Securities Fraud Class Actions and Corporate Governance: New Evidence on the Role of Merit

Christopher F Baum, James G. Bohn, Atreya Chakraborty

Boston College/DIW Berlin, UHY Advisors, Univ. of Mass.-Boston

University of York, May 2008



Baum, Bohn, Chakraborty (BC/UHY/UMass) SFCAs and Corporate Governance

- to investigate whether private securities litigation in the US acts to discipline corporate directors and improve corporate governance
- to investigate whether private securities lawsuits *with merit* discipline the perpetrators of securities fraud
- Answers to the first question will be clouded by the consideration of lawsuits that lack merit in their allegations.



- to investigate whether private securities litigation in the US acts to discipline corporate directors and improve corporate governance
- to investigate whether private securities lawsuits with merit discipline the perpetrators of securities fraud

Answers to the first question will be clouded by the consideration of lawsuits that lack merit in their allegations.



- to investigate whether private securities litigation in the US acts to discipline corporate directors and improve corporate governance
- to investigate whether private securities lawsuits with merit discipline the perpetrators of securities fraud

Answers to the first question will be clouded by the consideration of lawsuits that lack merit in their allegations.



- to investigate whether private securities litigation in the US acts to discipline corporate directors and improve corporate governance
- to investigate whether private securities lawsuits with merit discipline the perpetrators of securities fraud

Answers to the first question will be clouded by the consideration of lawsuits that lack merit in their allegations.



- Public enforcement efforts are carried out by the Securities and Exchange Commission (SEC) and Department of Justice (DOJ).
- Private enforcement involves lawsuits brought by private investors who believe they have been harmed by violations of the relevant statutes.
- There is ongoing interest in evaluating the efficacy of litigation to enforce securities laws, both public and private.
- Our research focuses on private actions and how their effects on corporate boards' turnover are related to the merit of the actions.



- Public enforcement efforts are carried out by the Securities and Exchange Commission (SEC) and Department of Justice (DOJ).
- Private enforcement involves lawsuits brought by private investors who believe they have been harmed by violations of the relevant statutes.
- There is ongoing interest in evaluating the efficacy of litigation to enforce securities laws, both public and private.
- Our research focuses on private actions and how their effects on corporate boards' turnover are related to the merit of the actions.



- Public enforcement efforts are carried out by the Securities and Exchange Commission (SEC) and Department of Justice (DOJ).
- Private enforcement involves lawsuits brought by private investors who believe they have been harmed by violations of the relevant statutes.
- There is ongoing interest in evaluating the efficacy of litigation to enforce securities laws, both public and private.
- Our research focuses on private actions and how their effects on corporate boards' turnover are related to the merit of the actions.



- Public enforcement efforts are carried out by the Securities and Exchange Commission (SEC) and Department of Justice (DOJ).
- Private enforcement involves lawsuits brought by private investors who believe they have been harmed by violations of the relevant statutes.
- There is ongoing interest in evaluating the efficacy of litigation to enforce securities laws, both public and private.
- Our research focuses on private actions and how their effects on corporate boards' turnover are related to the merit of the actions.



• The recent evidence on public enforcement efforts is quite robust.

- Recent work corrects for methodological flaws and finds that public enforcement deters perpetrators (Karpoff, Lee and Martin, *The Consequences to Managers for Financial Mispreresentation*, JFE, in press).
- At the same time, there are long-standing controversies in the legal and finance communities concerning the role of private enforcement efforts.
- Evidence on the efficacy of private enforcement is mixed.



- The recent evidence on public enforcement efforts is quite robust.
- Recent work corrects for methodological flaws and finds that public enforcement deters perpetrators (Karpoff, Lee and Martin, *The Consequences to Managers for Financial Mispreresentation*, JFE, in press).
- At the same time, there are long-standing controversies in the legal and finance communities concerning the role of private enforcement efforts.
- Evidence on the efficacy of private enforcement is mixed.



- The recent evidence on public enforcement efforts is quite robust.
- Recent work corrects for methodological flaws and finds that public enforcement deters perpetrators (Karpoff, Lee and Martin, *The Consequences to Managers for Financial Mispreresentation*, JFE, in press).
- At the same time, there are long-standing controversies in the legal and finance communities concerning the role of private enforcement efforts.
- Evidence on the efficacy of private enforcement is mixed.



