SEC now enjoys a panoply of enforcement options for fraudulent reporting practices. Before the 1990 legislation, the SEC's options for prosecuting such violations were extremely limited: the SEC could initiate an injunctive action in federal court, 30 or, if the misleading item appeared in a report required to be filed with the SEC, the SEC could bring an administrative action under section 15(c)(4) of the Exchange Act.³¹ However, the 15(c)(4) administrative remedy arguably was limited to requiring the registrant to correct its filing.³² A somewhat more sweeping administrative sanction existed under the Securities Act in the form of a stop order or refusal order when a registration statement filed with the SEC was believed to be materially misleading.³³ More frequently, the SEC resorted to negotiations with

^{28.} See Exchange Act § 21(d)(1), 15 U.S.C. § 78u(d)(1) (authorizing SEC enforcement actions in the federal district court).

^{29.} Pub. L. No. 101-429, 104 Stat. 931 (codified in scattered sections of 15 U.S.C.).

^{30.} See 104 Stat. at 931 (enacted "[t]o amend the Federal securities laws in order to provide additional enforcement remedies for violations of those laws").

^{31.} See 15 U.S.C. § 78o(c)(4) (authorizing administrative action when reporting company "has failed to comply" with disclosure requirements to compel the issuer to bring itself into compliance).

^{32.} On the operation of section 15(c)(4) actions, see generally William R. McLucas & Laurie Romanowich, SEC Enforcement Proceedings Under Section 15(c)(4) of the Securities Exchange Act of 1934, 41 Bus. Law. 145 (1985). Section 15(c)(4) is virtually moribund as a result of the SEC receiving in 1990 authority for cease-and-desist enforcement actions.

^{33.} See Securities Act of 1933 § 8(b), (d), 15 U.S.C. § 77h(b), (d) (2000) (allowing, respectively, the SEC to stop the registration of a security when the filed matter "on its face" is materially inaccurate or to issue an order stopping the effectiveness of a registration statement that the SEC deems materially misleading). See generally William R. McLucas, Stop Order Proceedings Under the Securities Act of 1933: A Current Assessment, 40 BUS. LAW. 515, 515 (1985) (examining "the Commission's stop order authority and the issues that arise in connection with stop order proceedings").

the offending parties that culminated in a settlement embodied in a report of the results of its investigation as authorized by section 21(a) of the Exchange Act.³⁴

The principal purpose of the 1990 legislation was to introduce greater flexibility into the SEC's enforcement program with the objective of allowing the SEC "to achieve the appropriate level of deterrence in each case and thereby maximize the remedial effects of its enforcement actions."35 While augmenting the SEC's enforcement arsenal in a variety of other contexts, such as administrative fines against brokers, investment advisors, and clearing agents, after the 1990 legislation the SEC enjoyed a new array of enforcement sanctions that it can invoke in the courts or in an administrative proceeding for financial fraud violations. Foremost among these new tools is the ability to proceed administratively to obtain a cease-anddesist order against one who "is violating, has violated, or is about to violate" the securities laws.³⁷ This remedy is also available against anyone who is the cause of such misconduct. In connection with any cease-and-desist order, the SEC is expressly empowered to force the respondent to disgorge any ill-gotten gains.³⁸

One benefit of the cease-and-desist order is that if the SEC sought the same relief via a judicially granted injunction, the defendant could face significant collateral consequences that arise automatically when certain regulated parties are subject to an injunction. An example of such a consequence is that anyone who is the subject of an SEC injunction cannot serve as an officer or director

^{34.} See 15 U.S.C. § 78u(a) (2000) (authorizing the SEC to make investigations into possible violations and to publish its findings). Settlements arrived at pursuant to statutory authority to issue reports are inherently problematic. See The Commission's Practice Relating to Reports of Investigations and Statements Submitted to the Commission Pursuant to Section 21(a) of the Securities Exchange Act of 1934, Exchange Act Release No. 15,664, [1979 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,014, at 81,558–59 (Mar. 21, 1979) (containing comments of Commissioner Roberta Karmel criticizing use of section 21(a) reports to reach settlements sanctioning violations); ABA Report of the Task Force on SEC Settlements, 47 BUS. LAW. 1083, 1140–49 (1992) (criticizing the use of settlements to establish legal principles as a substitute for formal rulemaking).

^{35.} H.R. REP. No. 101-616, at 13 (1990).

^{36.} See, e.g., Securities Exchange Act § 21B, 15 U.S.C. § 78u-2 (authorizing administrative fines to be imposed for misconduct by brokers, including those that deal only in federal or municipal securities, securities analysts, and clearing agents).

^{37.} Securities Act § 8A(a), 15 U.S.C. § 77h-1(a); Securities Exchange Act § 21C(a), 15 U.S.C. § 78u-3(a).

^{38.} Securities Act \$ 8A(e), 15 U.S.C. \$ 77h-1(e); Securities Exchange Act \$ 21C(e), 15 U.S.C. \$ 78u-3(e).

of an investment company.³⁹ Such a serious collateral consequence may cause the defendant in a SEC injunctive action to resist more vigorously than if the SEC proceeded to obtain a cease-and-desist order for the same misconduct.

The sanctions available in SEC judicial enforcement actions were also addressed in the 1990 legislation. The Act expressly authorizes the SEC to seek a judicial order that bars or suspends an individual who has violated the antifraud provisions from serving as an officer or director of a SEC reporting company. Although the SEC had obtained such bars in appropriate cases before the 1990 legislation, the 1990 legislation removed any doubt about the SEC's authority to seek such relief. Congress also sought to strengthen the deterrence effects of SEC enforcement actions by empowering the SEC to ask the presiding court to impose civil monetary penalties upon violators. Before the 1990 legislation, the SEC enjoyed this authority only in the case of insider trading violations.

To illustrate the SEC's choice of enforcement fora, Table 1 presents data on the number of different types of enforcement proceedings initiated by the SEC over the last six years.⁴⁴

^{39.} Investment Company Act of 1940 § 9(a)(2), 15 U.S.C. § 80a-9(a)(2) (2000); see also Investment Advisers Act of 1940 § 203(e)(4), 15 U.S.C. § 80b-3(e)(4) (2000) (authorizing the SEC to suspend an investment advisor who is subject to an order of court as a consequence of violating the securities laws). Moreover, the "bad boy" disqualifiers that appear in certain SEC regulations bar resort to regulatory exemptions and safe harbors when the issuer or certain of its senior management are the subject of a court order arising from violation of the securities laws. See 17 C.F.R. § 230.262(a)(4), (b)(2) (2003) (conditioning Regulation A in such a manner); id. § 230.507(a) (recognizing that the safe harbors provided by Regulation D contain such a bad boy disqualifier).

^{40.} See Securities Exchange Act of 1934 § 21(d)(2), 15 U.S.C.A. § 78u(d)(2) (West Supp. 2003) (individuals can be barred from serving as an officer or director of a reporting company if facts establish their "unfitness to serve as an officer or director" of reporting company).

^{41.} See, e.g., Techni-Culture, Inc., [1973–74 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 94,501, at 95,759 (D. Ariz. 1974) (prohibiting defendant from "assuming a position as or continuing to act as either an officer or director of any public company except upon a showing to the Court that measures have been taken to prevent repetition of the [prohibited] conduct").

^{42.} Congress sought to increase deterrence by adding fines in 1990.

^{43.} See Securities Exchange Act of 1934 § 21A, 15 U.S.C. § 78u-1 (providing that a civil penalty for insider trading can be imposed that does not exceed three times the profit gained or loss avoided; a culpable control person can be liable for not greater than a similar amount or \$1 million).

^{44.} This data is taken from SEC ANN. REP. 2 (2002); SEC ANN. REP. 1 (2001).

	1997	1998	1999	2000	2001	2002
Civil Injunctive Actions	189	214	198	223	205	270
Administrative Proceedings	285	248	298	244	248	280
Contempt Proceedings	14	15	29	36	31	47
Report of Investigations	1	0	0	0	0	1
Total	489	477	525	503	484	598

TABLE 1
TYPES OF SEC ENFORCEMENT PROCEEDINGS: 1997–2002

The data in Table 1 suggest a strong preference for administrative enforcement actions. However, the wide range of possible violations that can be the focus of an SEC enforcement action prevents any reliable conclusions to be drawn by merely comparing aggregate judicial actions with the total number of administrative enforcement proceedings.

Table 2 presents a more complete picture of the division of enforcement actions for 2001 and 2002 between civil injunctive actions in the federal courts and internal administrative proceedings. ⁴⁵ Several interesting observations arise from the data in Table 2. At least for the displayed years, there is surprising consistency in the year-to-year composition of the types of suits that pique the SEC's enforcement actions. We also note a substantial overall increase in the number of enforcement actions commenced in 2002 over 2001.

Because our focus in this Article is the interplay, if any, of SEC and private suits, the data in Table 2 can assist us in isolating the types of enforcement actions in which there most likely could be private suits. The most common types of violations that give rise to securities class actions are those involving misrepresentations committed in the public offering of securities, misleading financial reports of issuers, and insider trading cases. In contrast, market manipulation rarely gives rise to class action claims, and actions for

^{45.} SEC ANN. REP. 144 (2002); SEC ANN. REP. 134 (2001).

