2022

Coalitions among Plaintiffs' Attorneys in Securities Class Actions

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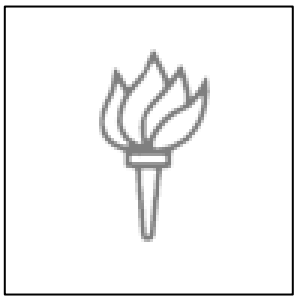
LAW AND ECONOMICS PAPER SERIES
WORKING PAPER NO. 20-42



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July 2020

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May 2020

Abstract: This paper examines contests among plaintiffs' firms to become lead counsel in securities fraud class actions. We study lead plaintiff appointments in all federal securities class actions involving a disclosure claim from 2005 to 2016. We find that law firms' decisions to combine correspond primarily with the existence of relationships—either with clients or between firms—rather than case characteristics. In the case of initial motions, the presence of a relationship between attorney firms and certain institutional investor movants for lead plaintiff corresponds with motions that propose multiple lead counsel. We also find that although the typical class action has several lead plaintiff motions, many of these motions will either withdraw or combine before the judge chooses the lead plaintiff and lead counsel. When motions combine, the number of selected lead counsel typically increases. The existence of prior relationships between law firms corresponds with the decision to withdraw or combine. Finally, we find that the correspondence of prior relationships between law firms on decisions to withdraw or combine does not increase with our proxies for the importance of synergies between law firms.

1. Introduction

The Private Securities Litigation Reform Act of 1995 (PSLRA) revolutionized the competitive landscape for plaintiffs' lawyers in securities fraud class actions. Prior to the enactment of the PSLRA, attorneys jockeyed for the lucrative position of lead counsel by being the first to file a complaint, creating an unseemly race to the courthouse. Critics alleged that attorneys were not adequately investigating claims before filing in their haste to lodge the initial complaint, resulting in cut-and-paste pleadings with little regard for the merits of the allegations.

The PSLRA dampened the race to the courthouse by creating a more orderly process for awarding lead counsel status in securities fraud class actions. Under the new statutory regime, the first plaintiff to file a complaint is required to provide notice of the suit, with a description of its allegations, in a "widely circulated national business-oriented publication or wire service."[1] Other potential class members then have sixty days to file a motion to be appointed as lead plaintiff and to have their choice of counsel approved as the lawyers for the class. The PSLRA instructs the district court hearing the case to select the most adequate plaintiff from among those shareholders who have filed a complaint or a motion. The most adequate plaintiff is presumed to be the "person or group of persons" which "in the determination of the court, has the largest financial interest in the relief sought by the class" and otherwise satisfies Fed. R. Civ. P. 23.[2] That presumption is rebuttable, but only upon a showing that the presumptive lead plaintiff "will not fairly and adequately protect the interests of the class" or "is subject to unique defenses that render such plaintiff incapable of adequately representing the class."[3] After appointment as lead plaintiff, "the most adequate plaintiff shall, subject to the approval of the court, select and retain counsel to represent

[1] Exchange Act § 21D(a)(3)(A)(i).
[2] Exchange Act § 21D(a)(3)(B)(iii)(I).
[3] Exchange Act § 21D(a)(3)(B)(iii)(II).

the class."[4] In most cases, judges defer to the lead plaintiff's selection of law firm. Thus, for plaintiffs' attorneys seeking to be appointed to the potentially lucrative position of lead counsel in a securities class action, it is essential to secure as a client the "person or group of persons" with "the largest financial interest" in the potential recovery.

That said, the seemingly objective "largest financial interest" standard leaves room for strategic maneuvering by plaintiffs' lawyers, either before or after a case has been filed. In particular, because the PSLRA allows a "group of persons" to serve as lead plaintiff, plaintiffs' lawyers may join forces to form a group of plaintiffs whose aggregate losses sum to the "largest financial interest" among the lead plaintiff candidates. Alternatively, law firms may cooperate by allocating the lead counsel role in different cases, with one firm stepping aside in the first case with the understanding that they will be given a clear path to lead counsel status in a subsequent case. These coalitions can be essential to securing prime lead counsel appointments, but the topic of coalition building among firms has received relatively little scholarly attention. This paper attempts to fill that gap, analyzing lead plaintiff appointments in all federal securities class actions involving a disclosure claim from 2005 to 2016.

Why do some securities class actions have one lead counsel, while others have multiple firms representing the class? In a companion paper, we find that multiple lead counsel correlate with higher attorneys' fees.[5] Do those higher fees generate benefits for the class? If multiple lead counsel complement each other's strengths, then having more than one lead counsel may promote better prosecution of a securities class action. If multiple lead counsel do not produce more efficient prosecution, but only correspond to higher attorney fees, then the presence of multiple lead counsel may be more about increasing profits and decreasing risk for plaintiffs' attorneys.

[4] Exchange Act § 21D(a)(3)(B)(v).
[5] Working Hard or Making Work, Plaintiffs' Attorneys Fees in Securities Class Actions (Working Paper, 2020).

This paper explores these issues by analyzing when law firms join together to serve as co-lead counsel. Specifically, it addresses two related, sequential questions:

1) When do firms combine to form groups prior to filing a motion to serve as lead plaintiff?
2) Having initially filed separate motions to serve as lead plaintiff, when do firms combine motions or withdraw from the competition?

Although most initial motions for lead plaintiff propose only a single lead counsel firm, a minority of the initial motions propose multiple lead counsel. We find that case characteristics, such as the types of allegations in the complaint or the amount at stake, do little work in explaining why some initial motions come with multiple proposed lead counsel. Instead, the decision to propose multiple lead counsel in an initial motion for lead plaintiff corresponds with the existence of relationships between institutional investors and specific plaintiffs' attorney firms.

Relationships also matter when it comes to combining or withdrawing after the initial round of lead plaintiff motions. Although there are often several initial lead plaintiff motions, we find that many of these motions will either withdraw or combine before the judge chooses the lead plaintiff and lead counsel. When motions combine, the number of selected lead counsel typically increases. We again find that the characteristics of the case are largely unimportant to the decision to withdraw or combine rather than compete. The existence of prior relationships between law firms, however, is significantly correlated with the decision to withdraw or combine. We also find that the influence of the prior relationships between law firms on decisions to withdraw or combine does not increase with our proxies for the importance of synergies between law firms. Thus, synergies do not appear to drive the presence of multiple lead counsel. Finally, we find some evidence that plaintiffs' firms trade off the lead counsel position across cases.

We proceed as follows. Part 2 reviews the relevant literature and develops our hypotheses. Part 3 describes out dataset and variables and presents our empirical tests. Part 4 concludes with potential policy implications of our findings.

2. Prior Literature and Hypotheses

2.1. Prior Literature

Since the enactment of the PSLRA, many researchers have studied the lead plaintiff appointment process and its impact on securities class actions. Most of this research has focused on the role of institutional investors as lead plaintiffs, finding significant evidence that institutional investors reduce agency costs and lead to better outcomes in these cases. Cox, Thomas, and Bai (2008), for example, report that institutional investors who serve as lead plaintiffs are more likely to obtain larger settlements, even controlling for provable losses, market capitalization, class period length, and the presence of an SEC investigation, especially when the institutional investor is a public pension fund or labor union. Similarly, Perino (2012) finds that cases with public pension lead plaintiffs have larger recoveries and lower fee awards than cases with other types of lead plaintiffs, even controlling for case characteristics. He also finds that fee requests by lead plaintiffs have declined generally over time, suggesting that lower fees negotiated by institutional investors have reduced the going rate in cases with individual investor lead plaintiffs as well. Cheng et al. (2010), however, find that courts are less likely to dismiss suits filed by institutional investors, suggesting a selection effect in the lawsuits that these investors choose to bring that may affect the findings in some studies.

