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## Securities Class Actions and Bankrupt Companies

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# SECURITIES CLASS ACTIONS AND BANKRUPT COMPANIES

*James J. Park\**

*Securities class actions are often criticized as wasteful strike suits that target temporary fluctuations in the stock prices of otherwise healthy companies. The securities class actions brought by investors of Enron and WorldCom, companies that fell into bankruptcy in the wake of fraud, resulted in the recovery of billions of dollars in permanent shareholder losses and provide a powerful counterexample to this critique. An issuer's bankruptcy may affect how judges and parties perceive securities class actions and their merits, yet little is known about the subset of cases where the company is bankrupt.*

*This is the first extensive empirical study of securities class actions and bankrupt companies. It examines 1,466 securities class actions filed from 1996 to 2004, of which 234 (16 percent) involved companies that were in bankruptcy proceedings while the class action was pending. The study tests two hypotheses. First, securities class actions involving bankrupt companies ("bankruptcy cases") are more likely to have actual merit than securities class actions involving companies not in bankruptcy ("nonbankruptcy cases"). Second, bankruptcy cases are more likely to be perceived as having merit than nonbankruptcy cases, regardless of their actual merit.*

*The study finds stronger support for the second hypothesis than for the first, suggesting that judges and parties use bankruptcy as a heuristic for merit. Even when controlling for various indicia of merit, bankruptcy cases are more likely to be successful in terms of dismissal rates, significant settlements, and third-party settlements than nonbankruptcy cases. These results are evidence that judges use heuristics not only to dismiss cases but also to avoid dismissing cases.*

*Securities class actions cannot be adequately understood without examining the subset of cases with a bankrupt issuer. The perception that securities class actions merely harass healthy companies should be revised in light of the significant number of bankruptcy cases in which shareholders have a greater need for a securities fraud remedy.*

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\* Associate Professor of Law, Brooklyn Law School. Thanks to Stephen Choi, Sean Griffith, Minor Myers, Michael Perino, Adam Pritchard, Amanda Rose, and participants of presentations at the 2011 Canadian Law and Economics Association, 2010 Conference on Empirical Legal Studies, 2011 Junior Business Law Scholars Conference at the University of Colorado Law School, 2012 Federalist Society Junior Scholars Colloquium, 2012 Conference of the International Society for New Institutional Economics, 2011 Midwest Law and Economics Association, NYU Law School Topics in U.S. and Global Business Regulation Seminar, and St. John's University School of Law for helpful comments. Thanks to Kelly Kraiss, Victoria Su, and Bradley Wanner for helpful assistance in compiling the data set for this study. The Brooklyn Law School Dean's Summer Research Fund provided support for this project.

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## INTRODUCTION

When securities class actions target temporary stock price declines, they often create unwarranted costs for otherwise healthy companies. Stock price fluctuations often reflect market overreaction to short-term developments. Shareholder value will recover once the market reassesses the situation.<sup>1</sup> Investors are aware that stock prices change frequently and can protect

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1. See, e.g., Baruch Lev & Meiring de Villiers, *Stock Price Crashes and 10b-5 Damages: A Legal, Economic, and Policy Analysis*, 47 STAN. L. REV. 7, 35 (1994) (“[S]tock price crashes are short-term phenomena . . . [B]uilt-in forces, namely the informed investors’ realization that the stock price is below fundamentals, will start operating in a crash and return the price to its fundamental or equilibrium value.”).

themselves in part through diversification.<sup>2</sup> However, securities class action attorneys, who receive a substantial percentage of any recovery, have significant monetary incentives to link such fluctuations to a theory of securities fraud. The defendant company must spend significant resources in litigating the truth of the asserted fraud claim, reducing shareholder wealth.<sup>3</sup>

Securities class actions directed at frauds involving large public companies that suddenly filed for bankruptcy, such as Enron and WorldCom, present a powerful counterexample to this pessimistic account. The stock prices of these companies did not just fluctuate and recover—they precipitously and completely collapsed in light of revelations that their financial statements were overstated by billions of dollars. Though shareholder wealth is typically wiped out in bankruptcy, Enron and WorldCom investors recovered billions of dollars through securities class actions.<sup>4</sup> In the wake of Enron and WorldCom, it has become more difficult to argue that securities class actions never serve a useful purpose for shareholders.

Though the Enron and WorldCom cases were the focus of much attention, very little is known about the subset of securities class actions involving bankrupt companies. While many studies have examined the question of whether securities class actions tend to have merit,<sup>5</sup> none have extensively examined the frequency and characteristics of securities class actions involving a bankrupt issuer. This subset of cases should be interesting to scholars of securities litigation because it includes those cases in which shareholders have suffered the greatest harm. The resolution of securities class actions in which a bankrupt company is the issuer may shed light on the way in which context affects how parties and courts assess the merits of lawsuits.

There are two competing views as to the relationship between bankruptcy and securities fraud. One view is that companies approaching bankruptcy have greater incentives to commit fraud in order to save the company or the jobs of managers. There thus might be a causal relationship between bankruptcy and securities fraud. The second view is that the context of bankruptcy leads parties and judges to more readily assume that fraud was present in bankrupt companies. This perception might reflect hindsight bias, the tendency to overestimate the predictability of events, leading to the

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2. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, *Optimal Damages in Securities Cases*, 52 U. CHI. L. REV. 611, 641 (1985) (observing that diversified investors are protected from impact of securities fraud).

3. See, e.g., Janet Cooper Alexander, *Do the Merits Matter? A Study of Settlements in Securities Class Actions*, 43 STAN. L. REV. 497, 572 (1991) (arguing that shareholder compensation shifts losses “from current . . . to former shareholders” and that “the net result is simply the destruction of shareholder value in the amount of the transaction costs of the litigation”).

4. See *In re Enron Corp. Sec., Derivative & “ERISA” Litig.*, No. MDL-1446, 2008 WL 4178151 (S.D. Tex. Sept. 8, 2008) (approving \$7 billion settlement fund including settlements by gatekeepers); *In re Worldcom, Inc. Sec. Litig.*, No. 02 Civ. 3288 (DLC), 2005 WL 2319118 (S.D.N.Y. Sept. 21, 2005) (approving \$6 billion in settlements including settlements by gatekeepers).

5. See *infra* note 44.

conclusion that management knew of the danger of bankruptcy but failed to disclose it. Class action attorneys may try to exploit this perception by bringing a strike suit against the management of the bankrupt company as well as third parties such as the company's auditor.

This study assesses the relationship between bankruptcy and securities fraud by analyzing a data set of 1,466 consolidated class actions filed from 1996 to 2004, of which 234 (approximately 16 percent) cases involved a company that was in bankruptcy during the pendency of the class action ("bankruptcy cases"). The study tests two hypotheses: (1) bankruptcy cases are more likely to have actual merit than cases in which the issuer is not bankrupt ("nonbankruptcy cases") and (2) bankruptcy cases are more likely to be perceived as having merit than nonbankruptcy cases, regardless of the actual relative merits. In testing these hypotheses, this study hopes to shed light upon the nature and purpose of securities class actions.<sup>6</sup>

The results of the study indicate stronger support for the second hypothesis. With regard to the first hypothesis, the evidence is mixed as to whether bankruptcy cases are more likely to involve valid allegations of fraud than nonbankruptcy cases. While bankruptcy cases are somewhat more likely to involve accounting restatements than nonbankruptcy cases, they are not more likely to have other indicia of merit such as insider trading allegations, parallel Securities and Exchange Commission ("SEC") actions, or a pension fund lead plaintiff. On the other hand, bankruptcy cases are more likely to succeed than nonbankruptcy cases. Bankruptcy cases are less likely to be dismissed and are more likely to result in third-party settlements and in settlements of \$3 million or more than nonbankruptcy cases.

Regression analysis shows that this bankruptcy effect persists even when controlling for factors relating to the merit of the case. Logistic regressions were estimated with various measures of success as the dependent variable and indicia of merit, case controls, and a bankruptcy variable as independent variables. For all three regressions, the bankruptcy variable was statistically significant at the 1 percent level.

This bankruptcy effect is evidence that bankruptcy cases are treated differently by parties and courts. The most likely explanation is that bankruptcy is a heuristic judges use to avoid dismissing cases, perhaps counteracting the tendency of judges to use heuristics to dismiss securities class actions. Though the use of the bankruptcy heuristic is troubling to the extent that it reflects hindsight bias, it is not so problematic if bankruptcy cases serve a more useful purpose than nonbankruptcy cases. Indeed, in bankruptcy cases, shareholder losses are permanent rather than temporary, and compensation to shareholders for fraud does not reflect a meaningless

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6. There is another interesting relationship between securities class actions and bankruptcy. An empirical study by Lynn Bai, James Cox, and Randall Thomas finds evidence that companies settling securities class actions are more likely to have liquidity problems and a greater propensity to file for bankruptcy. See Lynn Bai et al., *Lying and Getting Caught: An Empirical Study of the Effect of Securities Class Action Settlements on Targeted Firms*, 158 U. PA. L. REV. 1877 (2010). In contrast, this study focuses on the impact of bankruptcy filings prior to the resolution of securities class actions as opposed to after their resolution.

circular payment from shareholders to themselves. Judges may be influenced not only by hindsight bias but also by policy considerations in favoring bankruptcy cases.

In addition to its main finding—that there is a bankruptcy effect impacting the adjudication of bankruptcy cases—this study makes a number of findings relevant to understanding the nature of securities class actions. The bankruptcy effect fades with respect to the largest settlements, those above \$20 million, likely reflecting the influence of directors and officers (“D&O”) insurance policy limits. Moreover, bankruptcy cases do not seem to do much to determine the responsibility of individual defendants for the fraud, even when vicarious liability for the bankrupt issuer is not a possibility.

This Article shows that securities class actions involving bankrupt companies are an important subset of securities class actions. Far from just harassing healthy companies, securities class actions often involve companies troubled enough to have fallen into bankruptcy. There is evidence that judges and parties view these bankruptcy cases as more likely to have merit than nonbankruptcy cases. This tendency perhaps reflects an intuition that when fraud masks the impending bankruptcy of a company, there is a stronger case for providing shareholders with a remedy through a securities class action.

This Article is divided into four Parts. Part I describes the mechanics of securities class actions in the bankruptcy context. Part II describes the data set and provides some descriptive statistics. Part III tests two hypotheses: (1) bankruptcy cases are more likely to have merit than nonbankruptcy cases, and (2) bankruptcy cases are perceived as having more merit than nonbankruptcy cases. It finds more support for the second hypothesis than for the first. Part IV analyzes the significance of these findings with respect to how securities class actions are resolved as well as the general nature of securities class actions.

## I. BACKGROUND

Securities class actions involving a bankrupt issuer are of interest because there is an intuitive relationship between bankruptcy and securities fraud. There are two possible accounts of this relationship. First, there could be an actual correlation between bankruptcy and securities fraud. Managers might have greater incentive to commit fraud when a firm is heading toward bankruptcy. Second, there could be no such correlation but rather a tendency to jump to unwarranted conclusions of guilt when a bankrupt company is accused of fraud, even when the company is actually innocent. This Part discusses these alternative accounts of the relationship between bankruptcy and securities fraud and summarizes past empirical studies on this topic. An important consideration in studying bankruptcy cases is that the bankruptcy process often precludes the issuer from directly contributing to any settlement, leaving as contributors only individual defendants covered by an insurance policy and perhaps third-party defendants such as underwriters and auditors.

### A. Bankruptcy and Securities Fraud

This Section discusses the possible relationship between bankruptcy and securities fraud. Companies heading toward bankruptcy might be more likely to have managers who commit fraud. Alternatively, companies that end up bankrupt may not be more likely to commit fraud, but hindsight bias may lead to the perception that bankruptcy is associated with fraud.

#### 1. Actual Fraud

Bankruptcy is a context in which we may see a greater incidence of fraud than with respect to solvent companies. Managers have greater incentives to commit fraud in the period leading up to bankruptcy. Managers of companies that fall into bankruptcy might also be more likely to commit fraud because of incompetence.

There are many reasons why a company could find itself filing for bankruptcy.<sup>7</sup> Some developments leading to bankruptcy are the result of unavoidable macroeconomic trends, but others are at least partly the result of managers making bad strategic decisions and failing to make necessary investments.<sup>8</sup> A new company could find that expected demand for its product never materializes.<sup>9</sup> The market for an established company's products and services could shift unexpectedly, leaving the company without enough revenue to cover its expenses.<sup>10</sup> A company could overexpand, making it difficult to cover larger expenses such as financing costs.<sup>11</sup>

The managers of a company have incentives to mask developments that foreshadow bankruptcy.<sup>12</sup> Management could genuinely believe that the company's poor performance is an aberration that is not indicative of future performance. The managers might fear that if disappointing results are released, the market will overreact. Instead of reporting bad results, managers can stretch ambiguous accounting standards to report results they believe are more indicative of future performance, hoping to buy some time to save the company.

On the other hand, managers can be motivated by selfish personal interest rather than a genuine belief that what they are doing is best for the company. Misrepresenting the company's performance will give managers

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7. See, e.g., Douglas G. Baird, *Bankruptcy's Uncontested Axioms*, 108 YALE L.J. 573, 580–81 (1998); Hubert Ooghe & Sofie De Prijcker, *Failure Processes and Causes of Company Bankruptcy: A Typology*, 46 MGMT. DECISION 223, 227–34 (2008).