TABLE 2
SEC CIVIL AND ADMINISTRATIVE ENFORCEMENT PROCEEDINGS: 2001–2002

	2001		2002			
	Civil	Admin.	Total	Civil	Admin.	Total
Securities Offerings	56	39	95 (20%)	79	40	119 (20%)
Broker- Dealer	13	52	65 (13%)	17	65	82 (14%)
Issuer Financial Statements and Reporting	41	71	112 (23%)	69	94	163 (27%)
Other Regulated Entities ⁴⁶	13	33	46 (9%)	15	39	54 (9%)
Insider Trading	47	10	57 (12%)	53	6	59 (10%)
Market Manipulation	17	23	40 (8%)	27	15	42 (7%)
Delinquent Filings	5	9	14 (3%)	0	10	10 (2%)
Contempt Proceedings	31	0	31 (6%)	47	0	47 (8%)
Other	13	12	25 (5%)	10	12	22 (3%)
Total	236	249	485 ⁴⁷ (100%)	317	281	598 (100%)

broker-dealer, investment company, and investment company advisor misconduct are customarily not prosecuted as class actions. From this recent data, we can conclude that about one-half of SEC enforcement actions could have a parallel securities class action claim.⁴⁸ Also of

^{46.} This category refers to actions against investment companies, investment advisers, and transfer agents.

^{47.} This source reports one more case in the aggregate total than appears in Table 1, and we suspect it is an administrative proceeding labeled as "miscellaneous" in the SEC's report.

^{48.} This is derived by totaling the percentages for "securities offerings" (20%/95), "issuer financial statement and reporting (23%/112), and insider trading (12%/57) proceedings.

note is that even though securities offering and issuer reporting frauds are prosecuted with about equal frequency in judicial (245 instances in 2001 and 2002) and administrative proceedings (244 instances in 2001 and 2002), the SEC consistently prosecutes securities offering violations more frequently in court while showing a strong preference for administrative proceedings to prosecute issuer reporting violations.

In several respects, we might conclude that the total volume of SEC enforcement proceedings is quite modest compared to those possible. First, the volume of complaints the SEC received from investors the last few years exceeded 20,000 per year. 49 Second, unless there is an amazingly high level of compliance with the securities laws, it would appear that an enterprise where 17,000 reporting companies file at least four different reports each year could well be expected to produce more than the current 112 enforcement actions a year (an amount that equals slightly more than 0.6 percent of the total number of reporting companies). On the other hand, because about half of the investor complaints the SEC receives involve brokerdealers, many may involve both misunderstandings by the complaining party as well as misconduct too isolated to merit deployment of an SEC investigator. And, it may well be that compliance with the U.S. securities laws is quite high, so that the small percentage of SEC enforcement proceedings is as expected.

The actual distribution of judicial and administrative enforcement cases among types of violations reflects the overriding priorities the SEC must maintain in light of its limited resources. As recently reported:

[The] SEC generally prioritizes the cases in terms of (1) the message delivered to the industry and public about the reach of SEC's enforcement efforts, (2) the amount of investor harm done, (3) the deterrent value of the action, and (4) SEC's visibility in certain areas such as insider trading and financial fraud.⁵⁰

^{49.} The number of investor complaints to the SEC in 2000 was 20,431, with nearly one-half being focused on broker-dealers. SEC ANN. REP. 28 (2001).

^{50.} Major Human Capital Challenges at SEC and Key Trade Agencies: Hearing Before the S. Subcomm. on Oversight of Gov't Mgmt., Restructuring & the Dist. of Columbia, Comm. on Governmental Affairs, 107th Cong. 6 (2002) [hereinafter Human Capital Hearings] (statement of Richard J. Hillman, Director of Financial Markets and Community Investments, & Loren Yager, Director of International Affairs and Trade).

The fact that resources are limited so that priorities must be set places the above data in context. Enforcement actions serve as a bright beacon regarding what the SEC believes is important and it gauges importance by several metrics. Foremost among those is the message that an enforcement action communicates to the market and its participants. This dimension of the heuristic used to consider whether to commence a formal SEC enforcement action is beyond reproach for anyone who witnessed the immediate impact of the SEC's successful prosecution of insider trading cases, beginning with the landmark enforcement action in SEC v. Texas Gulf Sulphur Co.51 The SEC, through its path-breaking prosecutions on insider trading, not only established the boundaries of insider trading regulation, but also legitimized regulation of this phenomenon in the first place. Similarly the SEC's aggressive pursuit of corporate bribery and off-books slush funds in the aftermath of the Watergate investigations riveted the public's attention⁵² and ultimately led to legislation⁵³ on the reporting abuses that can flow from a corporation's acquiescence in systematic bribery. 54 More recently, the SEC concluded a series of enforcement actions surrounding its Regulation FD,55 which have made issuers and their advisors even more aware of the SEC's commitment to equal access to confidential information by all market participants.

^{51. 401} F.2d 833 (2d Cir. 1968) (en banc).

^{52.} See U.S. SEC, REPORT ON QUESTIONABLE AND ILLEGAL CORPORATE PAYMENTS AND PRACTICES (1976) (detailing the seemingly widespread practice of bribery as a means of securing business).

^{53.} Foreign Corrupt Practices Act of 1977, Pub. L. No. 95-213, 91 Stat. 1494 (codified as amended in scattered sections of 15 U.S.C.).

^{54.} The Foreign Corrupt Practices Act is the source of the books and records requirements of the Securities Exchange Act of 1934, which require registrants to maintain accounting records in sufficient detail and accuracy as to fairly reflect transactions and dispositions of company assets as well as to devise and maintain a system of internal control sufficient to assure that transactions are carried out according to management's authorization and that financial statements can be prepared in accordance with governing accounting principles. Securities Exchange Act of 1934 § 13(b)(2)(A)–(B), 15 U.S.C. § 78m(b)(2)(A)–(B) (2000).

^{55.} Regulation FD, 17 C.F.R. §§ 243.100–.103 (2003), in broad overview, prohibits domestic registrants from disclosing material, nonpublic information to a broker, dealer, investment adviser, investment company, and to holders of its securities in certain circumstances, unless such information is simultaneously made available to the public. See, e.g., Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: Motorola, Inc., Exchange Act Release No. 46,898, 2002 SEC LEXIS 3008, at *3–*8 (Nov. 25, 2002) (detailing violation of Regulation FD). For samples of the press reports of this development, see Kathleen Day, SEC Enforces Disclosure Rule for First Time, WASH. POST, Nov. 26, 2002, at E1; Floyd Norris, SEC Puts Data Disclosure in the Spotlight, N.Y. TIMES, Nov. 26, 2002, at C1; and Randall Smith & Jesse Drucker, Unfair Disclosure: SEC Brings Series of Cases, WALL ST. J., Nov. 26, 2002, at C-1.

Equally important is the need to protect investors from the ongoing harm of a violation. Thus, even though the deterrence value of an SEC action may in the particular case be slight, the threat of ongoing injury to investors can sway a regulator to commit its resources to a substantive violation that otherwise may have been crowded off the SEC's agenda if the violation was not ongoing. However, any priority setting inherently means that not all cases for which the SEC has a potential substantive dog in the fight will be engaged. It is here that the private attorney general thesis has its greatest traction.

II. SEC RECOVERIES ON BEHALF OF INJURED INVESTORS

When seeking civil injunctive relief, the SEC has long invoked the authority of the presiding court to concurrently seek ancillary relief. Among the ancillary remedies so requested is a court order requiring the defendant to disgorge any ill-gotten gains garnered through the violation. It was only a short step from this remedy to allowing the disgorged sums to be placed in a fund that would be available for those harmed as a consequence of the violation. In conjunction with a court order, the SEC can ask the court to appoint a receiver for the defendant's affairs who would, among other things, pursue or even manage the assets of the defendant with the objective of providing funds to investors harmed by the defendant's violation. Furthermore, as noted above, the 1990 legislation expands the SEC's authority to obtain disgorgement in administrative cease-and-desist

^{56.} Forms of ancillary relief include not simply disgorgement, but also the appointment of receivers, *see*, *e.g.*, SEC v. Wencke, 622 F.2d 1363, 1369 (9th Cir. 1980) (acknowledging the "inherent" authority of the court to impose a receivership in appropriate circumstances), the appointment of special counsel to carry out an internal investigation of the registrant's affairs, *see*, *e.g.*, Data Access Sys., Inc., [1982 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 98,779, at 94,005 (D.N.J. 1982) (examining recommendations made by the court-appointed "Special Agent"), and the creation of an audit committee, *see*, *e.g.*, SEC v. Oak Indus., SEC Litigation Release No. 10801, 1985 SEC LEXIS 1238, at *6–*7 (June 25, 1985) (requiring the company to maintain an audit committee of its board of directors for five years).

^{57.} The SEC took a major step forward in increasing the deterrence effect of disgorgement remedies by seeking interest on the sums to be disgorged from the date of the violation. *See*, *e.g.*, SEC v. First City Fin. Corp., 890 F.2d 1215, 1231 (D.C. Cir. 1989) (recovering profits the defendant garnered on shares acquired outside the statutory grace period for an early warning filing under the Williams Act, plus interest thereon).