There is less research on the impact of multiple investors or multiple law firms joining together to litigate a securities class action. Choi (2011) examined the relationship between different types of investors in the lead plaintiff appointment process. Using data from securities class actions filed between 2003 and 2005, his findings suggest that lead plaintiff applicants form groups based on strategic concerns,

rather than a desire for greater coordination or efficiency. Institutional investors, for example, are more likely to join together as co-lead plaintiffs when there are multiple competing motions for lead plaintiff. He also found that the law firms that most often served as lead counsel in a securities class action did not have significantly lower reported hours than other firms, even though these firms' experience should give them greater expertise and economies of scale.

Choi's study also found that the dynamics between competing motions for lead plaintiff may affect the number of hours that lead counsel works, as well as the fees that they ultimately receive. More competition at the lead plaintiff stage is correlated with lead counsel working more hours and receiving slightly lower attorneys' fees, suggesting that competition among investors for the lead plaintiff spot may reduce attorney agency costs. Similarly, lead plaintiff groups that form when there are multiple competing motions are correlated with greater attorney hours, but not significantly greater attorneys' fees. In contrast, lead plaintiff groups that form when there are not any competing motions have no significant impact on attorney hours or fees. Finally, Choi found that lead plaintiff groups that include only institutional investors are correlated with lower fees than other types of lead plaintiff groups, supporting the view that institutional investors that are willing to join together may also be more willing to negotiate more with plaintiffs' attorneys over fees. These findings suggest that certain types of lead plaintiff groups can reduce attorney agency costs.

Choi and Thompson (2006) examined how the behavior of plaintiffs' lawyers changed after the enactment of the PSLRA. Examining 419 securities class actions filed between 1990 and 2000, they found that the PSLRA increased the likelihood that plaintiffs' law firms will join together as co-lead counsel. Their data revealed that, while 31.9 percent of cases during the pre-PSLRA period had a sole lead counsel, only 19.6 percent of cases in the post-PSLRA period had a sole lead counsel. They also reported that, in the immediate aftermath of the PSLRA's enactment, larger plaintiffs' firms became more willing to join with lower-ranked firms as co-lead counsel, likely in an effort to build a group of investors with the largest

financial interest in the lead plaintiff process. This collaboration largely ended after 2000 as larger plaintiffs' firms started to develop repeat relationships with specific institutional investors.

In their study of fee awards in securities class actions, Baker, Perino, and Silver (2015) found that greater competition among lead plaintiff applicants affects fee awards. Overall, they found that 71 percent of the cases had more than one motion to be appointed lead plaintiff, with a mean of 3.22 motions per case. The cases with more competition at the lead plaintiff stage resulted in lower fees, although the magnitude of this impact was smaller than the magnitude of other variables in their study such as whether there was an ex ante fee agreement between the lead plaintiff applicant and their counsel and whether the lead plaintiff was a public pension fund. They also found that the fee requests were lower as a percentage of the settlement in districts that handle a high volume of securities class actions, such as the Central and Northern Districts of California and the Southern District of New York.

A few studies have also examined the interplay between law firms during the lead plaintiff appointment process in similar types of litigation. Erickson, for example, conducted a quantitative and qualitative examination of the process of appointing lead counsel in shareholder lawsuits filed under state law. Reviewing leadership orders in more than 200 shareholder lawsuits filed in the Delaware Court of Chancery, she found that 85 percent of the cases included two or more firms sharing the lead counsel position. The leadership structure in most cases also included two or three additional law firms that held a position other than lead counsel. The qualitative interviews of attorneys who regularly represent plaintiffs in these suits revealed that these attorneys did not think these complicated leadership structures were necessary to effectively litigate the cases; they agreed to them because judges pressured the firms to reach a mediated solution.

Other than the Erickson study, these studies focus on the lead plaintiff process in securities class actions, primarily examining the effect of multiple lead plaintiffs. For the most part, however, they do not

address the impact of multiple plaintiffs' law firms on agency costs in these cases. The number of plaintiffs' law firms in a given securities class action does not necessarily track the number of lead plaintiffs: multiple lead plaintiffs may hire a single law firm to represent them, or a single lead plaintiff may hire multiple lead counsel. Focusing primarily on lead plaintiffs ignores the underlying relationships among the law firms in these cases, as well as the potential impact of these relationships on the agency costs inherent in these lawsuits. This study thus builds on the prior literature by focusing specifically on the relationship between law firms vying to serve as lead counsel in securities class actions.

2.2. Hypotheses

Lawyers have argued in their lead plaintiff motions that multiple law firms add value for the class. Value might come from greater financing capability, expertise, or economies of scale. Given the relatively lax monitoring by lead plaintiffs, however, it is also possible that rival law firms join together to reduce competition for the lead counsel spot. This effort to limit competition could occur either before the filing of suit, or after filing during the process for selecting the lead plaintiff(s). We start our analysis by examining why some initial motions are filed with more than one proposed lead counsel firm at the outset of the case. We then turn to the lead plaintiff selection process, analyzing how the competition after the filing of the initial motions for lead plaintiff can lead to an increase in the number of selected lead counsel firms.

2.2.1. Initial Motions

The first stage of the lead plaintiff selection process is the filing of initial motions. In some cases in which the court appointed multiple lead counsel, the lead plaintiff proposed multiple lead counsel as part of their initial motion. Is this choice driven by case characteristics (complicated facts, higher stakes, etc.), or instead, relationships between the law firms and proposed lead plaintiff(s)? We posit that case characteristics are secondary, and that a motion with multiple lead counsel reflects an effort by the law firms to secure lead plaintiff status by aggregating a group of lead plaintiffs to show larger losses. If each

of the law firms has developed relationships with particular clients, then combining as movants, rather than competing for lead plaintiff status, may benefit the law firms. It is not clear, however, that the class as a whole benefits when law firms join forces. The class as a whole might be better off if the lead plaintiff instead required the law firms to compete on the fee percentage.

In some cases, however, a law firm may have cultivated a relationship with multiple institutional investors who have suffered losses from the alleged fraud. In these cases, the law firm may create its own plaintiff group to seek lead plaintiff status rather than combining with other firms to create a lead plaintiff group. In those cases, we predict that fewer lead counsel will be selected.

> **Hypothesis 1 (Investor-Attorney Relationship):** When multiple movants in the same motion have a repeat relationship with the same law firm, the number of selected lead counsel will be lower than cases in which multiple movants do not share a pre-existing relationship with the same law firm.

2.2.2. Competition Among Movants

Our next set of hypotheses looks at the competition among movants for lead plaintiff status after the initial set of motions is filed. In some cases, a movant for lead plaintiff may choose to withdraw their motion. In other cases, movants may decide to combine their motions into one unified motion for lead plaintiff. Typically, when two motions combine, the attorney firms associated with the separate motions are combined as a proposed co-lead counsel. Movants may also decide to fight for lead plaintiff status up until the judge rules on the competing motions.

