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PUBLIC AND PRIVATE ENFORCEMENT OF THE
SECURITIES LAWS: HAVE THINGS
CHANGED SINCE ENRON?

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with the Assistance of Dana Kiku‡*

INTRODUCTION

The U.S. securities laws seek to fulfill a variety of social objectives.¹ The most obtuse of them is allocational efficiency. Mandatory disclosure requirements for public offerings facilitates the allocation of scarce capital directly among competing investment opportunities and periodic disclosure does so indirectly through its impact on investors' decisions with respect to the array of risk-return relationships that compete for their savings. Mandatory disclosure also reduces the frequency and magnitude of fraud thus reducing the risk and losses to investors. Furthermore, the greater transparency provided by Securities and Exchange Commission (SEC) disclosure requirements is believed to reduce agency costs on the part of managers. Greater transparency not only protects investor-owners, but also contributes positively to efficient deployment of firm resources.

The mechanisms for mandatory disclosure under the U.S. securities laws are well understood. Disclosure is mandated episodically for

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1 See generally INT'L ORG. OF SEC. COMM'NS, OBJECTIVES AND PRINCIPLES OF SECURITIES REGULATION § 4.1 (1998) (setting forth three core objectives of securities regulation—protection of investors; ensuring that markets are fair, efficient, and transparent; and reduction of systematic risk), available at <http://www1.worldbank.org/publicsector/legal/Objectives&Principles%20for%20Securities%Reg.doc>; RICHARD W. JENNINGS ET AL., SECURITIES REGULATION 1–6 (8th ed. 1998) (discussing consumer protection, informational needs of investors, allocative efficiency, corporate governance and “agency costs,” economic growth innovation, and access to capital); Joel Seligman, *The Historical Need for a Mandatory Corporate Disclosure System*, 9 J. CORP. L. 1, 9 (1983) (explaining five principal arguments to justify the securities regulation system).

such events as public offerings,² proxy solicitations,³ and tender offers.⁴ Most public companies also face periodic disclosure requirements.⁵ Less formal requirements for disclosure arise by virtue of disclosure obligations anchored in the antifraud provision, such as the duty to update.⁶ These extensive disclosure requirements are backed up by a reasonably well-funded government agency, the SEC, as well as express and implied causes of actions for private litigants.⁷ Thus, a company manifesting anything less than undying obeisance to compliance with mandatory disclosure requirements must confront the possibility of a less than genteel encounter with the staff of the SEC's Division of Enforcement and/or the private class action attorney. America is unique not only in the governmental funds it commits to the enforcement of its securities laws, but also in the extent that private suits for alleged violations occur. The latter is not the product of rumored greater litigiousness of the U.S. citizens, but most likely reflects the effects of collateral legal rules such as the "American Rule" respecting parties' responsibility for attorneys fees, the availability of contingent fees, and, of course, the class action.

So robust is the securities class action that with great confidence the attorney can advise her client that one is far more likely to encounter the plaintiffs' securities class action lawyer than SEC enforcement personnel. This observation raises a wide range of questions

2 See Securities Act of 1933 § 5, 15 U.S.C. § 77e (2000).

3 See Securities Exchange Act of 1934 § 14(a), 15 U.S.C. § 78n(a); Exchange Act Schedule 14A, 17 C.F.R. § 240.14a-101 (2004).

4 See Securities Exchange Act of 1934 §§ 13, 14, 15 U.S.C. §§ 78m(d)(1), 78n(d)(1).

5 The companies so subject to the requirements are those falling within section 12(a) or 12(b) of the Securities Exchange Act, 15 U.S.C. § 78l(a), (g), which for domestic issuers requires annual and quarterly reporting and sometimes relatively prompt reporting of certain events required to be disclosed on Form 8-K. See also Securities Exchange Act of 1934 § 13, 15 U.S.C. § 78m (setting forth the requirements and mechanisms for periodic reporting).