^{58.} On the general subject of disbursements of sums recovered via SEC disgorgement orders, see U.S. SEC. & EXCH. COMM'N, REPORT PURSUANT TO SECTION 308(C) OF THE SARBANES-OXLEY ACT OF 2002 pt. IV.B (2003) [hereinafter SEC DISGORGEMENT STUDY].

proceedings.⁵⁹ Pursuant to this expanded authority, the SEC, in appropriate and what have now become numerous cases, continues its prior practice of calling for the disgorged sums to be available for restitution and other relief for those harmed by the defendant's misconduct.⁶⁰

A further development linking SEC enforcement activities to recoveries by private investors occurred in July 2002, when Congress enacted the Sarbanes-Oxley Act. Section 308(a) of the Act authorizes the SEC, in its discretion, to apply for the benefit of victims of a securities law violation the civil penalties (i.e., fines) collected in enforcement cases toward any disgorgement funds obtained from the respondent. This so-called Fair Fund provision thus expands the sum of money that can become available to victims of a securities law violation. Indirectly, it provides additional incentive for the SEC to impose civil penalties in its administrative proceedings against certain market professionals, and to seek civil penalties in its court enforcement actions.

The Fair Fund provision does have important limitations though. For example, it applies only in proceedings where the fined defendant is also required to disgorge funds to the SEC. Thus, if the particular defendant has not garnered any ill-gotten gain for which disgorgement would otherwise be appropriate, no part of the fine imposed upon that defendant can be made available to the victims of that violation. An even more limiting effect of the Fair Fund provision is that even though some of the violators in a fraudulent activity are required to disgorge sums they gained as a consequence of their violation, no part of the civil fine imposed upon co-violators, who avoided disgorgement because they did not benefit from their misconduct, would be made available to their victims.

^{59.} See, e.g., Securities Enforcement Remedies and Penny Stock Reform Act of 1990, Pub. L. No. 101-429, 104 Stat. 931 (codified as amended at 15 U.S.C. § 78u-3(e) (2000)) (granting the SEC the authority to enter an order requiring accounting and disgorgement, "including reasonable interest").

^{60.} See SEC DISGORGEMENT STUDY, supra note 58, pt. IV.B ("[A]nalyz[ing] what aspects of cases make it more likely there will be a distribution to injured investors.").

^{61.} Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (codified in scattered sections of 11, 15, 18, 28, and 29 U.S.C.A. (West Supp. 2003)).

^{62.} Sarbanes-Oxley Act of 2002 § 308(a), 15 U.S.C.A. § 7246(a) (West Supp. 2003).

Disgorgements the SEC obtains for the benefit of victims of securities fraud can be quite sizeable. For example, in a pre-Sarbanes-Oxley enforcement action, Michael Saylor, the CEO of MicroStrategy, Inc., was required to disgorge over \$8 million into a class action fund in connection with his insider trading. Furthermore, a recent SEC study of disgorgement and penalty cases arising from fraudulent offerings of securities over the past five years found that "on a per defendant basis, the largest amounts of disgorgement paid ranged from \$1.7 million to \$6.5 million, for a total of approximately \$33 million paid by eight defendants."

By far, the bulk of the funds the SEC has recovered through disgorgement for the benefit of investors has come from successful prosecutions of enforcement actions in the federal courts. The SEC's study reports that in thirty-four of the eighty-seven studied district court actions, a total of over one billion dollars was recovered and paid directly to approximately 125,000 investors. However, the SEC's study reflects that sizable disgorgements occur in only a distinct minority of disgorgement cases. Specifically, of the 35 financial fraud actions in the SEC study, two separate actions account for over 70 percent of the disgorgement funds ordered.

It is unlikely that profit disgorgements generated by the Fair Fund provision can be expected to displace private recoveries in many situations. As the SEC found in its own study, "financial fraud

^{63.} For a study of SEC disgorgement and penalty cases with an emphasis, but by no means exclusive focus on funds being made available to the victims, of securities frauds, see SEC DISGORGEMENT STUDY, *supra* note 58, at 5. The study by the SEC's Office of Economic Analysis examined eight types of cases, including the six most important enforcement program areas: offering fraud, issuer financial fraud and reporting, broker-dealer, insider trading, non-broker-dealer regulated entities, and market manipulation, involving 513 defendants covering the five years ending July 31, 2002. *Id*.

^{64.} Michael Jerry Saylor, et. al., SEC Litigation Release No. 16,829, 2000 SEC LEXIS 2743, *2 (Dec. 14, 2000). It should be noted, however, that in the subsequent settlements of the MicroStrategy class action suit, the company contributed \$98.5 million, *In re* MicroStrategy, Inc. Sec. Litig., 172 F. Supp. 2d 778, 781 n.2 (E.D. Va. 2001), and its auditors \$55 million to the settlement, *id.* at 781 n.3.

^{65.} SEC DISGORGEMENT STUDY, *supra* note 58, at 9. These eight defendants comprised less than 4 percent of the total offering fraud defendants in the sample; however, their disgorgements constituted 75 percent of the total disgorgement received from all defendants related to offering fraud cases. *Id*.

^{66.} *Id.* at 10. In four of the thirty-four cases, the funds were disgorged into an investor fund established in private litigation or to the bankruptcy trustee for the benefit of creditors and shareholders. *Id.*

^{67.} Id. at 6.

^{68.} Id.

violations . . . may cause huge investor losses that dwarf, by several orders of magnitude, any profit that violators may have made."69 As seen above, this was the story in the MicroStrategy case. ⁷⁰ Indirectly the SEC addresses this concern by its "real time" enforcement efforts, whereby it swiftly seeks to obtain relief to prevent further harm from a violation.⁷¹ Nevertheless, it is the nature of financial fraud violations that the harm caused as a consequence of misrepresenting the firm's performance or financial position is often greater than any profit violators take home. For example, the amount that a publicly traded firm's market value is inflated by a false announcement of earnings private benefit those anv responsible misrepresentation may have gained through their misconduct. Thus, when outside accountants turn a blind eve to an overstatement of revenue so that annual reports inflate their client's performance, the resulting inflation in the firm's market value and investor harm can be expected to greatly exceed any direct or indirect rewards the accountants derived from their complicity in the fraud. As seen above, the Fair Fund provision now authorizes the SEC to augment the funds available to harmed investors with the civil penalties imposed upon the defendants. Even though these sums can be considerable, with the largest penalty now authorized reaching \$25 million in the case of willful violations by an entity, 22 this amount can pale when compared to the harm proximately caused by the defendants' violation. 73 And, as seen in the next Part, by far the greatest limiting factor on federal enforcement actions is the resources the SEC can commit to these efforts.⁷⁴

^{69.} Id. at 1.

^{70.} See supra note 64 and accompanying text.

^{71.} SEC DISGORGEMENT STUDY, supra note 58, at 22.

^{72.} Securities Exchange Act of 1934 § 32(a), 15 U.S.C.A. § 78ff(a) (West. Supp. 2003).

^{73.} See id. (indicating that the amount for a natural person who commits a violation willfully is \$5 million). Outside of this criminal sanction, the maximum fine per violation is \$500,000 for a non-natural person (\$100,000 for a natural person). Securities Exchange Act of 1934 \$ 21B(b)(3), 15 U.S.C. \$ 78u-2(b)(3) (2000).

^{74.} See Bateman Eichler, Hill Richards, Inc. v. Berner, 472 U.S. 299, 315 (1985) (observing that even as securities markets have grown in recent years, SEC resources have declined).

III. THE SEC AS THE HEROIC "DAVID"

The resource limitations faced by the SEC are a much studied and well understood problem.75 Pursuing a philosophy that an ounce of protection is worth a pound of enforcement, the staff of the SEC reviews the mandatory filings of its registrants. Such SEC staff reviews can be seen as the first line of defense against ongoing disclosure violations. Despite the obvious social welfare implications of staff reviews, the SEC's funding to carryout reviews has been severely limited so that the percentage of filings examined by the SEC has continued to decline because the number of registrants and corporate filings simply increased at a far faster rate than has the SEC's budget. For example, from 1991 to 2000, the number of filings with the SEC increased by 60 percent; however, during the same period, the filings receiving some type of review declined from 21 percent to 8 percent. The SEC's announced goal in 2001 was to achieve a full review of each of its 17,000 issuer's annual reports once every three years—a review rate of 30 to 35 percent; however, in 2001 it completed a full review for only 16 percent of those issuers, thus achieving only half of its earlier stated goal.⁷⁷

Equally dramatic resource pressures exist for the SEC's enforcement staff. Over the past decade, the SEC's enforcement staff increased by 16 percent, while the number of cases commenced in that same time period increased by 65 percent and the number of

^{75.} See, e.g., Critical Resource and Staffing Issues Facing the SEC: Testimony Before the S. Subcomm. on Oversight of Gov't Mgmt., Restructuring & the Dist. of Columbia, Comm. on Gov't Affairs, 107th Cong. 1 (2002) (testimony of James M. McConnell, Executive Director, U.S. Securities and Exchange Commission) ("[A]s the complexity and utilization of our financial markets continues to grow unabated, the Commission must have the resources it needs to fulfill its multiple missions and to maintain the public's full confidence in our capital markets."); Human Capital Hearings, supra note 50, at 5–6 (statement of Richard J. Hillman, Director of Financial Markets and Community Investments, & Loren Yager, Director of International Affairs and Trade) ("[L]imited resources have forced SEC to be selective in its enforcement activities and have lengthened the time required to complete certain enforcement investigations."); U.S. GEN. ACCT. OFFICE, SEC OPERATIONS INCREASED WORKLOAD CREATES CHALLENGES (2002) [hereinafter GAO SEC OPERATIONS REPORT] (same); SEC. & EXCH. COMM'N., REPORT TO CONGRESS: THE IMPACT OF RECENT TECHNOLOGICAL ADVANCES ON THE SECURITIES MARKETS 70–80 (1997) (indicating that as technology develops, monitoring for fraud presents "a substantial challenge").