- The recent evidence on public enforcement efforts is quite robust.
- Recent work corrects for methodological flaws and finds that public enforcement deters perpetrators (Karpoff, Lee and Martin, *The Consequences to Managers for Financial Mispreresentation*, JFE, in press).
- At the same time, there are long-standing controversies in the legal and finance communities concerning the role of private enforcement efforts.
- Evidence on the efficacy of private enforcement is mixed.



A B F A B F

- Private actions take two forms: derivative suits and securities fraud class actions.
- Derivative suits (DS) are filed by a shareholder on behalf of the corporation, alleging that damage has been done: in some cases violations of fiduciary duties by officers or directors. Proceeds are awarded to the corporation.
- Ferris, Jandik, Lawless and Makhija (JFQA, 2007) find that DS are associated with firms with greater agency conflicts.
- They also find that DS are associated with changes in the board in favor of greater outside representation.
- Ferris et al. conclude that DS can serve as an effective corporate governance mechanism.



э

- Private actions take two forms: derivative suits and securities fraud class actions.
- Derivative suits (DS) are filed by a shareholder on behalf of the corporation, alleging that damage has been done: in some cases violations of fiduciary duties by officers or directors. Proceeds are awarded to the corporation.
- Ferris, Jandik, Lawless and Makhija (JFQA, 2007) find that DS are associated with firms with greater agency conflicts.
- They also find that DS are associated with changes in the board in favor of greater outside representation.
- Ferris et al. conclude that DS can serve as an effective corporate governance mechanism.



э

- Private actions take two forms: derivative suits and securities fraud class actions.
- Derivative suits (DS) are filed by a shareholder on behalf of the corporation, alleging that damage has been done: in some cases violations of fiduciary duties by officers or directors. Proceeds are awarded to the corporation.
- Ferris, Jandik, Lawless and Makhija (JFQA, 2007) find that DS are associated with firms with greater agency conflicts.
- They also find that DS are associated with changes in the board in favor of greater outside representation.
- Ferris et al. conclude that DS can serve as an effective corporate governance mechanism.



э

- Private actions take two forms: derivative suits and securities fraud class actions.
- Derivative suits (DS) are filed by a shareholder on behalf of the corporation, alleging that damage has been done: in some cases violations of fiduciary duties by officers or directors. Proceeds are awarded to the corporation.
- Ferris, Jandik, Lawless and Makhija (JFQA, 2007) find that DS are associated with firms with greater agency conflicts.
- They also find that DS are associated with changes in the board in favor of greater outside representation.
- Ferris et al. conclude that DS can serve as an effective corporate governance mechanism.



- Private actions take two forms: derivative suits and securities fraud class actions.
- Derivative suits (DS) are filed by a shareholder on behalf of the corporation, alleging that damage has been done: in some cases violations of fiduciary duties by officers or directors. Proceeds are awarded to the corporation.
- Ferris, Jandik, Lawless and Makhija (JFQA, 2007) find that DS are associated with firms with greater agency conflicts.
- They also find that DS are associated with changes in the board in favor of greater outside representation.
- Ferris et al. conclude that DS can serve as an effective corporate governance mechanism.



From an analytical perspective, what is the rationale for private enforcement efforts?

... firm-level penalties—i.e., those paid by shareholders—can be efficient if internal mechanisms work to discipline culpable managers, because firm-level monitoring and control can be less costly than direct monitoring by regulators." (Karpoff et al., note 3)

This rationale does not apply to the derivative suit, which innately claims that internal mechanisms have failed. It does apply to the second type of private action: the securities fraud class action (SFCA).



From an analytical perspective, what is the rationale for private enforcement efforts?

... firm-level penalties—i.e., those paid by shareholders—can be efficient if internal mechanisms work to discipline culpable managers, because firm-level monitoring and control can be less costly than direct monitoring by regulators." (Karpoff et al., note 3)

This rationale does not apply to the derivative suit, which innately claims that internal mechanisms have failed. It does apply to the second type of private action: the securities fraud class action (SFCA).



From an analytical perspective, what is the rationale for private enforcement efforts?

... firm-level penalties—i.e., those paid by shareholders—can be efficient if internal mechanisms work to discipline culpable managers, because firm-level monitoring and control can be less costly than direct monitoring by regulators." (Karpoff et al., note 3)

This rationale does not apply to the derivative suit, which innately claims that internal mechanisms have failed. It does apply to the second type of private action: the securities fraud class action (SFCA).