6 See, e.g., *Weiner v. Quaker Oats Co.*, 129 F.3d 310, 318 (3d Cir. 1997) (holding that there is a duty to disclose material change in financial limits on debt that would be required by a forthcoming acquisition). Even broader than the duty to update is the case law surrounding half-truths, which imposes a duty to disclose so as to avoid having what has been represented not to be materially misleading in light of what has not been disclosed. See generally Donald C. Langevoort, *Half-Truths: Protecting Mistaken Inferences by Investors and Others*, 52 STAN. L. REV. 87 (1999) (examining the half-truth doctrine of securities law in the context of the half-truth doctrine that exists in the common law of fraud).

7 See generally JAMES D. COX ET AL., *SECURITIES REGULATIONS: CASES AND MATERIALS* chs. 12–13 (4th ed. 2004) (reviewing the SEC's enforcement authority and the scope of private actions under the antifraud provision).

which we seek to answer in this Article. Foremost among our questions is the overall effectiveness of the public and private enforcement efforts. Given the doubts raised about the quality of American corporate governance practices after the collapse of Enron, WorldCom, and other subsequent corporate disasters, this is a particularly timely issue.

We address this question by gathering evidence on how those corporations that have been the targets of SEC enforcement efforts compare in terms of their size and financial health vis-à-vis firms that are targeted only by the private securities class action. Related to this inquiry is whether the SEC or the private bar systematically proceeds against violators that cause the greatest loss to investors. As to the latter inquiry, we are intrigued by the most basic questions posed by private suits: whether settlements bear any relationship to the losses suffered by the class and whether those losses bear any relationship to the size of either the firm itself or the duration of the class action. The data examined below is expanded beyond that in our earlier study contrasting the profiles of firms that are the subject of SEC enforcement actions with firms that are prosecuted through a private class action suit.⁸ The evidence presented below provides additional insight into the social welfare implications of SEC enforcement heuristics as well as the overall performance of the securities class action.

I. METHODOLOGY

Our data set consists of 389 securities class action settlements that occurred between 1990 and 2003. For this data set, we obtained from the Compustat database certain financial information, discussed below, regarding the companies that were the defendants in the settled securities class actions. We then reviewed the Enforcement Releases on the SEC's website as well as conducting a search of the Lexis-Nexis database. From these searches, we identified seventy-three cases, or nineteen percent of our sample, that had a parallel SEC enforcement action challenging the same conduct that was the subject of the private suit.

A central reference point in our assessment of the effectiveness of SEC or private enforcement actions is to compare the dollar amount of the relief obtained from the defendants with the estimated "prova-

8 See James D. Cox & Randall S. Thomas, *SEC Enforcement Heuristics: An Empirical Inquiry*, 53 DUKE L.J. 737 (2003) (presenting a study compiled with the assistance of Dana Kiku). Our earlier study included about forty percent fewer settlements than the present study, and we have since expanded our database to include settlements that extend into 2003.

ble losses" their violation has caused investors. The standard measure of damages for securities class actions is the difference between the price at which the investors purchased or sold the security and what that price would have been but for the misrepresentation. We refer to this as the "provable loss" for the class. Because the defendant is responsible only for the harm it has caused by its misrepresentation, other events and forces that affect the securities price must be removed from the calculus for measuring the provable loss. To do this, we use the familiar market model to construct a "true-value line" for each of the 389 settlements in our database.

The market model holds:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$

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

We have used the Equal-Weighted Market Index provided by the Center for Research Securities Prices as our market index. To determine the individual security's β , we used data on individual stock prices for a two-year period ending six months before the commencement of the class action period. We terminated our β calculations six months before the commencement of the class action period because our data sample consistently reflected abnormal stock price behavior in the three-to-six month period before the commencement of the class period. Using the market model, we estimated the unexplained return, ε_{it} .

We then derived the true value line by using our estimates of β and ε and going backward in time beginning with the company's stock price the day after the close of the class action period (the security's market price in response to disclosure of truthful information).⁹ After that we calculated the difference between the actual market price and the true value line at each point during the class period.