8. See, e.g., Ooghe & De Prijcker, *supra* note 7, at 234–35 (discussing poor management as a cause of bankruptcy).

9. See, e.g., *id.* at 228.

10. See, e.g., *id.* at 233.

11. See, e.g., Baird, *supra* note 7, at 580–81; Ooghe & De Prijcker, *supra* note 7, at 228–30.

12. See, e.g., Thomas Lys & Ross L. Watts, *Lawsuits Against Auditors*, 32 J. ACCT. RES. (SUPPLEMENT) 65, 68 (1994) (“We argue that managers’ incentives to mislead increase when the firm is in financial distress.”).

time to exercise options or sell stock before the company's collapse. Fraud might allow managers to keep their jobs while hoping that a miracle will turn the company around.<sup>13</sup> Jennifer H. Arlen and William J. Carney have identified these "last period agency costs" as a primary driver of securities fraud.<sup>14</sup>

There might also be a correlation between bankruptcy and securities fraud because managers presiding over bankrupt companies are more likely to be incompetent and thus more likely to misrepresent material facts about the company. Bankruptcy may not cause fraud, but the same factors that cause companies to go bankrupt can make it more likely that there is fraud in such companies. Competent managers are more likely to avoid bankruptcy and are also more likely to avoid committing fraud. If that is the case, there would be a greater likelihood of fraud in bankrupt companies.

## 2. Perception of Fraud

Even if fraud is not more likely in bankrupt companies, there might be a perception that bankruptcy is associated with fraud. One reason for this perception is the risk of hindsight bias, the tendency to "overstate the predictability of outcomes."<sup>15</sup> Because bankruptcy is a significant and calamitous event for a public corporation, factfinders might assume that insiders with superior knowledge relative to investors must have known that bankruptcy was imminent. If that is the case, the failure to disclose the developments that ultimately caused the bankruptcy is more likely to be perceived as fraudulent.<sup>16</sup>

To survive a motion to dismiss, any securities class action complaint alleging a violation of Rule 10b-5 must "state with particularity facts giving rise to a strong inference that the defendant acted with" scienter.<sup>17</sup> This

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13. E.g., Jennifer H. Arlen & William J. Carney, *Vicarious Liability for Fraud on Securities Markets: Theory and Evidence*, 1992 U. ILL. L. REV. 691, 701 (noting that a manager may benefit from fraud through "possible preservation of employment as well as the value of the manager's assets related to the firm's stock, if by committing fraud he is able to buy sufficient time to turn the ailing firm around").

14. See *id.* at 715 ("Under our last period hypothesis, Fraud on the Market usually results from the efforts of a few desperate managers to hide the fact that the corporation is ailing or has done sufficiently badly relative to reasonable expectations that senior managers can expect to be replaced.").

15. Mitu Gulati et al., *Fraud by Hindsight*, 98 NW. U. L. REV. 773, 778 (2004); see also Jeffrey J. Rachlinski, *A Positive Psychological Theory of Judging in Hindsight*, 65 U. CHI. L. REV. 571, 571 (1998) ("[P]sychologists have demonstrated repeatedly that people overstate the predictability of past events—a phenomenon that psychologists have termed the 'hindsight bias.'").

16. See, e.g., Zoe-Vonna Palmrose, *Litigation and Independent Auditors: The Role of Business Failures and Management Fraud*, AUDITING: J. PRAC. & THEORY, Spring 1987, at 90, 96 ("In the context of business failures, allegations usually include the assertion that business difficulties were hidden by the use or manipulation of financial information, so that either the existence or degree of financial distress was unexpected when finally disclosed.").

17. 15 U.S.C. § 78u-4(b)(2) (2006).



burden to describe fraudulent intent can be met by alleging that the defendant acted recklessly with respect to a disclosure.<sup>18</sup> Recklessness has been defined by one circuit as “an extreme departure from the standards of ordinary care to the extent that the danger was either known to the defendant or so obvious that the defendant must have been aware of it.”<sup>19</sup> Given the high subjective standard for liability in Rule 10b-5 cases, hindsight bias might not be a factor in all cases.<sup>20</sup> But in a close case, hindsight bias can lead decisionmakers to conclude that, in light of a company’s bankruptcy, management must have been aware of a risk that was not disclosed to investors.

The possibility of hindsight bias with respect to bankrupt companies has long been acknowledged in the accounting literature. A number of studies assessing various cases against auditors find hindsight bias in the way that judges and juries assess auditor liability.<sup>21</sup> In particular, the fact that an audited company filed for bankruptcy may influence perception of the auditor’s conduct.<sup>22</sup> However, there is some evidence that hindsight bias

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18. *E.g.*, *Rothman v. Gregor*, 220 F.3d 81, 90 (2d Cir. 2000) (noting that “to plead scienter . . . a complaint may . . . allege facts that constitute strong circumstantial evidence of conscious misbehavior or recklessness”); *In re Silicon Graphics Inc. Sec. Litig.*, 183 F.3d 970, 974 (9th Cir. 1999) (finding that plaintiff “must plead, in great detail, facts that constitute strong circumstantial evidence of deliberately reckless or conscious misconduct”). Of course, in some circuits, plaintiffs can also plead scienter by alleging motive and opportunity, *Rothman*, 220 F.3d at 90, an arguably easier standard to meet.

19. *Rothman*, 220 F.3d at 90 (quoting *Rolf v. Blyth, Eastman Dillon & Co.*, 570 F.2d 38, 47 (2d Cir. 1978)).

The standard for finding an auditor liable in a Rule 10b-5 case is an even higher standard of recklessness. *See, e.g.*, *PR Diamonds, Inc. v. Chandler*, 364 F.3d 671, 693 (6th Cir. 2004) (“[T]he meaning of recklessness in securities fraud cases is especially stringent when the claim is brought against an outside auditor.”); *DSAM Global Value Fund v. Altris Software, Inc.*, 288 F.3d 385, 391 (9th Cir. 2002) (requiring allegation of “such an extreme departure from reasonable accounting practice that [the auditor] knew or had to have known that its conclusions would mislead investors” (internal quotation marks omitted)); *Rothman*, 220 F.3d at 98 (noting that to find that an auditor acted recklessly, the conduct must “approximate an actual intent to aid in the fraud being perpetrated by the audited company” (internal quotation marks omitted)).

In 1994, the Supreme Court rejected a more lenient standard of aiding and abetting for holding auditors liable under Rule 10b-5. *See Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A.*, 511 U.S. 164, 191 (1994).

20. *See, e.g.*, *Rachlinksi*, *supra* note 15, at 592 (“Even if subjective standards invite biased judgments, the hindsight bias probably has less influence on judgments made under subjective standards than it does on judgments made under objective standards.”).

21. *See, e.g.*, John C. Anderson et al., *The Mitigation of Hindsight Bias in Judges’ Evaluation of Auditor Decisions*, *AUDITING: J. PRAC. & THEORY*, Fall 1997, at 20, 21 (“[W]e established the existence of hindsight bias with judges and then attempted to mitigate it with two individual debiasing methods.”). The hindsight bias may also affect auditors who evaluate the work of other auditors. *See Jane Kennedy, Debiasing the Curse of Knowledge in Audit Judgment*, 70 *ACCT. REV.* 249, 257 (1995) (“This experiment finds that subjects—auditors and MBA students—are susceptible to outcome knowledge that should be ignored . . .”).

22. *See, e.g.*, Thomas A. Buchman, *An Effect of Hindsight on Predicting Bankruptcy with Accounting Information*, 10 *ACCT., ORGS. & Soc’y* 267, 274 (1985) (“Reporting bankruptcy increased the perceived likelihood that it would happen, as would be expected from

does not uniformly influence decisions and liability may instead depend on an assessment of the foreseeability of bankruptcy.<sup>23</sup>

The risk of hindsight bias may also influence the decision of defendants to settle cases for significant amounts. Tom Baker and Sean J. Griffith have found through interviews of participants in securities class action settlement negotiations that D&O insurers focus on what they call “sex appeal” in determining settlement amounts.<sup>24</sup> Bankruptcy is an obvious fact that will add “sex appeal” to a case, resulting in a greater likelihood that settlements in bankruptcy cases will be significant. Defendants themselves are subject to hindsight bias, or are at least wary of the effects of hindsight bias, in determining the value of a claim.

### B. *Mechanics of Securities Class Actions Involving Bankrupt Companies*

Regardless of the precise cause, the impact of misrepresentations relating to the performance of a company heading toward bankruptcy can be serious. If the market is fooled by the fraud, the stock price will not adequately reflect the risk that the company will go bankrupt. Investors who purchase stock at the fraudulent price will overpay by the amount the stock would have been discounted if the truth were known. Management is less likely to make necessary adjustments to their strategy without the pressure of a declining stock price. The disciplining effect of a takeover is also less likely when the stock price is inflated, possibly depriving the company of a more competent management team that could turn the situation around. Revelation of significant misrepresentations can result in substantial stock price declines that destabilize the company as investors lose faith in the credibility of management. As a result, a bankruptcy that might have been avoidable can become unavoidable.

Securities class actions provide a remedy for the harm caused by misrepresentations made by a company in the period leading up to its bankruptcy. Investors can bring suit against the company, its directors and officers, as well as third-party gatekeepers such as auditors and underwriters under section 10(b) of the Securities Exchange Act,<sup>25</sup> SEC Rule

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prior research.”); D. Jordan Lowe & Philip M.J. Reckers, *The Effects of Hindsight Bias on Jurors’ Evaluations of Auditor Decisions*, 25 DECISION SCI. 401, 417 (1994) (“In spite of receiving instructions to base their responses on information available before learning of an outcome, jurors tended to make auditor evaluative judgments in the direction of the negative (bankruptcy) outcome. Outcome knowledge of the audit client’s bankruptcy resulted in lower evaluations of the auditor’s performance.”).

23. See Marianne M. Jennings et al., *Causality as an Influence on Hindsight Bias: An Empirical Examination of Judges’ Evaluation of Professional Audit Judgment*, 21 J. ACCT. & PUB. POL’Y 143, 161 (1998) (“[J]udges’ assessments of the external auditor’s responsibility to anticipate the outcome was directly related to the degree of outcome foreseeability.”).

24. Tom Baker & Sean J. Griffith, *How the Merits Matter: Directors’ and Officers’ Insurance and Securities Settlements*, 157 U. PA. L. REV. 755, 787 (2009).

25. See 15 U.S.C. § 78j (2006) (prohibiting manipulative and deceptive devices). The Supreme Court has recognized an implied private right of action for investors harmed by

10b-5,<sup>26</sup> and section 11 of the Securities Act of 1933 (if the company issued securities pursuant to a registration statement during the relevant timeframe).<sup>27</sup>

One complication with bringing a securities class action against a bankrupt issuer is that such litigation is generally subject to the Bankruptcy Code's automatic stay, which typically halts litigation against a company upon its filing for bankruptcy.<sup>28</sup> Any judgment or settlement in a securities class action against a company would be an unsecured claim,<sup>29</sup> and any recovery by shareholders from the bankruptcy estate would be subordinate to recovery by the company's more senior creditors.<sup>30</sup> Though at times there are deviations from this absolute priority rule,<sup>31</sup> studies find that even when shareholders receive a recovery, it is small.<sup>32</sup> Reorganization plans often discharge and release the bankrupt company from any obligations arising from securities class actions.<sup>33</sup> Therefore, it is rare, though not unheard of,

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violations of section 10(b). See *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 318 (2007).

26. See 17 C.F.R. § 240.10b-5 (2011) (SEC Rule enacted pursuant to section 10(b) of the Securities Exchange Act).

27. See 15 U.S.C. § 77k(a) (providing cause of action against issuer and other parties for misstatements in the registration statement).

28. See 11 U.S.C. § 362 (2006).

29. *E.g.*, Notice of Proposed Settlement of Class Action, Motion for Attorneys' Fees, and Settlement Fairness Hearing at 1, *In re Eagle Bldg. Techs., Inc. Sec. Litig.*, No. 02-80294-CIV-RYSKAMP (S.D. Fla. Jan. 31, 2006) ("Bankruptcy counsel for Eagle and counsel for the Settlement Class have agreed that the Settlement Class shall have an unsecured claim of \$8,000,000 in Eagle's liquidation. However, secured and unsecured claims exceed the available proceeds for liquidation and the Settlement Class is likely to receive only a small fraction of its claim against Eagle from the bankruptcy estate.").

30. Section 510(b) of the Bankruptcy Code provides the following:

[A] claim arising from rescission of a purchase or sale of a security of the debtor or of an affiliate of the debtor, for damages arising from the purchase or sale of such a security, or for reimbursement or contribution allowed under section 502 on account of such a claim, shall be subordinated to all claims or interests that are senior to or equal the claim or interest represented by such security, except that if such security is common stock, such claim has the same priority as common stock.

11 U.S.C. § 510(b).

For a critique of this provision, see generally Kenneth B. Davis, Jr., *The Status of Defrauded Securityholders in Corporate Bankruptcy*, 1983 DUKE L.J. 1 (1983).

31. See, *e.g.*, Kenneth M. Ayotte & Edward R. Morrison, *Creditor Control and Conflict in Chapter 11*, 1 J. LEGAL ANALYSIS 511, 522 (2009) (finding that equityholders recover in only 9 percent of chapter 11 cases when creditors have not been paid in full, marking a shift from recovery rates during the 1980s).

32. See, *e.g.*, Lynn M. LoPucki & William C. Whitford, *Bargaining over Equity's Share in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 139 U. PA. L. REV. 125, 143 (1990) (finding equity recoveries of between \$400,000 and \$63 million).

33. See, *e.g.*, Notice of Class Action, Proposed Settlement and Hearing Thereon at 1, *In re Mpower Commc'ns Corp. Sec. Litig.*, No. 00-CV-6463t(b) (W.D.N.Y. Feb. 20, 2003) ("On April 8, 2002, defendant Mpower Communications Corp. ('Mpower' or the 'Company') filed a petition for relief under Chapter 11 of the Bankruptcy Code. As of the effective date of Mpower's First Amended Joint Plan of Reorganization (the 'Plan'), Mpower was discharged

for a bankrupt company to contribute to the settlement of a securities class action. As discussed below, most bankrupt issuers are not named as defendants or are later dismissed from the securities class action once the trial court becomes informed of the bankruptcy filing.