- A SFCA claims that the value of shareholders' investments have been damaged by fraudulent action by the company or its agents. All shareholders comprise a class of parties, which must be certified by the court. This aggregation of claims allows the small individual shareholder to seek redress, and puts pressure on the corporation to address the claim.
- More than 99% of SFCAs are either dismissed by the court at some stage or lead to a financial settlement between the plaintiffs and the corporation. Per the quotation above, settlement awards represent transfers between shareholders as the corporate treasury funds the settlement.



- A SFCA claims that the value of shareholders' investments have been damaged by fraudulent action by the company or its agents. All shareholders comprise a class of parties, which must be certified by the court. This aggregation of claims allows the small individual shareholder to seek redress, and puts pressure on the corporation to address the claim.
- More than 99% of SFCAs are either dismissed by the court at some stage or lead to a financial settlement between the plaintiffs and the corporation. Per the quotation above, settlement awards represent transfers between shareholders as the corporate treasury funds the settlement.



A B F A B F

- A large share of the award is typically claimed by the legal firms who have initiated the case. In February 2008, the most famous member of the "plaintiff's bar", WIlliam Lerach of Milberg Weiss, was sentenced to two years in jail and fined for improperly soliciting 'professional plaintiffs' who received 'kickbacks' from settlement awards. His most famous case involved a \$7 billion judgment against Enron.
- Given the incentives to bring such actions, prior studies that compare firms who have been sued and similar firms which have not may be merely considering whether attorneys considered the firm an appropriate "target of opportunity".



- A large share of the award is typically claimed by the legal firms who have initiated the case. In February 2008, the most famous member of the "plaintiff's bar", WIlliam Lerach of Milberg Weiss, was sentenced to two years in jail and fined for improperly soliciting 'professional plaintiffs' who received 'kickbacks' from settlement awards. His most famous case involved a \$7 billion judgment against Enron.
- Given the incentives to bring such actions, prior studies that compare firms who have been sued and similar firms which have not may be merely considering whether attorneys considered the firm an appropriate "target of opportunity".



A major institutional change in the workings of SFCAs was instigated by the Private Securities Litigation Reform Act of 1995 (PSLRA). This legislation, generally seen as tightening the requirements for a class action suit, was passed in response to concerns that a sizable number of SFCAs were eventually considered frivolous and dismissed. Shareholders cannot claim damages merely because the market value of their shares fell.

Under the PSLRA, plaintiffs must cite *specific statements* or *omissions* that are alleged to be misleading, and must provide evidence that defendants *willfully sought to deceive* investors or were *reckless* in their statements. Merely alleging negligence ('bad management') is insufficient. The court must consider the adequacy of the allegations put forth by plaintiffs to allow the suit to continue.



A major institutional change in the workings of SFCAs was instigated by the Private Securities Litigation Reform Act of 1995 (PSLRA). This legislation, generally seen as tightening the requirements for a class action suit, was passed in response to concerns that a sizable number of SFCAs were eventually considered frivolous and dismissed. Shareholders cannot claim damages merely because the market value of their shares fell.

Under the PSLRA, plaintiffs must cite *specific statements* or *omissions* that are alleged to be misleading, and must provide evidence that defendants *willfully sought to deceive* investors or were *reckless* in their statements. Merely alleging negligence ('bad management') is insufficient. The court must consider the adequacy of the allegations put forth by plaintiffs to allow the suit to continue.



The restrictions placed on SFCAs by the PSLRA imply that research carried out on pre-1995 suits considered a quite different environment.

Findings from early studies are mixed. Romano (J.LawEcOrg., 1991) suggests that securities litigation may align the interests of shareholders and managers. She considers whether SFCAs and other private lawsuits cause changes in corporate governance. Niehaus and Roth (FinMgt., 1999) also study the pre-PSLRA period, considering inside director and CEO turnover rates. Agrawal, Jaffe and Karpoff (J.LawEc., 1999) consider turnover and governance changes following the revelation of fraud.



10/29

The restrictions placed on SFCAs by the PSLRA imply that research carried out on pre-1995 suits considered a quite different environment.

Findings from early studies are mixed. Romano (J.LawEcOrg., 1991) suggests that securities litigation may align the interests of shareholders and managers. She considers whether SFCAs and other private lawsuits cause changes in corporate governance. Niehaus and Roth (FinMgt., 1999) also study the pre-PSLRA period, considering inside director and CEO turnover rates. Agrawal, Jaffe and Karpoff (J.LawEc., 1999) consider turnover and governance changes following the revelation of fraud.