The next step toward measuring the provable losses for the class is to determine how to weigh these losses by estimating the trading that occurred during the class action period. Here there are two well-

⁹ See generally Harindra de Silva et al., *Securities Act Violations: Estimation of Damages*, in LITIGATION SERVICES HANDBOOK: ROLE OF THE ACCOUNTANT AS EXPERT WITNESS ch. 44 (Roman L. Weil et al. eds., 1995); Bradford Cornell & R. Gregory Morgan, *Using Finance Theory to Measure Damages in Fraud on the Market Cases*, 37 UCLA L. REV. 883, 888 (1990) (evaluating the market model approach to measuring damages and analyzing the legal questions raised by the approach).

accepted approaches—the one-trader and the two-trader models.¹⁰ The one-trader model assumes that each share within the class period has an equal probability of being traded at a given time during the class period. Thus, on any given day during the class period, the shares that are sold are drawn randomly from all outstanding shares so that the resulting class is made up of shares that have not been traded since acquired in the class period and those that were acquired from others who purchased the securities within the class period. The two-trader model divides investors into two sets according to their probable trading propensities. One set is high-active traders and the other is low-active traders. We assume low-active traders hold about 63% of the shares and account for 17% of the trading, so that high-active traders hold 37% of the shares and account for 83% of the trading.¹¹ These models, because they make different assumptions regarding to the magnitude of in-and-out trading, yield quite different provable damage estimates. Because we believe that the two-trader model's assumptions are more consistent with observed market behavior, we use it in estimating provable losses.

II. EMPIRICAL RESULTS

In our earlier work, we examined the overlap between securities fraud class actions filed solely by private plaintiffs and those class actions which accompany SEC enforcement actions.¹² We found that only about 15% of settled private actions in our sample of pre-2002 cases had accompanying SEC enforcement actions. In matters where both the SEC and private plaintiffs filed cases concerning the same alleged misconduct, the private plaintiffs recovered statistically significantly larger recoveries in cases that settled more rapidly than those class actions where the private plaintiffs proceeded alone. Several other important results emerged: (1) the SEC targeted statistically significantly smaller market capitalization companies than private plaintiffs who filed actions in matters which the government did not pursue; and (2) the SEC's choice of enforcement targets was best predicted by indicators of financial distress, while measures of provable losses, asset size, and length of class period did not appear to influ-

10 See generally Willard T. Carleton et al., *Securities Class Action Lawsuits: A Descriptive Study*, 38 ARIZ. L. REV. 491, 496–97 (1996) (explaining the one-trader and two-trader models).

11 We use data provided by MARCIA KRAMER MAYER, NAT'L ECON. RESEARCH ASSOCS., BEST-FIT ESTIMATION OF DAMAGE VOLUME IN SHAREHOLDER CLASS ACTIONS: THE MULTI-SECTOR, MULTI-TRADER MODEL OF INVESTOR BEHAVIOR (2000), available at http://www.nera.com/Publication.asp?p_ID=924.

12 Cox & Thomas, *supra* note 8.

ence the SEC's decision over which companies to pursue in enforcement cases.

A. *Descriptive Statistics and Bi-Variate Analysis*

In this paper, we have expanded our sample to include a larger number of class action settlements including many that occurred after 2001. More specifically, we now have a sample of 389 securities fraud class actions. Table 1 provides some descriptive statistics for the entire sample.

TABLE 1. DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Settlement Amount of Private Actions (millions of dollars)			
	Mean	Median	Number of observations
Without a parallel SEC action	11.5	5.3	316
With a parallel SEC action	23.6	8.0	73
Total Sample	13.8	5.7	389
Market Capitalization of Defendant Companies (millions of dollars)			
	Mean	Median	Number of observations
Without a parallel SEC action	1955.6	219.0	286
With a parallel SEC action	4931.9	202.0	66
Total Sample	2513.6	216.6	352
Class Period (months)			
	Mean	Median	Number of observations
Without a parallel SEC action	11.7	9.0	316
With a parallel SEC action	17.7	15.7	73
Total Sample	12.8	10.5	389
Time to Reach Settlement (months)			
	Mean	Median	Number of observations
Without a parallel SEC action	29.0	26.3	312
With a parallel SEC action	27.1	23.7	72
Total Sample	28.6	25.5	384
Ratio of Settlement Amount to Provable Losses (%)			
	Mean	Median	Number of observations
Without a parallel SEC action	11.8%	6.1%	316
With a parallel SEC action	16.2%	6.5%	73
Total Sample	12.7%	6.1%	389

For the sample as a whole, what we see is that class actions without parallel SEC actions result in lower average (median) settlements, are brought against on average (but not median) smaller market capi-

talization companies, have shorter average (median) class periods, and take longer on average (median) to reach settlement.¹³ These results are similar to those in our earlier paper with the exception of the average market capitalization comparisons, which show a large reversal (although the median values do not).