However, most public companies have insurance for their directors and officers intended to cover the costs of securities litigation. Individual directors and officers are almost always covered by D&O insurance, and many issuers purchase D&O insurance to cover the issuer's direct liability and indemnification payments.<sup>34</sup> Courts have generally found that D&O insurance payments made directly on behalf of directors and officers are not part of the bankruptcy estate and are therefore not subject to the automatic stay.<sup>35</sup> Indeed, such "Side A" policies appear to be specifically meant to cover situations in which the issuer is bankrupt.<sup>36</sup> On the other hand, D&O policies covering the company's indemnification obligations to directors and officers have been found to be part of the bankruptcy estate.<sup>37</sup> Similarly, while the courts have not definitively ruled on whether D&O insurance covering the company's direct liability is part of the bankruptcy estate, commentators have argued that payments made on behalf of the issuer are likely considered part of the bankruptcy estate.<sup>38</sup>

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and released from any claim, debt and interest, except as otherwise stated in the Plan, as set forth in the final confirmation order entered by the United States Bankruptcy Court for the District of Delaware on July 17, 2002.").

34. See, e.g., Sean J. Griffith, *Uncovering a Gatekeeper: Why the SEC Should Mandate Disclosure of Details Concerning Directors' and Officers' Liability Insurance Policies*, 154 U. PA. L. REV. 1147, 1163–68 (2006).

35. See, e.g., Gillman v. Cont'l Airlines (*In re* Cont'l Airlines), 203 F.3d 203, 216–17 (3d Cir. 2000) (implying that D&O insurance proceeds are not property of bankruptcy estate when nondebtor directors and officers are beneficiaries); *La. World Exposition, Inc. v. Fed. Ins. Co.* (*In re* La. World Exposition, Inc.), 832 F.2d 1391, 1400–01 (5th Cir. 1987) (finding that D&O policy proceeds belonged to the directors and officers and were not part of the estate). *But see* Amended Notice of Pendency and Proposed Settlement of Class Action at 4, *In re* Team Commc'ns Grp., Inc. Sec. Litig., No. 01-02312-DDP (SHx) (C.D. Cal. Dec. 6, 2004) ("The Trustee opposed the previous settlement reached by the parties on the grounds that the settlement released claims belonging to Team against the Individual Defendants and others, and that the insurance proceeds designated to fund that settlement were the property of Team's bankruptcy estate, and could not be used to fund the settlement. On September 18, 2002, the Bankruptcy Court denied a motion by one of the Insurers for relief from the Automatic Stay under 11 U.S.C. § 362, *inter alia*, on the grounds that the policy proceeds were the property of Team's bankruptcy estate.").

36. See Tom Baker & Sean J. Griffith, *The Missing Monitor in Corporate Governance: The Directors' & Officers' Liability Insurer*, 95 GEO. L.J. 1795, 1803 (2007) ("Side A coverage typically comes into play only when the corporation is bankrupt or insolvent . . .").

37. See, e.g., *Minoco Grp. of Cos., Ltd. v. First State Underwriters Agency of New Eng. Reinsurance Corp.* (*In re* Minoco Grp. of Cos., Ltd.), 799 F.2d 517, 519 (9th Cir. 1986) (finding that particular D&O insurance proceeds are "property of the estate . . . because the policies insure [the corporation] against indemnity claims"); *Circle K Corp. v. Marks* (*In re* Circle K Corp.), 121 B.R. 257, 259 (Bankr. D. Ariz. 1990).

38. See, e.g., Richard M. Cieri & Michael J. Riela, *Protecting Directors and Officers of Corporations that Are Insolvent or in the Zone or Vicinity of Insolvency: Important Considerations, Practical Solutions*, 2 DEPAUL BUS. & COM. L.J. 295, 333–34 (2004); Nan Roberts

Thus, securities class actions can often proceed despite the automatic stay, but only Side A policies directly covering directors and officers can fund any litigation or settlement costs. In virtually all cases, even when a company has filed for bankruptcy, the securities class action will proceed against some of the directors and officers of the corporation, and in some cases, against third parties such as underwriters and auditors who are not covered by the automatic stay. However, because the action is dismissed or stayed with respect to the bankrupt company, it is less likely that the company will directly contribute to the settlement. We thus might expect that bankruptcy cases tend to involve smaller settlements than comparable non-bankruptcy cases.

### C. Prior Studies

Perhaps the first empirical study examining the relationship between securities fraud and bankruptcy was a 1992 study by Arlen and Carney in which they set forth and attempted to verify their “last period agency costs” hypothesis. As noted earlier, that hypothesis predicts that securities fraud tends to involve managers attempting to save their jobs when their firms are heading toward bankruptcy.<sup>39</sup> The Arlen and Carney study examined a sample of 111 reported decisions in securities class actions.<sup>40</sup> In that sample, 24.3 percent of the cases involved bankrupt companies.<sup>41</sup> The study found support for the last period agency costs hypothesis in that most of the cases involved allegations of fraud that masked stock price declines.<sup>42</sup> However, as acknowledged by the authors, a major limitation of the study was that it did not have significant information on settlements, making it difficult to assess whether bankruptcy cases were more likely to involve valid allegations of fraud than nonbankruptcy cases.<sup>43</sup>

More recent studies have looked at larger samples with more comprehensive settlement data but have not found any link between bankruptcy and valid allegations of securities fraud. Two studies examined in passing the effect of bankruptcy on the size of a securities class action settlement.<sup>44</sup> In a

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Eitel, *Now You Have It, Now You Don't: Directors' and Officers' Insurance After a Corporate Bankruptcy*, 46 LOY. L. REV. 585 (2000); see also Kelli A. Alces, *Enforcing Corporate Fiduciary Duties in Bankruptcy*, 56 U. KAN. L. REV. 83, 119–125 (2007) (noting that derivative suits are controlled by the bankruptcy estate).

39. See Arlen & Carney, *supra* note 13, at 715.

40. See *id.* at 723.

41. *Id.* at 726.

42. *Id.* at 725.

43. See *id.* at 731 (“[A] sample of six firms is too small a sample from which to generalize.”).

44. See, e.g., Alexander, *supra* note 3; James Bohn & Stephen Choi, *Fraud in the New-Issues Market: Empirical Evidence on Securities Class Actions*, 144 U. PA. L. REV. 903 (1996); Stephen J. Choi, *Do the Merits Matter Less After the Private Securities Litigation Reform Act?*, 23 J. L. ECON. & ORG. 598 (2007); Stephen J. Choi et al., *The Screening Effect of the Private Securities Litigation Reform Act*, 6 J. EMPIRICAL LEGAL STUD. 35 (2009); Marilyn F. Johnson et al., *Do the Merits Matter More? The Impact of the Private Securities Litiga-*

study of the impact of pension fund lead plaintiffs on settlement size based on a sample of 731 securities class action settlements, Michael A. Perino found that bankruptcy was associated with smaller settlements.<sup>45</sup> In another study of lead plaintiffs, James D. Cox, Randall S. Thomas, and Lynn Bai examined a sample of 773 settled securities class actions and found that the bankruptcy of a company did not have a statistically significant effect on the size of the settlement.<sup>46</sup> These findings might be evidence that securities class actions against bankrupt companies are not likely to have more merit than securities class actions against nonbankrupt companies.

On the other hand, as discussed earlier, the fact that a company is in bankruptcy is likely to impact the potential size of the settlement. In cases where the company is not bankrupt, it could contribute to a securities class action settlement so that the total settlement could exceed the limit of the D&O insurance policy. When a company is bankrupt, the automatic stay would likely prevent settlement payments that supplement those made by D&O insurance policies. Of course, third-party defendants such as auditors and underwriters could contribute to the settlement, but such third-party settlements can be difficult to obtain.

Class action attorneys are aware of D&O insurance limits and may take a smaller settlement in bankruptcy cases to avoid the risk that the D&O policy may be exhausted by litigation. The Notice of Settlement for one securities class action observed the following:

In this Action, there was the additional risk that even if Plaintiffs ultimately prevailed, any recovery could well be substantially less than that obtained in the proposed Settlement because of CHS' filing in bankruptcy. Under the provisions of the Bankruptcy Code, the filing means that the Action cannot proceed against the Company. Thus, any recovery obtained would be against the Individual Defendants alone and the insurance coverage available to satisfy a judgment would be greatly depleted, if not exhausted, by the costs of prosecuting the Action through trial and the subsequent appeals which would surely follow if Plaintiffs prevailed at trial.<sup>47</sup>

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*Litigation Reform Act*, 23 J. L. ECON. & ORG. 627 (2007); A.C. Pritchard & Hillary A. Sale, *What Counts as Fraud? An Empirical Study of Motions to Dismiss Under the Private Securities Litigation Reform Act*, 2 J. EMPIRICAL LEGAL STUD. 125 (2005); see also Roberta Romano, *The Shareholder Suit: Litigation Without Foundation?*, 7 J. L. ECON. & ORG. 55 (1991) (studying merit of derivative suits).

45. See Michael Perino, *Institutional Activism Through Litigation: An Empirical Analysis of Public Pension Fund Participation in Securities Class Actions*, 9 J. EMPIRICAL LEGAL STUD. 368, 382 (2012).

46. James D. Cox et al., *There Are Plaintiffs and . . . There Are Plaintiffs: An Empirical Analysis of Securities Class Action Settlements*, 61 VAND. L. REV. 355, 377 (2008) ("We also find that class period length and bankruptcy filing are not significant explanatory variables for settlement size."). Cox et al. observe that the absence of significance for the bankruptcy variable in their regressions may result from the fact that D&O policies are the primary source of funding settlements in bankruptcy cases. *Id.* at 377 n.73.

47. Notice of Pendency of Class Action, Proposed Settlement Thereof, Settlement Fairness Hearing and Right to Share in Settlement Fund at 2, *In re CHS Elecs., Inc. Sec. Litig.*, No. 99-8186-CIV-GOLD/SIMONTON (S.D. Fla. Nov. 29, 2001).

Therefore, settlement size may not be a good indicator of the merits of the underlying suit in bankruptcy cases. Understanding the relationship between securities class actions and bankruptcy requires analyzing other indicators of merit.

## II. DATA SET AND DESCRIPTIVE STATISTICS

This Part describes the data set used in this study. The data set consists of 1,466 consolidated securities class actions filed from 1996 to 2004.<sup>48</sup> The cases were drawn primarily from the Stanford Securities Class Action Clearinghouse and supplemented with information from the Public Access to Court Electronic Records (“PACER”) database, the LoPucki Bankruptcy Research Database, Westlaw, LexisNexis, and other internet sources. The data set consists of traditional Rule 10b-5 and section 11 securities class actions alleging that issuers inflated their stock price by reporting misleading information about themselves in their periodic disclosures or registration statements. It therefore does not include securities class actions relating to research analyst fraud, investment adviser fraud, initial public offering (“IPO”) tying, mutual fund market timing, merger approval, or proxy fraud.<sup>49</sup> Excluding such cases makes it possible to compare similar cases in assessing the influence of bankruptcy. Apart from the excluded cases, the data set contains virtually all of the securities class actions filed from 1996 to 2004. Unlike some prior studies, the data set includes not only settled cases but also cases that ended in dismissal.

The data set contains 234 securities class actions involving companies that were in bankruptcy during the pendency of the class action. Bankruptcy cases thus make up 16 percent of the securities class actions in the data set. On average, from 1996 to 2004, there were about twenty-five securities class actions per year with a bankrupt issuer. Table 1 summarizes the number of bankruptcy cases filed from 1996 to 2004:

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48. Typically, multiple securities class actions are filed against a company. The court will consolidate these class actions into one action and choose a lead plaintiff for the class action.

49. See, e.g., Arlen & Carney, *supra* note 13, at 722 (excluding cases involving allegations relating to mergers and hostile takeovers); Choi, *supra* note 44, at 604–05 (excluding IPO allocation cases from sample); Michael A. Perino, *Did the Private Securities Litigation Reform Act Work?*, 2003 U. ILL. L. REV. 913, 932 (“The allegations in the [IPO] allocation cases are markedly different from the traditional securities fraud class actions.”).

TABLE 1  
SUMMARY DATA ON NUMBER OF BANKRUPTCY CASES  
IN DATA SET BY YEAR (1996–2004)

Year	Number of Securities Class Actions	Number of Bankruptcy Cases	Percent of Securities Class Actions that Were Bankruptcy Cases
1996	84	13	15.5
1997	139	17	12.2
1998	198	28	14.1
1999	173	26	15.0
2000	184	32	17.4
2001	155	38	24.5
2002	186	34	18.3
2003	163	33	20.2
2004	184	13	7.1
<b>Total</b>	<b>1,466</b>	<b>234</b>	<b>16.0</b>

The fact of a bankruptcy filing was evident in a number of ways. A case was only classified as a bankruptcy case if there was clear evidence that the court was informed of the bankruptcy because the bankrupt company was not named as a defendant or the bankruptcy was referenced in a pleading such as a complaint or notice of bankruptcy.<sup>50</sup> In 198 of the 234 bankruptcy cases (85 percent), as a result of the automatic stay, the securities class action against the bankrupt company was formally dismissed or stayed, or the bankrupt company was not named in the complaint.<sup>51</sup> Of the 234 bankruptcy cases, 54 (23 percent) of the bankruptcy filings occurred before the filing of the complaint, and 180 (77 percent) of the bankruptcy filings occurred after the filing of the complaint.<sup>52</sup>

The bankrupt companies in the sample were modest in size, averaging approximately \$3 billion in total assets with a median of \$400 million in total assets.<sup>53</sup> Nonbankrupt companies by comparison tended to be larger,

50. A notice of bankruptcy is a pleading filed by a party to apprise the court of a defendant's bankruptcy. *See, e.g.,* Yang v. Odom, 392 F.3d 97, 99 n.1 (3d Cir. 2004) (noting that with the filing of a notice of bankruptcy, a securities class action was stayed against the issuer but could proceed against individual defendants).

51. In some cases, the parties and court recognize that the bankrupt company will not contribute anything to the settlement, but the company is not formally dismissed from the case. In a small number of cases, the bankrupt company makes a contribution to the settlement that is usually minimal.