What drives the choice to withdraw, combine, or fight? Although it is possible that lead plaintiff movants are making decisions based on their relative losses and the complexity or legal needs of individual cases, we think it more likely that these decisions are driven by relationships among law firms separate from the characteristics of the case. The number of law firms that represent the plaintiffs' side in securities class actions is limited and they are repeat players. Indeed, judges frequently cite experience with securities class actions as an important criterion for appointing lead counsel. We posit that these

relationships among law firms will sometimes lead law firms to combine to seek lead plaintiff status for their clients, and in other situations will lead the law firms to allocate representation in class actions over time. This latter strategy of reciprocity is more likely for law firms that have significant stables of institutional clients that are likely to have substantial losses in future cases.

> **Hypothesis 2 (Law Firm Relationship):** Relationships between law firms, and not the characteristics of the case, affect how competing firms will respond after the initial set of lead plaintiff motions.
>
> **Hypothesis 3 (No Synergy):** Possible synergies between law firms with a prior relationship do not affect how competing firms will respond after the initial set of lead plaintiff motions.
>
> **Hypothesis 4 (Tit-for-Tat):** Some law firms with strong relationships allocate the opportunity to serve as lead counsel in securities class actions across time.

3. Sample and Empirical Tests

3.1 Sample Description

To test our hypotheses, we collected data from lead plaintiff motions and rulings available on Bloomberg Law for every federal securities class action involving a disclosure claim from 2005 to 2016. We collected the names of the proposed lead plaintiff(s) for each initial motion, whether the plaintiffs were institutional investors, their claimed losses, and the law firm(s) filing the motion. We coded for both the initial number of motions filed and the final number of motions ruled on by the judge. From the court's lead plaintiff ruling, we collected the lead plaintiff(s) appointed as well as the name of the law firm(s) selected to represent the class. We also coded the allegations from the final amended complaint. To capture the potential stakes in the litigation, we collected the market capitalization of the defendant issuer on the last day of the class period. In a companion paper, we found that greater market capitalization positively correlates with potential damages and the expected settlement amount.[6] Comparing the settlement amounts and fees for our sample, we find that multiple lead counsel are associated with larger settlement amounts (a mean of $59 million compared with $31 million for single

[6] Working Hard or Making Work, Plaintiffs' Attorneys Fees in Securities Class Actions (Working Paper, 2020).

firm cases; difference significant at the 5% level) and correspondingly larger fee awards ($9.7 million compared with $5 million for single firms cases; difference significant at the 1% level). These results set the foundation for this paper, which explores the formation of multiple lead counsel coalitions.

3.2. Initial Motion Tests

What do the initial motions for lead plaintiff look like? If plaintiffs expect that multiple lead counsel firms are valuable in prosecution of litigation, we anticipate this will be reflected in the initial motion for lead plaintiff. We should see multiple lead counsel, not resulting from the competitive process between movants for lead plaintiff, but instead up front in the initial motion. Table 1 presents descriptive statistics regarding the lead plaintiff motions for the initial motions in our sample. The variables are defined in the Appendix.

[Insert Table 1 here]

The mean number of law firms proposed by the movant is 1.188, suggesting that multiple law firms are not the norm. In 81.8% of the initial motions, only a single attorney firm is proposed as lead counsel. At the initial filing, most movants represent in their motion that a single law firm is sufficient to prosecute the class action. In contrast, for the selected lead plaintiffs, the mean number of selected lead counsel firms is 1.329 and 70% of the class actions in our sample have a single selected lead counsel firm. This increase in the average number of firms between filing and selection is consistent with coalition building during the contest for lead plaintiff. We examine this coalition building in the next section.

We are particularly interested in repeat relationships among institutional investors and law firms. Looking at the identity of the movants, institutional investors are slightly more than half of the movants (0.552). To capture the relationship between institutional investor movants and attorney firms, we created two indicator variables, Mode Movant, for the institutional investors in the sample, and Mode Attorney, for the law firms that represent them. To construct these variables, we tabulate a list of the

institutional investors in motions for lead plaintiff that are the sole movant in our dataset. If the institution proposes the same lead counsel more than 50% of the time in these sole movant motions (with a minimum of two motions), we code the institution as a Mode Movant and the associated law firm the Mode Attorney. By looking only at motions with a single movant for this purpose, we can be confident that there is a relationship between the specific institutional investor and the law firm. For example, if Alaska Electrical Pension Fund is an institutional investor movant, we look at all initial motions where Alaska Electrical Pension Fund is the sole movant for lead plaintiff. We then tabulate the law firms that are associated with these motions. If a law firm, for example, Labaton Sucharow, is associated with more than 50% of these other motions and there are at least two such motions, we designate Alaska Electrical Pension Fund a Mode Movant and Labaton Sucharow as the associated Mode Attorney. Our analysis assumes that the relationship between Mode Attorney firms and Mode Movants is long-term and thus constant throughout our dataset. In our sample 28.2% of the institutional investors have such a relationship with a law firm, so repeat relationships are common, if not the norm.

We posited in Hypothesis 1 (Investor-Attorney Relationship) that there would be fewer law firms named when multiple movants in the same motion have a repeat relationship with the *same* law firm. To test this hypothesis, we focus on motions with only two mode movants and only three mode movants with no other movants. We examine three possible situations involving mode movants: 1) the mode movants have the same mode attorney, 2) each mode movant has a different mode attorney, and 3) partial overlap, with two out of the three have the same mode attorney. Table 2 shows the average number of proposed lead counsel in each situation.

[Insert Table 2 here]

Looking at initial motions with only two mode movant and initial motions with only three mode movants, we see that the number of proposed lead counsel goes down when the mode movants have the

same mode attorney, which is consistent with Hypothesis 1 (Investor-Attorney Relationship). For initial motions with only two mode movants, when the two have the same mode attorney then the mean number of proposed lead counsel is 1.02 compared with a mean proposed lead counsel of 1.46 when the two mode movants have different mode attorneys (difference significant at the 1% level).[7] For our sample, 97.4% of the motions that have only two mode movants with the same mode attorney firm have only one attorney firm as the proposed lead counsel in the motion. For initial motions with only three mode movants, when the three have the same mode attorney then the mean number of proposed lead counsel is 1.08 compared with 2.00 mean proposed lead counsel when all three mode movants have different mode attorneys (difference significant at the 1% level).[8] For our sample, 92.3% of motions that have only three mode movants with the same mode attorney firm have only one attorney firm as the proposed lead counsel. This is consistent with mode attorneys bundling plaintiffs as lead plaintiff groups to improve their chances of being selected as lead counsel.

To further assess the incidence of multiple lead counsel in initial motions, we create an indicator variable, Multiple Proposed Lead Counsel, which equals 1 if an initial motion for lead plaintiff proposes more than one lead counsel and 0 otherwise. We use Multiple Proposed Lead Counsel as the dependent variable in the following OLS linear probability regression estimated on case-motion level data with errors clustered by securities class action.

$$\begin{aligned}\text{Prob(Multiple Proposed Lead Counsel}_i) = {} & \alpha + ß_1\text{Number Movants}_i \\ & + ß_2\text{Number Institutional Movants}_i + \\ & + ß_3\text{Overlap}_i + ß_4\text{Movant Losses}_i \\ & + ß_5\text{Number Initial Motions}_i\end{aligned}$$

[7] We also compared initial motions with two mode movants and possibly other movants where the two mode movants have the same mode attorney and where the two do not share the same mode attorney. Where the two mode movants share the same mode attorney, the mean number of proposed lead counsel is 1.15 compared with 1.64 when the two mode movants have different mode attorneys (difference significant at the 1% level).

