Are Securities Class Actions “Supplemental” to SEC Enforcement?
An Empirical Analysis

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Abstract

Securities class actions have been justified as a necessary supplement to SEC enforcement of Section 10(b) and related securities laws. This paper evaluates that justification by analyzing the targeting and outcomes of securities class actions at the margin, taking into account the targeting and outcomes of SEC enforcement actions. The conclusions are as follows: (a) a substantial number of class actions that survive a motion to dismiss run parallel to SEC actions, yield outcomes that differ dramatically from the outcomes of those SEC actions with respect to penalties imposed on officers, and provide no apparent supplementation; (b) class actions without parallel SEC actions are a mixed bag with respect to targeting [further analysis to be done on this question]; and (c) the outcomes of class actions without parallel SEC actions differ dramatically from the actual outcomes of SEC actions, and appear to differ dramatically from outcomes that would be predicted if the SEC had prosecuted those cases [further analysis to be done on that question]. The paper therefore raises doubt regarding the claim that securities class actions provide a useful supplement to SEC enforcement.

1. Introduction

The Supreme Court, Congress, the SEC and some commentators have all justified securities class action lawsuits as “supplemental” to SEC enforcement.¹ Using a newly collected dataset of securities class actions and SEC enforcement actions, this paper evaluates that claim. Specifically, I analyze whether securities class actions are supplemental in either of two respects: First, do securities class actions target violations that the SEC would target if it had the resources? Second, does officer and director liability in class actions correspond reasonably closely to officer and director liability in SEC enforcement actions?

¹ [Stoneridge, Tellabs, PSLRA, SEC statement, Coffee]
The answer to the second question is clearly no, which raises substantial doubt regarding the justification of class actions as “supplemental” to SEC enforcement. [Note: I am still in the process of collecting data on the first question.]

Enforcement of the securities laws, and Section 10(b) specifically, can potentially serve two policy objectives. Enforcement could deter public company managers from disseminating false or incomplete information to the markets; and it could compensate shareholders for losses suffered as a result of such misconduct. SEC enforcement has historically focused on deterrence. SEC policy statements articulate a goal of identifying individual executives responsible for misstatements and punishing those individuals. The SEC does, however, impose monetary penalties on corporate defendants as well.

For class actions to be supplemental to SEC actions, they would have to accomplish these same goals. To deter misconduct, they must impose costs—directly or indirectly—on managers who violate the law. Moreover, they must do so to a sufficient extent that, at the margin, they deter misconduct beyond the degree of deterrence provided by the SEC. And to compensate shareholders, class actions would have to put money into shareholders’ pockets.

Do securities class actions actually fulfill this goal of supplementing SEC enforcement? I address that question in a straightforward manner by looking at the outcome of cases in relation to the outcome of SEC enforcement actions. To the extent SEC actions target and impose personal penalties on officers and directors who have violated the securities laws, I ask whether class actions do the same in similar cases. That

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3 Since 2002, the SEC has been authorized to use amounts it collects in monetary penalties and disgorgement of gains to compensate shareholder losses. So today, SEC enforcement actions could serve a compensation role as well, although as discussed below the amounts it collects are likely to be small in relation to investor losses.
is, first, are class actions targeted at serious violations; and second, do they impose liability on executives who are responsible for those violations in a manner that is consistent with SEC enforcement practices. This approach may be narrow in that, even if class actions do not impose personal liability on officers and directors, they may impose ancillary costs, such as lost jobs and reputations. Others have found evidence that class actions indeed impose these costs on officers and directors of firms that are sued. (Fich and Shivdasani (2007), (Baum, Bohn, and Chakraborty (2007), Helland (2006).)

Whether these ancillary costs are well targeted against officers and directors who have actually engaged in misconduct, however, is a separate and much more difficult question that these authors have not addressed.

Commentators have long argued that the incentives of the parties to class actions lead to counterproductive results—results that are inconsistent with the claim that these suits supplement SEC enforcement with respect to deterrence. First, there are incentives on the plaintiffs’ side to settle meritorious cases for less than they are worth rather than taking the risk of going to trial. On the defense side, there is an incentive and often the ability to settle these meritorious suits with funds that come from the company and its directors’ and officers’ liability (D&O) insurer, rather than the personal funds of the executives responsible for the misconduct at issue. Second, there are incentives on the defense side to settle even weak cases with funds provided by the company and its D&O insurer. Third, because weak cases settle, plaintiffs have incentives to initiate cases

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4 There is a large literature that has made these points over the years. [Coffee, Macey & Miller, Easterbrook & Fischel, others]. Even if these cases were litigated and settled consistent with their merits, and even if payments were made by those responsible for the misstatements, it is unclear whether the social benefit of these lawsuits is worth their social cost. That social cost is not measured by the loss to the shareholder class because their loss is exactly offset by the gain to their (innocent) counterparties who traded the company’s shares in the public markets at prices influenced by the misstatement. The social cost of misstatements is the misallocation of resources that results, a cost that is not measured by damage rules in these suits, and that would be very hard to measure. This issue is not addressed here.
where the merits are weak. The result of this set of incentives, commentators have
countered, is that securities class actions are often nonmeritorious, and even when
meritorious they do not deter misconduct because they fail to impose liability on the
individual officers who have engaged in misconduct.\textsuperscript{5} If these claims are true, there
would be grounds to question whether securities class actions can be justified as
supplemental to SEC enforcement. But none of these claims has been empirically
investigated.

Commentators have also long pointed out that compensation is a problematic goal
for securities class actions. To the extent the corporate defendant and its D&O insurer
pay to settle cases, the cost of those payments is borne by shareholders. From a
compensation perspective, therefore, unless officers, directors or third parties such as
accounting firms and investment banks pay into a settlement, these cases constitute a net
cost to shareholders collectively. As a practical matter, however, even if these suits did
extract payments from culpable officers or directors, these individuals are rarely wealthy
enough to compensate shareholders for more than a small fraction of shareholder losses.
Consequently, unless a case involves large third party defendants, compensation of
shareholder losses is not a realistic goal, and the potential benefit of securities class
actions is deterrence alone.

Returning to the question of whether class actions can be justified as supplemental
to SEC enforcement, the answer turns on four empirical questions. First and most
basically, to what extent are class actions targeted against violations that the SEC has not
targeted? Second, do these potentially supplemental cases target serious violations that
the SEC would target if it had the resources, or are these cases commonly

\textsuperscript{5} [Coffee, Macey & Miller]
nonmeritorious, as commentators fear? Third, to the extent class actions are well targeted, do they yield outcomes that are consistent with securities enforcement policy goals? Fourth, where class actions target the same violations that the SEC targets, and the two actions run parallel to one another, does the class action provide any supplementation? The third and fourth questions largely come down to a point that commentators have plausibly asserted but that has not been examined empirically: Do securities class actions settle entirely with corporate and insurer funds and no contributions from the officers or directors who are alleged to have broken the law?\(^6\) I address these questions below.

2. Previous Research [Incomplete]

This paper is most closely related to the legal literature that argues, without data, that misaligned incentives in securities class actions lead to “collusive settlements” between plaintiffs’ lawyers and defendants in which the company and the insurer foot the bill for settlements, and the executives alleged to have violated the law pay nothing (Rose (2008?), Coffee (19__), Coffee (2006), Macey & Miller (19__)). This paper provides empirical support for some, but not all, of the claims these authors make.

Romano (1991) analyzed data on shareholder litigation, focusing primarily on state fiduciary duty suits. She found that many suits settle with the defendants agreeing

\(^6\) In an earlier article, my coauthors and I investigated the incidence of out-of-pocket payments by outside directors in securities class action settlements (that is, unindemnified and uninsured). We reported that such payments by outside directors are exceedingly rare, having found only eight cases in which outside directors made personal payments in securities class actions out of thousands of cases filed since 1980. We found a total of 13 cases in which outside directors made personal payments in any type of lawsuit—securities class actions, SEC enforcement actions, and state corporate law suits. In that paper and others, I have concluded that the near-immunity of outside directors for oversight failures is sensible from a policy perspective. But the policy considerations with respect to officer liability are different. Unlike outside directors, officers are actively involved in managing the company, implementing its internal controls, and making accounting and other disclosure decisions, and they are well compensated for their services. Consequently, penalizing officers when they violate the securities laws is important from a deterrence perspective. Black, Cheffins & Klausner, Outside Director Liability, 58 Stan. L. Rev. 1055 (2006).
to governance reforms rather than monetary compensation, and that such governance reforms were frequently cosmetic. These settlements are sufficient to allow a plaintiffs’ lawyer to collect a fee from the corporation in fiduciary duty suits. Romano further found evidence that managers lost jobs as a result of shareholder suits, but she attributed those job losses to the underlying problem that gave rise to the lawsuit rather than to the lawsuit itself. These nonmonetary settlements do not occur in securities class actions.