^{76.} Human Capital Hearings, supra note 50, at 5 (statement of Richard J. Hillman, Director of Financial Markets and Community Investments, & Loren Yager, Director of International Affairs and Trade).

^{77.} Id.

cases pending at the close of this period grew by 77 percent. Some of the SEC's staffing problems were exacerbated by the riches that lured talented enforcement staff to the private sector during a period of strong economic growth; one-third of the enforcement staff left the SEC between 1998 and 2000. Overall, the General Accounting Office Report data reflect that in 1996, the SEC's workload started to increase at a much higher rate than the SEC staff years the agency could commit to meeting its growing workload.

Gross staffing numbers are only part of the sad funding story of the SEC. The detection and enforcement problems that arise from the decline in staffing relative to the far faster rate of filings, and more generally the significant growth in the U.S. capital markets, were compounded by a high turnover of the SEC's most experienced staff. Between 1992 and 1999, due to departures the average tenure of an examiner decreased from 3.4 to 2.5 years so that the agency suffered a serious erosion of the most experienced staff for all areas of the SEC's operations. The obvious point is that a more experienced staff can handle a much higher workload than a less experienced staff. Not surprisingly, compensation is the overriding consideration for those leaving the SEC.

Two recent developments have retarded the pace of staff departures. First, the prolonged recession that began in 2001 has provided fewer opportunities for non-SEC employment than existed with the steadily expanding economy of the 1990s. Staff defections have declined because there was no place for talented attorneys to migrate. Second, Congress enacted legislation in January 2002 exempting the SEC from federal pay restrictions and giving it authority to bring a large number of positions in line with the higher

^{78.} Id. at 6.

^{79.} *Id.* at 6–7. As a result, 250 positions remained unfilled at the close the SEC's fiscal year, September 2001—8.5 percent of its authorized positions—and overall, the average tenure of an SEC attorney declined from 3.4 to 2.5 years between 1992 and 1999. *Id.* at 7.

^{80.} GAO SEC OPERATIONS REPORT, supra note 75, at 12.

^{81.} *Human Capital Hearings, supra* note 50, at 7 (statement of Richard J. Hillman, Director of Financial Markets and Community Investments, & Loren Yager, Director of International Affairs and Trade).

^{82.} U.S. GEN. ACCT. OFFICE, REPORT TO THE RANKING MINORITY MEMBER, SUBCOMM. ON FIN. INSTITUTIONS, COMM. ON BANKING, HOUS., AND URBAN AFFAIRS, U.S. SENATE: SEC: HUMAN CAPITAL CHALLENGES REQUIRE MANAGEMENT ATTENTION 2, 26 fig. 8 (2001).

federal pay of other federal regulators.⁸³ The combination of these two factors has meant that staff departures have declined. And a third positive development for confronting its growing workload is that in response to the recent financial and accounting scandals, the SEC has obtained its largest funding increase in its history.⁸⁴ Its budget has been increased for the express purposes of enhancing its capacity to review more frequently the filings of its registrants and to increase its enforcement capabilities.

Our intuition is that funding for the SEC will, as it has in the past, increase over time in response to political forces stimulated by public revelation and reaction to dramatic scandals such as those that preceded the enactment of Sarbanes-Oxley. One can certainly expect the SEC's staff to grow more rapidly during times of abundance when the federal fisc is bountiful than during an era of budgetary austerity. Because the number, breadth, and scope of the recent scandals are unparalleled in recent history, we believe that future funding increases will be more along the lines of the first sixty years of the SEC's history, namely episodic, large augmentations in its staffing, sprinkled among more modest budget increases. At the same time, there is every reason to believe its workload will expand with the steadily growing, and increasingly more complex, capital markets.

We add to this uncertainty, whether the current level of SEC funding is sufficient for it to achieve the optimal amount of detection, enforcement, and deterrence of financial frauds. Just what is the right level of funding is problematic and beyond even conjecture in this Article. However, we are interested in exploring an important correlative point: assuming that the SEC lacks the resources to achieve the utopian level of detection, enforcement, and deterrence, what evidence is there, first, that its efforts are supplemented in important ways by private litigants, and second, that the SEC selects optimal enforcement targets.

As seen earlier, the SEC gauges its enforcement priorities by the message the action sends to the industry and public, the relative harm to investors, the deterrent effects of the action, and the visibility the SEC enjoys in combating such abuses. These appear to be excellent heuristics for identifying from a large set of possible enforcement

^{83.} The Investor and Capital Markets Fee Relief Act, Pub. L. 107-123, 115 Stat. 2390 (2002) (codified as amended at 15 U.S.C.A. § 78d (2003)). However, currently, only about 10 percent of the SEC's total personnel are covered by the pay parity provision.

^{84.} See supra note 16 and accompanying text.

actions where to allocate the agency's scarce enforcement resources. The social welfare benefits of applying these criteria wisely and consistently appear obvious. To see if this is the case, the balance of this Article focuses heavily on evaluating whether the targets of SEC enforcement actions for financial reporting violations are consistent with two of these criteria—namely, whether the SEC appears to target for its enforcement actions matters that involve greater harm to investors and, to a lesser extent, whether the target actions are likely to result in a deterrent message that is broadly understood as such by the industry and public. Our data also examine the major supposition of the private attorney general thesis, namely that private suits are indeed a necessary component in the enforcement of the securities laws.

IV. TESTING SUPPOSITIONS AND SUSPICIONS REGARDING PRIVATE SECURITIES CLASS ACTION SUITS

The central question about private securities class action suits is whether they contribute to social welfare. Concerns that too many suits were "strike suits" led to the enactment of the PSLRA. Among its features, the PSLRA introduced a mechanism for appointing as the lead plaintiff an investor or investors with a sufficiently large loss as a result of the alleged disclosure violation to serve as a monitor of the suit's attorney, so more demanding pleading requirements that, prior to class certification, invite close scrutiny of the factual bases for believing that the defendants had committed a disclosure violation, discovery bars that prevent the filing of a complaint from serving as a fishing expedition through the defendants' records to determine whether there is a claim, and steps to prevent individuals from

^{85.} See 15 U.S.C. § 78u-4(a)(3)(B)(iii) (2000) (noting that the "most adequate" lead plaintiff would have the "largest financial interest" in the sought relief). For the view that it is the relative size of the investor's loss rather than the investor's skill in negotiating a lower fee with the class's counsel that guides the selection of the lead plaintiff, see *In re Cavanaugh*, 306 F.3d 726, 732 (9th Cir. 2002). See also *In re* Cendant Corp. Litig., 264 F.3d 201, 268 (3d Cir. 2001) (observing that to choose a lead plaintiff turns not on whether another petitioner would do a better job but whether the petitioner with the largest loss fails to be a "fair and adequate" representative of the class).

^{86.} See 15 U.S.C. § 78u-4(b)(2) (requiring that scienter must be pled with particularity so as to raise a "strong inference" that the defendant acted with the proscribed state of mind).

^{87.} See id. § 78u-4(b)(3)(B) (providing a stay of discovery during the pendency of any motion to dismiss, unless the discovery is necessary to "preserve evidence" or "prevent undue prejudice").

serving as professional plaintiffs. 88 Among the possible effects of these reforms is that meritorious suits may not survive the new pleading requirement and may therefore fall on the altar of pretrial dismissal motions. 89 At the same time, suits that survive are more likely to be meritorious than was the case prior to the PSLRA.

From their fear that the PSLRA will prematurely extinguish meritorious suits, it is a short step to surmise that the plaintiffs' bar will now have an even keener interest in SEC enforcement actions because an enforcement action's fruits include facts that can support a class action's complaint, thereby filling the current discovery void faced by the plaintiffs' bar after the enactment of the PSLRA. However, free-rider concerns regarding the initiation of private securities class action suits that predate the PSLRA arguably are even greater in the post-PSLRA era. Equally important is whether the relief obtained in the private action is materially greater than what the SEC may have recovered pursuant to its enforcement action. That is, one important inquiry here is whether a SEC enforcement action

^{88.} See id. § 78u-4(a)(3)(B)(vi) (declaring that except as the court may permit, a person is barred from being a lead plaintiff if that person has participated in more than five securities class actions in a three-year period).