10/29

If SFCAs are effective tools for disciplining managers, their outcomes should be related to the underlying *merit* of the action. Alexander (Stanf.LawRev., 1991), again using pre-PSLRA data, found that SFCA outcomes were unrelated to the seriousness of the underlying violation. Coffee (Colum.LawRev., 2006) has argued that the SFCA mechanism does little to sanction wrongdoers.

More recent research (using a post-PSLRA sample) has tried to consider the merit of SFCAs by considering threats to outside directors' reputation (Helland, JLawEc., 2006; Fich and Shivdasani, JFE, 2007).



If SFCAs are effective tools for disciplining managers, their outcomes should be related to the underlying *merit* of the action. Alexander (Stanf.LawRev., 1991), again using pre-PSLRA data, found that SFCA outcomes were unrelated to the seriousness of the underlying violation. Coffee (Colum.LawRev., 2006) has argued that the SFCA mechanism does little to sanction wrongdoers.

More recent research (using a post-PSLRA sample) has tried to consider the merit of SFCAs by considering threats to outside directors' reputation (Helland, JLawEc., 2006; Fich and Shivdasani, JFE. 2007).



Our research strategy differs from much of this literature by focusing on a set of firms who have *all* been named as defendants in SFCAs. We are concerned with the effect of the underlying *merit* of the action on corporate governance.

Research questions:

- Does merit drive the outcome of securities fraud class actions (SFCAs)?
- Are corporate directors linked to alleged securities fraud disciplined?



12/29

Our research strategy differs from much of this literature by focusing on a set of firms who have *all* been named as defendants in SFCAs. We are concerned with the effect of the underlying *merit* of the action on corporate governance.

Research questions:

- Does merit drive the outcome of securities fraud class actions (SFCAs)?
- Are corporate directors linked to alleged securities fraud disciplined?



3

Our research strategy differs from much of this literature by focusing on a set of firms who have all been named as defendants in SFCAs. We are concerned with the effect of the underlying *merit* of the action on corporate governance.

Research questions:

- Does merit drive the outcome of securities fraud class actions. (SFCAs)?
- Are corporate directors linked to alleged securities fraud disciplined?



To answer these research questions, we construct a joint test. If merit drives the outcome of SFCAs and disciplinary mechanisms are effective, we should detect higher rates of *corporate board turnover* when an SFCA is settled than when it is dismissed.

Our key intuition: pooling of *dismissed* and *settled* lawsuits will dilute the observed disciplinary impact of SFCAs if the likelihood of dismissal is related to lack of merit or seriousness of the allegations. Studies which have ignored this distinction are less likely to find a clear relationship between merit and turnover outcomes.



13/29

To answer these research questions, we construct a joint test. If merit drives the outcome of SFCAs and disciplinary mechanisms are effective, we should detect higher rates of *corporate board turnover* when an SFCA is settled than when it is dismissed.

Our key intuition: pooling of *dismissed* and *settled* lawsuits will dilute the observed disciplinary impact of SFCAs if the likelihood of dismissal is related to lack of merit or seriousness of the allegations. Studies which have ignored this distinction are less likely to find a clear relationship between merit and turnover outcomes.



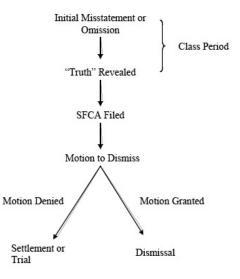


Figure: Typical series of events in a SFCA



э

Baum, Bohn, Chakraborty (BC/UHY/UMass)

SFCAs and Corporate Governance

イロト イヨト イヨト イヨト

- Unlike prior research, we avoid the drawbacks of creating a matched sample to investigate the efficacy of SFCAs.
- Our sample is constructed from lawsuits against most 'S&P 1500' firms named as defendants in SFCAs filed between 1996–2002.
- We classify the lawsuits as *Dismissed*, *Settled* or *Ongoing* based on their status as of August 2007.



15/29

- Unlike prior research, we avoid the drawbacks of creating a matched sample to investigate the efficacy of SFCAs.
- Our sample is constructed from lawsuits against most 'S&P 1500' firms named as defendants in SFCAs filed between 1996–2002.
- We classify the lawsuits as *Dismissed*, *Settled* or *Ongoing* based on their status as of August 2007.