This paper also relates to the literature on the extent to which the merits matter in securities class actions. Alexander (199_) used a small set of examples to suggest that these cases settle at levels below the limits of the D&O insurance available, regardless of merit. Choi, Nelson and Pritchard (2007) show that the Public Securities Litigation Reform Act (PSLRA) reduced the filing and increased the dismissal of less meritorious cases. They also found, however, that the PSLRA had a similar but smaller effect on more meritorious cases. Their measure of a case’s merit was the presence of a restatement or parallel SEC action. I use a measure of merit that looks not only at whether there was a restatement but also at the seriousness of the restatement along with other factors related to merit. I ask whether class actions target violations that are as serious as those targeted by the SEC—and hence whether the former can be said to be supplemental of the latter. Also, in contrast to these articles, the outcome of interest is liability imposed on individual officers and directors, not the corporation.

This paper also relates to studies in the finance literature that look at the ancillary impact of securities class actions and SEC actions on the officers and directors of the defendant corporation—whether they lose their jobs or their outside directorships in other companies. Rather than looking at the ancillary impact, however, I look at the direct impact of these cases—whether officers and directors pay?
Baum, Bohn, and Chakraborty (2007) analyze whether securities class actions lead to the termination of officers and directors. They find that officers as well as board members who are lawyers, bankers and other consultants to the company tend to leave the company at a higher rate when a class action is settled than when it is dismissed. This effect is strongest for CEOs. They interpret this higher rate of termination in settled suits to be a reflection of the merits of suits that are settled. An alternative interpretation, however, is that the terminations are attributable to the existence of the suit itself, and the fact that it has not been dismissed, rather than to the validity of the underlying claims.

Fich and Shivdasani (2007) examine whether directors of firms that are sued experience an increase or decrease in outside directorships on other companies’ boards. They find that outside directorships decline following a securities class action, and interpret their finding as an indication that these suits have a negative reputational effect on the outside directors of the corporation that has been sued. On the other hand, Helland (2006) finds that outside directorships actually increase. Fich and Shivdasani explain the difference in results as being linked to the fact that Helland’s sample goes back in time to a period prior to the PSLRA, when fewer securities class actions were dismissed, and securities class actions of lesser merit resulted in settlements.

These ancillary penalties may be sufficient to justify securities class actions as socially valuable supplements to SEC enforcement. This would be true, however, only if the ancillary effects correlate with actual misconduct, a difficult empirical question that has not been investigated.

Karpoff, Lee and Martin (2007) examine the effect of enforcement actions by the Securities and Exchange Commission (SEC) against officers. They find that the SEC frequently imposes fines on officers and bars them from serving as officers or directors of
public companies. They further find that officers frequently lose their jobs, regardless of whether the SEC bars them from service. Feroz, Park, and Pastena (1991) similarly find that officers tend to be fired in wake of SEC investigations.\footnote{Relatedly, Desai, Hogan and Wilkins (2006) find that officers tend to lose their jobs following accounting restatements regardless of whether an SEC enforcement action ensues.} Comparing these results to Baum et al, officers appear to lose their jobs more frequently following SEC actions than following settlements in securities class actions.

3. The Anatomy of a Securities Class Action

This appendix explains how class actions work and how incentives on all sides of these cases can lead to counterproductive results.

Private suits to redress misstatements by public companies generally take the form of a class action in which the plaintiffs are the shareholders who were adversely affected by the misstatement (typically by buying at an inflated price). The primary statutory prohibitions on which these cases are based appear in Section 10(b) of the Securities and Exchange Act and Section 11 of the Securities Act. Section 10(b) applies to any misstatement or omission of material information.\footnote{Choi, lead counsel paper} Typical violations include accounting misstatements in a company’s quarterly or annual financial statements, or in a press release regarding the company’s business. In some cases, the suit follows a restatement of financial statements. Section 10(b) requires a plaintiff to prove that a misstatement was made with “scienter,” meaning intentionality or a high degree of recklessness. Officers and directors of a company, the company itself, and third party advisors to the company such as accountants and investment banks are potentially liable under Section 10(b). Section 11 applies only to misstatements related to a public offering of securities. Cases governed by Section 11 are less common than Section 10(b)
A typical Section 11 case would involve a misstatement in the prospectus of a company going public. The parties subject to Section 11 are the same as those subject to Section 10(b). Section 11, however, does not require proof of intent or recklessness. Officers, directors and third party advisors to a company are liable under a negligence standard, and the company itself is strictly liable—the plaintiff has to prove only that there was a material misstatement in order to collect from the company itself.

A securities class action may begin with a revelation that a company has issued information to the market that was inaccurate—for example, an overstatement of earnings in its financial statements or an exaggeration of a product’s success in a press release. That revelation results in a drop in the price of the company’s shares. Shareholders that had purchased the shares at a price inflated by the prior misstatement suffer a loss equal to their purchase price minus the price of the shares after the misstatement has been revealed. Alternatively, the predicate to a securities class action may be a report of a bad event at a company and an accompanying stock drop that had not been foreshadowed by earlier disclosures. Arguably the failure to have disclosed facts that lead to the bad event constituted a material omission in violation of Section 10(b). In response to an alleged misstatement or an omission, if a lawyer believes he can prove that one or more officers of the company acted with sufficient intent (in the case of a Section 10(b) case), the lawyer files a complaint in court on behalf of all shareholders that suffered a loss as a result of the misstatement. The potential damages in the lawsuit are equal to the sum of all losses the class members suffered as a result of purchasing the company’s shares at the inflated price. The lead counsel is typically awarded a fee equal to 20% to 30% of the recovery.

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9 [Explain due diligence defense]

10 For simplicity, references to a misstatement include a misstatement or an omission.
The law allows a plaintiffs’ lawyer to name as a defendant any officer, director or employee believed to have participated in the misstatement. The lawyer may name a third party such as an accounting firm or investment bank as well so long as they are alleged to participate directly in the misstatement. Finally, the lawyer may name the company itself. This puts the company in a position to pay an entire settlement. Typically, the plaintiffs’ lawyer names a company’s CEO, CFO and perhaps one or two other officers. Directors are named in a substantial number of cases as well. And the company itself is essentially always named.

In response to the complaint, the defendants file a motion to dismiss the suit. This is a key moment of the lawsuit. In order to survive a motion to dismiss, the plaintiff must allege specific facts that support a “strong” inference that each defendant acted with sufficient intent or recklessness to meet the requirement of Section 10(b) described above. The hurdle for a Section 11 case (involving a misstatement in a public offering) is not as high. If court denies the motion to dismiss, the case proceeds to discovery, where the costs to both sides range into the millions of dollars, and potentially to trial. It is rare, however, that securities class action go to trial.

Nearly all cases that are not dismissed are settled. Trials are very rare. A settlement can occur at any time after a complaint is filed, but most settlements occur after a motion to dismiss has been denied. It is the logic of settlement in securities class actions that raises the concern that officers and directors responsible for violations may not shoulder the appropriate burden in settling shareholders’ claims. That logic is a function of two sets of factors: the parties present at the settlement table; and the incentives created by certain legal rules impinging on those parties.
On the defense side of the settlement negotiation, there are the officers and directors who have been named as defendants, and there is the company. (For simplicity, I assume no third party defendants such as accounting firms or investment banks.) Unless management of the company has turned over since the time of the alleged violation, the company’s position with respect to settlement is determined, or at least strongly influenced, by the CEO and perhaps other officers who have been named as defendants. The danger is that those officers will have the company pay a settlement rather than paying themselves, even if it was their misconduct that resulted in the lawsuit. The company’s outside directors may oversee the settlement negotiations and insist that those involved in the misconduct contribute. If the outside directors are named as well, however, the danger is even greater that the company will pay and the officers and directors who engaged in the misconduct will not.

The other key party on the defense side is the D&O insurer. Unless the insurer has grounds to deny coverage, it will pay on behalf of all defendants—officers, directors, and the company itself—the amount to which the defendants agree up to the limit provided for in the insurance policy. The terms of the D&O insurance policy provide that the insurer’s obligation to pay a settlement is contingent on the insurer’s approval of the settlement, but for reasons described below, it is difficult for the insurer to resist a settlement that the defendants favor.