^{89.} See, e.g., Lynn A. Stout, Type I Error, Type II Error, and the Private Securities Litigation Reform Act, 38 ARIZ. L. REV. 711, 712–15 (1996) (emphasizing that there are better ways to distinguish meritorious from nonmeritorious suits than to raise the pleading requirements).

^{90.} See, e.g., S.E. Bonner et al., Fraud Type and Auditor Litigation: An Analysis of SEC and Accounting Enforcement Releases, 73 ACCT. REV. 503, 513 (1998) (observing that in the study's sample, the SEC enforcement action for certain types of financial statement misrepresentations gave rise to private suits in 58 percent of the cases); Zoe-Vonna Palmrose & Susan Scholz, The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements 23 (Sept. 2002) (unpublished manuscript, on file with the Duke Law Journal) (finding private suits result in 86 percent of the instances when a company's revenue restatement is accompanied by SEC enforcement actions).

^{91.} One dimension of the free-rider concern is that private litigation will follow public announcement of a government prosecution and thus "pile on" to the good investigative efforts of the government. See, e.g., In re PaineWebber Ltd. P'ships Litig., 999 F. Supp. 719, 725 (S.D.N.Y. 1998) (noting that fees awarded to class counsel were reduced below the amount requested because earlier government investigation had produced voluminous evidence of violation and thereby removed risk of private action). One possible way to examine this is to compare the date when private suits are initiated and when the government enforcement action is formally begun. Such a comparison was not pursued here because government enforcement actions generally commence well in advance of their formal announcement by action of the SEC. Therefore, a complaint that appears to be filed before the SEC has approved a formal investigation of a matter may nevertheless be commenced after the SEC has begun its investigation and there has been some public disclosure of its informal investigation.

can be seen as the litmus test for a more meritorious suit than a private suit commenced *sans* SEC enforcement action.

Skeptics of the securities class action bar may also reason that there is a qualitative difference between class action suits where there is a collateral SEC enforcement action and those where there is no SEC enforcement action. As seen earlier, the SEC's limited resources force it to allocate its enforcement efforts to achieve the greatest impact. Among the guiding heuristics the SEC claims to use is the gravity of the harm caused by the violation. We may therefore suppose that private recoveries for misconduct that has been the subject of a SEC enforcement action will on average be statistically larger both in absolute size and relative to the actual damages suffered than when the private action concerns a matter that has not been the subject of an SEC enforcement action.⁹²

A more sympathetic view of the world, however, suggests that the SEC's limited resources and admitted lack of clairvoyance will lead to no such relationship between the size (absolute or relative) of private recoveries and the presence of an SEC enforcement action. That is, the volume of violations is too great for the SEC to detect and investigate all possible wrongdoing. When it makes its assessments of the gravity of harm suffered, it does so with an eye on a limited set of enforcement matters before the staff, and not the wider universe of all possible securities violations. Moreover, the SEC also weighs whether the violation is ongoing. 93 With the SEC staff's awareness that a disclosure violation has ceased and that private suits are moving forward to recover for those harmed by the violation, the SEC may well decide to focus its efforts in other areas, such as detecting and investigating possible ongoing violations. Under these more sobering assumptions about the SEC's focus, we can expect that private litigation will frequently focus on suits that are not within the SEC's field of vision. We therefore need to examine the size of recoveries in private suits when there is no parallel SEC prosecution.

^{92.} A recent study by Cornerstone Research finds that private settlements are larger and constitute a higher percentage of estimated damages when accompanied by a SEC enforcement action. Cornerstone Research, Post-Reform Act Securities Case Settlements: Case Reported Through December 2002, at 6 (2003).

^{93.} See supra note 37 and accompanying text.

V. EMPIRICAL ANALYSIS OF THE PUBLIC-PRIVATE ENFORCEMENT OF THE SECURITIES LAWS

To test the role private litigation plays in the overall enforcement of the securities laws—especially compensating those harmed as a result of a disclosure violation—we use data that we compiled as part of a separate study of securities class action settlements. In that study, we gathered data on 265 securities fraud class actions that were settled between 1990 and 2001 and that covered violations between 1986 and 2000. We reduced this sample by eliminating cases where the only defendant party was an auditing firm. We also put aside cases where financial data was not available from the Compustat database. This left us with a sample of 248 class actions. For this set of cases, we searched the SEC's Enforcement Releases and also carried out a Nexis search to identify settlements for which there was also a collateral SEC enforcement action. We found that 37 out of our 248 cases were prosecuted by the SEC, and the remaining 211 cases were only subject to private litigation.

The final sample helps examine the determinants of SEC enforcement actions. As stated above, the SEC's announced policy is that it primarily targets violations for enforcement action based on the message that will be sent to the public and to the industry about the reach of its enforcement actions and the amount of investor harm. We therefore examine in the context of our settled cases data set (1) whether the cases brought by the SEC are the largest settlements in terms of their absolute size and (2) whether the cases brought are more likely to involve instances of the largest provable losses suffered by the class of investors.

We begin with some bivariate comparisons between those private cases in which there is a parallel SEC action and those private actions filed alone. First, Table 3 compares the size of settlements in private actions without a parallel SEC case with private actions with an SEC proceeding.

The data show that private settlements are larger in cases where there is a parallel SEC action.⁹⁴ This difference supports the hypothesis that the SEC tends to file enforcement actions in cases with greater harm to investors. It may also reflect that the SEC prosecutions occur when there is a stronger basis to conclude that a

^{94.} This is consistent with the results in the Cornerstone Research study. *See* CORNERSTONE RESEARCH, *supra* note 92, at 6.

violation has occurred. The difference in the medians between these two subsets is statistically significant at the 10 percent level. 95

TABLE 3
SETTLEMENT AMOUNT OF PRIVATE ACTIONS
(MILLIONS OF DOLLARS)

	Mean	Median	Number of Observations
Without a Parallel SEC Action	9.5	4.8	211
With a Parallel SEC Action	11.2	7.2	37
Total Sample	9.8	5.0	248

However, these differences may just reflect differences in the market capitalization of the companies that are sued by the SEC and those that are targeted solely by the private plaintiffs' bar. Thus, if the SEC tends to sue larger companies than those selected by the private bar, we might anticipate that the size of settlement data shown above could reflect the greater potential damages that are available when larger capitalization companies are subject to securities fraud suits. To test this supposition, we examined the difference between the market capitalization of companies subject only to a private action and those sued by both the SEC and the private bar. Table 4A illustrates this comparison.

The market capitalization data clearly shows that the supposition is not correct. In our sample, the SEC targeted companies with an average market capitalization \$735 million less than those sued by the private plaintiffs' bar alone. ⁹⁶ An earlier study reached a similar

^{95.} The difference in the means is not statistically significant at the conventional levels of significance. However, due to the presence of large outliers, we believe that the comparison of the medians is more meaningful.

^{96.} The data presented in Table 4A for our study's sample is consistent with a separate data set we compiled based on a recent SEC study in response to section 704 of Sarbanes-Oxley. Congress called upon the SEC to study enforcement actions for a five-year period preceding the enactment of Sarbanes-Oxley to identify areas of issuer financial reporting that are most susceptible to fraud. The resulting study collected information from 515 enforcement actions involving 164 entities (and 705 individuals) between July 31, 1997 and July 30, 2002. SEC. & EXCH. COMM'N., REPORT PURSUANT TO SECTION 704 OF THE SARBANES-OXLEY ACT OF 2002, at 1–6 (2003). This represented approximately 20 percent of the total number of SEC

TABLE 4A
MARKET CAPITALIZATION OF DEFENDANT COMPANIES
(MILLIONS OF DOLLARS)

	Mean	Median	Number of Observations ⁹⁷
Without a Parallel SEC Action	1206.8	128.4	186
With a Parallel SEC Action	471.8	75.7	30
Total Sample	1104.7	114.5	216

enforcement actions during the five-year period. See id. at 1 n.4 (noting that the total number of enforcement actions during the study period was 2,508). The bulk of the violations involved improper revenue and/or expense recognition. Id. at 6. However, only 106 of the 227 investigations that spawned the 515 enforcement actions involved allegations of "fraud" as proscribed by section 10(b) and Rule 10b-5. Id. The balance of the enforcement actions involved violations of the Securities and Exchange Act's "books and records" provisions for which there is no private cause of action. Id. The books and records provisions appear in section 13(b)(2) of the Securities Exchange Act of 1934, 15 U.S.C. § 78m(b)(2) (2000), and Rules 13(b)(2)(A)–(B) and 13(b)(5), 17 C.F.R. § 240.13(b)(2)(A)–(B), (b)(5) (2003).

From this fraud group, we used the Compustat data base to search for market capitalization data for each company for the quarter before the SEC filed its enforcement action. We were able to locate data for only 60 of the issuers involved in the 106 investigations as many of the issuers were not within that database for any one of several possible reasons, such as bankruptcy, acquisition or otherwise disappearing as separate entities. We then searched the Securities Class Action Clearing House website maintained by the Stanford Law School and Lexis-Nexis databases to discover instances in which a private action was commenced among the 60 issuers.