[8] We also compared initial motions with three mode movants and possibly other movants where the three mode movants have the same mode attorney and where the three all have different mode attorneys. Where the three mode movants share the same mode attorney, the mean number of proposed lead counsel is 1.18 compared with 1.75 when the two mode movants have different mode attorneys (difference significant at the 10% level).

$$+ ß_6 \ln(\text{Market Capitalization})_i$$
$$+ ß_7 SDNY_i + ß_8 NDCal_i + ß_9 CDCal_i$$
$$+ \text{Case Characteristics}$$
$$+ \text{Industry Controls} + \text{Year Effects} + \varepsilon_i$$

For our independent variables, we include the number of movants in the motion (Number Movants), the number of institutional movants (Number Institutional Movants), the number of mode movants with the same attorney (Overlap). If plaintiffs have a relationship with the same firm, there is less incentive to have multiple attorneys. We also include the losses claimed by the movants, and the natural log of the market capitalization of the defendant issuer, measured on the last day of the class period. As discussed above, market cap is a proxy for the potential stakes involved for the attorneys. We include the Number of Initial Motions as a measure of the initial competitive environment for lead plaintiff. This variable may correspond to otherwise unobservable characteristics associated with either the merits of the action or the likelihood of a large settlement.

We include controls for the federal district court in which the class action is filed. Although venue may lie for a securities class action in multiple federal district courts, a handful of courts receive the lion's share of securities class actions. In our dataset, the federal district court for the Southern District of New York had 456 class actions, representing 26.8% of our sample. The next two busiest courts were the Northern District of California (161 cases) and the Central District of California (151 cases). No other district had over 100 cases. Courts with many cases may develop greater expertise in identifying when adding multiple lead counsel is useful for class action litigation. Accordingly, we add indicator variables for the three busiest courts (SDNY, NDCal, CDCal).

We also include controls for the nature of the specific class action (Case Characteristic Controls). The Case Characteristics include the following, all obtained from the last filed complaint:1) Accounting restatement (Restatement); 2) SEC investigation or enforcement action (SEC Action); 3) or other government action (Other Gov Action); 4) termination of a top officer, (Officer Termination); 5) a Section

11 allegation (Section 11); 6) a Section 12 allegation (Section 12); 7) or other allegation is made (Other Allegation); 9) a violation of GAAP accounting without a restatement (Accounting); 10) Merger (Merger); 11) option backdating (Backdating); 12) the late 2000s credit crisis (Credit Crisis); 13) an initial public offering (IPO); and 14) a violation of the Foreign Corrupt Practices Act (FCPA). Although information may come to light after the last filed complaint, the allegations in the complaint reflect the information available to the plaintiffs at the time of filing. We also track from the complaint: 15) the total number of officer and director defendants (Officer-Director); 16) whether an underwriter is a defendant (Underwriter); and 17) whether an accounting firm is a defendant (Accountant). We track those SIC 2-digit industries (SIC 28, SIC 36, and SIC 73) with at least 100 cases in our dataset that have firm defendants that operate in the specific industry (referred to as our "Industry Controls").[9] Lastly, we include year fixed effects. We report the results of the estimation in Model 1 of Table 3.

[Insert Table 3 here]

We see that the number of movants in a motion is positively correlated with the number of law firms proposed as lead counsel in that motion, suggesting that movants often bring their own preferred counsel to the coalition. The coefficient for the number of institutional investors is also positive, and of similar magnitude. Both coefficients are significant at the 1% level. Overlap of attorney choice for the mode movants is negatively related to the number of law firms in the original motions (coefficient significant at the 1% level). This is consistent with less need to coordinate with other law firms if a firm has developed relationships with multiple clients who have claims in that case. The coefficient for the plaintiffs' losses is positively related to the number of firms (coefficient significant at the 10% level), which is consistent with firms coming together in an effort to maximize the alleged losses in their motion.

[9] The three 2-digit SIC codes that we track represent 11.5% (SIC 28), 11.4% (SIC 73), and 9.2% (SIC 36) of those firms in our sample for which we have data on the SIC code.

These findings also suggest that firms are not joining together when there is more at stake. Market capitalization and the Initial Number of Motions, which are proxies for the desirability of the case from the lawyers' perspective, have negative coefficients, suggesting that more desirable cases attract motions with fewer firms per motion. This is consistent with firms having greater incentive to compete, rather than cooperate, in the most lucrative cases.

Other case characteristics are generally not significant. We find no evidence that the number of proposed lead counsel in an initial motion is related to the merits or specific characteristics of the suit. It also bolsters our skepticism that multiple lead counsel reflect a need for resources or expertise. In Model 1 of Table 3, only the coefficients on FDA and Underwriter are significant (at the 5% and 10% levels respectively). In addition, the magnitude of the impact of FDA and Underwriter is smaller than the impact of having mode movants with an overlapping mode attorney firm. An action that involves disclosures relating to the FDA corresponds to a decreased in the probability of multiple proposed lead counsel by 4.05 percentage points measured at the means of all independent variables. Similarly, the presence of an underwriter defendant corresponds to an increased probability of 5.92 percentage points. In contrast, for each institutional movant that share the same mode attorney, the probability of multiple proposed lead counsel decreases by 19.9 percentage points. Overall, the number of law firms named in the initial motions seems to correspond primarily with relationships between the plaintiffs and the law firms that they propose for lead counsel.

To control for all possible case characteristics, we re-estimate Model 1 removing all case specific variables and adding case fixed effects. We report the results of the OLS linear probability regression in Model 2 of Table 3 again clustering errors by case. The results in Model 2 are consistent with Model 1. Although the coefficient on the alleged losses is no longer significant, the other coefficients remain qualitatively the same. In particular, the coefficient on Overlap is negative and significant at the 1% level. This is consistent with relationships between attorney firms and institutional movants driving whether a

motion has multiple proposed lead counsel, rather than the characteristics of the case, consistent with Hypothesis 1 (Investor-Attorney Relationship).

3.2. Consolidation Tests

3.2.1 Multiple Lead Counsel

We now look at coalition building between the time the initial motion is filed and the court's appointment of the lead plaintiff. What happens to motions after they are filed? To analyze this question, we identify a "dominant" motion for each case, which is the motion that is actually selected as lead plaintiff. We refer to the non-dominant motions as the "competing" motions. We assume that the movants can predict accurately which motion has the highest likelihood of being selected. We use the motion that is actually selected as a proxy for this prediction. If there is more than one motion that is selected, we pick the one with the highest losses among the selected motions as the "dominant" motion. Table 4 reports case-level summary statistics.

[Insert Table 4 here]

Table 4 shows that almost half of the original motions filed are no longer before the court by the time the judge selects among the lead plaintiff candidates. Table 4 sheds light on the attrition by tabulating the outcomes for the non-dominant motions (referred to as the "competing" motions). Of the motions that fall aside (1.949 motions on average), 5.0% (or 0.098) combine with the dominant motion and are selected as co-lead counsel with the dominant law firm, 0.4% (or 0.007) combine with the dominant motion, but are rejected as co-lead counsel by the court, 65.5% (or 1.277) are withdrawn entirely, and 29.1% (or 0.567) fight up to the court's lead plaintiff decision, but lose. These numbers suggest that contestants for lead plaintiff status can predict outcomes of many contests for lead plaintiff status and avoid wasting effort on motions that are likely to lose.