We also added to this table statistics on the ratio of absolute settlement amount to estimated provable losses. We see that the average ratio of settlement amount to provable losses is higher for private actions with parallel SEC actions, but that the median values are roughly the same. The differences in the median values are statistically insignificant.

However, these average values may conceal changes that have occurred in recent years after the collapse of Enron and ensuing corporate governance reforms. In particular, our data set permits us to determine if the SEC's approach to enforcement has changed during the post-Enron period. To examine this issue, we split our sample into pre-January 1, 2002, and post-January 1, 2002 (the divide being roughly one month after the Enron bankruptcy), and compare the two sub-samples. Tables 2 and 3 present these statistics.

Our data for the pre-2002 period for our expanded sample show very similar patterns to those in our earlier paper. We see that private suits that are filed against companies without parallel SEC enforcement actions result in smaller settlements, target larger companies, have shorter class periods, and are slightly slower to settle. Moreover, if we look at the ratio of settlement to provable losses, we see that private suits without parallel SEC enforcement proceedings recover a lower percentage of losses.

When we test for the significance of these differences, we find that median market capitalization and median settlement-to-provable-losses ratios are statistically different across the two sub-samples at the 10% level of significance. The difference in median class periods is statistically significant at the 1% level.

Table 3 sets forth similar data on the settlements in our sample that occurred after January 1, 2002. We see a different pattern in the settlements during this time period.

The settlement amount data show a dramatic increase in the size of settlements in private actions where the SEC has also filed an en-

13 The differences of the medians of the settlement amount and class period across the two sub-samples are statistically significant at the 1% level of significance. The other bi-variate comparative tests are statistically insignificant. Throughout the Article, we test the median differences for significance because of the presence of large outliers in the data.

TABLE 2. DESCRIPTIVE STATISTICS FOR SETTLEMENTS
PRIOR TO JANUARY 1, 2002

Settlement Amount of Private Actions (millions of dollars)			
	Mean	Median	Number of observations
Without a parallel SEC action	10.1	5.0	248
With a parallel SEC action	11.5	6.6	52
Total Sample	10.3	5.5	300
Market Capitalization of Defendant Companies (millions of dollars)			
	Mean	Median	Number of observations
Without a parallel SEC action	1789.9	196.9	229
With a parallel SEC action	692.8	134.9	48
Total Sample	1599.7	184.8	277
Class Period (months)			
	Mean	Median	Number of observations
Without a parallel SEC action	11.2	9.0	248
With a parallel SEC action	15.4	12.9	52
Total Sample	12.0	9.6	300
Time to Reach Settlement (months)			
	Mean	Median	Number of observations
Without a parallel SEC action	27.1	24.1	244
With a parallel SEC action	26.1	23.1	51
Total Sample	26.9	23.8	295
Ratio of Settlement Amount to Provable Losses (%)			
	Mean	Median	Number of observations
Without a parallel SEC action	12.3%	6.6%	248
With a parallel SEC action	20.8%	8.3%	52
Total Sample	13.8%	7.1%	300

forcement case. During this time period, we see that the size of the average settlements shown in private suits with parallel SEC cases are more than triple those where there is a private class action alone, while the median values are almost triple. The difference in the medians is statistically significant at the 1% level of significance. If we compare these values with those in the pre-January 1, 2002, cases shown in Table 2, we see that the average settlement size increased for both categories but this increase was much larger for private cases with parallel SEC filings. The median values show little change for private suits alone over the two time periods, but a very large increase in median settlements for private suits with parallel SEC proceedings. Within the group of cases with a parallel SEC action, the difference in