There is strong pressure on the defense side to settle a case rather than going to trial, even if the defendants’ believe their prospects at trial are good. The defendant officers and directors face financial ruin if the judge or jury rules against them at trial. Potential damages in these cases are generally greater than the personal wealth of even the richest CEOs. The company can also face a devastating blow to the extent it pays the
damage award after trial. Moreover, litigation expenses in securities class actions are high. A case that goes to trial can cost between $10 and $20 million. Thus, even leaving aside other factors, the defense side has a strong incentive to settle.

There are in addition factors unique to securities class actions that create pressure to settle. By contract or bylaw, a company is generally obligated to indemnify its officers and directors for costs they incur in connection with these suits, including litigation expenses and amounts paid in settlement, so long as an officer has acted in “good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation.” From an officer’s or director’s point of view, settlement is essential. If a case goes to trial and the officers or directors lose, there is a real danger that evidence will have emerged suggesting that they their conduct did not meet the “good faith” requirement for indemnification. On the other hand, if the case settles, the officers and directors will be indemnified. Thus, from the officers’ and directors’ perspective there is no cost entailed in a settlement, and a potentially devastating cost entailed in going to trial.

From the company’s perspective, the D&O insurance policy creates similar settlement incentives. The insurer is obligated to reimburse the company for amounts it pays to indemnify its officers and directors, for the company’s own litigation expenses, and for amounts paid to settle a case. The policy excludes from coverage losses arising out of “deliberately fraudulent” conduct, but only if there has been a “final adjudication” of the underlying lawsuit that supports a finding that such conduct occurred. At least in a

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11 All defendants share responsibility for the damage award. The rules for sharing a damage award among the corporate and individual defendants are both complex and unclear, and since so few cases go to trial, courts have had no opportunity to clarify them.
12 [Baker & Griffith]
13 This is reflected in the fact that approximately 95% of civil cases of all types settle.
14 Delaware General Corporation Law, §145(a).
Section 10(b) suit, where the plaintiff must prove that a defendant committed the misstatement intentionally or with a high degree of recklessness, a loss at trial is likely to provide grounds for the insurer to deny coverage under the policy. Thus, if a case goes to trial, the company risks losing its D&O coverage. On the other hand, if the company settles, it has a stronger basis for keeping its insurance protection.

If the company is bankrupt, the settlement incentives do not change. The insurance policy will cover the officers, subject to the “deliberate fraud” exclusion described above. Thus, just as the officers do not want to risk a finding of bad faith for purposes of indemnification when the company is solvent, they do not want to risk a final adjudication of deliberate fraud and the loss of their D&O coverage when the company is bankrupt. Consequently, their incentive is to settle within the limits of the insurance policy.

The D&O insurer is not a party to the litigation, but it is potentially a key factor on the defense side. As stated above, the insurer’s obligation to pay a settlement is contingent on its approval of the settlement. On the other hand, the insurance policy provides that such approval will not be “unreasonably withheld.” Moreover, there is an insurance law doctrine of “bad faith refusal to settle,” which requires an insurer to pay the full amount of damages assessed after trial, regardless of the policy limits, if the insurer is found to have wrongfully refused to settle on terms to which the plaintiffs and defendants had agreed. Thus, if the insurer approves a settlement, it must pay the settlement up to the limit provided for in the insurance policy, but if it declines to approve a settlement and allows a case to go to trial, the insurer risks having to pay the entire judgment. If the insurer believes it has grounds to deny coverage on the basis of the
deliberate fraud exclusion or other grounds\textsuperscript{15} but does not want to risk litigating the issue, it will try to negotiate a deal in which the case settles, the insurer pays an amount less than the policy limits, and the company (and potentially the officers and directors) pay the rest.

On the plaintiffs’ side there are incentives to settle as well. The lead counsel or his firm must finance the litigation itself—its client is not paying it by the hour. If the case goes to trial and the plaintiff loses, the lead counsel gets nothing and will have spent many millions of dollars prosecuting the case. If the case settles, however, the lead plaintiff will get between 20 and 30 percent of the amount paid to the plaintiff class. An interest in avoiding further litigation costs along with risk aversion on the lead plaintiff’s counsel’s side will lead to a willingness to settle for less than the expected value of the case. If the lead plaintiff is an institutional shareholder, it may have some influence over the terms of the settlement. The lead counsel will want to maintain good relations with the lead plaintiff so that the two can work together in future cases. Thus, an institutional plaintiff may be able to extract a larger settlement from the defendants than a non-institutional plaintiff can, or the lead plaintiff may be able to extract a contribution to the settlement from culpable officers. But ultimately, especially in light of the lead counsel’s familiarity with the strength of the plaintiffs’ case, the influence of the lead plaintiff is limited.

The incentives of the parties involved in settlement negotiations suggest that class actions may suffer from a number of maladies that would undermine the claim that they supplement SEC enforcement. First, the logic of these incentives explains why class actions will be settled, not tried. Second, this logic implies that settlements will be

\textsuperscript{15} There are other exclusions in the policy that allow the insurer to deny coverage. In addition, an insurer may be able to rescind the insurance policy based on the claim that the company and its officers fraudulently induced the insurer to provide the issue the insurance policy.
funded largely or entirely by the company and its D&O insurer, and that officers will rarely if ever pay into a settlement. Moreover, unless the defendants can have a case dismissed, there is a reasonable concern that the company will use either shareholder money or D&O insurance money to settle even a weak case. This possibility in turn raises the question of whether plaintiffs’ lawyers file weak cases in the hope of obtaining a settlement. A class action regime that generates nonmeritorious cases and that fails to result in culpable officers being found liable or contributing to settlements is of questionable supplemental value to securities law enforcement.

But the logic of class action settlement can only raise theoretical possibilities. Culpable officers may well be forced by their boards to pay at least part of a settlement. Settlements of weak cases may not be common enough to tempt plaintiffs’ lawyers to knowingly file weak cases. The next sections address those questions empirically. More importantly, the next sections analyze these questions at the margin, beyond what the SEC accomplishes.

4. **Overview of Study**

This study is divided into two parts. The first part looks at targeting, or case selection, by class action plaintiffs’ lawyers compared to the SEC’s selection of cases. The second part looks at the outcome of class actions compared to the outcome of SEC enforcement actions.

With respect to targeting, the question is whether these private prosecutions supplement SEC prosecution. The focus for this question is therefore on class actions that
do not run parallel to SEC prosecutions.\textsuperscript{16} We want to know whether these stand-alone class actions are well targeted toward actual misconduct. The concern is that they may not be; they may be cases with weak merits but potentially high damages and therefore potentially high settlement value. There are thus two alternative hypotheses with respect to these stand-alone class actions. One hypothesis is that they target serious violations. The alternative hypothesis is that they exploit the settlement incentives described above and target cases with weaker merits but potentially high damages.\textsuperscript{17}

To test these hypotheses, I develop a model of the SEC’s decision to bring an enforcement action and fit that model to the cases in the sample of SEC cases. I then apply that model to the class action sample. My assumption is that the SEC’s decisions to bring an action are based on the merits of a case. If I were to find that the model that explains the initiation of an SEC action also explains the initiation of a class action, then I could conclude that class actions supplement SEC enforcement, at least in the targeting of cases. My assumption here, which follows from the claim that class actions supplement SEC enforcement, is that the SEC is resource constrained and that if it had greater resources it would pursue more public company misstatement cases.

The second part of the study looks at the outcome of securities class actions and asks whether these outcomes supplement SEC enforcement actions. Even if a class action is well targeted against a violation that the SEC would prosecute if it had the resources, the outcome of the case would have to be consistent with securities law

\textsuperscript{16} It is well known that class actions frequently target companies that the SEC targets as well. [Choi, Nelson, Pritchard, others] Plaintiffs’ lawyers may prosecute cases where the SEC is pursuing an enforcement action because they can reasonably infer that the SEC has found strong evidence of a violation. (In contrast to a private suit, the SEC files an enforcement action only after it has completed an investigation.) In addition, the presence of an SEC action may create pressure for the company to settle in order to avoid having additional evidence produced that the SEC can use in its case.

\textsuperscript{17} [Can’t necessarily argue that this is socially detrimental, although damages are not related to social losses.]
enforcement goals for us to conclude that the case is supplemental to SEC enforcement. As demonstrated below, the outcomes of SEC actions reflect a strong preference for imposing penalties on individual officers rather than corporate defendants. This approach to enforcement is consistent with SEC policy statements and statements of Congress when legislating in this area. I therefore analyze the extent to which officers bear personal liability in class actions. The hypothesis consistent with the supplementation claim is that they do. The alternative hypothesis, consistent with the incentives described above, is that plaintiffs’ lawyers and defendants in class actions enter into settlements in which officers and directors who have engaged in misconduct pay nothing and instead the company and its insurer pays the entire settlement.