Who prevails in this jostling for the lead plaintiff position? In most cases – 87.4% – the motion with the highest loss among the initial motions is selected as lead plaintiff. In a non-trivial number of cases, however, various challenges and combinations displace the initial front runner.

Do these combinations to win lead plaintiff status affect the number of law firms selected as lead counsel? To answer that question, we use whether the court appoints multiple lead counsel (Multiple Lead Counsel) as the dependent variable in the following OLS linear probability regression, estimated on case level data with robust standard errors:

$$\begin{aligned}\text{Prob(Multiple Lead Counsel}_i) = {} & \alpha + ß_1\text{Number Initial Motions}_i \\ & + ß_2\text{Motion Reduction}_i + ß_3\text{Number Lead Plaintiffs}_i \\ & + ß_4\text{Number Inst Lead Plaintiffs}_i \\ & + ß_5\text{Market Capitalization}_i + ß_6\text{SDNY}_i + ß_7\text{NDCal}_i \\ & + ß_8\text{CDCal}_i + \text{Case Characteristics} \\ & + \text{Industry Controls} + \text{Year Effects} + \varepsilon_i\end{aligned}$$

For our independent variables, we include the initial number of motions (Number Initial Motions) and the percentage reduction in motions up to the judge's lead plaintiff decision (Motions Reduction). We calculate Motions Reduction as the difference between the initial number of motions and the final number, divided by the initial number. We also include the number of plaintiffs appointed by the court as lead plaintiff (Number Lead Plaintiffs) and the number of institutional lead plaintiffs appointed by the court (Number Inst Lead Plaintiffs) and the log of Market Capitalization. We include indicators for the three district courts in our sample with the greatest number of securities class action filings (SDNY, NDCal, and CDCal). We also include case characteristic variables to control for the merits (Case Characteristics). We present the results of this estimation as Model 1 of Table 5.

[Insert Table 5 here]

The coefficient for the initial number of motions is negative and significant at the 1% level. Greater initial competition for lead plaintiff corresponds to a lower likelihood of multiple lead counsel. In contrast,

the coefficients for Motion Reduction and Number Lead Plaintiffs are positive and significant at the 1% levels. These results are consistent with law firms combining forces when confronted with a competitive battle for lead plaintiff to ensure that they are not excluded altogether from the lead counsel spot. Market Capitalization is also positive and significant, although at only the 10% level. These results indicate that, although judges ultimately decide how many law firms to appoint to the lead counsel role, the maneuvering by the law firms may also influence the court's decision. These law firms can increase their chances of being appointed lead counsel by combining with rival law firms.

To get an alternative lens on the effect of combination on lead counsel rulings, in Model 2 of Table 5 we remove Number Initial Motions and Motion Reduction and add variables for the number of competing motions in the class action that made specific decisions to Combine, Combine-Fail (which involves a competing motions that combined with the dominant motion but the judge rejected either a proposed lead plaintiff or lead counsel), Withdraw and Fight. In this specification, the coefficient for Combine is positive and significant at the 1% level. When a dominant and competing motion combine, this combination corresponds with a higher likelihood of multiple lead counsel. Notably, many of these motions had only one plaintiff firm at the start of the litigation. These movants implicitly represented that the firm was capable of prosecuting the class action on its own. Competition among motions, however, led to the combination of motions with a corresponding increase in the number of attorney firms that are selected as lead counsel. The coefficients on Withdraw and Fight are negative and significant at the 1% and 5% levels, respectively. As expected, when competing motions withdraw, the law firm with the competing motion typically does not go on to become one of the lead counsel firms. Similarly, when a competing motion fights and loses, the law firm for the losing motion also does not go on to become one of the lead counsel firms.

Do the characteristics of the case affect the number of lead counsel selected? In Models 1 and 2 of Table 5 the coefficients for the Case Characteristics variables were generally insignificant, with minor

exceptions. Only the coefficients for Officer Termination and Accountant Defendant are significant in both models. In addition, Merger is significant at the 5% level in Model 2. The magnitude of the probability impact of the case characteristic variables is also small. The marginal increase in the likelihood of multiple lead counsel with each competing motion that combines with the dominant motion is equal to 51% in Model 2. In contrast, none of the case characteristic variables corresponds to a change of greater than 13% in the probability of multiple lead counsel.

Overall, we conclude that the characteristics of the case are not strongly correlated with the selection of multiple lead counsel, consistent with Hypothesis 2 (Law Firm Relationship). Instead, the most important correlation appears to be with the number of lead plaintiffs selected and whether previously separate motions for lead plaintiff have been combined into a unified motion.

3.2.2. Analysis of Competing Motions for Lead Plaintiff

Recognizing that the movants' actions vis-à-vis each other affect the ultimate ruling by the court, what prompts these actions? When do movants withdraw or combine before the court's decision? To shed light on this issue, we focus on the interaction between competing motions and the dominant motion for each case. For our analysis we go to the case-motion level of data and focus only on the competing motions, dropping the dominant motion. We refer to this as the "case-competing motion" level of data. We focus on the relationship between the attorney firms associated with each competing motion in a class action and the attorney firms in the dominant motion. The variables used in the competing motion level of analysis, as well as relevant descriptive data,are reported in Table 6.

[Insert Table 6 here]

For each attorney in the dominant motions and each attorney in the competing motions we construct attorney firm pairs. For example, if we had the following motions in a case:

Dominant motion: Labaton Sucharow; Milberg Weiss
Other Motion #1: Chitwood Harley

Other Motion #2: Robbins Geller

We would then construct the following pairs:

Labaton Sucharow—Chitwood Harley
Labaton Sucharow—Robbins Geller
Milberg Weiss—Chitwood Harley
Milberg Weiss—Robbins Geller

For each pair we assign an outcome based on what happens to the other motion. If Other Motion #1 withdraws then

Labaton Sucharow—Chitwood Harley = withdraw
Milberg Weiss—Chitwood Harley = withdraw

For each attorney firm pair we then construct measures of the prior experience of the attorney firms and then average the measures for all pairs for the competing motion in question and the dominant motion to construct a prior relationship measure. Unlike for relationships between institutional investors and plaintiffs' law firms which tend to be long term and durable, we conjecture that how plaintiffs' law firms interact with one another depends on the relatively immediate history of their interaction in prior cases. Accordingly, for each case in our dataset, we look at the interaction between dominant and competing motion plaintiffs' law firms in the three years prior to the filing date of that specific case. Because our dataset begins in 2005, we only construct our measures for cases filed after 2007.

Our first measure looks at whether the dominant and competing attorney firms were proposed as co-lead counsel in an *initial* motion for lead plaintiff at least once in the prior three years. We define Prior Cooperation as equal to 1 if any of the attorney firm pairs between the dominant motion and a particular competing motion joined together at least once as proposed co-lead counsel in an initial motion for lead plaintiff during the three years prior that case. For example, if Labaton Sucharow-Chitwood Harley and Milberg Weiss-Chitwood Harley are the two attorney firm pairs for a dominant motion and a specific competing motion in the class action in question, we assign a value of 1 to Prior Cooperation if Labaton

Sucharow-Chitwood Harley or Milberg Weiss-Chitwood Harley are proposed as co-lead counsel in at least one initial motion in the prior three years. We conjecture that only firms with a close working relationship will agree to combine in an initial motion prior to the competition for lead plaintiff.