15/29

- Unlike prior research, we avoid the drawbacks of creating a matched sample to investigate the efficacy of SFCAs.
- Our sample is constructed from lawsuits against most 'S&P 1500' firms named as defendants in SFCAs filed between 1996–2002.
- We classify the lawsuits as *Dismissed*, *Settled* or *Ongoing* based on their status as of August 2007.



- Unlike prior research, we avoid the drawbacks of creating a matched sample to investigate the efficacy of SFCAs.
- Our sample is constructed from lawsuits against most 'S&P 1500' firms named as defendants in SFCAs filed between 1996–2002.
- We classify the lawsuits as *Dismissed*, *Settled* or *Ongoing* based on their status as of August 2007.



15/29

- We observe the board composition at T=0, the annual meeting prior to the lawsuit filing date, and in each of four years hence: at T=1, 2, 3 and 4. We record all changes in board composition during those years.
- As directors' terms of office are customarily three years, each director seated at T=0 and T=4 will have been reelected at least once.



- We observe the board composition at T=0, the annual meeting prior to the lawsuit filing date, and in each of four years hence: at T=1, 2, 3 and 4. We record all changes in board composition during those years.
- As directors' terms of office are customarily three years, each director seated at T=0 and T=4 will have been reelected at least once.



< ロ > < 同 > < 回 > < 回 >

- Of the 243 actions, 93 (28%) were dismissed, 123 (51%) were settled and 27 (11%) are classified as ongoing.
- For the settled actions, the average settlement amount was \$120 million.
- 22% of all actions and 30% of settled actions involved restatements of financials.
- Cumulative abnormal returns (CARA) computed at the time of filing of the action does not differ significantly between settled and dismissed actions. Thus, identifying 'high-impact' suits by focusing on CARA will be misleading. The market does not predict the lawsuit's outcome.



- Of the 243 actions, 93 (28%) were dismissed, 123 (51%) were settled and 27 (11%) are classified as ongoing.
- For the settled actions, the average settlement amount was \$120 million.
- 22% of all actions and 30% of settled actions involved restatements of financials.
- Cumulative abnormal returns (CARA) computed at the time of filing of the action does not differ significantly between settled and dismissed actions. Thus, identifying 'high-impact' suits by focusing on CARA will be misleading. The market does not predict the lawsuit's outcome.



3

- Of the 243 actions, 93 (28%) were dismissed, 123 (51%) were settled and 27 (11%) are classified as ongoing.
- For the settled actions, the average settlement amount was \$120 million.
- 22% of all actions and 30% of settled actions involved restatements of financials.
- Cumulative abnormal returns (CARA) computed at the time of filing of the action does not differ significantly between settled and dismissed actions. Thus, identifying 'high-impact' suits by focusing on CARA will be misleading. The market does not predict the lawsuit's outcome.



э

- Of the 243 actions, 93 (28%) were dismissed, 123 (51%) were settled and 27 (11%) are classified as ongoing.
- For the settled actions, the average settlement amount was \$120 million.
- 22% of all actions and 30% of settled actions involved restatements of financials.
- Cumulative abnormal returns (CARA) computed at the time of filing of the action does not differ significantly between settled and dismissed actions. Thus, identifying 'high-impact' suits by focusing on CARA will be misleading. The market does not predict the lawsuit's outcome.



3

1,538 outside directors and 842 inside directors are included in the sample.

- Inside directors include current and former employees, relatives and directors with business dealings with the firm.
- Outside directors include all other board members.
- Of the inside directors, 28.3% serve as CEOs.
- Outside directors were on average 60 years old when the action was filed; inside directors were on average 55 years old.
- 39.0% of outside directors and 50.4% of inside directors depart within four years after they are initially observed.



18/29

- 1,538 outside directors and 842 inside directors are included in the sample.
- Inside directors include current and former employees, relatives and directors with business dealings with the firm.
- Outside directors include all other board members.
- Of the inside directors, 28.3% serve as CEOs.
- Outside directors were on average 60 years old when the action was filed; inside directors were on average 55 years old.
- 39.0% of outside directors and 50.4% of inside directors depart within four years after they are initially observed.