52. This is consistent with an earlier study finding that auditor "litigation tends to precede bankruptcy." *See* Joseph V. Carcello & Zoe-Vonna Palmrose, *Auditor Litigation and Modified Reporting on Bankrupt Clients*, 32 J. ACCT. RES. (SUPPLEMENT) 1, 25 (1994) ("[L]itigation following bankruptcy has the lowest occurrence rate . . .").

53. It appears that a substantial percentage of large public companies filing for bankruptcy face a securities class action. According to the LoPucki Bankruptcy Research Database, 448 "large" public companies filed for bankruptcy from 1996 to 2004, the period of the data set. Not all of the bankruptcy cases in the data set involved "large" companies. However, a comparison of the data set with the cases listed in the LoPucki database found that at least 135



averaging approximately \$9 billion in total assets with a median of \$3 billion in total assets.

The data set also collects information on various measures such as whether a public pension fund was named as one of the lead plaintiffs, whether the complaint included a section 11 claim, whether the complaint alleges that the defendant restated its financial statements, whether the complaint alleges insider sales as a motivation for the fraud, and whether there was a parallel SEC proceeding. These variables are relevant in assessing the merit and success of securities class actions. Table 2 presents summary statistics for some of these characteristics:

TABLE 2  
VARIOUS SUMMARY STATISTICS FOR DATA SET (1996–2004)

Characteristic	Number of Cases	Percent of Data Set (1,466 observations)
Pension Fund Lead Plaintiff	227	15.5
Section 11 Claim	301	20.5
Restatement	466	31.8
Insider Sales	652	44.5
SEC Proceeding	176	12.1

Consistent with findings from other studies, a high percentage of the cases in the data set settled or were dismissed. Almost a third of the cases in the data set, 30.8%, ended in dismissal.<sup>54</sup> Almost half of the cases in the data set, 47.7%, ended in a settlement of \$3 million or more, a common threshold used in determining whether a settlement is significant in size. A relatively small percentage of the cases, 7.6%, resulted in settlement payments from parties other than the issuer such as auditors, underwriters, and individual directors or officers.

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of 448 (30 percent) of the large public companies that filed for bankruptcy from 1996 to 2004 were also the subject of a securities class action. Of course, these rates may not be transferable to bankruptcies of smaller public companies as large companies may be more susceptible generally to securities class actions. The 30 percent rate of suit for large bankrupt companies is slightly higher than the 24 percent litigation rate for bankrupt companies found in a study by Joseph V. Carcello and Zoe-Vonna Palmrose. *See id.* at 2 (studying a sample of 655 public companies that declared bankruptcy between 1972 and 1992); *see also* Palmrose, *supra* note 16, at 96 (examining a sample of 458 companies declaring bankruptcy from 1970–1985 and finding that 21 percent were involved in auditor litigation). It is also lower than the 38 percent litigation rate for companies restating their earnings found in a study by Zoe-Vonna Palmrose and Scholz. Zoe-Vonna Palmrose & Susan Scholz, *The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements*, 21 CONTEMP. ACCT. RES. 139, 145 (2004).

54. I do not classify cases that are voluntarily dismissed by the plaintiff as “dismissed” and limit the term “dismissal” to cases in which the court decides a motion to dismiss against the plaintiff and enters a judgment dismissing the plaintiff’s claims that is not later overturned on appeal.

TABLE 3  
SUMMARY OF CASE RESULTS FOR DATA SET (1996–2004)

Result	Number of Cases	Percent of Data Set (1,466 Observations)
Dismissal	452	30.8
Significant Settlement (\$3 million or more)	700	47.7
Third-Party Settlement	112	7.6

### III. EMPIRICAL ANALYSIS

Using the data set of securities class actions just described, this Part tests two hypotheses regarding the relationship between securities fraud and bankruptcy. To the extent that a securities class action reflects a valid allegation of fraud, we can say that the action has merit. The study thus frames the hypotheses in terms of the merit of securities class actions: (1) securities class actions against bankrupt companies are more likely to have merit than securities class actions against nonbankrupt companies, and (2) securities class actions do not have more merit than securities class actions against nonbankrupt companies but are perceived as having more merit. Stronger support exists for the second hypothesis than for the first.

#### A. Hypotheses

The first hypothesis, that there is some actual correlation between bankruptcy and securities fraud, predicts that bankruptcy cases have more merit than nonbankruptcy cases and might be framed as follows:<sup>55</sup>

H(0): Bankruptcy cases are not more likely to have merit than nonbankruptcy cases.

H(A): Bankruptcy cases are more likely to have merit than nonbankruptcy cases.

The second hypothesis, that hindsight bias leads parties to perceive the existence of a relationship between bankruptcy and securities fraud, predicts that parties perceive bankruptcy cases as having more merit than nonbankruptcy cases and might be framed as follows:

H(0): Bankruptcy cases are not more likely to be perceived as having merit than nonbankruptcy cases.

H(A): Bankruptcy cases are more likely to be perceived as having merit than nonbankruptcy cases.

Perhaps the most obvious way to test these hypotheses would be to compare the outcomes of bankruptcy and nonbankruptcy cases. If bankruptcy cases succeed more often than nonbankruptcy cases, there is evidence

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55. H(0) designates the null hypothesis and H(A) designates the alternate hypothesis.

supporting both the actual-merit and perception-of-merit hypotheses. Indeed, if litigation results do not differ, it would be difficult to conclude that either hypothesis is supported.

However, looking solely at litigation results does not help decide between the actual-merit and perception-of-merit hypotheses. To do that, one must also assess whether plaintiffs in bankruptcy cases are more likely to allege credible evidence of fraud. Of course, it is difficult, if not impossible, to determine whether a complaint describes actual fraud. However, as will be discussed further below, certain allegations may be more likely to objectively indicate a valid fraud claim. If bankruptcy cases are more likely to contain such indicia of merit than nonbankruptcy cases, we might conclude that they have more actual merit than nonbankruptcy cases.

### B. Measures of Merit

This Section describes the various ways this study measures the merit of securities class actions. Common measures of litigation results include whether the case avoids dismissal, leads to a significant settlement, or results in a settlement from a third party. Common indicia of merit include whether the complaint alleges an accounting restatement, alleges insider sales, has a lead plaintiff that is a public pension fund, and whether there is a parallel SEC proceeding.<sup>56</sup>

#### 1. Litigation Results

The end result of a securities class action is an obvious measure of merit. If a group of cases has a higher rate of successful outcomes than another group of cases, we might conclude that the first group has more merit than the second.

Dismissal rates are an indicator of what courts think of a set of cases.<sup>57</sup> If courts dismiss a set of cases at a high rate, it might be evidence that those cases are less likely to have merit. If the dismissal rate of a set of cases is low, it might be evidence that those cases are more likely to have merit. At the same time, dismissal rates can reflect the difficulty of meeting heightened pleading requirements, prejudice by judges against certain types of cases, bad luck, or poor lawyering. Dismissal rates also do not necessarily measure what the parties themselves think of a case. A court often has im-

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56. See, e.g., Baker & Griffith, *supra* note 24, at 787 (“[O]ur participants frequently mentioned earnings restatements, insider selling, and SEC investigations as highly significant in determining settlement outcomes.”); Choi et al., *supra* note 44, at 43 (noting that a restatement, SEC investigation, or enforcement action is “hard evidence” of fraud); Perino, *supra* note 49, at 948 (“[S]cholars and courts often consider allegations of accounting misrepresentations or unusual trading by insiders during the class period as generally stronger, all other things being equal, than allegations that a company’s forecasts or other predictive statements were fraudulently made.”).

57. For an example of a study that uses dismissal rates as a measure of merit, see C.S. Agnes Cheng et al., *Institutional Monitoring Through Shareholder Litigation*, 95 J. FIN. ECON. 356, 357–58 (2010).

perfect information relative to the parties and can come to the wrong conclusion in deciding whether to dismiss a case. Because plaintiffs do not have access to discovery until after the motion to dismiss is decided, the defendant may have information relevant to the merits of the case that is unknown to the court. Thus, dismissal rates are a useful but limited measure of merit.

Settlements are a rough indicator of what the parties think of a case. A defendant generally will not settle a case unless it believes that the case has some merit and that there is a risk that it will face higher costs absent a settlement. Of course, not all settlements signal a suit with merit. Parties also take into account litigation costs in negotiating a settlement. Small settlements could only indicate that the defendant is willing to pay an amount less than its litigation costs to make the suit go away.<sup>58</sup> Thus, other studies often consider only settlements over a certain threshold,<sup>59</sup> often a threshold of \$3 million,<sup>60</sup> as significant enough to reflect merit. Of course, the \$3 million threshold is an imperfect measure since potential litigation costs vary among cases. A settlement of less than \$3 million can be high for some cases, while a settlement of more than \$3 million can be low for other cases. But as a rough measure, the \$3 million threshold can serve as a way of assessing the success of a securities class action.<sup>61</sup>

As discussed earlier, another way of measuring success is to compare the size of settlements. Very large settlements can indicate greater merit than small settlements. Absent bankruptcy, parties look at the potential damages that could result from a judgment against the defendant in negotiating the amount of the settlement.<sup>62</sup> But as noted before, when a company is bankrupt, the size of any settlement is more likely to be below insurance policy limits because the company is unlikely to contribute to the settlement. Instead of comparing the size of settlements, this study thus focuses on whether a case ended in a significant settlement.

A settlement with a third party other than the company or the company's insurance company is also a sign of merit. I define third-party settlements to include settlements by parties unassociated with the company such as auditors and underwriters, as well as individuals associated with the company, such as directors and officers, when those individuals personally contribute to the settlement. Such third-party settlements are relatively rare (representing only 7.6 percent of the sample), reflecting the high legal standard for finding third-party gatekeepers such as auditors liable<sup>63</sup> and the reality that

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58. See Joseph A. Grundfest, *Why Disimply?*, 108 HARV. L. REV. 727, 740–41 (1995) (“[A] key statistic in the merits debate is the difference between the observed settlement amount and the amount a defendant would be willing to pay simply to avoid the costs of mounting a defense.”).

59. See, e.g., Choi, *supra* note 44 at 613–14 (using \$2 million threshold).

60. See, e.g., Cox et al., *supra* note 46, at 381 (using \$3 million threshold).

61. In addition to the \$3 million threshold, I use higher thresholds in some calculations. See *infra* Table 6.

62. See Baker & Griffith, *supra* note 24, at 791–96.

63. The Supreme Court has erected significant barriers to suits against gatekeepers. The *Central Bank* case precluded aiding and abetting liability during the period of this data set. See

directors and officers almost never personally contribute to securities class action settlements.<sup>64</sup> Thus, payments by these parties could indicate that the merits of a case are unusually strong.

It is important to acknowledge that these measures of success are related. For example, significant settlements should result in part because parties know that certain cases are likely to survive dismissal. Certainly, third-party settlements are more likely in cases involving significant settlements than cases without significant settlements. However, each measure of success looks at the case from a different perspective. Judges decide whether to dismiss a case, defendants and insurance companies decide whether there will be a significant settlement, and third-party defendants decide whether a third-party settlement occurs. Examining all three measures of success can allow for a more comprehensive assessment of the relationship between bankruptcy and litigation results than looking at just one measure can.

## 2. Indicia of Merit

If a group of cases has a higher rate of common indicia of merit than another group of cases, we might conclude that the first group is more likely to have merit than the second.

The fact that a defendant company has restated its financial statements is widely considered to be an indicator of a securities class action's merit.<sup>65</sup> A restatement essentially concedes that there is a material misstatement in the financial statements that the markets have relied upon in valuing a company. Of course, a restatement by itself does not establish that the defendant acted with fraudulent intent,<sup>66</sup> but it does provide a starting point for a successful securities class action. Consistent with these intuitions, prior studies have

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Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A., 511 U.S. 164, 191 (1994). The impact of the Court's decision in *Stoneridge*, which was decided four years after the last year of the data set, is likely limited with respect to this study, though some of the later cases in the data set may have been affected. See *Stoneridge Inv. Partners, LLC v. ScientificAtlanta, Inc.*, 552 U.S. 148, 166–67 (2008).

64. See John C. Coffee, Jr., *Reforming the Securities Class Action: An Essay on Deterrence and Its Implementation*, 106 COLUM. L. REV. 1534, 1551 (2006) (“The reality is that corporate insiders are sued in order for the plaintiffs to gain access to their insurance, but their personal liability appears not to be seriously pursued.”).

65. See, e.g., Stephen J. Choi et al., *Do Institutions Matter? The Impact of the Lead Plaintiff Provision of the Private Securities Litigation Reform Act*, 83 WASH. U. L.Q. 869, 892 (2005) (“[W]e consider one measure of the pre-filing strength of the cases . . . the presence of an accounting restatement . . . .”); Johnson et al., *supra* note 44, at 633–34 (“Some of the strongest evidence to satisfy [the requirement of a material misstatement or omission] . . . is a violation of generally accepted accounting principles (GAAP) that results in an earnings restatement, which is required only when earnings have been materially misstated.”).

66. Indeed, a restatement might also indicate that management is conscientious about acknowledging mistakes. Ideally, a distinction would be drawn between voluntary and involuntary restatements, but it can be difficult to find data that makes such a distinction.

found that restatements are associated with successful securities class actions.<sup>67</sup>

Evidence of insider trading during the class period can also be an indicator of merit. Many complaints allege that insiders were motivated to commit fraud so they could sell their stock before the stock price collapsed. Allegations of insider sales during the class period may be evidence that defendants personally profited from misleading the market, making it easier to satisfy the Private Securities Litigation Reform Act (“PSLRA”) requirement that the complaint plead a strong inference of scienter with particularity.<sup>68</sup> On the other hand, given the frequency of insider sales, it could be that such sales were coincidental rather than part of a fraudulent scheme. Courts could be wary of concluding that an allegation of normal insider sales is in itself a good indicator of merit. At least one study has found that an allegation of insider sales does not correlate with a complaint’s survival of a motion to dismiss.<sup>69</sup> Nevertheless, the inclusion of an insider trading allegation in the complaint is a rough measure of whether a case has meritorious evidence of fraudulent intent.