For each attorney pair between a dominant motion and a specific competing motion, we compute the fraction of cases in the prior three years when the dominant attorney firm was associated with a competing motion and decided to fight against the dominant motion. For example, if Labaton Sucharow-Chitwood Harley is a specific dominant attorney-competing attorney pair, we compute the fraction of cases that Labaton Sucharow appeared in a class action in the prior three years where Labaton Sucharow was associated with a competing motion that decided to fight the dominant motion. We compute the same fraction for the competing firm in the pair. Continuing the example, we tabulate the fraction of cases that Chitwood Harley appeared in a class action in the prior three years where Chitwood Harley was associated with a competing motion that decided to fight the dominant motion. We compute the difference in the fractions for the dominant and competing attorney firms in the pair. If the fraction for Labaton Sucharow is 0.6 and the fraction for Chitwood Harley is 0.4, the value is 0.2. We define Prior Fight Differential as the average of these computed values for all attorney firm pairs between the dominant motion and a specific competing motion. Prior Fight Differential captures the differential in the willingness to fight between the dominant and competing attorney firms. A more positive Prior Fight Differential indicates that the dominant firm is more likely to fight than the competing attorney firm.

For each attorney pair between a dominant motion and a specific competing motion, we also count the number of cases in the prior three years when the dominant attorney-competing attorney pair was present in the prior case in the same dominant-competing motion relationship. For example, if Labaton Sucharow-Chitwood Harley is a specific dominant attorney-competing attorney pair, we count the number of times the same Labaton Sucharow-Chitwood Harley pair appeared in a class action in the prior three years where Labaton Sucharow was associated with the dominant motion and Chitwood

Harley was associated with the competing motion. We then computed the fraction of these prior cases when the competing attorney firm decided to fight in the prior case. For example, if the Labaton Sucharow-Chitwood Harley both appeared in 10 prior cases in the same dominant motion-competing motion relationship and in 7 of those cases the competing motion (i.e., those associated with Chitwood Harley) decided to fight against the dominant motion, we computed a value of 0.7 for the Labaton Sucharow-Chitwood Harley pair for the specific class action. We then define Prior Competing-Dominant Pair Fight Rate as the average of the computed values for all attorney firm pairs between the dominant motion and a particular competing motion.

Lastly, for each attorney pair between a dominant motion and a specific competing motion, we count the number of cases in the prior three years when the dominant attorney-competing attorney pair was present in the prior case in the reverse competing-dominant motion relationship. For example, if Labaton Sucharow-Chitwood Harley is a specific dominant attorney-competing attorney pair, we count the number of times the same Labaton Sucharow-Chitwood Harley pair appeared in a class action in the prior three years where Labaton Sucharow was associated with the competing motion and Chitwood Harley was associated with the dominant motion. We then computed the fraction of these prior cases when the competing attorney firm decided to fight in the prior case. For example, if the Labaton Sucharow-Chitwood Harley both appeared in 10 prior cases in the reverse competing motion-dominant motion relationship and in 4 of those cases the competing motion (i.e., those associated with Labaton Sucharow) decided to fight against the dominant motion, we computed a value of 0.4 for the Labaton Sucharow-Chitwood Harley pair for the specific class action. We then define Prior Dominant-Competing Pair Fight Rate as the average of the computed values for all attorney firm pairs between the dominant motion and a particular competing motion.

We start by looking at whether a competing motion chooses to fight, coded as 0, or cooperate, defined as either withdrawing or combining the dominant motion and coded as 1 (Cooperate). We use

Cooperate as the dependent variable in the following OLS linear probability regression estimated on case-competing motion level data, clustering errors by case.

$$\begin{aligned}\text{Prob}(\text{Cooperate}_i) = \alpha &+ ß_1\text{Prior Cooperation}_i \\ &+ ß_2\text{Loss Difference}_i + ß_3\text{Number Initial Motions}_i \\ &+ ß_4\ln(\text{Market Capitalization})_i \\ &+ ß_5\text{SDNY}_i + ß_6\text{NDCal}_i \\ &+ ß_7\text{CDCal}_i + \text{Case Characteristics} \\ &+ \text{Industry Controls} + \text{Year Effects} + \varepsilon_i\end{aligned}$$

For independent variables, we include Prior Cooperation, which measures the average amount of cooperation between dominant attorney firms and competing attorney firms (for a specific competing motion) over the prior three years. We also include the difference in potential losses between the dominant motion and competing motion (Loss Difference). To control for the stakes of the litigation and degree of competitive environment we include ln(Market Capitalization) and Number Initial Motions. We include indicator variables for the three largest district courts (SDNY, NDCal, CDCal), Case Characteristics, Industry Effects, and Year Effects.

[Insert Table 7 here]

We report the results in Model 1 of Table 7. As with our model for the presence of multiple lead counsel, the Case Characteristics variables are largely insignificant; only the coefficient on Officer-Director is significant at the 5% level. In contrast, the coefficient on Prior Cooperation is positive and significant at the 1% level. Prior Cooperation corresponds with a 10.3% increase in the probability of cooperation while one additional officer-director defendant corresponds with only a 0.68% reduction in the probability of cooperation. When the dominant and competing attorney firms have a prior relationship working together in an initial lead plaintiff motion, the likelihood of a cooperative outcome in the specific case is significantly higher. This suggests that relationships matter in coalition building. The coefficient on Number of Initial Motions is negative and significant at the 1% level, suggesting that competing firms are more likely to cooperate if there are only a few firms competing for the lead counsel spot. As the number

of competing motions grows, firms are more likely to fight with each other, rather than combine or step aside.

Although we use Case Characteristic variables in Model 1, it is possible that unobserved characteristics may affect our results. As an alternative model, we use case fixed effects and only include variables that vary by competing motions for the same case: Prior Cooperation and Loss Difference. We report the results of the OLS linear probability regression in Model 2 of Table 7 again clustering errors by case. The coefficient on Prior Cooperation remains positive and significant at the 1% level. In addition, the coefficient on Loss Difference is now positive and significant at the 5% level. When the dominant firm has greater losses compared with a competing motion, the competing motion is more likely to cooperate with the dominant firm.

In the next models, we add Prior Fight Differential (Model 3), Competing-Dominant Pair Fight Rate (Model 4), and Prior Dominant-Competing Pair Fight Rate (Model 5) to the fixed effects model in Model 2. In Model 3, the coefficient on Prior Fight Differential is positive and significant at the 1% level. When the dominant firm has a higher rate of fighting in the past three years (when it was a competing motion) compared with the competing firm, there is a greater likelihood that the competing firm will cooperate in that case. In contrast, the coefficient on Prior Competing-Dominant Pair Fight Rate in Model 4 is negative and significant at the 5% level. When the competing firm has a history of fighting with the dominant firm in prior cases,it will be more willing to fight in the subsequent cases.

The results of Table 7 indicate that although case characteristics do not appreciably affect the choice by competing motions to fight, withdraw, or combine with the dominant motion, the prior interactions between dominant and competing attorney firms do have an important effect. Our tests in Table 7 group the decision by a competing motion to withdraw or combine together as a decision to cooperate with the dominant motion. We now disaggregate these two forms of cooperation.