TABLE 3. DESCRIPTIVE STATISTICS FOR SETTLEMENTS
AFTER JANUARY 1, 2002

Settlement Amount of Private Actions (millions of dollars)			
	Mean	Median	Number of observations
Without a parallel SEC action	16.6	5.6	68
With a parallel SEC action	53.7	16.0	21
Total Sample	25.4	7.1	89
Market Capitalization of Defendant Companies (millions of dollars)			
	Mean	Median	Number of observations
Without a parallel SEC action	2621.3	584.5	57
With a parallel SEC action	16,236.4	1806.0	18
Total Sample	5889.0	806.6	75
Class Period (months)			
	Mean	Median	Number of observations
Without a parallel SEC action	13.5	9.0	68
With a parallel SEC action	23.3	20.6	21
Total Sample	15.8	12.7	89
Time to Reach Settlement (months)			
	Mean	Median	Number of observations
Without a parallel SEC action	35.8	30.2	68
With a parallel SEC action	29.4	24.9	21
Total Sample	34.3	28.7	89
Ratio of Settlement Amount to Provable Losses (%)			
	Mean	Median	Number of observations
Without a parallel SEC action	10.2%	4.3%	68
With a parallel SEC action	4.8%	2.4%	21
Total Sample	8.9%	4.0%	89

the medians of the settlement amount across the pre-January 1, 2002, and post-January 1, 2002, sub-samples is statistically significant at the 1% level.

Similarly striking changes occurred in the average market capitalization of defendant firms. If we compare the post-January 1, 2002, cases with those for the earlier time period, we see that average market capitalization more than tripled in the latter period. Median comparisons over time show an even more pronounced quadrupling in market capitalization, rising from 185 million to 807 million in the post-2001 period.

More importantly, the SEC appears to be targeting much larger companies during the post-January 1, 2002, period than it did in the

earlier time frame. Average market capitalization for SEC enforcement targets was more than twenty-three times bigger in the post-January 1, 2002, time period than in the earlier period, while the median market capitalization went up by a multiple of over thirteen times. These differences are significant at all conventional levels.

This large increase in the size of SEC targets carries over to comparisons with the size of defendant firms of private class actions alone. As we saw in Table 2, in the pre-January 1, 2002, time period, private actions without parallel SEC proceedings targeted larger companies than those with parallel SEC proceedings. In the post-January 1, 2002, time frame, this pattern reverses: average market capitalization of firms subject to both private and SEC actions is more than six times greater than for firms that are the subject only to private actions. A similar but less pronounced pattern is observed in the median data. The median differences in firm size are statistically significant at the 10% level.

Both the length of class period and the time to reach settlement increase in the post-2001 cases, although the relative comparisons between cases with SEC parallel actions and those without remain the same. Average class period length, a proxy of the number of investors that may have been affected by fraud, increases from twelve months in the pre-January 1, 2002, period to sixteen months in the post-January 1, 2002, period. The shift is even greater for companies with parallel SEC proceedings, as mean class period increases from fifteen months in Table 2 to twenty-three months in Table 3. Similar patterns are visible in the time to settlement data, although the increase for private actions alone is larger than that for private actions with parallel SEC cases.

Finally, if we look at the ratio of settlement amount to provable losses, we see that the pattern in Table 2 of greater percentage recoveries in private actions with parallel SEC actions has reversed itself in the post-January 1, 2002, data shown in Table 3. After January 1, 2002, the average ratio of settlement amounts to provable losses for private cases with parallel SEC proceedings drops from 20.8% to 4.8%, while the median ratio declines from 8.3% to 2.4%. These changes are statistically significant at the 1% level. Given the large increase in the dollar settlements for the cases with parallel SEC actions, there must have been a very big jump in the amount of provable losses in these cases, probably because the companies involved are much larger and

the class periods somewhat longer.¹⁴ Private actions that do not have accompanying SEC actions show a smaller decrease in average and median levels for this ratio.

B. *Multivariate Analysis of Settlement Amounts*

Our next step is to see if we can explain the size of dollar settlements using our data. In this section, we use multivariate regression analysis to determine what factors influence the size of settlements. As our dependent variable, we use a logarithmic transformation of the dollar amount of the settlement paid in each case. For independent variables, we look at the length of the class period in months, the log of provable losses, the log of total assets, a measure of financial distress, and a dummy variable for the presence of an SEC enforcement action.¹⁵

Our independent variables are defined as follows. First, we include a measure of provable losses for each private action. We calculate these values using the damage model that was discussed above. Provable losses are a measure of the losses that investors suffered as a result of the company's alleged fraud. Our hypothesis in this set of regressions is that larger provable losses should increase the size of the dollar settlement. We therefore anticipate that the sign of the coefficient on this variable should be positive.