5. **Data**

My sample of securities class actions consists of all cases filed between 2000 and 2003 against public companies and/or officers or directors of public companies for alleged misstatements. There were 746 class actions filed during this period. I selected the end date for this sample period so that litigation would be completed in nearly all cases in my sample. I selected the starting date because this is the point at which court filings became available in relatively large numbers on PACER. To identify cases filed during this time period, I used the Stanford Securities Class Action Clearinghouse and selected all cases the Clearinghouse identified as “classic,” meaning that the defendant is a public company and the basis of the suit is an alleged material misstatement or omission. I dropped cases that, upon further examination, did not fit this description. The primary sources of data for each case were court filings and company filings with the

18 [cites]
SEC. Where data was not available from such sources, I attempted to fill gaps with press reports, cases descriptions on law firm websites, and telephone calls to lawyers involved in the suits.

My sample of SEC enforcement actions consists of two subsamples. One subsample consisted of SEC enforcement actions that paralleled cases in the class action sample, regardless of when the SEC initiated them. For each case in the class action sample, I defined a parallel SEC action as one based on the same alleged misconduct where the timing of the misconduct described in the SEC complaint overlapped with the time period described in the consolidated class action complaint. I made this determination initially based on data compiled by the Stanford Securities Class Action Clearinghouse and in each case verified that both cases focused on the same misconduct. I imposed no constraint regarding the timing of a parallel SEC action. Thus, a parallel SEC action initiated outside the 2000 to 2003 time period was included in this part of the SEC sample. I also imposed no constraint on whether the SEC action was filed before or after the class action was filed or settled. For all parallel SEC actions, I collected data regarding the defendants charged and the outcomes of the cases. The sources of data were SEC releases and documents filed in litigation. There were 146 parallel SEC actions.

The second subsample of SEC enforcement actions consists of SEC actions with no parallel class action. My sample period for these cases, like that of the class action sample period, is 2000 to 2003. From this sample, I dropped any SEC action for which there was a parallel class action, regardless of whether the parallel class action fell within my class action period. I used the Stanford Securities Class Action database to determine whether a there was a parallel SEC action at any time between 1996 and 2008. In addition, because nearly all class actions target companies whose shares trade on a
national market—the NYSE, AMEX, or NASDAQ—I limited my sample of SEC actions to those against companies whose shares trade on a national market.\textsuperscript{19} There were 44 non-parallel SEC actions.

As shown in Panel A of Table 1, there were a total of 746 securities class actions filed from 2000 to 2003. Of these, 263 cases were either dismissed or voluntarily dropped by the plaintiffs. A total of 422 have been settled, and 58 are still pending. Consistent with the discussion above regarding incentives to settle, only 3 of the 746 cases in this sample went to trial. Of those, one settled during trial,\textsuperscript{20} and one settled after trial pending appeal.\textsuperscript{21} In the third case, the defendants did not appear at trial and a default judgment of $192 million was entered against them.\textsuperscript{22} For simplicity in the discussion below, I group these three cases with the 422 cases that settled before trial, and I refer to all 425 cases as settlements. As also shown in Panel A, plaintiffs named third parties such as accounting firms and underwriters in 262 cases (35 percent of cases filed). Among the 746 class actions in this sample, there were 146 parallel SEC enforcement actions,\textsuperscript{23} 127 of which were settled, 11 of which were dismissed and 8 of which are still pending.

\textsuperscript{19} In addition, it is difficult to distinguish some public company misstatement cases from pump-and-dump or bucket shop broker dealer cases when the public company is small and traded off the national exchanges. By restricting the SEC sample to companies with shares trading on a national market, I have a more comparable set of cases across the SEC and class action samples.

\textsuperscript{20} [ATT case]

\textsuperscript{21} [Clarent case. CEO Jerry Chang paid $900,000]

\textsuperscript{22} [Safety Kleen case]

\textsuperscript{23} The SEC enforcement action would focus on the same violation at issue in the class action, but in addition to prosecuting for illegal misstatement under Section 10(b) or Section 11, the SEC can include lesser violations such as a failure to comply with internal books and records or internal control requirements. The derivative suit would be based on an alleged violation of the duty of care or, more likely, the duty of loyalty, which can stem from the same underlying act that resulted in a misstatement. For instance, the act of overstating revenues to increase a company’s share price would be both a misstatement and a violation of the duty of loyalty if the officers involved sold stock while the share price was inflated.
Table 1: Descriptive Statistics: Class Actions

Table 1: Descriptive Statistics

Panel A: Cases and Outcomes

<table>
<thead>
<tr>
<th>Total number of cases</th>
<th>N</th>
<th>Percent of cases filed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases dismissed or voluntarily dropped</td>
<td>263</td>
<td>35%</td>
</tr>
<tr>
<td>Cases settled</td>
<td>422</td>
<td>57%</td>
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<tr>
<td>Cases that went to trial</td>
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<td>0.4%</td>
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<tr>
<td>Cases ongoing</td>
<td>58</td>
<td>8%</td>
</tr>
<tr>
<td>Cases with third-party defendants (e.g. accountant) named</td>
<td>262</td>
<td>35%</td>
</tr>
<tr>
<td>Cases in which third-party defendants paid into settlement</td>
<td>77</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cases with parallel SEC enforcement actions</th>
<th>Settled</th>
<th>Dismissed</th>
<th>Ongoing</th>
<th>Total</th>
<th>Percent of cases filed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>127</td>
<td>12</td>
<td>8</td>
<td>147</td>
<td>20%</td>
</tr>
</tbody>
</table>

Panel B: Settlement/Damage Payments

<table>
<thead>
<tr>
<th>Amount paid in settlement</th>
<th>Mean</th>
<th>Median</th>
<th>N(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Settlement including 3rd party payments</td>
<td>$82.4 million</td>
<td>$7.5 million</td>
<td>424</td>
</tr>
<tr>
<td>Total Settlement excluding 3rd party payments</td>
<td>$47.9 million</td>
<td>$7 million</td>
<td>414</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent of investor losses recovered</th>
<th>All cases</th>
<th>Cases with over $1 billion in losses</th>
<th>Cases without third party payments</th>
<th>Cases without third party payments over $1 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.6%</td>
<td>2%</td>
<td>5.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>2.6%</td>
<td>1%</td>
<td>2.4%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>
Panel C: Sources of Settlement/Damage Payments

<table>
<thead>
<tr>
<th>Sources of Settlement Payments</th>
<th>Yes</th>
<th>No</th>
<th>N^2</th>
<th>Paid 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>172 (45%)</td>
<td>214</td>
<td>386</td>
<td>34</td>
</tr>
<tr>
<td>Insurer</td>
<td>328 (85%)</td>
<td>56</td>
<td>384</td>
<td>187</td>
</tr>
<tr>
<td>Officers &amp; Directors</td>
<td>27 (7%)</td>
<td>381</td>
<td>408</td>
<td>1</td>
</tr>
<tr>
<td>Third Party Defendants</td>
<td>78 (185)</td>
<td>347</td>
<td>425</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount of Payment</th>
<th>Mean</th>
<th>Median</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company (where payment &gt; $0)</td>
<td>$76 million</td>
<td>$4.45 million</td>
<td>161</td>
</tr>
<tr>
<td>Insurer (where payment &gt; $0)</td>
<td>$18.5 million</td>
<td>$7 million</td>
<td>314</td>
</tr>
<tr>
<td>Officers &amp; Directors per case (where&gt;0)^3</td>
<td>$8.43 million</td>
<td>$2.91 million</td>
<td>27</td>
</tr>
<tr>
<td>Officers &amp; Directors per person (where&gt;0)^4</td>
<td>$7.87 million</td>
<td>$1.07 million</td>
<td>62</td>
</tr>
<tr>
<td>Third Party (where payment &gt; $0)</td>
<td>$192 million</td>
<td>$7.15 million</td>
<td>78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Settlement^5</th>
<th>Mean</th>
<th>Median</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of settlement paid by company (where&gt;0)</td>
<td>54.0%</td>
<td>53.3%</td>
<td>161</td>
</tr>
<tr>
<td>Percent of settlement paid by insurer (where &gt;0)</td>
<td>84.4%</td>
<td>100.0%</td>
<td>314</td>
</tr>
<tr>
<td>Percent of settlement paid by third party (where &gt;0)</td>
<td>34.1%</td>
<td>25.5%</td>
<td>77</td>
</tr>
</tbody>
</table>

^1 These include cases settled and tried
^2 Numbers different due to missing data
^3 Mean excludes a $192 million default judgment at trial against officers in Safety-Kleen.
^4 N denotes the number of officers and directors that paid out-of-pocket in the 27 cases.
^5 Percentages do not add to 100% because often there is more than one source of payment.