The involvement of a public pension fund as lead plaintiff can also be an indicator of merit.<sup>70</sup> With the rising role of institutional plaintiffs in securities litigation, a number of commentators have posited that pension fund lead plaintiffs are associated with successful securities class actions.<sup>71</sup> Pension funds are sophisticated institutions that can assess the merits of a suit and make an informed choice about whether to become involved. A pension fund’s choice to serve as lead plaintiff may be an additional signal that the case is persuasive. One study finds some evidence that pension funds are likely to be involved in cases with stronger evidence of securities fraud (reflecting the *indicia-of-merit* approach).<sup>72</sup> A number of studies also find that pension fund lead plaintiffs are associated with higher settlements (reflecting the *litigation-results* approach).<sup>73</sup> However, it is unclear whether

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67. See, e.g., Johnson et al., *supra* note 44, at 646–47 (“[L]awsuits in the post-PSLRA period are significantly more likely to result in a settlement if the firm restated class period earnings.”); Perino, *supra* note 45, at 382–83.

68. See 15 U.S.C. § 78u-4(b)(2) (2006).

69. See Pritchard & Sale, *supra* note 44, at 146.

70. This study focuses on public pension funds as lead plaintiffs because private pension funds may not be as publicly minded as public pension funds. When the study refers to a pension fund, it is referring only to public pension funds. However, I also estimated regressions using a broader definition of pension fund that included private pension funds, and the results of the study did not differ.

71. See, e.g., Choi et al., *supra* note 65; James D. Cox & Randall S. Thomas, *Does the Plaintiff Matter? An Empirical Analysis of Lead Plaintiffs in Securities Class Actions*, 106 COLUM. L. REV. 1587 (2006); Perino, *supra* note 45.

72. See Choi et al., *supra* note 65, at 892 (“These results . . . suggest that public pensions tended to target both larger stakes cases and those with stronger evidence of fraud.”).

73. See *id.* at 896 (“[P]ension funds correlate with a significantly greater outcome for the class in the post-PSLRA period . . . .”); Cox & Thomas, *supra* note 71, at 1636 (“Our data shows that institutions increase settlements by 0.04% for every 1% increase in Provable Losses.”); Perino, *supra* note 45, at 369.

settlements in these cases are higher because pension funds push for better results or because they tend to be involved in cases with merit. Either way, the presence of a pension fund lead plaintiff is a signal that the case has characteristics of merit.

Finally, the existence of a parallel SEC proceeding, regardless of whether it is an investigation or enforcement action, can indicate that a securities class action has merit.<sup>74</sup> The fact that a government enforcer without economic incentive to over-enforce the securities laws has taken action is evidence that the plaintiff's claim is not frivolous. In some cases, private securities class actions are filed after an SEC enforcement action has been filed. The SEC has subpoena powers allowing it to investigate allegations prior to filing a case. A securities class action can include the evidence from an SEC investigation in the complaint, making it more likely to survive a motion to dismiss.

### C. Tests for Association

This Section finds that bankruptcy cases are more likely to succeed than nonbankruptcy cases in terms of litigation results. However, the evidence is mixed with respect to whether bankruptcy cases are more likely to have indicia of merit than nonbankruptcy cases. The study used a simple test for association that compares bankruptcy and nonbankruptcy cases with respect to litigation results and indicia of merit. Using a Pearson's chi-squared test, it assessed whether any difference in the success rates of bankruptcy and nonbankruptcy cases is statistically significant. On the one hand, the higher success rate of bankruptcy cases provides support for both the actual-merit and perception-of-merit hypotheses. On the other hand, the fact that bankruptcy cases succeed without clear evidence of greater indicia of merit indicates that there is stronger support for the perception-of-merit hypothesis than the actual-merit hypothesis.

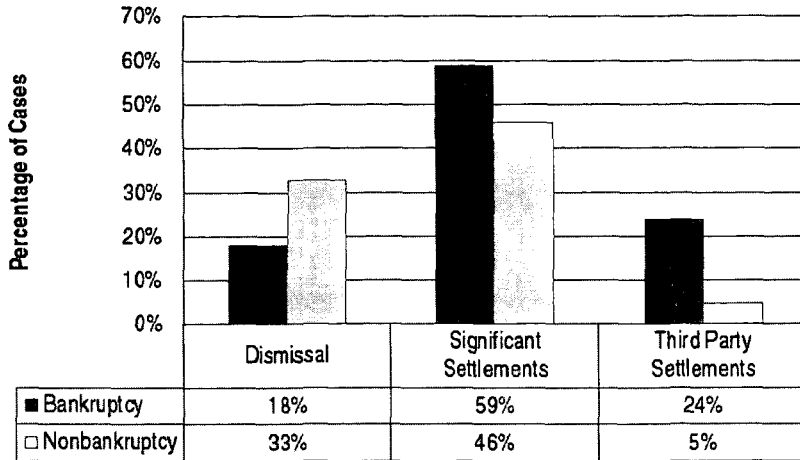
#### 1. Litigation Results

Table A2 of the Appendix compares the litigation results of bankruptcy cases and nonbankruptcy cases. By all three measures, bankruptcy cases are more likely to end successfully than nonbankruptcy cases. A lower percentage of bankruptcy cases (18%) were dismissed than nonbankruptcy cases (33%). A higher percentage of bankruptcy cases (59%) resulted in significant settlements than nonbankruptcy cases (46%). A higher percentage of bankruptcy cases (24%) had third-party settlements than nonbankruptcy cases (5%). All of these differences were statistically significant at the 1 percent confidence level. Figure 1 summarizes these results:

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74. See, e.g., Choi et al., *supra* note 65, at 892 (using existence of an SEC investigation as an indicator of merit).

**FIGURE 1**  
**LITIGATION RESULTS**



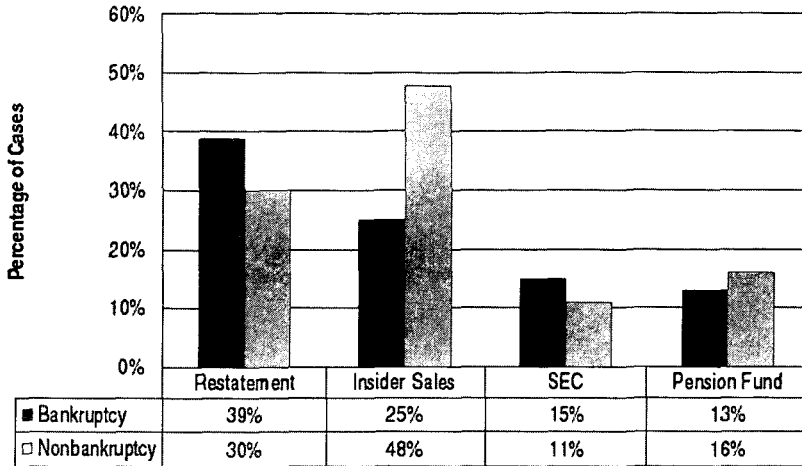
Judged by success, there is evidence supporting the two hypotheses that bankruptcy cases are more likely to have merit or are perceived to have more merit than nonbankruptcy cases. The difference appears to be most pronounced with respect to third-party settlements.

**2. Indicia of Merit**

Table A3 of the Appendix compares rates of indicia of merit between bankruptcy and nonbankruptcy cases. There was a statistically significant positive association between bankruptcy cases and restatements, though the difference was not large (39 percent of bankruptcy cases have an accounting restatement compared to 30 percent of nonbankruptcy cases). There was no statistically significant difference in the percentage of pension fund lead plaintiffs and parallel SEC actions for bankruptcy cases. There was a statistically significant association between bankruptcy cases and insider sales, but the association was negative, meaning that bankruptcy cases were less likely to have allegations of insider sales that could support a scienter requirement than nonbankruptcy cases. Figure 2 summarizes these results:



FIGURE 2  
INDICIA OF MERIT



Thus, because bankruptcy cases are more likely to have restatements, there is some support for the hypothesis that there is a difference in actual merit between bankruptcy and nonbankruptcy cases. However, the support is not unambiguous, suggesting that the success of bankruptcy cases may reflect perceived merit rather than actual merit.

#### D. Logistic Regression Analysis

Comparing rates of success and indicia of merit gives a rough sense of whether bankruptcy cases have more merit, but fully understanding the relationship between bankruptcy and merit requires additional analysis. Though we know that bankruptcy cases are more likely to succeed than nonbankruptcy cases, simple comparisons do not explain why bankruptcy cases are more successful. Is it because they have actual merit, or does the mere fact that a company is bankrupt impact the result? Many factors can influence whether a securities class action succeeds, and fully understanding the relationship between bankruptcy and the outcome of securities class actions requires analysis of additional variables that can affect the outcome of a case. Regression analysis can help us further understand why bankruptcy cases are more likely to succeed than nonbankruptcy cases.

Though we have examined litigation results and indicia of merit separately until this point, there is an obvious relationship between the success of a lawsuit and the presence of indicia of merit. A suit is more likely to succeed if it has indicia of merit such as allegations of a restatement or a pension fund lead plaintiff. Judges are less likely to grant motions to dismiss if indicia of merit are present. Moreover, parties are more likely to settle cases for significant amounts and third parties are more likely to contribute to a settlement if indicia of merit are present.

In addition to indicia of merit, the fact that a company is bankrupt could have an effect on the success of a lawsuit. As noted earlier, the fact of bankruptcy might itself influence the decisions of judges and parties independently from the existence of objective indicia of merit.

Simple models can be constructed that test the relationship between success and indicia of merit. A bankruptcy variable can be included to test whether the fact of bankruptcy influences the success of a securities class action. If the bankruptcy variable is not statistically significant, we might conclude that bankruptcy cases are generally decided the same way as non-bankruptcy cases. If the bankruptcy variable is statistically significant, there might be evidence that the fact of bankruptcy has an impact apart from the merits.

I estimated logistic regressions<sup>75</sup> with the various measures of litigation results (dismissal, significant settlements, and third-party settlements) as the dependent variable and independent variables reflecting indicia of merit such as restatements, pension fund lead plaintiffs, insider sales, and parallel SEC actions. I included an independent variable reflecting whether the case is a bankruptcy case. The regressions also had case controls such as the size of the company measured by total assets, whether the complaint alleged section 11 claims, the length of the class period, and whether the case was filed in the Second or Ninth Circuit.<sup>76</sup> Variables such as the year the case was filed, as well as industry of the issuer, were also included though they are not reported in the tables that follow. Definitions of these variables are set forth in the Appendix at Table A1. Equations for the estimated regressions are set forth below:

$$(1) \text{ Dismissal} = \alpha + \beta_1 \text{Bankruptcy} + \beta_2 \text{Indicia of Merit} + \beta_3 \text{Case Controls} + \epsilon_i$$

$$(2) \text{ Significant Settlement} = \alpha + \beta_1 \text{Bankruptcy} + \beta_2 \text{Indicia of Merit} + \beta_3 \text{Case Controls} + \epsilon_i$$

$$(3) \text{ Third-Party Settlement} = \alpha + \beta_1 \text{Bankruptcy} + \beta_2 \text{Indicia of Merit} + \beta_3 \text{Case Controls} + \epsilon_i$$

Table 4 reports the results of the regressions. For all three regressions, the bankruptcy variable is statistically significant at the 1 percent confidence level. As the perception-of-merit hypothesis might predict, even when controlling for indicia of merit and other factors, bankruptcy is negatively associated with dismissal and positively associated with significant settlements and third-party settlements. Thus, the study finds support for a

75. A logistic regression is a regression where the dependent variable is binary—that is, can only take on the value of 0 or 1.

76. The total assets and class period variables are proxies for measuring potential damages awards. Larger damages are more likely in cases involving larger companies and longer class periods. The section 11 variable controls for the fact that it is easier for a plaintiff to establish liability under section 11 because that provision does not require a showing of scienter. The circuit variable assesses whether judges in different circuits are more or less willing to allow securities class actions to proceed. *See, e.g.,* James D. Cox et al., *Do Differences in Pleading Standards Cause Forum Shopping in Securities Class Actions?: Doctrinal and Empirical Analyses*, 2009 WIS. L. REV. 421, 430–38 (2009) (describing differences in circuit pleading standards for securities class actions).

“bankruptcy effect” where bankruptcy cases are more likely to succeed than nonbankruptcy cases.<sup>77</sup>

TABLE 4  
LOGISTIC REGRESSION WITH DISMISSAL, SIGNIFICANT  
SETTLEMENT, AND THIRD-PARTY SETTLEMENT  
AS DEPENDENT VARIABLES

Variable	Dismissal	Significant Settlement (\$3 million or more)	Third-Party Settlement
Log Total Assets	.113** (3.64)	.198** (6.62)	.030 (0.54)
Pension Fund	-.532** (-2.68)	.635** (3.41)	1.65** (5.17)
Second Circuit	-.288 (-1.66)	.172 (1.07)	.206 (0.69)
Ninth Circuit	-.133 (-0.92)	.182 (1.32)	-.289 (-0.93)
Section 11	-.366* (-2.32)	.725** (4.95)	1.13** (4.48)
Bankruptcy	-.740** (-3.77)	.534** (3.24)	1.92** (7.57)
Restatement	-1.018** (-6.52)	.818** (6.12)	1.49** (5.84)
Insider Sales	-.046 (-0.36)	.435** (3.53)	-.220 (-0.83)
SEC	-.198 (-0.86)	.076 (0.37)	.210 (0.63)
Class Period	-.019** (-3.13)	.024** (4.35)	.045** (4.61)
Constant	-2.21* (-2.12)	-6.78** (-6.31)	-6.75 (-4.03)
Pseudo R <sup>2</sup>	0.09	0.12	0.32

Note: z-statistics in parentheses. Industry and year variables not reported.

\*p<.05.

\*\*p<.01.