Our second independent variable is a measure of financial distress for each firm. As a proxy for financial distress we use the change in the ratio of the company's book value to market value during the interval between the filing of the suit and the settlement of it. Our hypothesis is that companies that are in financial distress during the settlement negotiations will be less able to pay larger settlements. This leads us to expect a negative coefficient on this term.

14 This intuition is supported by the data in Table 3A below. It shows that the market capitalization of companies with relatively low settlement amount to provable loss ratios is much bigger than those with higher ratios.

TABLE 3A. PROVABLE LOSS RATIOS BY MARKET CAPITALIZATION

Market Capitalization of Defendant Companies (millions of dollars)		
	Ratio of Settlement Amount to Provable Losses \leq 2%	Ratio of Settlement Amount to Provable Losses $>$ 2%
Mean	9698.3	568.3
Median	1176.6	155.9
Number of observations	75	277

15 We use a logarithmic transformation of the settlement amount, provable losses, and total assets of the defendant companies to mitigate the effect of large outliers in the data.

As the third independent variable we added a measure of firm size: total asset value. This is defined as current assets plus net property, plant, and equipment plus other non-current assets including intangible assets, deferred charges, and investments and advances. Once again we do a logarithmic transformation of the variable. Our hypothesis is that larger companies have greater resources to use in settling actions, and we therefore expect that the sign of this term will be positive.

Fourth, we add the length of class period as an independent variable. This variable is measured in months. We include this term as a measure of the number of defrauded investors. We believe that if there are more defrauded investors, then the company will be under more public pressure to increase the amount of the settlement.

Finally, to examine the effect of parallel SEC proceedings on private class action settlements, we augment our regression with a dummy variable that controls for the presence of an SEC enforcement action. This dummy variable equals one if a private class action is accompanied by parallel SEC proceedings and zero otherwise.

Table 4 presents our regression results for the entire sample. The adjusted *R*-squared for the equation is 55.1%.

TABLE 4. MULTIVARIATE REGRESSION RESULTS FOR ENTIRE SAMPLE

Dependent Variable: Log (Settlement Amount)				
Variable	Coefficient	Robust		Prob.
		Std. Error	t-Statistic	
Log (Provable Losses)	0.32	0.04	7.23	0.00
Measure of Financial Distress	-0.06	0.05	-1.04	0.30
Log (Total Assets)	0.19	0.03	5.57	0.00
Class Period	0.02	0.01	2.81	0.01
SEC	0.29	0.12	2.41	0.02
Intercept	3.70	0.38	9.82	0.00
Adjusted R-squared	55.1%			

Each of the independent variables has the expected sign and all of them except financial distress are highly significant. We interpret these results as consistent with our hypotheses that the absolute dollar amount of a settlement is increased by the size of estimated provable losses, the size of the target firm, the length of the class period, and the presence of an SEC action.

We also estimated this equation with a dummy variable to control for pre-January 1, 2002, and post-January 1, 2002, to see if settlement sizes were statistically significantly larger in the latter time period. However, this variable was insignificant in all of the regressions (re-

sults not shown). Similarly, we tried various interaction terms to see if cases with parallel SEC actions had different characteristics than those without such cases, but all of these terms were statistically insignificant.

C. Multivariate Analysis of Determinants of SEC Enforcement Actions

The last empirical question we ask is: what are the factors that lead the SEC to file an enforcement action? In our prior work, using a similar set of independent variables to those in Part II.B. above, we found that the only statistically significant determinant for SEC filing decisions was financial distress. Table 5 below revisits that question with our expanded sample that includes post-2001 settlements of SEC enforcement actions. Because the dependent variable is discontinuous, we use a probit analysis.

Our first four independent variables are provable losses, financial distress, market capitalization, and class period. These independent variables are defined as previously. We expect that larger provable losses will increase the likelihood of the SEC filing an enforcement proceeding as it tries to target bigger frauds. Our second hypothesis is that the SEC will also target financially distressed firms because it is very concerned about highly visible fraud at these companies that will have a high likelihood of hurting investors. For market capitalization, we are unsure what sign to expect because while the SEC could choose to go after larger companies that are more visible, it might also prefer to go after weaker targets. Finally, we expect a positive sign on the class period variable as a longer class period will mean a larger potential number of defrauded investors, which should make it more likely that the SEC will file an action.