Panel B of Table 1 provides summary statistics on settlements. The mean and median settlement amounts, including payments by third party defendants, were $82 million and $7.5 million, respectively. Excluding third party payments, mean and median settlement payments totaled $47.9 million and $7 million, respectively. As implied by the difference between the mean and median, there are some extreme “mega-settlements” among these cases, including the $7.2 billion settlement in the Enron case and the $6.2 billion settlement in the Worldcom case. Panel B also shows that the amounts investors recover in securities class actions is generally a small fraction of their losses. The mean recovery across the full set of 425 settlements is 5.6 percent of investor losses. The median is 2.6 percent. In approximately one quarter of cases that settled, investors lost $1 billion or more. In those cases, mean and median recoveries for investors were lower:
2 percent and 1 percent, respectively. In cases in which no third party defendant paid into the settlement, the plaintiffs’ recover was an even smaller fraction of their losses.

Finally, Panel C of Table 1 reports the sources of funds in settlements. As one would expect from the discussion above, the primary source of funds is the D&O insurer. D&O insurers paid some portion of the settlement in 85 percent of the cases for which these data were available. Of those cases in which the insurer paid some amount, the mean insurance payment was 84 percent and the median was 100%. The insurer paid 100 percent of the settlement in 187 of the 384 cases for which data on the amounts of insurer payments are available. The company made payments in 45 percent of settlements. In those cases, the mean and median payments were 54 percent and 53 percent, respectively.

There are three primary explanations for why the insurer would pay less than 100 percent of a settlement. First, D&O insurance policies provide for “retentions” (known as deductibles in other types of insurance) that the company must pay before the insurer begins to pay. If, however, those retentions are exhausted by litigation expenses prior to the settlement, the insurer will pay 100 percent of the settlement. Retentions can be in the multi-millions of dollars for large companies, and are almost always at least a few hundred thousands of dollars. Second, if a settlement exceeds the limits on a company’s policy, the company will pay any amount over the limit. Third, if the insurer has potential grounds for denying coverage—for example, based on the deliberate fraud exclusion discussed above—the insurer may negotiate an agreement with the company whereby the insurer pays less than the limits on the policy and the company and/or its officers or directors contribute to the settlement.

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24 Of the 425 cases that settled, there were 383 cases in which I was able to determine whether the insurer paid. Of those, there were 314 in which I was able to determine exactly how much the insurer paid.
Most importantly for purposes of the analysis here, individual officers or directors made payments in only 27 settlements—7 percent of the 408 settlements for which data is available on the details of who contributed to the settlement. Much of the discussion below focuses on this fact. The question raised is whether the low frequency of officer and director payments is consistent with the claim that these suits supplement SEC enforcement. The low volume of personal payments suggests either that class actions are poorly targeted toward cases of serious misconduct or that officers and/or directors who have engaged in serious misconduct are let off the hook. The analysis below attempts to distinguish between these two explanations.

Finally, it is clear from these numbers that securities class actions do not result in compensation to any significant degree. Not only do the company and the D&O insurer pay the vast bulk of the settlements, meaning that shareholders are paying shareholders, but these payments are very small portions of shareholder losses.

5.2 SEC Enforcement as a Baseline

As a baseline from which to analyze class actions as potentially supplemental to SEC actions, I begin with the sample of SEC actions described above. As I have explained above, these SEC actions consist of two subsamples. One consists of the 146 cases that parallel the cases in the class action sample. The second is an additional 44 cases that the SEC filed between 2000 and 2003 but for which there was no parallel class action.25 Table 2 presents descriptive data on outcomes of SEC actions. These data provide a picture of SEC enforcement policy as reflected in practice.

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25 Between 2000 and 2003, the SEC brought [221] enforcement actions against firms whose shares traded on national markets. Of those, [178] cases had parallel class actions. Thus, during this sample period, there were only 43 SEC actions that had no parallel class action.
As is apparent from Table 2, the SEC frequently imposes penalties on individual officers, and it imposes penalties on corporate defendants much less frequently. The SEC named the corporation a defendant in 135 of the [190] enforcement actions included in the sample, and imposed a monetary penalty on the corporation in 30 of the 112 cases that have been resolved to date. The more common sanction against a corporate defendant is an injunction or a cease and desist order against further violations (not listed in Table 2). Each of these sanctions imposes no immediate cost on the company but raises the penalty if the defendant commits a violation in the future.

In contrast, the SEC imposes penalties against one or more officers in nearly all sample cases. The SEC imposed these penalties on both top level officers and lower level officers. Thus, CEOs incurred monetary penalties in 39 cases (53% of closed cases brought against CEOs) and officer-and-director bars in 33 cases against CEOs (45% of closed cases). Non-financial officers and financial officers below the CEO and CFO level, respectively, incurred these penalties to an even greater extent. The SEC, however, rarely imposes penalties against outside directors, and as will be seen below rarely brings actions against them.

The SEC also referred several cases to the Department of Justice for criminal prosecution of particular executives. Among cases that have been closed, there were nine referrals of CEOs, ten referrals of CFOs, 20 cases against financial officers, and 19 cases against nonfinancial officers.
Table 2

Outcomes of SEC Enforcement Actions

Penalties the SEC imposed on defendants in the 190 SEC actions, including 146 cases that paralleled the class actions in my sample (those filed from 2000 to 2003), and the 44 SEC actions filed between 2000 and 2003 for which there were no parallel class actions. Numbers refer to the number of cases, as opposed to the number of individual defendants. Most cases involve several individual defendants. Cases are defined as a set of SEC actions against a company and/or its officers and directors. Percentages refer to resolved cases as a denominator, as opposed to the number of cases filed (some of which are still pending).

<table>
<thead>
<tr>
<th>Company</th>
<th>Monetary Penalty</th>
<th>Disgorgement</th>
<th>Permanent Bar</th>
<th>Temporary Bar</th>
<th>Criminal Action</th>
<th>Resolved</th>
<th>Total cases naming defendant</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>27%</td>
<td>10%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>112</td>
<td>135</td>
</tr>
<tr>
<td>CEO</td>
<td>39</td>
<td>36</td>
<td>33</td>
<td>14</td>
<td>9</td>
<td>74</td>
<td>109</td>
</tr>
<tr>
<td>CFO</td>
<td>50</td>
<td>66</td>
<td>30</td>
<td>24</td>
<td>10</td>
<td>85</td>
<td>113</td>
</tr>
<tr>
<td>General Counsel</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Financial Officer</td>
<td>55</td>
<td>51</td>
<td>31</td>
<td>29</td>
<td>20</td>
<td>84</td>
<td>118</td>
</tr>
<tr>
<td>Non-Financial Officer</td>
<td>48</td>
<td>46</td>
<td>29</td>
<td>20</td>
<td>19</td>
<td>89</td>
<td>104</td>
</tr>
<tr>
<td>Outside Director</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 3 presents the dollar amounts of monetary penalties. For CEOs and CFOs, monetary penalties cluster around a median of roughly $100,000. For lower tier officers, monetary penalties are lower. Where the SEC imposes monetary penalties on corporate defendants, the median penalty is $10 million. The mean penalty is ten times that amount, but that figure reflects a few extraordinarily large penalties.
Table 3
Monetary Penalties and Disgorgement in SEC Actions
Mean and median monetary penalties and disgorgement amounts. These figures for individuals are given on a per individual basis (as opposed to means and medians of aggregated individual payments on a per case basis).

<table>
<thead>
<tr>
<th></th>
<th>Monetary Penalty</th>
<th>Disgorgement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>Company</td>
<td>104,000,000</td>
<td>10,000,000</td>
</tr>
<tr>
<td>CEO</td>
<td>257,544</td>
<td>110,000</td>
</tr>
<tr>
<td>CFO</td>
<td>134,589</td>
<td>100,000</td>
</tr>
<tr>
<td>General Counsel</td>
<td>490,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Other Financial</td>
<td>107,020</td>
<td>73,000</td>
</tr>
<tr>
<td>Other Non-Financial</td>
<td>106,288</td>
<td>50,000</td>
</tr>
<tr>
<td>Outside Director</td>
<td>84,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

* In this chart, N denotes the number of individuals as the observation, not the number of SEC cases.

6. Analysis

Analysis of the supplementation claim consists of two parts. The first part examines the targeting of class actions in relation to the targeting of SEC actions, and investigates, first, the extent to which class actions target violations that the SEC does not target, and second, whether those suits are targeted toward serious violations? The second part examines outcomes of class actions in relation to outcomes of SEC actions and analyzes whether the outcomes in class actions support the supplementation claim.