- 1,538 outside directors and 842 inside directors are included in the sample.
- Inside directors include current and former employees, relatives and directors with business dealings with the firm.
- Outside directors include all other board members.
- Of the inside directors, 28.3% serve as CEOs.
- Outside directors were on average 60 years old when the action was filed; inside directors were on average 55 years old.
- 39.0% of outside directors and 50.4% of inside directors depart within four years after they are initially observed.



- 1,538 outside directors and 842 inside directors are included in the sample.
- Inside directors include current and former employees, relatives and directors with business dealings with the firm.
- Outside directors include all other board members.
- Of the inside directors, 28.3% serve as CEOs.
- Outside directors were on average 60 years old when the action was filed; inside directors were on average 55 years old.
- 39.0% of outside directors and 50.4% of inside directors depart within four years after they are initially observed.



- 1,538 outside directors and 842 inside directors are included in the sample.
- Inside directors include current and former employees, relatives and directors with business dealings with the firm.
- Outside directors include all other board members.
- Of the inside directors, 28.3% serve as CEOs.
- Outside directors were on average 60 years old when the action was filed; inside directors were on average 55 years old.
- 39.0% of outside directors and 50.4% of inside directors depart within four years after they are initially observed.



- 1,538 outside directors and 842 inside directors are included in the sample.
- Inside directors include current and former employees, relatives and directors with business dealings with the firm.
- Outside directors include all other board members.
- Of the inside directors, 28.3% serve as CEOs.
- Outside directors were on average 60 years old when the action was filed; inside directors were on average 55 years old.
- 39.0% of outside directors and 50.4% of inside directors depart within four years after they are initially observed.



< ロ > < 同 > < 回 > < 回 >

Table 4A: Outside director retention rates by SFCA outcome.						
	Dismissed		Settled/Ongoing		p-value	
Year	Number	Retention	Number Retention			
	Directors	Rate	Directors	Rate		
0	607	100.00	931	100.00		
1	538	88.63	796	85.50	0.077	
2	461	75.95	681	73.15	0.220	
3	402	66.23	599	64.34	0.448	
4	352	57.99	513	55.10	0.265	

Reported p-values of two-sided tests for differences in retention rates between dismissed and settled/ongoing actions.



2

Baum, Bohn, Chakraborty (BC/UHY/UMass) SFCAs and Corporate Governance U

イロト イヨト イヨト イヨト

Table 4B: Inside director retention rates by SFCA outcome.						
	Dismi	ssed	Settled/C	p-value		
Year	Number of	Retention	Number of Retention			
	Directors	Rate	Directors	Rate		
0	325	100.00	517	100.00		
1	275	84.62	390	75.44	0.001	
2	218	67.08	312	60.35	0.049	
3	196	60.31	259	50.10	0.004	
4	174	53.54	215	41.59	0.001	

Reported p-values of two-sided tests for differences in retention rates between dismissed and settled/ongoing actions.



Baum, Bohn, Chakraborty (BC/UHY/UMass) SFCAs and Corporate Governance University

ヘロト 人間 とくほとくほど

Table 8A: CEO retention rates by SFCA outcome.

	Dismissed		Settled/Ongoing		p-value
Year	Number	Retention	Number	Retention	
		Rate		Rate	
0	90	100.00	148	100.00	
1	77	85.56	109	73.65	0.031
2	63	70.00	87	58.78	0.083
3	57	63.33	68	45.95	0.009
4	48	53.33	58	39.19	0.033

Reported p-values of two-sided tests for differences in retention rates between dismissed and settled/ongoing actions.

In our analysis below, we study the overall (T=0->T=4) survival rate. In follow-on work, we consider year-to-year survival rates.



	Dismissed		Settled/Ongoing		p-value
Year	Number	Retention	Number	Retention	
		Rate		Rate	
0	90	100.00	148	100.00	
1	77	85.56	109	73.65	0.031
2	63	70.00	87	58.78	0.083
3	57	63.33	68	45.95	0.009
4	48	53.33	58	39.19	0.033

Reported p-values of two-sided tests for differences in retention rates between dismissed and settled/ongoing actions.

In our analysis below, we study the overall (T=0->T=4) survival rate. In follow-on work, we consider year-to-year survival rates.



21/29

We observe the board at T=0 (prior to SFCA filing) and at T=1, 2, 3, 4. We estimate

 $Pr[depart] = \Phi(SFCAOutcome, Alleg, CARA, Size, Age, Tenure, controls) + \epsilon$

where Pr[depart] is the probability that a director seated at T=0 will no longer be seated at T=4. All models are estimated with binomial probit with cluster-robust standard errors.

controls include whether an inside director is CEO, whether an outside director is a member of the audit committee, whether a director is personally named in the SFCA and their voting share.