Table 4B presents the results of our inquiry. Note that parallel private actions are filed against issuers whose market capitalization is substantially greater than for issuers who are subject to an SEC enforcement action for fraudulent reporting for which there is no private action. The difference between the medians is statistically significant at the 5 percent level of significance.

TABLE 4B
MARKET CAPITALIZATION OF FIRMS WITH SEC SECTION 704 STUDY

MARKET CATTALIZATION OF THEMS WITH SEC SECTION 704 STOD I					
	Mean	Median	Number of Observations		
Without a Parallel Private Action	263.82	29.68	27		
With a Parallel Private Action	1,872.07	82.19	33		
Whole Sample	1,148.36	52.48	60		

97. The total number of observations is reduced below 248 because some companies went bankrupt and we cannot observe their market capitalization.

conclusion, finding that the SEC almost always targets companies with a market capitalization less than \$200 million largely because these smaller capitalized companies frequently lack audit committees, or if they do have such committees, they do not appropriately staff them. The differences in the medians are statistically significant at the 5 percent level.

A second possible explanation of the larger settlements in private cases in which there are SEC parallel proceedings could be that the class period length is longer. A longer class period should mean that more shares have been traded during the interval of alleged fraud, and this will normally lead to a greater damage claim for the plaintiffs. Table 5 below presents this data.

TABLE 5
CLASS PERIOD (MONTHS)

	Mean	Median	Number of Observations
Without a Parallel SEC Action	11.0	9.0	211
With a Parallel SEC Action	14.8	12.5	37
Whole Sample	11.6	9.4	248

Here we see that the class period in cases with parallel SEC proceedings is longer than in instances where only a private action is filed. For example, the median class period when the SEC has prosecuted the same misconduct is more than one-third longer than for class actions without a parallel SEC action. This supports the SEC's heuristics for initiating enforcement actions based on its belief about which situations pose the greatest harm to investors. The data in Table 5 also provide a possible alternative explanation for the observed larger settlements in private actions filed in cases with parallel SEC proceedings. The differences in medians are statistically significant at the 5 percent level of significance.

Another characteristic by which the two groups may differ is the time that it takes for the private action to reach settlement. This is

^{98.} Mark S. Beasley et al., Fraudulent Financial Reporting 1987–1997, An Analysis of U.S. Companies (COSO 1999).

measured by the number of months between the filing of the first class action complaint and the date of the settlement of the consolidated class action. Here we hypothesize that private settlements will occur more quickly when there is a parallel SEC investigation than when there is not. The causes for this perhaps being the case are many. With the additional enforcement efforts of the SEC, more information is likely to be available to the private class action lawyers. More information improves their (as well as the defense counsel's) assessment of the suit's likelihood of success with the result that settlement will be seen as the most efficient result for all parties. Also, a parallel SEC action creates a climate in which defendants wish to put the "whole matter" behind them. Thus, settlement in the SEC enforcement action is likely to stimulate settlement of the private suit, and vice versa. Thus we would expect that the length of time for settlements to be reached in private suits will be shorter when there is an accompanying SEC enforcement action. Table 6 provides some descriptive information about this variable.

TABLE 6
TIME TO REACH SETTLEMENT (MONTHS)

	Mean	Median	Number of Observations ⁹⁹
Without a Parallel SEC Action	26.8	23.8	152
With a Parallel SEC Action	20.8	16.6	26
Whole Sample	25.9	22.3	178

As can be seen, cases with a parallel SEC proceeding do settle more quickly—approximately two-thirds the median time—than those without such an action, consistent with our expectations. The differences of both the means and the medians are statistically significantly different across the two sub-samples at the 10 percent level of significance.

The more important question is whether the presence of an SEC action is correlated with a higher recovery of potential damages in a

^{99.} The total number of observations is reduced because we do not have complete information on the timing of the filing of the complaint or the date of entry into the settlement.

private suit. We therefore compare whether the sums recovered in the settlement of private suits represent a higher fraction of provable losses when there has been an SEC prosecution than when there has been no SEC enforcement action. To determine whether a settlement is better, we compare for each of our 248 settled class actions the provable loss suffered by the class with the resulting settlement, which we call the "provable loss ratio." We then array the settlements into ranges, running from settlements with the largest to the lowest percentage recovered per provable loss. To calculate provable losses, we use the damage estimation model described in the footnote below. Tables 7 and 8 show our results.

100. The standard measure of damages for securities class actions is the price at which the investors purchased or sold the security and what that price would have been but for the misrepresentation. We refer to this as the provable loss for the class. Because the defendant is responsible only for the harm it has caused by its misrepresentation, other events and forces that affect the securities price must be removed from the calculus for measuring the provable loss. To do this, we use the familiar market model to construct a "true-value line" for each of the 248 settlements in our data base. The market model holds:

$$R_{\rm it} = \alpha_{\rm i} + \beta_{\rm i} R_{\rm mt} + \varepsilon_{\rm it}$$

Where R_n is the return of a stock on day i for time period t, R_{nn} is the return of a market index for time period t, α_i is the asset specific intercept, β_i is the observed correlation of the individual return of security i, and ε_n is the so-called error term which is the return that cannot be explained by market-wide events.

We have used the Equal-Weighted Market Index provided by the Center for Research Securities Prices as our market index. To determine the individual security's β , we commenced our observation period for a two-year period ending six months before the commencement of the class action period. We terminated our β calculations six months before the commencement of the class action period because our data sample consistently reflected abnormal stock price behavior in the three-month to six-month period before the commencement of the class period. With the unexplained return, β , determined through the market model, we determined the true value line by going backward in time; we apply the unexplained return to the security's market price in response to disclosure of truthful information (this was the market price the day after the class action period closes). See generally Bradford Cornell & R. Gregory Morgan, Using Finance Theory to Measure Damages in Fraud on the Market Cases, 37 UCLA L. REV. 883, 886–89 (1990) (demonstrating the calculation of a value line); Harindra de Silva et al., Securities Act Violations: Estimation of Damages, in LITIGATION SERVICES HANDBOOK: THE ROLE OF THE ACCOUNTANT AS EXPERT WITNESS, 44-1 to -37 (Roman L. Weil et al. eds., 2d ed. 1995) (describing the market model and how to estimate damages).

The next step toward measuring the provable losses for the class is to determine the trading that occurred during the class action period. Here there are two, well-accepted, approaches—the one-trader and the two-trader models. *See generally* Willard T. Carleton et al., *Securities Class Action Lawsuits: A Descriptive Study*, 38 ARIZ. L. REV. 491, 496–97 (1996) (distinguishing the "one-trader" model, where "all traders are identical," from the "two-trader model," which assumes two types of investors, "traders" and "holders"). The one-trader model assumes that each share within the class period has an equal probability of being traded at a given time during the class period. Thus, on any day during the class period, the shares that are sold are drawn randomly from all outstanding shares so that the resulting class action is made up of shares that have not been traded since acquired in the class period and those that were

TABLE 7
DISTRIBUTION OF THE RATIO OF SETTLEMENT
AMOUNTS TO PROVABLE LOSSES

	Without a Parallel SEC Action						
Value ¹⁰¹	Count	Percent	Cumulative	Cumulative			
value	Count	reicent	Count	Percent			
[0, 0.1)	135	64.0	135	64.0			
[0.1, 0.2)	51	24.2	186	88.2			
[0.2, 0.3)	8	3.8	194	91.9			
[0.3, 0.4)	8	3.8	202	95.7			
[0.4, 0.5)	4	1.9	206	97.6			
[0.5, 0.6)	3	1.4	209	99.1			
[0.7, 0.8)	1	0.5	210	99.5			
[1.3, 1.4)	1	0.5	211	100.0			
Total	211	100	211	100.0			
	With a	Parallel SEC	Action				
Value	Count	Percent	Cumulative	Cumulative			
value	Count	reicent	Count	Percent			
[0, 0.1)	17	46.0	17	46.0			
[0.1, 0.2)	11	29.7	28	75.7			
[0.2, 0.3)	6	16.2	34	91.9			
[0.3, 0.4)	1	2.7	35	94.6			
[0.7, 0.8)	1	2.7	36	97.3			
[1.9, 2)	1	2.7	37	100.0			
Total	37	100	37	100			

acquired from others who purchased the securities within the class period. The two-trader model divides investors into two sets according to their probable trading propensities. One set is high-activity traders and the other are low-activity traders. Using data provided by Marcia Kramer Mayer, we assume low-activity traders hold about 63 percent of the shares and account for 17 percent of the trading, so that high-activity traders hold 37 percent of the shares and account for 83 percent of the trading. See MARCIA KRAMER MAYER, BEST-FIT ESTIMATION OF DAMAGE VOLUME IN SHAREHOLDER CLASS ACTIONS: THE MULTI-SECTOR, MULTI-TRADER MODEL OF INVESTOR BEHAVIOR 110 (Nat'l Econ. Research Ass'ns, Working Paper, 2000) (demonstrating that high-activity traders were 8.6 times more likely to sell holdings on a given day than low-activity traders). These models, because they make different assumptions regarding the magnitude of in-and-out trading, yield quite different provable damage estimates. A more extensive description of the methodology used to calculate provable damages is on file with the Duke Law Journal.