We create a new dependent variable based on outcomes of the attorney firm pair that are coded as 0 if the movant fights and loses (the base category), 1 if the movant withdraws voluntarily, and 2 if the movant joins with the dominant motion (Competing Motion Outcome). We estimate a multinomial logit on dominant motion-competing motion level data using the competing motion fighting as the base category. We compare this base category against the competing motion withdrawing and against the competing motion combining with the dominant motion.

$$\begin{aligned}\text{Competing Motion Outcome}_i = {} & \alpha + ß_1\text{Prior Cooperation}_i \\ & + ß_2\text{Loss Difference}_i + ß_3\text{Number Initial Motions}_i \\ & + ß_4\ln(\text{Market Capitalization})_I + ß_4\text{SDNY}_i + ß_5\text{NDCal}_i \\ & + ß_6\text{CDCal}_i + \text{Case Characteristics} \\ & + \text{Industry Controls} + \text{Year Effects} + \varepsilon_i\end{aligned}$$

For independent variables, we include Prior Cooperation, which measures the average amount of cooperation between dominant attorney firms and competing attorney firms (for a specific competing motion) over the prior three years. We also include the difference in potential losses between the dominant motion and competing motion (Loss Difference). To control for the stakes of the litigation and intensity of competition, we include ln(Market Capitalization) and Number Initial Motions. We include indicator variables for the three largest district courts (SDNY, NDCal, CDCal), the Case Characteristics, Industry Effects, and Year Effects. We estimate the multinomial logit model using errors clustered by case.

[Insert Table 8 here]

Model 1 of Table 8 reports the results. The coefficient for Prior Cooperation, our proxy for a repeat relationship between attorney pairs in initial motions, is significant at the 1% level, in the estimations for both Withdraw and Combine. The coefficients for the Case Characteristics variables are generally insignificant. The exceptions are the coefficients on IPO and Officer-Director, significant at the 10% and 5% level respectively in the Withdraw estimation. None of the case characteristics are significant in the Combine estimation.

To Model 1 of Table 8 we add indicator variables for Prior Fight Differential (Model 2), Prior Competing-Dominant Pair Fight Rate (Model 3), and Prior Dominant-Competing Pair Fight Rate (Model 4). In the estimation for Withdraw, the coefficient on Prior Fight Differential is positive and significant at the 1% level. When the dominant attorney firms have a higher rate of fighting compared with the competing attorney firms in the prior three years, the competing motion is more likely to withdraw. The coefficient on Prior Competing-Dominant Pair Fight Rate is negative and significant at the 1% level. When the competing attorney firms were more likely to fight against the same dominant attorney firms in prior actions as measured by Prior Competing-Dominant Pair Fight Rate, the competing motion is less likely to withdraw against the dominant motion in the case in question. In contrast, the coefficients on Prior Fight Differential and Prior Competing-Dominant Pair Fight Rate, and Prior Dominant-Competing Pair Fight Rate are not significantly different from zero in the estimation for Combine. Only Prior Cooperation is significant in the Combine estimation.

Overall, our findings are consistent with Hypothesis 2 (Law Firm Relationship). Relationships between law firms, rather than case characteristics, are significantly correlated with the outcome of contests for lead plaintiff. Prior close relationships, as indicated by prior joint filings of initial motions for lead plaintiff, correspond to an increased likelihood of both withdrawal and combination compared with the base category of fighting. A greater propensity to fight on the part of the dominant firm compared with the competing firm corresponds to an increase in the probability of withdrawing for the competing motion. In contrast, a prior history of the competing firm fighting against the specific dominant firm corresponds to a decrease in the probability of the competing motion withdrawing. These results are consistent with firms fostering reputations for battling in lead plaintiff contests.

3.2.3. Cooperation and Synergy Between Law Firms

Our hypothesis is that law firms join together as co-lead counsel not because of the need to combine resources to effectively litigate the case, but because plaintiffs' attorney firms view cooperation as more profitable than competition. Although a firm would prefer to take on the role of lead counsel alone, thereby capturing all of the attorney fees, the attorney firm may benefit from sharing the fees in a given case if this leads to a higher likelihood of combining with the opposing attorney firm to share fees in later cases. Because multiple lead counsel correlates with higher overall fees (Choi, Pritchard, Erickson, 2020), the settlement class ultimately pays for this cooperation among plaintiffs' attorney firms.

The contrary conjecture is that attorney firms combine because of the synergy between the two firms for a particular class action. To assess this possible synergy, we look at whether Prior Cooperation matters more for cases with higher stakes. We posit that synergy becomes more important in cases with higher stakes. Higher stakes cases may require more resources from the plaintiffs' attorneys and multiple plaintiffs' firms may be better situated to meet these resource requirements compared to a single firm. We use the market capitalization of the corporate defendant as a proxy for the overall stakes in the class action. The market capitalization of the corporate defendant may also correlate with the D&O insurance policy limits available to fund a potential settlement and overall defense resources available to the class action defendants.

We also examine whether competing firms are more likely to cooperate in situations in which the dominant attorney firms and competing attorney firms are both relatively minor players. In these situations, the firms may value the synergy from combining together more than a firm with greater resources and expertise already in-house. We define Small Market Share as an indicator variable coded as 1 if a law firm is selected as lead counsel for 50 or fewer cases in the dataset.[10] We determine whether

[10] Our threshold of 50 cases for a plaintiffs' attorney firm with a small market share corresponds to 3% of the class actions in our dataset for which we have data on the selected lead counsel.

each dominant attorney and competing attorney pair involves a Small Market Share—Small Market Share Pair and code this as 1 and 0 otherwise. We then define Small Market Share Pair as the average for all dominant attorney and competing attorney pairs for the dominant motion and a specific competing motion.

Lastly, we expect synergy to be more important in cases where a dominant attorney firm has a weaker track record in securities class actions compared with competing attorney firms. The competing firm may provide expertise in such situations to the dominant attorney firm. We compute the difference in aggregate settlement amounts obtained by the dominant attorney firm and the competing firm in prior class actions for which each was lead counsel in the prior three years. We then define Prior Set Amt Difference as the average for all dominant attorney and competing attorney pairs for the dominant motion and a specific competing motion.

We test the relationship of Prior Cooperation and Market Capitalization, Small Market Share Pair, and Prior Set Amt Difference as a measure of the importance of synergy. If synergy is important, we expect that Prior Cooperation will become more important in explaining a coalition between competing motions and the dominant motion as our proxies for synergy increase. For our tests, we use as our dependent variable whether a competing motion chooses to fight, coded as 0, or cooperate, defined as either withdrawing or combining the dominant motion and coded as 1 (Cooperate). We use Cooperate as the dependent variable in the following OLS linear probability regression estimated on case-competing motion level data, using case fixed effects and errors clustered by securities class action case.

$$\begin{aligned}\text{Prob}(\text{Cooperate}_i) = {} & \alpha + ß_1\text{Prior Cooperation}_i \\ & + ß_2\text{Loss Difference}_i + \\ & + ß_1\text{Prior Cooperation}_i \times \ln(\text{Market Capitalization}) \\ & + \text{Case Effects} + \varepsilon_i\end{aligned}$$

Model 1 of Table 9 reports the results. In Model 1, the coefficient on Prior Cooperation x Market Capitalization is negative and not significantly different from zero. If anything, large market capitalization corresponds to a reduced importance for Prior Cooperation, inconsistent with synergy resulting in cooperative outcomes.

[Insert Table 9 here]

In the remaining models we remove the interaction term between Prior Cooperation and ln(Market Capitalization). Model 2 adds the indicator variable for Small Market Share Pair and an interaction between Prior Cooperation and Small Market Share Pair; the coefficient on Prior Cooperation x Small Market Share Pair is negative and significant at the 10% level. If anything, for firms with a prior relationship, smaller market share corresponds to a reduced importance for Prior Cooperation. This result is inconsistent with the possibility that synergy is driving cooperation among attorney firms.