3

Table 5: Outside director turnover: key marginal effects.

		-	
Variable	[1]	[2]	[3]
Suit Settled/Ongoing+	0.008	0.009	0.002
	(0.025)	(0.025)	(0.030)
Restatement	0.082	0.082	0.082
of financials (0/1) +	(0.032)***	(0.032)***	(0.032)***
Voting Share (%)	0.001	0.001	0.001
	(0.008)	(0.008)	(0.008)
Cumulative Abnormal	-0.023	-0.023	-0.023
Returns	(0.017)	(0.017)	(0.017)
Member Audit Comm. (0/1) +		-0.017	
		(0.024)	
Settled/Ongoing x			0.012
Audit Comm. (0/1) +			(0.031)

Dependent variable: director's Pr[depart] between T=0 and T=4.

+: marginal effect for discrete change of dummy variable from 0 to 1.



Table 6: Inside director turnover: key marginal effects.

Variable	[1]	[2]	[3]
Suit Settled/Ongoing+	0.095	0.101	0.015
	(0.035)***	(0.035)***	(0.042)
Restatement	0.180	0.177	0.171
of financials (0/1) +	(0.041)***	(0.041)***	(0.041)***
Voting Share (%)	-0.005	-0.006	-0.006
	(0.002)***	(0.002)***	(0.002)***
Cumulative Abnormal	-0.071	-0.069	-0.068
Returns	(0.022)***	(0.022)***	(0.022)***
Named as Defendant (0/1) +		0.147	
		(0.041)***	
Settled/Ongoing x			0.172
Named Def. (0/1) +			(0.046)***

Dependent variable: director's Pr[depart] between T=0 and T=4.

+: marginal effect for discrete change of dummy variable from 0 to 1.



(I) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1))

Table 9: Inside director turnover: key marginal effects.

Variable	CEOs	Other	Other
Suit Settled/Ongoing+	0.159	0.092	0.019
	(0.073)**	(0.047)**	(0.050)
Restatement	0.203	0.219	0.208
of financials $(0/1) +$	(0.086)**	(0.053)***	(0.053)***
Other GAAP (0/1) +	0.105	0.122	0.117
	(0.086)	(0.054)**	(0.054)**
Cumulative Abnormal	-0.046	-0.079	-0.079
Returns	(0.045)	(0.030)***	(0.030)***
Named as Defendant (0/1) +		0.185	
		(0.049)***	
Settled/Ongoing x			0.234
Named Def. (0/1) +			(0.059)***

Dependent variable: director's Pr[depart] between T=0 and T=4.

+: marginal effect for discrete change of dummy variable from 0 to 1.



(I) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1)) < ((1))

No significant relationship is found for outside directors (Table 5).

- Turnover rates of *inside directors* following filing of a SFCA are substantially higher when the action is not dismissed by the court.
- Among insiders, turnover rates for CEOs and directors named as defendants are even more sensitive to outcome of the suit.
- Turnover rates are significantly higher for named defendants, consistent with the hypothesis of disciplinary action.
- Pooling SFCAs that are dismissed with those that are not dismissed (as in the prior literature) will dilute the observed impact of the alleged wrongdoing on board turnover.



26/29

э

- No significant relationship is found for outside directors (Table 5).
- Turnover rates of *inside directors* following filing of a SFCA are substantially higher when the action is not dismissed by the court.
- Among insiders, turnover rates for CEOs and directors named as defendants are even more sensitive to outcome of the suit.
- Turnover rates are significantly higher for named defendants, consistent with the hypothesis of disciplinary action.
- Pooling SFCAs that are dismissed with those that are not dismissed (as in the prior literature) will dilute the observed impact of the alleged wrongdoing on board turnover.



э

- No significant relationship is found for outside directors (Table 5).
- Turnover rates of *inside directors* following filing of a SFCA are substantially higher when the action is not dismissed by the court.
- Among insiders, turnover rates for CEOs and directors named as defendants are even more sensitive to outcome of the suit.
- Turnover rates are significantly higher for named defendants, consistent with the hypothesis of disciplinary action.
- Pooling SFCAs that are dismissed with those that are not dismissed (as in the prior literature) will dilute the observed impact of the alleged wrongdoing on board turnover.