101. Value is defined as the settlement amount divided by provable losses.

Table 7 shows that the presence of a SEC enforcement action is associated with a decrease in the number of cases that settle for less than 10 percent of estimated damages. Correspondingly, the presence of a SEC enforcement action is associated with more private settlements that recover higher percentages of estimated damages for the affected shareholders. However, this effect is only noticeable in the range of 10–30 percent recoveries, and may even reverse itself for recoveries above that level. Our sample size is too small to determine whether these differences are statistically significant.

As Table 7 illustrates, the main difference observed between the provable loss ratio in cases where the SEC files an action, and the cases where it does not, arise in the very lowest portion of the distribution. There is an eighteen-percentage-point difference in the number of cases in the 0 to 0.1 interval of the distribution of cases between private actions where there is no accompanying SEC action and those in which there is a SEC action. To examine these differences more closely, in Table 8 we breakdown the distribution for the lowest range into one-percent categories.

When we look at Table 8, it becomes clear that the big difference between these two sets of cases is in the very lowest part of the distribution of settlement amounts to provable loss ratios. One-fourth of all private settlements that occur for suits that yield less than 10 percent of provable losses are settled for less than 2 percent of provable losses, and there are no parallel SEC actions for these small settlements. Skeptics of the private bar can with some justification reason that cases within these lowest ranges of the distribution most likely represent strike suits filed by private lawyers, as they settle for a tiny fraction of the provable losses. A possible explanation for this difference is that the actions in which the SEC files a parallel action are less likely to be frivolous.

To investigate this result further, we compared the market capitalization and settlement amounts for the private actions not involving parallel SEC enforcement actions that had a provable loss ratio of less than 2 percent with those with a provable loss ratio of 2 percent or greater. There were 27 settlements recovering less than 2 percent of provable losses and 159 settlements (not involving a parallel SEC action) recovering a greater percentage of provable

Table 8 Distribution of the Ratio of Settlement Amounts to Provable Losses in [0, 0.1) Interval

	Without a Parallel SEC Action						
Value	Count	Percent	Cumulative	Cumulative			
value	Count	reicent	Count	Percent			
[0, 0.01)	11	8.15	11	8.15			
[0.01, 0.02)	22	16.3	33	24.44			
[0.02, 0.03)	15	11.11	48	35.56			
[0.03, 0.04)	16	11.85	64	47.41			
[0.04, 0.05)	24	17.78	88	65.19			
[0.05, 0.06)	12	8.89	100	74.07			
[0.06, 0.07)	7	5.19	107	79.26			
[0.07, 0.08)	7	5.19	114	84.44			
[0.08, 0.09)	9	6.67	123	91.11			
[0.09, 0.1)	12	8.89	135	100			
Total	135	100	135	100			
	With a Parallel SEC Action						
Value	Count	Percent	Cumulative	Cumulative			
value	Count	Percent	Count	Percent			
[0,0.01)	0	0	0	0			
[0.01, 0.02)	0	0	0	0			
[0.02, 0.03)	3	17.65	3	17.65			
[0.03, 0.04)	3	17.65	6	35.29			
[0.04, 0.05)	3	17.65	9	52.94			
[0.06, 0.07)	1	5.88	10	58.82			
[0.07, 0.08)	3	17.65	13	76.47			
[0.08, 0.09)	3	17.65	16	94.12			
[0.09, 0.1)	1	5.88	17	100			
Total	17	100	17	100			

losses.¹⁰² Our hypothesis was that private suits involving large capitalization firms are settled for large amounts of money in terms of

^{102.} Although Table 8 reflects 33 cases yielding a recovery of less than 0.02 (without there being a parallel SEC action), we were able to obtain market capitalization data for only 27 of these cases. The total number of cases without a parallel SEC enforcement action in our sample

the absolute dollar amounts recovered in class actions generally; however, because the issuers involved in these cases are significantly larger in terms of their market capitalization, they also involve significantly greater provable losses. If this claim is correct, it would lead us to observe a higher market capitalization for companies with less than 2 percent provable loss ratio.

In Table 9 we see that both the median and mean capitalization of firms for which less than 2 percent of provable losses are substantially greater than for firms for which a greater percentage of provable losses was recovered through the settlement. Indeed, the median market capitalization for the 27 firms involved in these relatively smaller settlements was more than *eight* times the market capitalization of firms for which greater than 2 percent of provable losses was recovered. Our results are statistically significant at all conventional levels of significance.

TABLE 9
MARKET CAPITALIZATION OF FIRMS WITH SETTLEMENTS WITHOUT SEC ACTION

	Market Cap	Observations	
	Mean	Median	
Recovery Less than 0.02	4768.0	828.8	27
Fraction of Provable Loss	170010	020.0	
Recovery Greater than 0.02 Fraction of Provable Loss	602.0	101.5	159
Total	1206.8	128.4	186

These results make us hesitant to conclude that the low end of the Ratio of Settlement to Provable Loss (PLR) distribution are strike suits—that suits yielding the lowest recovery are initiated against the largest companies who will pay a relatively small amount to rid itself of a nuisance suit. Rather, it seems likely that the numerator (dollar value recovered in the settlement) of the provable loss ratio is relatively constant while the denominator (provable losses) is much bigger for these very large companies. This is confirmed by the data: there are substantive provable losses in these

is 211 so that there are 178 such class actions yielding payments in excess of 0.02 for which there is market capitalization data for 159 of the actions.

cases and, in absolute dollar amounts, the median settlements yielding only 2 percent of provable losses are not statistically different from settlements that recover more than 2 percent of provable losses. To explore these findings further, we also examined the relationship between the size of the settlement and the size of the defendant company. We found that the absolute amount of the settlement displays almost no correlation with the market capitalization of the firm being sued. The market capitalization of the firm being sued.

If the dollar amount of the settlement is relatively invariate in relation to the amount of provable losses, this raises the spectre that something else besides the value of the underlying claims is determining the size of the settlement. We speculate that an unobserved variable, such as the amount of insurance coverage, may have a strong effect on the absolute amount of damages.

We also note that, even though the market capitalization for firms targeted in settlements yielding less than 2 percent of provable losses is extremely large, the mean and median market capitalization of firms yielding settlements greater than 2 percent of provable losses when there is no SEC enforcement action, when compared with the data in Table 4A, continues to be greater by one-third (\$101.5 versus \$75.7 million)¹⁰⁵ than the market capitalization of firms that are the target of both SEC and private securities actions. Thus, private suits, even disregarding the low-settlement tail, target much larger capitalization firms than do SEC enforcement actions. The above suggest to us that settlements against large capitalization firms systematically reflect the prevailing norms for settlements in the terms of the absolute amounts recovered, but ignore the fact that larger capitalization firms naturally involve much larger provable losses.

Table 9A

Absolute Amount of Settlements (Millions of Dollars)

	Median	Mean
Recovery Less than 2 Percent Provable Loss	3.00	8.72
Recovery Greater than 2 Percent of Provable Loss	5.02	9.64

^{104.} The correlation between these variables is around 5 percent only.

^{103.} The distribution of the dollar amount of settlements is presented in Table 9A below. The difference in medians is not statistically significant at both 5 percent and 10 percent levels of significance.

^{105.} This economically significant difference remains statistically significant at the 10 percent level.

To determine whether the differences in the empirical distributions of the PLR for the two subsets (those with and those without a parallel SEC action) are statistically significant, we performed a Kolmogorov-Smirnov test. The results are presented in Table 10 below.

TABLE 10
KOLMOGOROV-SMIRNOV TEST: COMPARING DISTRIBUTIONS OF SETTLEMENT-AMOUNT-TO-PROVABLE-LOSSES

Hypothesis	Approximate P-value
PLR (w/o SEC action) = PLR	0.046 (0.020)
(w/ SEC action)	0.046 (0.029)

To address our concern whether the distributions of the two subsets are statistically distinct, we tested the hypothesis of the equality of the distributions of these two subsets (i.e., the overall distribution of each subset of the sample is representative of the distribution of the other subset). The approximate p-value of this test is 4.6 percent. We also observe that the resulting p-value is, because of the small size of our sample, conservative. By making standard adjustments for the sample's size, we obtain a less conservative p-value of 2.9 percent (reported in parenthesis in Table 10). This result enables us to reject the null hypothesis that the distributions of the two subsets are equal at the conventional 5 percent level of significance. That is, the distribution of PLR for cases without a parallel SEC enforcement action is statistically significantly different from the distribution of cases where there is no SEC action. 107

^{106.} N.V. Smirnov, Estimate of Deviation Between Empirical Distribution Functions in Two Independent Samples, 2 BULL. MOSCOW U. 3 (1939) (in Russian). The Kolmogorov-Smirnov test is a non-parametric test that tries to determine if two data sets differ significantly. See generally JEAN DICKINSON GIBBONS, NONPARAMETRIC STATISTICAL INFERENCE 84–85 (David Blackwell & Herbert Solomon eds., 1971) (applying the Kolmogorov-Smirnov one-sample statistic).