In addition, the restatement, pension fund lead plaintiff, and section 11 variables were all statistically significant at the 1 percent or 5 percent confidence level for all three regressions. As might be expected, the sign of

77. It may be that different types of bankruptcies have different associations with the measures of success. I estimated a number of logistic regressions in which the bankruptcy variable was defined in different ways. For example, I estimated a regression in which the bankruptcy variable was limited to bankruptcies where the company was liquidated. I also estimated a regression where the bankruptcy variable was limited to bankruptcies where the company was reorganized. I also distinguished between cases in which the bankruptcy filing occurred prior to the filing of the complaint and cases in which the bankruptcy filing occurred after the filing of the complaint. For the most part, these limited bankruptcy variables retained their statistical significance. The exception was the limited bankruptcy variable in which the bankruptcy filing occurred prior to the filing of the complaint.

these variables was negative with respect to dismissal and positive with respect to large settlements and third-party settlements. These results confirm the intuition that these variables are valid indicia of merit.

The insider sales variable was not statistically significant with respect to dismissal and third-party settlements, but was positive and statistically significant with respect to large settlements. The lack of a statistically significant relationship between insider sales and dismissal is consistent with earlier studies.<sup>78</sup> It may be that courts are not fooled by rote assertions that a securities fraud was motivated by the desire of insiders to sell their stock at a high price. With respect to third-party settlements, the fact that an issuer's management sold its stock is unlikely to affect a case against gatekeepers who did not benefit from such sales.<sup>79</sup> On the other hand, the fact that insider sales are positively associated with significant settlements might indicate that the parties themselves assess such evidence in deciding whether a case has merit.

Surprisingly, the SEC variable is not statistically significant in any of the logistic regressions. This likely reflects the broad definition of this variable, which included not only cases that resulted in an SEC enforcement action but also cases where there was an informal investigation that may not have resulted in formal action.

Because these were logistic regressions, some translation is necessary to interpret the regression results. In order to quantify the bankruptcy effect, I calculated the marginal effects of selected variables. The marginal effects are a way of measuring the impact of an independent variable such as bankruptcy on a dependent variable such as dismissal rates. For the dismissal regression, the marginal effect for the bankruptcy variable was  $-0.14$ , meaning that a bankruptcy case was 14 percent less likely to end in dismissal than a nonbankruptcy case. As points for comparison, in the dismissal regression, the marginal effect for a pension fund lead plaintiff was  $-0.10$  and the marginal effect for a restatement was  $-0.19$ . For the significant settlement regression, the marginal effect for the bankruptcy variable was  $0.11$ , meaning that a bankruptcy case was 11 percent more likely to end in a significant settlement than a nonbankruptcy case.<sup>80</sup> For the third-party settlement regression, the marginal effect for the bankruptcy variable was  $0.10$ , meaning that a bankruptcy case was 10 percent more likely to end in a significant third-party settlement than a nonbankruptcy case.<sup>81</sup>

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78. See, e.g., Pritchard & Sale, *supra* note 44, at 146 (finding that allegations of insider trading are positively associated with dismissal and concluding that "courts are skeptical of the rather noisy signal provided by such trades").

79. Of course, insider sales might make it more likely that directors and officers are held personally liable, but directors and officers almost never personally contribute to settlements. See Coffee, *supra* note 64, at 1550–51.

80. For the significant settlement regression, the marginal effect for a pension fund lead plaintiff was  $0.13$  and the marginal effect for a restatement was  $0.17$ .

81. For the third-party settlement regression, the marginal effect for a pension fund lead plaintiff was  $0.09$  and the marginal effect for a restatement was  $0.08$ .

TABLE 5  
MARGINAL EFFECTS OF SELECTED VARIABLES

Litigation Result	Bankruptcy	Pension Fund Lead Plaintiff	Restatement
Dismissal	-0.14	-0.10	-0.19
Significant Settlement	0.11	0.13	0.17
Third-Party Settlement	0.10	0.09	0.08

In addition to estimating three separate logistic regressions, I also estimated an ordered logistic regression in which the dependent variable was equal to 2 if the case ended in a significant settlement (\$3 million or more), 1 if the case ended in a settlement that was not significant (less than \$3 million), or 0 if the case ended in dismissal. This method takes into account the possibility that the fact of settlement, regardless of size, can be a signal of merit. The results are reproduced in the Appendix at Table A4. As with the logistic regressions, the bankruptcy variable for the ordered logistic regression is positive and statistically significant at the 1 percent level.

By all three measures of success for securities class actions, controlling for other variables that are predictors of a successful suit, bankruptcy is associated with successful securities class actions.

#### E. *The Disappearing Bankruptcy Effect*

An additional finding of this study is that the bankruptcy effect disappears with respect to very large settlements, providing further insight into the relationship between bankruptcy and securities class actions.

As noted earlier, a number of studies have found either no association or a negative association between the size of a settlement and the fact that a securities class action involves a bankrupt company. To verify these results, I estimated a multiple linear regression in which the dependent variable was the natural log of the size of the settlement, and the independent variables were the same as those used for the earlier logistic regressions.<sup>82</sup> The equation for this regression is below:

$$(4) \ln(\text{Settlement Size}) = \alpha + \beta_1 \text{Bankruptcy} + \beta_2 \text{Indicia of Merit} + \beta_3 \text{Case Controls} + \epsilon_i$$

Table A5 in the Appendix presents the results of the regression. As with the prior studies cited, the bankruptcy variable was not statistically significant, while other variables such as the restatement and pension fund lead plaintiff variables retained their statistical significance.

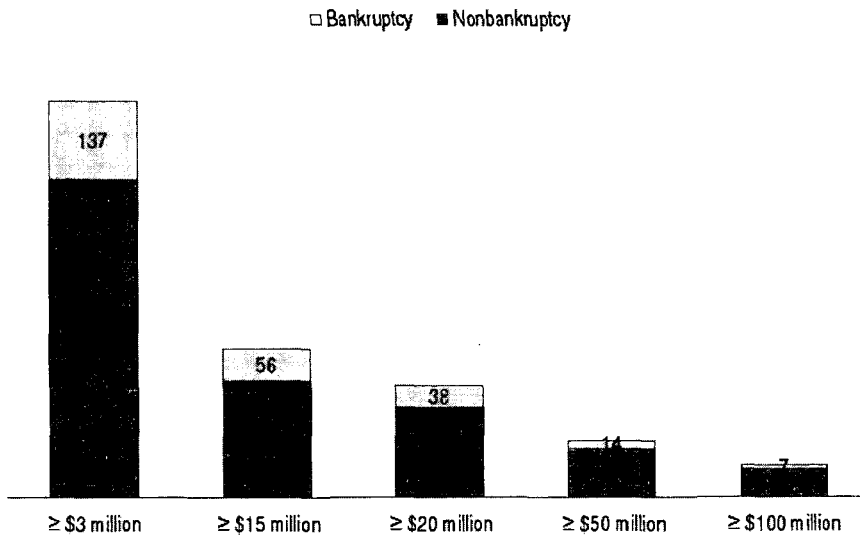
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82. The average size of settlement in all settled cases (excluding the Enron and WorldCom settlements) was approximately \$40 million while the median settlement was approximately \$6 million. The average size of settlement in settled cases involving a bankrupt company (excluding the Enron and WorldCom settlements) was approximately \$21 million while the median settlement was approximately \$7 million. The average size of settlement in settled cases involving a nonbankrupt company was approximately \$44 million while the median settlement was approximately \$6 million.

Earlier, I noted that these results may be explained by the fact that companies do not contribute to settlements when in bankruptcy. The size of settlements in bankruptcy cases are often limited by D&O policy limits. The study thus used in its main analysis a different measure of merit—the fact of a significant settlement, defined as those settlements of \$3 million or more, rather than the size of the settlement—and found a statistically significant relationship between bankruptcy and settlements of \$3 million or more.

If D&O policies are affecting the size of settlements, one might expect that the bankruptcy effect would fade as settlements grow larger. Though significant in size, a \$3 million settlement should fit well within the D&O policy limits of almost all public companies.<sup>83</sup> I grouped settlements into different categories by size. As can be seen from Figure 3, bankruptcy settlements represent a smaller proportion of the larger settlements than they do of smaller settlements:

FIGURE 3  
DISTRIBUTION OF SETTLEMENTS



Bankruptcy cases represented about 20 percent of the settlements over \$3 million, \$15 million, and \$20 million. Considering that the overall percentage of bankruptcy cases in the sample was approximately 16 percent, bankruptcy cases were overrepresented relative to their overall proportion of the overall data set. In contrast, bankruptcy cases represented 12–13 percent of the settlements over \$50 million and \$100 million. For the largest

83. See, e.g., Baker & Griffith, *supra* note 36, at 1806 (citing average D&O limits of \$28.25 million for small-cap companies, \$64 million for midcap companies, and \$157.69 million for large-cap companies).

settlements, bankruptcy settlements were underrepresented relative to their proportion of the overall data set.

In order to further determine the point at which D&O policies affect the fact of a significant settlement, I estimated logistic regressions with higher settlement thresholds of \$10 million, \$15 million, \$20 million, and \$50 million as dependent variables. Table 6 reports the results of these regressions:

TABLE 6  
LOGISTIC REGRESSIONS WITH SETTLEMENTS OF \$10 MILLION OR MORE,  
\$15 MILLION OR MORE, \$20 MILLION OR MORE, AND \$50 MILLION  
OR MORE AS DEPENDENT VARIABLES

Variable	Settlement of \$10 million or more	Settlement of \$15 million or more	Settlement of \$20 million or more	Settlement of \$50 million or more
Log Total Assets	.354** (9.28)	.440** (9.66)	.501** (9.42)	.674** (7.96)
Pension Fund	1.41** (6.98)	1.71** (7.69)	1.74** (7.17)	2.19** (6.78)
Second Circuit	.316 (1.66)	.438* (2.00)	.367 (1.50)	.420 (1.19)
Ninth Circuit	.384* (2.26)	.631** (3.09)	.308 (1.28)	.454 (1.24)
Section 11	.593** (3.49)	.691** (3.51)	.705** (3.15)	.872** (2.69)
Bankruptcy	.451* (2.41)	.480* (2.24)	.243 (.97)	-.175 (-.43)
Restatement	.855** (5.41)	.677** (3.61)	.941** (4.43)	1.09** (3.51)
Insider Sales	.308* (2.03)	.294 (1.62)	.259 (1.25)	.549 (1.81)
SEC	.434 (1.88)	.646* (2.50)	.810** (2.86)	.957** (2.57)
Class Period	.018** (2.86)	.023** (3.36)	.028** (3.54)	.025* (2.44)
Constant	-11.47 (-8.21)	-13.56** (-8.82)	-14.87** (-8.94)	-22.24** (-4.62)
Pseudo R <sup>2</sup>	0.21	.29	.33	.46

Note: z-statistics in parentheses. Industry and year variables not reported.

\*p<.05.

\*\*p<.01.

The results show that while there is still a bankruptcy effect for settlements of \$10 million or more and \$15 million or more, the bankruptcy effect disappears for larger settlements of \$20 million or more and \$50 million or more. This suggests that, on average, D&O policies begin affecting the size of settlements in bankruptcy cases as they reach that \$20/\$50 million threshold. Of course, there are still settlements in bankruptcy cases above those thresholds, but there is not a statistically significant difference compared to nonbankruptcy cases. It is likely that bankruptcy cases lose

their advantage over nonbankruptcy cases with respect to settlements over \$20 million or so because of the lack of an issuer defendant.

It appears that there are two groups of securities class action settlements. One set of settlements reflects payments within the limits of D&O policies. Of the 700 or so settlements in the data set that are \$3 million or greater, about 200 are \$20 million or greater, meaning that 500 of 700 (about 70 percent) of significant settlements were below \$20 million and likely to fit within D&O insurance policy limits. In addition, there are many settlements below even the \$3 million threshold. The second set of settlements reflects payments that may exceed D&O policy limits. Only about 100 of the 700 settlements that were \$3 million or more (14 percent) were above \$50 million, likely requiring a significant contribution by the issuer. Put another way, over the nine-year span of the data set, about eleven cases per year settled for \$50 million or more, representing less than 10 percent of the 1,466 cases in the data set. Further study of settlements that do not settle within D&O insurance policy limits may be fruitful.

#### IV. DISCUSSION

The evidence indicates that bankruptcy cases are more likely to succeed than nonbankruptcy cases, though they are not likely to have greater rates of most indicia of merit. The regressions confirm that bankruptcy has an independent influence on the success of a bankruptcy case, apart from indicia of merit. This Part assesses these results and concludes that there is stronger support for the hypothesis that bankruptcy cases are perceived to have merit than the hypothesis that bankruptcy cases are actually more meritorious. Bankruptcy is a heuristic that judges use to avoid dismissing cases. Finally, the study of bankruptcy cases has significance for a number of issues relating to securities class actions.

##### A. *Bankruptcy Effect: Merits or Perception?*

The bankruptcy effect likely reflects some difference relating to the merits of bankruptcy cases. The question is whether the difference is real or perceived. On balance, there is some support for both possibilities, though the evidence more clearly supports the perception-of-merit hypothesis.

Perhaps the strongest evidence in support of the actual-merit hypothesis is that bankruptcy cases are more likely to be associated with accounting restatements than nonbankruptcy cases. Such a difference reflects an actual difference in merits consistent with the Arlen and Carney last period agency costs hypothesis. Bankruptcy cases are more likely to involve situations where last period agency costs are in play, leading to a greater incidence of actual fraud than nonbankruptcy cases where the incentive to commit fraud may not be as strong. On the other hand, the difference is arguably not a large one (39 percent of bankruptcy cases have restatements as compared to 30 percent of nonbankruptcy cases).