6.1 Violations Targeted [This section is incomplete]

This section compares the targeting of class actions to the targeting of SEC actions. During our sample period, there were 746 class actions filed. Of those, 146 had parallel SEC actions, and 599 had no parallel class action. Since the primary way in which securities class actions might supplement SEC enforcement would be to target cases that the SEC does not target, in this step of the analysis I focus on the 599 class
actions for which there was no parallel SEC action. The ultimate question to be answered is the extent to which these 599 cases tended to focus on potentially serious violations of the securities laws, as opposed to efforts by plaintiffs’ lawyers to exploit defendants’ incentives to settle even non-meritorious cases at the company’s expense.

To assess whether the 599 stand-alone class actions target serious violations, I would ideally analyze the merits of these cases. But there is no general way to determine whether a case is meritorious from the outside. How, for instance, would one compare the merits of a case involving alleged misstatement in a product announcement to a case involving a misstatement in a company’s financials? Even more difficult, how would one compare the merits of a case that was brought with a case that was not brought? There is no way of knowing the universe of cases that could have been brought—misstatements that were actually made and that constituted violations of Section 10(b), but that did not become targets of class actions. We would need to identify these cases, in addition to the cases that were brought, in order to determine the quality of class action targeting.

We can, however, do a partial job by looking only at class actions that target misstatements that have been subject to restatement. We know the universe of restatements. Furthermore, we can compare the seriousness of those misstatements using a proprietary database that scores the aggressiveness of accounting practices for a wide range of public companies. We can also identify class actions that target misstatements that have been restated. Accordingly, we can compare the aggressiveness of restated misstatements among the population of restatements and among those that class actions targeted.

I take the following approach. Using GAO and Glass Lewis restatement databases as the universe of restatements, I assign each restatement a score for the
aggressiveness of the misstated financial reports that the restatement corrected. I treat
the aggressiveness scores for these misstatements as one element of the merits of a case
based on the misstatement. In addition, I consider the following merits-related factors:
(a) whether or not there was trading of stock by insiders during the restated period, a fact
that is often used by plaintiffs as an indication of intent to defraud; (b) the percentage
drop in stock price attributable to the misstatement.; (c) the length of the restatement
period; and (d) the market capitalization of the company following the restatement. All
of these factors could legitimately enter into the decision of both the SEC and a plaintiffs’
lawyer to file a suit. The accounting aggressiveness score and the presence of insider
trades relate to the existence of an intentional misstatement. The percentage stock drop
also relates to the seriousness of the misstatement and therefore to the possibility that it
was intentional. The length of the restatement period relate to investor losses. The
longer the restatement period, the more trading occurred during the period of the
misstatement, and therefore the greater investor losses would have been. One would
expect a plaintiffs’ lawyer’s decision to file a suit to be more influenced by these factors
than the SEC staff’s decision. While the SEC may be motivated to pursue cases of large
shareholder losses, the plaintiffs’ lawyers are paid based on the size of the recovery and
presumably are therefore more motivated by this factor. The last factor—company
size—is also a measure of investor losses, since a small percentage drop in share price
means more losses for a company with a large market capitalization than a small one. In
addition, the SEC might be influenced by the relatively high visibility of a misstatement
in a large company—or perhaps only in very large companies—compared to that of a
misstatement in a small company. Thus both the SEC and a plaintiffs’ lawyer could be

26 [additional information on the source of these scores and the methodology to be provided]
influenced by this factor. But here too, the economic motivation of the plaintiffs’ lawyer implies that this factor will be more important in class actions than SEC actions.

I use these factors to model the decision to bring a class action. If the decisions to bring class actions are related to the merits of the case, I would expect all of the factors listed above to be significant. If plaintiffs’ lawyers select their cases based on settlement incentives, we would expect to see them trading weaker merits for higher potential damages. They might, for instance, bring cases against larger companies where the merits-related factors are relatively low. Or they might bring cases with long class periods or large stock drops where the merits on intent are weak.

To further get a sense of the decisions of plaintiffs’ lawyers to bring a class action, I compare the factors that enter into their decisions with those that enter into the SEC’s decisions to bring an enforcement action. I do so, first by modeling the SEC’s decision and comparing that model to the model of the plaintiffs’ lawyer’s decisions. The relative size of the coefficients in each model will indicate the extent to which the two sets of decisions differ.

In addition, I use the model of the SEC’s case selection to determine the extent to which the SEC would have filed enforcement actions in those instances where class actions were filed. The assumption here, since in fact the SEC did not initiated enforcement actions in these cases is that the constraint on the SEC’s enforcement decisions is resources based—that is, with more resources, the SEC would bring more enforcement actions. What we want to know is the extent to which those additional suits would have targeted the violations that plaintiffs’ lawyers targeted.
Before presenting the results of that analysis, Table 4 provides some descriptive statistics comparing the 599 class actions with the 190 SEC actions in my sample (including the 146 cases that parallel class actions and the 44 cases that do not).

Table 4: Descriptive Statistics on Prosecuted and Unprosecuted Restatements

[Analysis to be added]

5.3 Case Outcomes

Even if class actions target serious violations that the SEC does not target, we cannot conclude that they supplement SEC enforcement unless the outcome of those class actions is consistent with the goals of securities law enforcement. To be consistent with the SEC’s enforcement priorities, the outcomes of class actions for which there is no parallel SEC action would impose costs on individual officers to the same extent and in the same sorts of instances that the SEC does—or perhaps in some equivalent or complementary fashion. I therefore analyze the 599 stand-alone class actions in our sample in relation to SEC enforcement actions. Before reaching that step, however, I make a more direct comparison. For those cases where there are pairs of parallel class actions and SEC actions, I examine how the outcomes in the two sets of cases compare.

I make this comparison for three reasons. First, by comparing the two types of enforcement action that focus on the same alleged misconduct, we can see how the
outcomes differ without resorting to statistical inference—the approach we must take when we analyze the 599 class actions for which there is no parallel SEC action. These cases, therefore, provide the best comparison of outcomes. Second, a comparison among parallel cases can inform our inferences regarding stand-alone class actions. Third, it is conceivable that a parallel class action can supplement an SEC action. I am skeptical about such a claim; the SEC seems fully able to assess a penalty in accordance with its own enforcement policies. But perhaps the SEC finds itself forced to settle cases on terms it views as too lenient in order to limit its litigation costs. If so, a class action that assesses a greater penalty against those engaged in misconduct could be supplemental.

To analyze pairs of parallel SEC and class actions, I begin with an examination of who is named as defendants. Figure 1 shows the percentage of cases in which particular defendants are named in class actions and SEC actions. Three differences are apparent. First, class actions name outside directors as defendants far more frequently than do SEC actions. Second, while the difference is not as pronounced, class actions name CEOs more frequently than do the SEC actions. Third, class actions name CFOs somewhat more frequently than do SEC actions. Each of these differences is significant at the .001 level.27 The next question is the role these differences play in the outcome of class actions and SEC actions, respectively. For instance, do class actions result in personal liability for outside directors, CEOs and CFOs more frequently than SEC actions? As I will explain, the answer is no.

**Figure 1**

**Defendants Named in SEC Actions and Class Actions**

Defendants named in each SEC action (n=190) and each class action (n=746). Financial Officers and Nonfinancial Officers are officers below the CEO and CFO level.

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27 [McNamar test.]
Defendant Involvement

- OD Named
- CEO Named
- CFO Named
- Financial Officer Named
- Non-Financial Officer Named
- General Counsel Named
- Company Named

Percent of Cases

- SEC Actions
- Class Actions
Table 5 presents the outcomes of class actions, separating the sample into those cases with and without parallel SEC actions. Of the 599 class actions with no parallel SEC actions, 42% were dismissed, and 8% settled for less than $2 million, a threshold that is often viewed as reflecting a non-meritorious case that the defendants settled to avoid the expense of trial. Among the 146 cases with parallel SEC actions, only 8% were dismissed, and 9% settled at under $2 million. These results are consistent with Choi, Nelson and Pritchard (2006), which finds that the presence of an SEC action is correlated with a reduced likelihood of dismissal. Based on these comparisons alone, however, we cannot exclude the possibility that stand-alone class actions target enough serious violations to warrant whatever social cost they entail.28

Table 5
Outcomes of Class Actions
Outcomes of class actions separated according to whether there is a parallel SEC action. Parallel is defined as a case based on the same allegations during an overlapping time period.