^{107.} We also tested the hypothesis that the percentages for the Settlement-Amount-to-Provable-Loss Ratio is smaller for cases for which there is no parallel SEC action than for cases with a parallel SEC action. In other words, our null hypothesis is that the percentage PLR is smaller for cases for which there is no parallel SEC action than for cases with a parallel SEC action. Here we find that PLR (w/o SEC action) < PLR (w/o SEC action) yields an approximate p-value of 0.023. As shown, the p-value for this test is 2.3 percent, thus we reject the null hypothesis. This result does not statistically support the evident differences in the lower portion of the distribution of the PLR that we can observe in Tables 7 and 8.

With these results in mind, we are ready to examine empirically what leads the SEC to file an enforcement action in a case alleging fraud of the type that could lead to a private action. Our dependent variable is the presence or absence of a SEC action. This variable is coded 1 if there is a SEC enforcement action, and 0 if not. Because the dependent variable is discontinuous, we use a Probit model in our analysis.¹⁰⁸

Our independent variables are defined and are included as follows: First, we include a measure of the provable loss in the private action. We calculate these values using the same damage model that is discussed above. This is a direct measure of the size of the harm that investors suffer as a result of the alleged fraud by the company. We expect a higher provable loss to increase the likelihood of an enforcement action and therefore anticipate a positive coefficient in the Probit analysis.

The second independent variable we include is a measure of financial distress. We utilized two alternative measures here: Altman's Z score and the change in ratio of the company's book

This result must be understood in light of two important caveats. First, the observed p-value is sufficiently high to suggest differences between the two subsets, but the result is not overwhelming. Second, the Kolmogorov-Smirnov test is known for having lower power to examine distributions at the tails of a sample's distribution. GIBBONS, *supra* note 106, at 86.

108. Discussion of a probit model is given in any advanced econometric textbooks. See, e.g., GREENE, WILLIAM H., ECONOMETRIC ANALYSIS 849–57 (4th ed. 2000). We also considered the use of a logit model. Both probit and logit models are designed to model the "choice" between two discrete alternatives (in our case the dependent variable(y) is the presence(1) or absence(0) of an SEC action). Essentially these models describe the probability that y = I directly, i.e.:

 $Prob(y=1) = F(some\ factors).$

It follows then that Prob(y=0) = 1 - F(some factors).

Typically F is chosen to be a cumulative density function (cdf) since cdf's by nature are restricted to lie between zero and one. Probit and Logit models differ in their assumptions about F: in Probit models, F is a cumulative density function of a standard normal random variable, while in Logit models, F is a cdf of a logistic random variable.

The Logistic distribution is similar to the Normal except in the tails, so if the data is only moderately unbalanced between 0s and 1s, the results from Probit and Logit models are very similar; moreover, there is an approximate relation between the estimated Probit and Logit coefficients.

In some cases, one model can be preferred over the other for computational convenience, but it is hard to justify a distributional choice on any theoretical grounds. We could have used Logit instead of Probit, and would have come to the same conclusions. However, just to make sure, we checked our data and found similar results using either model. In this Article, we present the results from the probit model.

109. See supra note 100.

110. Altman's Z score is a commonly used measure of when a company is approaching financial distress.

value to market value over the time period between the filing of the first class action complaint and the settlement of the suit. Here the rationale is that the SEC is more likely to file enforcement actions in situations where the firm is in financial distress because these are more highly visible enforcement scenarios. We expect this variable to therefore have a positive sign.

Our third independent variable is the length of time of the class period. We include this term as a measure of the number of defrauded investors. Our hypothesis is that when more investors are alleged to have been defrauded, this results in a higher visibility case, and therefore increases the likelihood that the SEC will file an enforcement action.

Finally, we include total assets of the defendant company as an independent variable. Here we believe that the SEC is more likely to target smaller companies, as we saw in Tables 4 and 4A, perhaps because these companies have weaker internal control and financial reporting systems more likely to experience fraud, as claimed by the Coso study mentioned above. Table 11 below shows our results.

TABLE 11

DETERMINANTS OF SEC ENFORCEMENT ACTIONS: DEPENDENT VARIABLE—PRESENCE OF AN SEC INVESTIGATION

	Coefficient	Std. Error	t-Statistic	P-value
Class Period	0.021	0.014	1.470	0.142
Asset Size	-0.016	0.016	-1.017	0.309
Provable Losses/MarCap	0.008	0.011	0.763	0.446
Measure of financial distress	0.255	0.073	3.518	0.000
Intercept	-1.381	0.205	-6.748	0.000
McFadden R-squared	7.5%			

^{111.} See supra note 98.

Financial distress is the only variable that is significant under ordinary measures of statistical significance. Table 11 reports the results for the change in company book value to market value ratio. The significance of the financial distress measure is consistent with the claim that the SEC is very concerned about fraud at companies that are experiencing financial distress, probably because of the high likelihood that investors will be harmed, and the high visibility of such harm.

Our direct measure of investor losses—the magnitude of provable losses—does not seem to be a strong factor that motivates the SEC to file an enforcement action. However, the length of the class period may also proxy for the magnitude of the harm to investors. Its positive coefficient, although only close to significant at the 10 percent level, may suggest that the SEC still considers the potential losses to shareholders when making its decisions.

CONCLUSION

This Article examines the overlap in private class action suits and SEC enforcement actions that arise out of violations of the federal securities laws. We find that only about 15 percent of settled private cases in our sample have a parallel SEC action. When both a SEC and private action proceed for the same misconduct, private recoveries are statistically larger and settled more quickly than when there is no parallel SEC enforcement action.

We find that the SEC targets smaller capitalization issuers than are targeted by private litigants when there is no parallel SEC enforcement action. Indeed, the disparity in market capitalization between the firms where there is a parallel SEC enforcement action, and those where there is no parallel action, is not only dramatic and statistically significant at the 5 percent level, but leads us to question the social welfare implications of the SEC's apparent preoccupation with smaller firms and the private suit's preoccupation with large capitalization companies.

Recent events have demonstrated that large capitalization firms do commit securities violations, and when they do so it has

^{112.} We do not report the results from using the Altman's Z score as a measure of financial distress as they are insignificant.

^{113.} When the inquiry is the converse, we find that 55 percent of the SEC enforcement actions recently studied by the SEC have produced parallel private suits; it remains to be seen whether this percentage will decline significantly when the focus is on settlement of the action.

devastating effects on investors. Nevertheless, an interesting data point is that the investors' provable losses—scaled by the firm's market capitalization—are not a variable that explains the "SEC's" choice of enforcement targets. That is, a large percentage decline relative to the share value is not a variable associated in our database with the likelihood of a SEC prosecution. This observation strikes us as inconsistent with the SEC-announced practice of pursuing cases where there are significant investor losses.

We also note that the strongest explanatory variable underlying the SEC's choice of its targets is the level of financial distress of the issuer. This is consistent with the SEC-stated heuristic of minimizing ongoing losses to investors. But the SEC's focus on firms in financial distress, coupled with its preoccupation with small capitalization firms, is also consistent with the hypothesis that the SEC, at least during the sample period, preferred weak opponents. Our disquiet is not eased by the insignificance of investors' provable losses as an explanation of who becomes the target of a SEC enforcement action.

Although we have an intuitive sense that recoveries in private actions of 20 percent or more of provable losses are "good" recoveries, a disquieting feature of our data is that more than half of these settlements yielded less than 10 percent of provable losses. Yet, our comparative analysis of the distribution of the cases recovering less than 10 percent of provable losses indicates that while there were differences between the distributions when there was a parallel SEC action and when there was no SEC action, the differences were not overwhelming. Stated somewhat more directly, even when there is an enforcement action by the SEC, the case may still yield a low recovery relative to provable losses.

Nonetheless, the data are also consistent with the view that many of the private suits falling within this low settlement range are little more than small payments to rid the issuer of the nuisance and expense of the suit. This is particularly evident when we focus on the fact that 33 cases without a parallel SEC enforcement action settled for less than 2 percent of provable losses, while no cases were settled within this range when there was an SEC enforcement action. We find more support for this dim view of private actions in our second test of the distributions, where we observe that the distribution of settlements when there was a SEC enforcement action are statistically distinct from settlements not involving a parallel SEC action. This further suggests that settlements for less than 2 percent of provable losses do not occur when there is a parallel SEC action. Our

confidence with identifying the outlier is underscored by our earlier finding that settlements of cases where there has been a parallel SEC action settled on average for a greater percentage of provable losses than when there is no parallel SEC action.

We offer two possible non-competing explanations for what we observe for suits recovering less than 0.02 of provable losses. Because their resulting settlements compare favorably in absolute terms with those of our entire sample, it may well be that settlement decisions are guided by the amount of insurance that is available. It also may be that what is viewed as an acceptable settlement is judged against the absolute dollar value of settlements generally and not by the losses suffered by the members of the class being settled.

On the other side of the settlement coin, we note that many cases not involving a parallel SEC enforcement action settle for 20 or more percent of provable losses. Here we have cause to find the obvious: the SEC cannot and does not prosecute all violations and the private suit picks up the slack. As we argued earlier, even after the enactment of the Fair Fund provision, the SEC is not armed in most instances with authority to recover from the wrongdoers sums equal to those that can be recovered in private suits. Thus, even when there is a SEC enforcement action, the private suit provides a more encompassing remedy for the injured investors.