To test for differences in SEC enforcement strategies between the pre-January 1, 2002, time period and post-January 1, 2002, we include time dummy variables for each independent variable as well as a separate dummy to pick up changes in the overall level of enforcement activity. We do so because our bi-variate analysis led us to suspect that the SEC changed its targeting techniques in the later time period.

For the pre-January 1, 2002, time period, we find that financial distress is the only statistically significant predictor of SEC enforcement actions. This is consistent with the results in our earlier work. We interpret this to mean that prior to January 1, 2002, the SEC was most concerned with fraud at companies experiencing financial distress, probably because of the greater likelihood that investors at those companies would suffer permanent and irreversible losses. It could also reflect a potential preference by the SEC to choose weak opponents.

TABLE 5. DETERMINANTS OF SEC ENFORCEMENT ACTION FILING

Dependent Variable: SEC				
Variable	Coefficient	Robust		Prob.
		Std. Error	t-Statistic	
Provable Losses	-0.04	0.08	-0.53	0.60
Provable Losses * Time Dummy	1.83	0.55	3.35	0.00
Measure of Financial Distress	0.19	0.10	1.89	0.06
Measure of Financial Distress * Time Dummy	-0.16	0.13	-1.22	0.22
Market Capitalization	-0.02	0.02	-0.94	0.35
Market Capitalization * Time Dummy	-0.10	0.04	-2.57	0.01
Class Period	0.02	0.01	1.31	0.19
Class Period * Time Dummy	0.00	0.02	-0.18	0.86
Time Dummy	0.06	0.43	0.14	0.89
Intercept	-1.04	0.22	-4.66	0.00
McFadden R-squared	10.8%			

A very different pattern shows up in the post-January 1, 2002, dummy variables. We see that the time dummy variables for provable losses and market capitalization are statistically significant, although the sign of the market capitalization variable is negative. We interpret these findings to indicate that the SEC prefers targets where shareholders have suffered greater provable losses with a bias toward selecting smaller firms.

CONCLUSION

Our results are consistent with the view that there was a shift in the targeting of SEC enforcement actions after the end of 2001. We find that the SEC seems to have shifted its enforcement focus away from challenging frauds at firms in financial distress to seeking out frauds at companies where investors may have suffered larger losses, especially if they are smaller firms. This shift could be due to numerous factors. First, the national elections in 2000 ushered in not only a new set of commissioners but also a new Director of Enforcement at the SEC. These changes may well have influenced the case selection that led to settlements studied in our post-2001 cohort of settlements. Second, public concern about fraudulent practices at the largest corporations could well have provided impetus for the SEC's enforcement staff to involve itself with more "high profile" cases than it otherwise would have engaged.

We also add a note of caution about our interpretation of our findings about SEC enforcement targeting. These results are based on dates of settlements and not on the date the SEC began its enforce-

ment investigation of a company. We have focused on the dates of settlements because there frequently is little information as to when the SEC has commenced its investigation since its initial investigations lack the formality of public authorization by the commissioners. Thus, there is no accurate way available to us to determine when the SEC first began its investigation that ultimately led to the sanction being imposed on the respondent in that action. We nevertheless are comfortable that most of the cases settled after 2001 would have been at least initiated in the post-Enron atmosphere and in any case that the sanctions imposed in 2002 and later were indeed in the shadow of Enron.

With respect to settlement sizes in private class actions, we find that provable losses, total assets, class period, and the presence of an SEC enforcement action are all positively and significantly related to the dollar amount of the settlement obtained in a private action. These effects do not change over the time period of our sample. The fact that provable losses are such an important determinant of the size of actual recoveries supports the view that the “merits do matter.”¹⁶

16 Compare Janet Cooper Alexander, *Do the Merits Matter? A Study of Settlements in Securities Class Actions*, 43 STAN. L. REV. 497, 500 (1991), who claims that all securities fraud cases in her sample settled for approximately “one quarter of the potential damages . . . [so that] a strong case in this group appears to have been worth no more than a weak one.” *Id.*