The most powerful evidence against the actual-merit hypothesis is that measurable indicia of merit such as allegations of insider trading, SEC proceedings, and pension fund lead plaintiffs are not present at statistically significant higher rates in bankruptcy cases.<sup>84</sup> Some of these indicia, such as the presence of a pension fund lead plaintiff, are arguably stronger indicators of merit than the simple existence of a restatement. Restatements can occur by mistake and a showing of fraudulent intent is usually necessary to prevail in a securities class action. Pension funds presumably evaluate cases holistically, weighing all possible indicia of merit, both obvious and non-obvious. The presence of a credible party who can assess the merits of a case is a stronger indicator of merit than the presence of a restatement.

The regression results, moreover, are evidence that perception of merit rather than actual merit explains the tendency of bankruptcy cases to succeed at higher rates than nonbankruptcy cases. By controlling for various indicia of merit that might explain lower dismissal rates and higher rates of significant and third-party settlements, the logistic regressions isolate an independent bankruptcy effect that is evidence that the greater success of bankruptcy cases is not solely explained by the actual merits. A skeptic might respond that the regressions only control for obvious indicia of merit. There could be nonobvious measures of merit that cannot be easily scrutinized through empirical study.<sup>85</sup> Such nonobvious indicia of merit could be correlated with bankruptcy and thus explain the bankruptcy effect. This argument, however, is ultimately unpersuasive without the identification of particular nonobvious indicia of merit associated with bankruptcy. Moreover, some of the obvious indicia of merit, such as the pension fund lead plaintiff variable, also reflect assessment of nonobvious indicia of merit. This study's analysis of obvious indicia of merit indicates that perception rather than actual merit is driving the success of bankruptcy cases.

### B. *The Bankruptcy Heuristic*

The perception-of-merit hypothesis is consistent with the intuition that judges tend to decide complex cases using mental shortcuts. The fact of bankruptcy is likely a heuristic that influences how judges and parties perceive the merits of bankruptcy cases, leading to higher success rates for those cases relative to nonbankruptcy cases. In the bankruptcy cases in this data set, judges and parties knew of the issuer's bankruptcy and could have used the fact of bankruptcy as a way of sorting good cases from bad cases. The "bankruptcy effect" found through regression analysis is evidence that in some cases, a bankruptcy heuristic tilts the scales against dismissal or in favor of a significant settlement.

The use of bankruptcy as a heuristic for merit is somewhat different from the judging heuristics that scholars have focused on. For the most part,

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84. Some of these variables were not statistically significant in all of the regressions. However, the pension fund variable was consistently statistically significant for all regressions.

85. Choi, *supra* note 44, at 601 (discussing nonobvious indicia of merit).

heuristics have been discussed as a way by which judges can dismiss cases quickly to clear their dockets.<sup>86</sup> In contrast, the use of a bankruptcy heuristic is a way by which judges allow certain cases to proceed. The bankruptcy effect counteracts the tendency of judges to dispose of securities class actions at an early stage.<sup>87</sup> The existence of heuristics that make it less likely that cases will be dismissed might make it more difficult to conclude that judges always discriminate against securities class actions.

The use of a bankruptcy heuristic can be problematic insofar as it leads to unjust results. As noted earlier, hindsight bias leads to a tendency to overestimate management's knowledge of factors resulting in a business failure. It can be unfair to predicate liability on the happenstance that a defendant was associated with a bankrupt company.<sup>88</sup> If judges are less likely to dismiss bankruptcy cases, parties may take this into account in settling a case. A bankruptcy provides a hint of scandal that influences parties to settle for significant amounts. Defendants are especially risk averse in these situations, leading to preemptive settlements. Knowing this, plaintiffs could be more aggressive in bringing securities class actions against bankrupt companies so that they can extort settlement payments.

On the other hand, the bankruptcy effect may not be as problematic if there are stronger policy reasons for securities class actions when the issuer has filed for bankruptcy. The compensatory rationale for securities class actions is more compelling when the issuer is a bankrupt company. The loss by shareholders is likely significant and permanent rather than fleeting. Without a securities class action, shareholders typically receive little or nothing to cover their losses.<sup>89</sup>

Bankruptcy cases avoid the circularity problem that has commonly been associated with securities class action settlements involving nonbankrupt companies.<sup>90</sup> As a number of commentators have noted, settlements of securities class actions involving claims of secondary market fraud are circular

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86. See, e.g., Stephen M. Bainbridge & G. Mitu Gulati, *How Do Judges Maximize? (The Same Way Everybody Else Does—Boundedly): Rules of Thumb in Securities Fraud Opinions*, 51 EMORY L.J. 83, 87 (2002) (“[J]udges are using substantive heuristics to dispose of securities cases at the motion to dismiss stage.”); Hillary A. Sale, *Judging Heuristics*, 35 U.C. DAVIS L. REV. 903, 946 (2002) (“[C]ourts are, consciously or unconsciously, utilizing the heuristics to clear complex cases that would otherwise remain on the dockets for lengthy periods of time.”).

87. Stephen Choi finds that nonnuisance claims without “hard evidence” are more likely to be dismissed post-PSLRA. Choi, *supra* note 44, at 598. Bankruptcy may be one setting in which the PSLRA bias toward obvious indicators of fraud is not as influential.

88. See, e.g., Rachlinski, *supra* note 15, at 602 (“[R]epeat players might notice the tendency of biased judgments to raise standards after the fact, as might judges. This could undermine the perceived fairness of the system of civil liability.”).

89. Shareholders only receive recovery after creditors are paid. See 11 U.S.C. § 1129(a)(8)(A), (b)(2)(B)(ii) (2006).

90. See, e.g., James J. Park, *Shareholder Compensation as Dividend*, 108 MICH. L. REV. 323 (2009) (describing and critiquing circularity problem).

because injured shareholders pay for part of their own remedy.<sup>91</sup> In bankruptcy, because shareholders are wiped out, payment does not come from their own pockets in the form of a payment from the issuer they own. One alternative source of payments is D&O insurance. Of course, shareholders fund the costs of D&O insurance over time, but the payout to shareholders can exceed the amount in premiums paid by the shareholders. Moreover, when a company is bankrupt, there is greater incentive and ability to pursue third-party wrongdoers.<sup>92</sup> Rather than solely targeting the company, a securities class action may be more likely to target auditors and underwriters who stood by while the fraud proceeded.<sup>93</sup> Payments by such third parties to shareholders are not circular because they do not come from the company (which is owned by the shareholders). And indeed, as this study shows, bankruptcy cases obtain third-party settlements at a higher rate than non-bankruptcy cases (24 percent of the time versus only 5 percent of the time). Compensation from a successful securities class action provides shareholders with value that they would not have otherwise obtained and thus is more difficult to characterize as a meaningless transfer from shareholders to themselves.<sup>94</sup>

Perhaps judges treat bankruptcy cases differently because they believe the policy reasons are stronger for securities class actions when such actions involve bankrupt rather than solvent companies. To come to this conclusion, judges need not have a full appreciation of the nuances of shareholder compensation for securities fraud but only an intuition that the context of

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91. Coffee, *supra* note 64. Another version of the circularity problem states that because shareholders are diversified, they are as likely to be winners as they are to be losers from securities fraud. In some cases, investors buy stock inflated by fraud but in others, they sell stock inflated by fraud. However, if a company in an investor's portfolio goes bankrupt, it is more difficult to offset such a loss with gains from securities fraud. Because the universe of bankrupt companies is smaller than solvent companies, it is less likely that the loss from buying inflated stock in a company that later goes bankrupt would be offset by a corresponding gain from selling inflated stock in a company that later goes bankrupt. Notwithstanding this argument, it is important to acknowledge that a sufficiently diversified investor will be shielded from significant losses from a bankrupt issuer, simply by virtue of the fact that no one stock will be a large percentage of the portfolio.

92. As a general matter, gatekeepers are rarely named in securities class actions. *See, e.g.*, John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301, 320 (2004).

93. *See, e.g.*, Coffee, *supra* note 64, at 1550 ("Although large settlements involving accounting firms do occur, these often involve the insolvency of the corporate defendant (as in Enron and WorldCom) so that the auditor becomes the defendant of last resort—namely, the remaining defendant with a deep pocket.").

94. Bondholders may also be more likely to be plaintiffs in bankruptcy cases than nonbankruptcy cases. In the data set, 32 of 234 (14 percent) bankruptcy cases involved bondholder plaintiffs. When a company is solvent, it is less likely that bondholders will suffer losses than when a company is insolvent. The WorldCom case is an example where bondholders recovered billions of dollars after a bankruptcy through a securities class action. When bondholders recover compensation, such payment is not a circular transfer. The transfer is likely to come from a third party such as an underwriter or auditor, or from D&O insurance that is funded by the shareholders.

bankruptcy provides a better case for compensation. Judges could be dismissing these cases at lower rates because they believe that greater scrutiny of the facts through discovery is necessary to unpack the relationship between the bankruptcy and the securities fraud allegations, and that such inquiry is more likely to be worthwhile than when the case involves a healthy company. Bankruptcy cases might thus succeed because judges take a broad view of merit that includes policy considerations and not just indicia of merit relating to the existence of fraud.

Indeed, there is reason to believe that judges are not easily duped by hindsight bias, and that policy reasons are at least part of the reason why judges are allowing such cases to proceed. Judges have long been aware of the dangers of hindsight bias and have dismissed complaints that solely allege “fraud by hindsight.”<sup>95</sup> Judges use the fraud-by-hindsight doctrine to screen out cases that do no more than allege the occurrence of some bad event.<sup>96</sup> Though it is unlikely that the fraud-by-hindsight doctrine totally solves the problem of hindsight bias,<sup>97</sup> the existence of the doctrine raises the possibility that judges are not declining to dismiss bankruptcy cases out of ignorance, but because in their judgment, such cases deserve close scrutiny.<sup>98</sup>

The study finds some evidence supporting the idea that judges are wary of concluding that bankruptcy is always associated with fraud. The bankruptcy effect tends to be primarily associated with cases in which the complaint was filed prior to the bankruptcy announcement.<sup>99</sup> In other words,

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95. *Denny v. Barber*, 576 F.2d 465, 470 (2d. Cir. 1978) (Friendly, J.) (“[T]he complaint is an example of alleging fraud by hindsight.”); *see also DiLeo v. Ernst & Young*, 901 F.2d 624, 627–28 (7th Cir. 1990) (Easterbrook, J.) (applying the fraud-by-hindsight doctrine and noting that “[b]ecause only a fraction of financial deteriorations reflects fraud, plaintiffs may not proffer the different financial statements and rest”).

96. *See DiLeo*, 901 F.2d at 627–28 (dismissing a complaint under the fraud-by-hindsight doctrine because it alleged “nothing other than the change in the stated condition of the firm”). One group of commentators describes the fraud-by-hindsight doctrine as “another way of saying that plaintiffs must have more in their complaints than just backward induction from the fact that a problem subsequently surfaced—there have to be facts showing awareness at the time of the fraud.” Gulati et al., *supra* note 15, at 820.

97. *E.g.*, Rachlinski, *supra* note 15, at 617 (“The ‘fraud by hindsight’ doctrine guards only against a severe abuse of the hindsight bias; it does not entirely purge the system of the bias’s influence.”).

98. It is interesting that hindsight bias does not appear to affect the SEC and pension fund lead plaintiffs. The SEC does not investigate cases involving bankrupt companies at rates greater than it investigates cases involving nonbankrupt companies. Pension funds do not appear as lead plaintiffs at higher rates in bankruptcy cases. On the other hand, perhaps the SEC and pension funds are more sophisticated in assessing securities fraud than generalist judges.

99. As noted earlier, in 54 out of the 234 bankruptcy cases (23 percent), the bankruptcy filing occurred before the filing of the complaint, and in 180 out of the 234 bankruptcy cases (77 percent), the bankruptcy filing occurred after the filing of the complaint. I estimated regressions where the bankruptcy variable was defined as including only the cases where the bankruptcy occurred prior to the complaint. In those regressions, the bankruptcy variable was not statistically significant. On the other hand, when I estimated regressions using only the

the plaintiff when filing the complaint does not necessarily know that the case will involve a bankrupt company. A judge in those circumstances may be less likely to conclude that the case is targeting an issuer mainly because it happened to file for bankruptcy. On the other hand, the bankruptcy effect disappears with respect to bankruptcy cases in which the bankruptcy filing occurs prior to the filing of the complaint. In other words, the plaintiff knew at the time of the filing of the complaint that the case involved a bankrupt company. It may be that judges are wary of cases in which plaintiffs appear to be exploiting the fact of bankruptcy by filing a complaint. However, it is difficult to draw firm conclusions from smaller subsamples of bankruptcy cases that distinguish between case filings before and after bankruptcy.

The use of bankruptcy as a heuristic is a likely explanation for the bankruptcy effect. Though hindsight bias is a factor, policy reasons might also be why bankruptcy cases are decided differently. Whatever the reason, given the ambiguity of the concept of securities fraud, we can expect judges and parties to rely on context in assessing the merit of these cases.

### C. Alternative Explanations for the Bankruptcy Effect

It is important to recognize that there are explanations other than merit or perception of merit for the higher rate of success for bankruptcy cases. There is less incentive to vigorously contest a case when the issuer is bankrupt. A company is unlikely to be required to cover the costs of a settlement because any such obligation is typically discharged in bankruptcy.<sup>100</sup> Because management is often replaced after bankruptcy,<sup>101</sup> there is little incentive for the company to aggressively defend the reputation of management. Managers who are moving on from their jobs at the issuer do not have a significant incentive to fight the suit as long as a settlement is covered by D&O insurance.<sup>102</sup> It can be more difficult for insurers to coordinate a defense when managers are no longer with the company. Higher rates of

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cases where the bankruptcy filing occurred after the filing of the complaint, the bankruptcy variable retained its statistical significance.

100. See 11 U.S.C. § 1141(d)(1)(A) (2006) (“[T]he confirmation of a plan . . . discharges the debtor from any debt that arose before the date of such confirmation . . .”). Equity holders often receive little to no distribution under a chapter 11 plan. See, e.g., Ayotte & Morrison, *supra* note 31, at 522. Civil actions by equity holders against a chapter 11 debtor for securities fraud will generally be treated as equity claims. See 11 U.S.C. § 510(b) (subordinating claims “arising from the purchase or sale of such a security” to the priority of distribution associated with that security). Thus, the prospect of recovery for such claimants is low.