<table>
<thead>
<tr>
<th></th>
<th>Non-Parallel</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>599</td>
<td>146</td>
</tr>
<tr>
<td><strong>Settled</strong></td>
<td>298</td>
<td>127</td>
</tr>
<tr>
<td><strong>Settled &lt; $2m</strong></td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td><strong>Dismissed</strong></td>
<td>251</td>
<td>12</td>
</tr>
<tr>
<td><strong>Ongoing</strong></td>
<td>50</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 6 presents additional descriptive statistics concerning outcomes of stand-alone class actions those that parallel SEC enforcement actions. Mean and median settlements in stand-alone cases are $22.1 million and $6.5 million, respectively. Settlements in cases with parallel SEC actions are substantially higher, with a mean and median of $222 million and $13.4 million, respectively. These differences suggest that

28 [One gap here that I plan to fill in is the timing of class actions and SEC actions. Generally, the class action precedes the filing of an SEC action because the SEC investigation precedes its filing of an action, whereas the class action follows soon after a potential violation appears. I am currently in the process of collecting data on the timing of SEC investigations to the extent those data are available.]
stand-alone cases may be less meritorious than those that parallel SEC cases. Insurance contributions in the stand-alone cases are higher than in parallel cases. This may suggest that the cases with parallel SEC actions are more meritorious than the stand-alone cases, since insurance policies do not provide coverage for deliberate fraud. Alternatively, the difference in insurance contributions may reflect the fact that higher settlements are more likely to exceed insurance policy limits. There was a higher proportion of cases where there is no insurance paid in class actions with parallel SEC actions than in stand-alone class actions (31 cases out of 127 compared to 66 out of 297). This would support the former inference. Finally, and most importantly, individual officer and director contributions to settlements are substantially more common in class actions with parallel SEC actions, and larger as well.

Table 6
Contributions to Settlements
Contributions from insurer, individual officers and directors, and the company in class actions separated according to whether there is a parallel SEC action.

<table>
<thead>
<tr>
<th></th>
<th>Non-Parallel Settlements</th>
<th>Parallel Settlements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td><strong>Total Settlement</strong></td>
<td>$22,100,000</td>
<td>$6,500,000</td>
</tr>
<tr>
<td><strong>Director &amp; Officer Payments</strong></td>
<td>$4,183,382</td>
<td>$415,000</td>
</tr>
<tr>
<td><strong>Insurance Recovery (including nonpayments)</strong></td>
<td>77%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Insurance Recovery (when Insurance Paid &gt; 0)</strong></td>
<td>89%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Number of cases included in calculation. Missing data is dropped. For instance, there were 222 cases in which the insurer covered at least part of the settlement in non-parallel cases and there were 255 cases for which data was available on whether the insurer paid in those cases (it did not in 33).
5.3.1 Class Actions with Parallel SEC Enforcement Actions

I now turn to class actions with parallel SEC actions, beginning again with an examination of the defendants named in each type of suit. Figure 2 shows how these class actions and SEC actions differ with respect to who is named a defendant. It shows the extent to which class actions name defendants that a parallel SEC action does not name, and conversely the extent to which SEC actions name defendants that a parallel class action does not name. Defendants common to a parallel class action-SEC action pair are not counted in Figure 2. This comparison is consistent with the comparison of all class actions and all SEC actions in Figure 1. When confronting the same alleged violation, class action attorneys tend to name CEOs, CFOs, and outside directors as defendants while the SEC does not name them. This difference could be explained by the fact that when a class action complaint is filed, the plaintiffs’ lawyer would have little information regarding how the alleged violation occurred, whereas the SEC staff has conducted an investigation and presumably has detailed information by the time it files its complaint. Perhaps the plaintiffs’ lawyer names top management based on an assumption that they are somehow responsible for the alleged violation, and because they lack information on lower tier managers’ involvement. As a class action proceeds through discovery, however, the plaintiffs’ lawyer has the opportunity to drop defendants and to name additional defendants. But they rarely do so. Of the 425 class actions that settled, there were only [15] cases in which a defendant was dropped and [17] cases in which a defendant was added.

**Figure 2**

Additional Defendants in Parallel SEC and Class Actions
This chart shows non-overlapping defendants in class actions and SEC actions. For example, in 77 (out of 146) class actions, the plaintiffs named a CEO who was not named in the parallel SEC action.
Turning to settlements, officers and directors make personal payments into settlements infrequently, as shown in Table 6, above. Of the class actions with parallel SEC actions, they did so in only 18 of those cases—14% of cases settled. It thus appears that plaintiffs’ lawyers may name these parties as defendants for reasons other than their own culpability and their own bank accounts. In these 18 cases, the mean and median amounts these individuals contributed on a per case basis cases were $26,200,000 and 5,135,000, respectively. On the other hand, 86% of these cases involved no payment by an officer or director. The question raised is whether these 18 cases were the only meritorious cases against officers and directors?

Table 7 compares the outcomes of the parallel SEC actions in these 18 cases. In five of these cases, the SEC actions are still pending. In the remaining 13 cases, Panel A shows that the SEC imposed severe penalties in every case, including monetary penalties in 12 of the 13 cases, and permanent bars in eight cases. (Severe penalties are defined as either a monetary penalty, disgorgement or a permanent officer and director bar.) In addition, the SEC spread those penalties widely below the CEO and CFO levels. Panel B
highlights the differences between the SEC and class actions. In ten of the 13 completed cases, the SEC imposed severe penalties on individuals who did not pay at all into the class action settlement. Of those, seven cases involved a monetary penalty and seven involved a permanent bar. These sanctions were spread among a wide range of officers, with most imposed below the CEO and CFO level. In addition, there are a few cases, where the SEC imposed a severe penalty on the CEO or CFO where the class action did not.

Table 7
SEC Penalties in Cases Where There Were Officer Payments in Class Actions

<table>
<thead>
<tr>
<th>Position of Individual Sanctioned</th>
<th>Number of Cases</th>
<th>(Number of Individuals)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CEO</td>
<td>CFO</td>
</tr>
<tr>
<td><strong>Panel A:</strong> Penalties imposed on one or more individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe Penalty</td>
<td>13</td>
<td>7 (8)</td>
</tr>
<tr>
<td>Monetary penalty</td>
<td>12</td>
<td>5 (5)</td>
</tr>
<tr>
<td>Disgorgement</td>
<td>7</td>
<td>4 (5)</td>
</tr>
<tr>
<td>Permanent Bar</td>
<td>8</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Temporary Bar</td>
<td>10</td>
<td>2 (2)</td>
</tr>
<tr>
<td><strong>Panel B:</strong> Penalties imposed on one or more individuals who did not pay in class action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe Penalty</td>
<td>10</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Monetary Penalty</td>
<td>7</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Disgorgement</td>
<td>5</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Permanent Bar</td>
<td>7</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Temporary Bar</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Total cases = 18
Total individual defendants = 231
* Severe Penalty includes Monetary Penalty, Disgorgement, or Permanent Bar

Turning now to the 128 pairs of parallel class actions and SEC actions in which no officer or director paid into a class action settlement, a pattern again emerges in which the SEC imposes sanctions on individual officers where the class action does not. As
shown in Table 8, the SEC imposed severe penalties on defendants in 83 of these cases. It imposed monetary penalties in 64 of these cases, disgorgement in 55 of these cases, permanent bars in 40 of these cases, and temporary bars in 42 of these cases. These SEC sanctions are spread among the full range of officers, with most imposed on executives below the CEO level.

Table 8
Penalties in Parallel SEC Cases Where There Were No Officer Payments in Class Action

Penalties in 128 SEC actions that paralleled class actions that settled with no contribution from officers or directors. Numbers refer to cases, not individual defendants. For example, in 54 cases one or more Other Financial Officers incurred severe penalties.

<table>
<thead>
<tr>
<th>Penalty Type</th>
<th>Number of Cases</th>
<th>Number of Individuals</th>
<th>CEOs</th>
<th>CFOs</th>
<th>Outside Directors</th>
<th>Other Financial</th>
<th>Other Nonfinancial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary Penalty</td>
<td>64</td>
<td>146</td>
<td>26</td>
<td>31</td>
<td>4</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>Disgorgement</td>
<td>55</td>
<td>122</td>
<td>22</td>
<td>23</td>
<td>1</td>
<td>34</td>
<td>31</td>
</tr>
<tr>
<td>Permanent Bar</td>
<td>40</td>
<td>65</td>
<td>20</td>
<td>16</td>
<td>2</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Severe Penalty*</td>
<td>83</td>
<td>206</td>
<td>38</td>
<td>38</td>
<td>5</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>Temporary Bar</td>
<td>42</td>
<td>69</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Injunction</td>
<td>77</td>
<td>200</td>
<td>37</td>
<td>33</td>
<td>5</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>Cease &amp; Desist</td>
<td>31</td>
<td>43</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>18</td>
<td>12</td>
</tr>
</tbody>
</table>

*Defined to include monetary penalty, disgorgement, or permanent bar

The class actions with parallel SEC actions end in settlements paid by the company and its insurer in the vast majority of cases. These outcomes stand in contrast to the outcomes of SEC actions, which far more often impose penalties on individual officers and (or rare occasions) directors. This pattern does not support the claim that class actions supplement SEC enforcement. Instead, far from providing supplementation, this set of class actions instead takes money from shareholders while the SEC is exacting penalties against the individuals who engaged in misconduct.