э

- No significant relationship is found for outside directors (Table 5).
- Turnover rates of *inside directors* following filing of a SFCA are substantially higher when the action is not dismissed by the court.
- Among insiders, turnover rates for CEOs and directors named as defendants are even more sensitive to outcome of the suit.
- Turnover rates are significantly higher for named defendants, consistent with the hypothesis of disciplinary action.
- Pooling SFCAs that are dismissed with those that are not dismissed (as in the prior literature) will dilute the observed impact of the alleged wrongdoing on board turnover.



э

- No significant relationship is found for outside directors (Table 5).
- Turnover rates of *inside directors* following filing of a SFCA are substantially higher when the action is not dismissed by the court.
- Among insiders, turnover rates for CEOs and directors named as defendants are even more sensitive to outcome of the suit.
- Turnover rates are significantly higher for named defendants, consistent with the hypothesis of disciplinary action.
- Pooling SFCAs that are dismissed with those that are not dismissed (as in the prior literature) will dilute the observed impact of the alleged wrongdoing on board turnover.



- The nature of the allegations is an important determinant of board turnover. Inside director turnover rates are significantly higher when a restatement is involved.
- Some evidence that more concentrated external equity ownership provides greater discipline (Table 10).
- We observe greater board independence among firms who have settled SFCAs (insider representation fell by 13.4%, vs. 9.6% for dismissed actions).
- Researchers should control for both the *nature* and *strength* of allegations when investigating the impact of private securities litigation on corporate governance.



Key findings

- The nature of the allegations is an important determinant of board turnover. Inside director turnover rates are significantly higher when a restatement is involved.
- Some evidence that more concentrated external equity ownership provides greater discipline (Table 10).



3

Key findings

- The nature of the allegations is an important determinant of board turnover. Inside director turnover rates are significantly higher when a restatement is involved.
- Some evidence that more concentrated external equity ownership provides greater discipline (Table 10).
- We observe greater board independence among firms who have settled SFCAs (insider representation fell by 13.4%, vs. 9.6% for dismissed actions).
- Researchers should control for both the *nature* and *strength* of allegations when investigating the impact of private securities litigation on corporate governance.



3

Key findings

- The nature of the allegations is an important determinant of board turnover. Inside director turnover rates are significantly higher when a restatement is involved.
- Some evidence that more concentrated external equity ownership provides greater discipline (Table 10).
- We observe greater board independence among firms who have settled SFCAs (insider representation fell by 13.4%, vs. 9.6% for dismissed actions).
- Researchers should control for both the *nature* and *strength* of allegations when investigating the impact of private securities litigation on corporate governance.



< ロ > < 同 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < 回 > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ >

Conclusions:

- Our empirical findings are consistent with the hypothesis that SFCAs with greater merit, in terms of their outcome, affect corporate governance.
- Our findings are also consistent with the hypothesis that firms apply discipline to those most closely associated with wrongdoing.
- Directors most likely to be disciplined are inside directors, particularly CEOs.



Conclusions:

- Our empirical findings are consistent with the hypothesis that SFCAs with greater merit, in terms of their outcome, affect corporate governance.
- Our findings are also consistent with the hypothesis that firms apply discipline to those most closely associated with wrongdoing.
- Directors most likely to be disciplined are inside directors, particularly CEOs.



Conclusions:

- Our empirical findings are consistent with the hypothesis that SFCAs with greater merit, in terms of their outcome, affect corporate governance.
- Our findings are also consistent with the hypothesis that firms apply discipline to those most closely associated with wrongdoing.
- Directors most likely to be disciplined are inside directors. particularly CEOs.



< ロ > < 同 > < 回 > < 回 >

The major methodological innovation of our findings: prior studies which have pooled lawsuits ignoring their disposition (settled vs. dismissed) have estimated biased effects of SFCAs on corporate governance and board turnover.

By focusing only on firms who have been sued and separating cases based on their *outcome*, we have been able to generate more reliable estimates of these effects, and of the disciplinary power of private lawsuits on corporate performance.



The major methodological innovation of our findings: prior studies which have pooled lawsuits ignoring their disposition (settled vs. dismissed) have estimated biased effects of SFCAs on corporate governance and board turnover.

By focusing only on firms who have been sued and separating cases based on their *outcome*, we have been able to generate more reliable estimates of these effects, and of the disciplinary power of private lawsuits on corporate performance.