101. E.g., M. Todd Henderson, *Paying CEOs in Bankruptcy: Executive Compensation when Agency Costs Are Low*, 101 Nw. U. L. REV. 1543, 1596 (2007) (finding that 60 percent of CEOs are replaced in the zone of insolvency); Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 669, 729 (1993) (finding that 95 percent of CEOs left office before or during reorganization).

102. There is some evidence that managers do not suffer a reputational penalty for being the subjects of a securities class action. Eric Helland, *Reputational Penalties and the Merits of Class-Action Securities Litigation*, 49 J. L. & ECON. 365 (2006).

significant settlements for bankruptcy cases could simply reflect that it is in the best interest of the parties to settle the case rather than exhaust insurance policy limits through litigation.

On the other hand, D&O insurers, auditors, underwriters, and directors and officers who may have to personally contribute to a settlement, all have an incentive to fight a securities class action. The cost of filing a motion to dismiss is modest, and with the heightened pleading requirement for scienter, there is an incentive to at least contest a securities class action with a motion to dismiss. A motion to dismiss focuses on procedural issues such as pleading requirements and thus only needs minimal involvement from managers who may have left the company. Indeed, a motion to dismiss is filed in virtually every case in the data set. A motion to dismiss is filed in 90 percent of the bankruptcy cases and 89 percent of the nonbankruptcy cases. Because motions to dismiss are made at similar rates in bankruptcy and nonbankruptcy cases,<sup>103</sup> lower dismissal rates are an indication that bankruptcy cases are more likely to have merit from the perspective of the judges deciding those motions to dismiss.

Moreover, a D&O insurer will not settle a case for significant sums unless there is some evidence of merit. A D&O insurer would likely fight for a nominal settlement rather than one that approaches policy limits. The greater percentage of significant settlements in bankruptcy cases is thus evidence that the parties involved believe these cases are more likely to have merit.

Finally, the higher rate of third-party settlements cannot be explained solely by a lack of willingness to fight bankruptcy cases. Third parties have incentives to resist securities class actions because they may be paying out of their own pocket.<sup>104</sup> On the other hand, the higher rate of significant third-party settlements might partly reflect that class action attorneys are more aggressive in seeking third-party settlements in bankruptcy cases to supplement settlements because the issuer cannot contribute.

#### D. Implications

What are the implications of these findings? This Section summarizes the ways in which the results of this study have significance for our general understanding of securities class actions.

First, a significant percentage of securities class actions involve failed companies. Sixteen percent of securities class actions describe a situation in

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103. Baker and Griffith find through interviews of participants in securities litigation “that defendants filed a motion to dismiss in every case with which [the participants] were familiar.” Baker & Griffith, *supra* note 24, at 775.

104. Most of the third-party settlements involving bankrupt companies involve complaints that only allege Rule 10b-5 claims. In thirty-two of the fifty-six (57 percent) third-party settlements in bankruptcy cases, there were no section 11 claims. Thus, third parties in those cases would have substantial defenses under *Central Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A.*, 511 U.S. 164, 177–78 (1994), and *Stoneridge Investment Partners, LLC v. Scientific-Atlanta, Inc.*, 552 U.S. 148, 158–61 (2008), both of which limit secondary liability in Rule 10b-5 cases.

which shareholders have lost virtually their entire investment. In addition, there are many cases in which a company has not formally filed for bankruptcy but is in financial distress. In these cases, criticisms such as the circularity problem, which mainly apply to securities class actions against solvent companies, are less of a concern.

Second, empirical support for the Arlen and Carney last-period hypothesis is mixed. The finding that bankruptcy cases are more likely to have restatements indicates that accounting fraud may be driven by a desire to mask last-period developments. On the other hand, it is evident that securities class actions involving nonbankrupt companies are just as likely to have other indicia of merit. If these securities class actions are an accurate reflection of the incidence of securities fraud, these results indicate that securities fraud is not just a last-period problem, but is also a significant problem with respect to solvent companies. Judges and parties should not readily assume that securities class actions against nonbankrupt companies are necessarily weaker than those against bankrupt companies.

Third, it is likely that in some cases, motions to dismiss and decisions to settle are influenced by something other than the merits. Whether it is because of the pressure to settle in the context of a bankruptcy, hindsight bias, or a sense that shareholders have a greater need for a remedy in bankruptcy, bankruptcy cases are decided differently than nonbankruptcy cases. This might be a troubling development, and perhaps judges should be educated about these tendencies to reduce hindsight bias. On the other hand, to the extent that bankruptcy cases serve a more compelling policy reason, the best course may simply be to allow judges to use their discretion with respect to bankruptcy cases.

Fourth, the Supreme Court should be wary of completely eliminating secondary liability in Rule 10b-5 cases,<sup>105</sup> though the findings of this study indicate that it is prudent to make the standard for finding such liability high. In bankruptcy cases, defendants such as auditors are important sources of compensation because the issuer cannot contribute to the settlement. On the other hand, there may be a tendency to conclude too quickly in bankruptcy cases that third parties are liable even without strong evidence of actual fraud. Judges who are deciding motions to dismiss with respect to auditors in bankruptcy cases should be wary of the danger of hindsight bias.

#### *E. Additional Observations Relating to Vicarious Liability*

This study of bankruptcy cases also has implications for the desirability of vicarious liability in securities class actions. These observations, however, are not the focus of this study and need more research to fully develop.

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105. As noted earlier, the trend has been to make it more difficult to find secondary liability in Rule 10b-5 cases. *See supra* note 104 (citing cases in which the Court rejected aider-and-abettor liability and scheme liability, two potential forms of secondary liability under Rule 10b-5).

In a typical securities class action, the issuer is responsible for misstatements made by individual agents. A number of commentators have suggested eliminating such vicarious liability for securities fraud-on-the-market cases.<sup>106</sup> Part of the rationale for this proposal is that entity liability creates incentives not to target individual managers who might be responsible for the fraud. Focusing securities fraud liability on these individuals could better deter securities fraud.

Bankruptcy cases shed some light on cases in which vicarious liability is not a basis for liability. As noted earlier, because the issuer is typically not a defendant, the securities class action can only proceed against managers and third parties such as auditors. Bankruptcy cases are thus a setting where individuals rather than the company should be the focus of liability.

In the bankruptcy cases identified in this data set, there does not appear to be additional inquiry into the responsibility of individuals for securities fraud. Groups of directors and officers collectively settle and litigate suits and it does not appear that courts look any deeper into establishing individual liability. Though there is a smattering of cases in which individuals personally contribute to the settlement, the number is an insignificant percentage of the data set. These results may indicate that vicarious liability is not the determinative factor in the lack of scrutiny of individuals in securities fraud cases. The nature of securities fraud could be such that systemic rather than individual causes are responsible. Establishing individual liability might simply be too difficult and costly in most cases, regardless of whether there is vicarious liability.

#### CONCLUSION

This study began by advancing two hypotheses relating to the difference between bankruptcy and nonbankruptcy cases. The first was that there is a difference in actual merits consistent with the view that fraud is more likely in a last-period context. The second was that there is no actual difference in merits but that bankruptcy cases are perceived to have more merit than nonbankruptcy cases. Stronger support was found for the second hypothesis. Even when controlling for various indicia of merit, there is a bankruptcy effect that makes it more likely that bankruptcy cases will succeed. This finding likely reflects a form of hindsight bias on the part of judges who decide bankruptcy cases.

This study has implications for understanding the role of securities class actions. Perhaps the most compelling cases brought by investors involve companies that fall into bankruptcy in the wake of a fraud. The study of bankruptcy cases shows that judges use heuristics not only to dismiss securities class actions but also to deny motions to dismiss. This tendency could

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106. See Arlen & Carney, *supra* note 13, at 720 (“We conclude that enterprise liability should not be applied to Fraud on the Market cases.”); Coffee, *supra* note 64, at 1582 (“The SEC can and should exempt the non-trading corporate issuer from private liability for monetary damages under Rule 10b-5.”).



reflect hindsight bias as well as the belief that there is a core set of cases where there is greater consensus as to the utility of securities class actions. Certainly, context matters in the way that judges and parties assess the merit of securities class actions.

## APPENDIX

TABLE A1  
SELECTED VARIABLE DEFINITIONS

Variable	Definition
Log Total Assets	Variable is equal to the natural log of the total assets of the issuer within one year prior to the filing of a securities class action.
Pension Fund	Variable = 1 if the lead plaintiff was a pension fund. Variable = 0 if the lead plaintiff was not a pension fund.
Second Circuit	Variable = 1 if the suit was filed in a district in the U.S. Court of Appeals for the Second Circuit. Variable = 0 if the suit was not filed in a district in the U.S. Court of Appeals for the Second Circuit.
Ninth Circuit	Variable = 1 if the suit was filed in a district in the U.S. Court of Appeals for the Ninth Circuit. Variable = 0 if the suit was not filed in a district in the U.S. Court of Appeals for the Ninth Circuit.
Section 11	Variable = 1 if the complaint alleged a violation of section 11 of the Securities Act of 1933. Variable = 0 if the complaint did not allege a violation of section 11 of the Securities Act of 1933.
Bankruptcy	Variable = 1 if the issuer was in bankruptcy during the pendency of the securities class action. Variable = 0 if the issuer was not in bankruptcy during the pendency of the securities class action.
Restatement	Variable = 1 if the complaint alleged that the defendant issuer restated its financial statements during the class period. Variable = 0 if the complaint did not allege that the defendant issuer restated its financial statements during the class period.
Insider Sales	Variable = 1 if the complaint alleged that a defendant sold stock in the issuer during the class period. Variable = 0 if the complaint did not allege that a defendant sold stock in the issuer during the class period.
SEC	Variable = 1 if there was an SEC investigation or action relating to the subject matter of the complaint. Variable = 0 if there was not an SEC investigation or action relating to the subject matter of the complaint.
Class Period	Variable is equal to the length of the class period of the securities class action measured in months.
Dismissed	Variable = 1 if the final disposition of the case was dismissal. Variable = 0 if the final disposition of the case was not dismissal.

Significant Settlement	Variable = 1 if the final disposition of the case involved a settlement greater than or equal to \$3 million.  Variable = 0 if the final disposition of the case did not involve a settlement greater than or equal to \$3 million.
Third-Party Settlement	Variable = 1 if the final disposition of the case included a settlement by a defendant other than the issuer.  Variable = 0 if the final disposition of the case did not include a settlement by a defendant other than the issuer.

TABLE A2  
BANKRUPTCY CASES AND LITIGATION RESULTS

	Nonbankruptcy	Bankruptcy
<i>Dismissal</i>		
Not Dismissed	822 (67%)	192 (82%)
Dismissed	410 (33%)	42 (18%)
Pearson $\chi^2(1)=21.67$ ; $p=0.000$ .		
Significant Settlements (\$3 million or more)		
No Significant Settlement	669 (54%)	97 (41%)
Significant Settlement	563 (46%)	137 (59%)
Pearson $\chi^2(1)=13.01$ ; $p=0.000$ .		
Third-Party Settlements		
No Third-Party Settlement	1,176 (95%)	178 (76%)
Third-Party Settlement	56 (5%)	56 (24%)
Pearson $\chi^2(1)=104.74$ ; $p=0.000$ .		

TABLE A3  
BANKRUPTCY CASES AND INDICIA OF MERIT

	Nonbankruptcy	Bankruptcy
<i>Restatements</i>		
No Restatement	858 (70%)	142 (61%)
Restatement	374 (30%)	92 (39%)
Pearson $\chi^2(1)=7.30$ ; $p=0.007$ .		
<i>Insider Sales</i>		
No Insider Sales	638 (52%)	176 (75%)
Insider Sales	594 (48%)	58 (25%)
Pearson $\chi^2(1)=43.71$ ; $p=0.000$ .		

	Nonbankruptcy	Bankruptcy
<i>SEC Proceeding</i>		
No SEC	1091 (89%)	199 (85%)
SEC	141 (11%)	35 (15%)
Pearson $\chi^2(1)=2.30$ ; $p=0.130$ .		
<i>Pension Fund Lead Plaintiff</i>		
No Pension Fund Lead Plaintiff	1035 (84%)	204 (87%)
Pension Fund Lead Plaintiff	197 (16%)	30 (13%)
Pearson $\chi^2(1)=1.51$ ; $p=0.219$ .		

TABLE A4  
ORDERED LOGISTIC REGRESSION

Variable	Coefficient
Log Total Assets	.071** (2.74)
Pension Fund	.658** (3.68)
Second Circuit	.199 (1.35)
Ninth Circuit	.055 (0.44)
Section 11	.638** (4.70)
Bankruptcy	.546** (3.62)
Restatement	.918** (7.46)
Insider Sales	.298** (2.65)
SEC	.182 (.99)
Class Period	.020** (3.95)
Pseudo R <sup>2</sup>	.07

Note: z-statistics in parentheses. Industry and year variables not reported.

\* $p < .05$ .

\*\* $p < .01$ .

TABLE A5  
 MULTIPLE LINEAR REGRESSION WITH LOG SETTLEMENT  
 SIZE AS DEPENDENT VARIABLE

Variable	Significant Settlement
Log Total Assets	.375** (18.75)
Pension Fund	.923** (7.74)
Second Circuit	.201 (1.94)
Ninth Circuit	.307** (3.28)
Section 11	.391** (4.29)
Bankruptcy	-.041 (-.41)
Restatement	.218** (2.57)
Insider Sales	.323** (4.00)
SEC	.225 (1.83)
Class Period	.012** (3.70)
Constant	7.29** (11.25)
Adjusted R <sup>2</sup>	.49

Note: t-statistics in parentheses. Industry and year variables not reported.

\*p<.05.

\*\*p<.01.