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29 These add to more than 128 because multiple penalties are imposed in a single case and sometimes against a single defendant.
Recall that class actions, to a far greater degree than the SEC, name CEOs, CFOs and outside directors as defendants. Yet, officers and directors pay into settlements infrequently. Class action lawyers apparently name top officers and outside directors as defendants, not necessarily to obtain settlements from them, but rather because these people will make decisions on behalf of the corporation whether to settle the case and for how much. By naming them personally as defendants, the plaintiffs’ lawyers bring pressure on them to have the corporation settle with its own funds and those of its insurer.

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5.3.2 Stand-Alone Class Actions [This section is incomplete]

I now turn to the key cases with which to test the supplementation claim, the 599 class actions for which there is no parallel SEC action. At the outset, however, we know that only nine (1.5%) of these cases resulted in officer or director payments. Mean and median settlements, paid by the company and its insurer (and third parties in some cases) amounted to $22,100,000 and $6,500,000, respectively. Nonetheless, it is instructive to estimate how the SEC would have handled these cases. To do so, I model SEC actions to determine what factors influence SEC penalties. I begin with the following Penalty Index reflecting the seriousness of an SEC penalty:

5 = permanent officer and director bar plus monetary penalty
4 = only permanent officer and director bar
3 = monetary penalty but no bar
2 = disgorgement but no monetary penalty
1 = temporary officer and director bar
0 = cease and desist order or injunction against future violations

As explanatory variables, I use the following to model the SEC’s decision to initiate an enforcement action: (a) whether a case involved a restatement, (b) whether a case
involved one or more non-restatement accounting issues, (c) the percentage drop in
market value when the misstatement or omission was revealed, (d) the length of the class
period, (e) whether there were insider trades during the class period, and (f) whether
management allegedly had bonus-related or similar incentives to issue a misstatement. I
then fit this model to the stand-alone class actions to infer the penalties the SEC would
have imposed on the officers in those cases. Finally I compare those inferred outcomes
with the actual outcomes in the class actions.

[analysis to follow]

5.3.3 Settlement Model as a Predictor of Officer Payments

One final inquiry may shed light on whether officer and director contributions to
class action settlements are related to the merits of a case. Litigation consulting firms
have constructed models to predict settlement payments based on past settlements.30
Those models explain a high proportion of the variance in settlements. As one would
expect, they take into account factors that proxy for merits and potential damages. If
such a settlement model accurately predicts class action settlements, and if officer
liability occurs when the merits of a case are strong, one would expect the same model to
predict officer payments.

I construct a settlement model similar to those that NERA and Cornerstone have
used and reported in their publications. The explanatory variables in the model are (a)
the presence or absence of an SEC action, (b) the presence or absence of a parallel
derivative action, (c) whether or not a case involves a restatement, (d) the natural log of

30 [NERA, Cornerstone]
damages, (e) whether there is an accountant defendant, (f) whether there is an underwriter defendant, and (g) whether the lead plaintiff is a public pension plan. I first fit that model to the log of settlements. Column 1 of Table 8 reports the results of that regression. As expected, the R-squared for this regression is .69 and the coefficients are highly significant.

I then fit a logit model using the same explanatory variables and a binary dependent variable indicating whether or not an individual officer or director paid into a settlement. The results are reported in Column 2 of Table 8. The fit of this model is poor, and the signs of some coefficients are the opposite of what one would expect. There are two statistically significant coefficients: the presence of a public pension plan as a plaintiff, and the presence of an accounting firm as a defendant. The presence of a public pension plan as a lead plaintiff is consistent with the well publicized demands of public pension plans that officers and directors pay personally when they bear responsibility for misstatements. Where they are present, these pension plans may exert influence over the lead counsel and insist that officers and/or directors contribute to the settlement fund. Nonetheless, their influence has resulted in very few officer or director payments. The presence of an accountant as a defendant may be a proxy for severe accounting misstatements in a case, which may be associated with a higher degree of intentionality on the part of one or more officers, which in turn could create pressure for those officers to contribute to a settlement. These significant positive relationships aside, the weak fit of the model suggests a very attenuated relationship between the merits of a case and the presence of officer or director payments into a settlement. This is consistent with the findings above regarding the differences between outcomes in SEC actions and outcomes in class actions.
Table 8: Settlement Prediction Model as a Predictor of Officer Payments
Model 1 is an OLS regression with the size of a class action settlement as a dependent variable. Model 2 is a logit regression with the dependent variable being presence/absence of an officer or director payment into a class action settlement.

<table>
<thead>
<tr>
<th>Model (1)</th>
<th>Model (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Payment</td>
<td>Officer Pays</td>
</tr>
<tr>
<td>Parallel SEC Action</td>
<td>.3469***</td>
</tr>
<tr>
<td></td>
<td>(.1192)</td>
</tr>
<tr>
<td>Parallel Derivative Suit</td>
<td>.3871****</td>
</tr>
<tr>
<td></td>
<td>(.1045)</td>
</tr>
<tr>
<td>Restatement</td>
<td>.2341**</td>
</tr>
<tr>
<td></td>
<td>(.1063)</td>
</tr>
<tr>
<td>Log Damages</td>
<td>.4937****</td>
</tr>
<tr>
<td></td>
<td>(.0255)</td>
</tr>
<tr>
<td>Accountant Defendant</td>
<td>.3315*</td>
</tr>
<tr>
<td></td>
<td>(.1273)</td>
</tr>
<tr>
<td>Underwriter Defendant</td>
<td>.5826****</td>
</tr>
<tr>
<td></td>
<td>(.1449)</td>
</tr>
<tr>
<td>Public Pension Plan Lead Plaintiff</td>
<td>.7940****</td>
</tr>
<tr>
<td></td>
<td>(.1489)</td>
</tr>
</tbody>
</table>

F-value 117.59
R² 0.69 0.16
N 374 337

**** p<.001
*** p<.005
** p<.05
* p<.01
7. Conclusion

The claim that securities class actions “supplement” SEC enforcement is vague. Neither the Supreme Court, nor Congress, nor the SEC has explained what they mean when justifying class actions on this basis. This paper has considered two possible forms of supplementation. First, class actions might target violations that the SEC would target if it had the resources. Second, in those cases, class actions might achieve results similar to what the SEC would achieve if it prosecuted those cases. Of the 746 class actions filed during the sample period used in this paper, 599 were potentially supplemental in that the SEC did not pursue parallel enforcement actions. Nearly half of those class actions were dismissed, but more importantly, the outcome in all but nine cases was a settlement funded entirely by the company and its D&O insurer. These outcomes stand in stark contrast to the outcomes of SEC actions, which commonly impose monetary and nonmonetary penalties on officers accused of misconduct. While this comparison may be problematic, since the merits in the two sets of cases may be different, a comparison of pairs of parallel class actions and SEC actions supports the conclusion. Where SEC enforcement actions and class actions targeted the same violation, the results in the two sets of cases were entirely different. The SEC enforcement actions resulted in penalties imposed on a wide range of officers—CEOs, CFOs and lower level officers—while the class actions ended 84% of the time in a settlement funded by the corporate defendant and its insurer. There is little basis for concluding that a class action settlement funded by a corporation and its insurer constitutes supplemental enforcement. Moreover a multivariate analysis showed that the factors that explain settlement amounts with a high
degree of accuracy do not explain the incidence of officer and director payments into a settlement. Thus either the merits do not matter in predicting settlements, or they do not matter in predicting officer and director payments. In light of the rest of the analysis, the latter is the better inference.

Securities class actions cannot be justified as supplemental in the sense of targeting cases and reaching outcomes that resemble what the SEC would have done if it had expended additional resources to prosecute additional cases. On the other hand, other studies have found that securities class actions have ancillary effects on officers and directors such as lost jobs and lost outside directorships. It is possible that those ancillary effects are sufficient to consider class actions supplemental. Further analysis of those effects is necessary before one can support that conclusion. In particular, one would want to determine whether ancillary outcomes correspond to the merits of a case against an officer or director.