In Model 3, we add the Prior Set Amt Difference variable and an interaction term between Prior Cooperation and Prior Set Amt Difference. If synergy drives cooperation, we expect that dominant attorney firms would be more willing to cooperate with more successful competing attorney firms that could provide more resources. The coefficient on Prior Set Amt Difference, however, is significant but positive. The positive coefficient on Prior Set Amt Difference suggests the opposite: dominant firms are more willing to cooperate with competing firms that have had less success in the past. The coefficient on Prior Cooperation x Prior Set Amt Difference is not significantly different from zero. We find no evidence that synergy becomes more important as the experience of the competing attorney firm grows relative to the dominant attorney firm.

If profit seeking and not synergies drives cooperation among attorney firms, court oversight could affect how competing motions interact with dominant motions. All courts should agree to multiple lead counsel that provide synergy and thereby reduce the overall cost of litigation or provide better outcomes

for the class. Only more experienced courts, however, may have the capacity to identify (and reject) those cooperative decisions by attorneys that benefit the attorneys, but not the class. Accordingly, if a court has more expertise in monitoring securities class actions, we expect less cooperation among attorney firms.

To test the importance of experienced courts, we add interaction terms between Prior Cooperation and the indicator variables for the three federal district courts with the largest number of class action filings in the dataset (SDNY, NDCal, and CDCal). We report the results in Model 4 of Table 9. In Model 4 note that for Prior Cooperation x SDNY, the coefficient is negative and significant at the 10% level. For the SDNY, the federal district court with by far the largest experience with securities class actions,[11] Prior Cooperation is far less important in determining the likelihood of cooperation. This is consistent with more experienced courts discouraging cooperation by attorneys that is designed to discourage competition.

To disaggregate cooperation between decisions to withdraw and to combine, we use Competing Motion Outcome as our dependent variable based on outcomes of the attorney firm pair which are coded as 0 if the movant fights and loses (the base category), 1 if the movant withdraws voluntarily, and 2 if the movant joins with the dominant motion. We estimate a multinomial logit on dominant motion-competing motion level data using the competing motion fighting as the base category and comparing this base category against the competing motion withdrawing and against the competing motion combining with the dominant motion. We cluster errors by case.

$$\begin{aligned}\text{Competing Motion Outcome}_i = {} & \alpha + ß_1\text{Prior Cooperation}_i \\ & + ß_2\text{Prior Cooperation}_i \times \ln(\text{Market Capitalization})_i \\ & + ß_3\text{Loss Difference}_i + ß_4\text{Number Initial Motions}_i \\ & + ß_5\ln(\text{Market Capitalization})_I \\ & + ß_6\text{SDNY}_i + ß_7\text{NDCal}_i + ß_8\text{CDCal}_i \\ & + \text{Case Characteristics} \\ & + \text{Industry Effects} + \text{Year Effects} + \varepsilon_i\end{aligned}$$

[11] As reported in Table 1, over one quarter of all securities class actions in our sample were filed in the SDNY alone.

For independent variables, we include the same independent variables as in Model 1 of Table 7 with the addition of an interaction term between Prior Cooperation and Market Capitalization. In Models 2-4, we remove the interaction term between Prior Cooperation and Market Capitalization. Model 2 adds the indicator variable for Small Market Share Pair and an interaction between Prior Cooperation and Small Market Share Pair. In Model 3, we add the Prior Set Amt Difference variable and an interaction term between Prior Cooperation and Prior Set Amt Difference. In Model 4, we add interaction terms between Prior Cooperation and the indicator variables for the three federal district courts with the largest number of class action filings in the dataset (SDNY, NDCal, and CDCal).

[Insert Table 10 here]

We conjecture that synergy, if it matters at all, should matter more for the decision to combine rather than the decision to withdraw a motion for lead plaintiff. Note from Table 10 that in the estimation for Withdraw, we find no evidence that larger market capitalization, the presence of paired small Market Share firms, or competing attorney firms with more prior success in obtaining settlement dollars correspond to an increase in the probability of a competing motion withdrawing. The coefficient on Prior Set Amt Difference is positive and significant at the 1% level. We expect the value of synergy to increase as the competing attorney firm has relatively more prior success in securities class actions compared with the dominant motion but find that withdrawals, compared with the base category of fighting, are more likely when the competing attorney firm has relatively less prior success. The interaction terms between Prior Cooperation and our measures of synergy are not significantly different from zero other than the interaction term between Prior Cooperation x SDNY which is negative and significant at the 5% level. If we take experience with securities class actions as a proxy for judicial expertise, the negative coefficient on Prior Cooperation x SDNY indicates that law firms in the SDNY gain less value from withdrawing their motions. Rather than any synergy in the case in question, we conjecture that the goodwill competing firms

may earn from the dominant firm by withdrawing may be less useful in districts where the ability to reward the withdrawing firm by combining together in a later case is less likely. Of course, dominant firms may reward withdrawing firms in other districts, but the competing firms may file fewer actions in other districts.

If synergy matters, it should affect the decision on the part of a competing motion to combine with the dominant motion. We find little evidence for synergy, however, in the estimation for Combine in Table 10. We find no evidence that larger market capitalization, the presence of paired small Market Share firms, or competing attorney firms with more prior success in obtaining settlement dollars correspond to an increase in the probability of a competing motion withdrawing. The coefficient on Market Capitalization is negative and significant at the 1% level. We would expect the value of synergy to increase with the stakes of the class action but find that combinations occur less frequently with larger market capitalization defendants.

We also expect synergy to matter more for the decision to combine when the competing motion and the dominant motion already have a prior track record of cooperation. In contrast, the coefficient on Prior Cooperation x Market Capitalization is not significantly different from zero. The coefficient on Prior Cooperation x Both Market Share Pair is negative and significant at the 1% level. When both dominant and competing attorney firms are smaller players, and thus presumably benefit more from synergy, the likelihood of combining is significantly reduced. This is the opposite of what we predict if synergy drove combination of motions. Similarly, the interaction terms between Prior Cooperation x SDNY and Prior Cooperation x NDCal are negative and significant at the 1% and 10% levels respectively. In two of the district courts with the most expertise on securities class actions, Prior Cooperation corresponds significantly less with motions combining together, contrary to such combinations providing litigation efficiencies. Our results are consistent with Hypothesis 3 (No Synergy).

Our tests for the value of synergy between law firms are only suggestive and do not directly measure the causal impact that multiple law firms may have on outcomes in a securities class action, including the probability of settlement and, conditional on settlement, the size of the settlement for the class. Although we lack a natural experiment to test the impact of multiple law firms, we estimate models on case-level data for both the probability of settlement and the log of the settlement amount with an indicator variable for multiple lead counsel (Multiple Lead Counsel) as an independent variable and variables associated with the strength of the case (Case Characteristic controls, the number of initial motions of lead plaintiff, and the number of institutional lead plaintiffs) and the potential stakes at issue in the litigation (log of market capitalization). We also include industry controls and year fixed effects. Unreported, after controlling for the strength of case and the potential stakes, the coefficient on Multiple Lead Counsel is not significantly different from zero. We thus find no evidence that Multiple Lead Counsel corresponds to any synergy benefits for class members in securities litigation.

3.2.4. Tit-for-Tat

Our last set of tests attempts to identify patterns across the cases in our sample. Do firms trade off the lead counsel spot? We look at pair combinations of the 10 law firms that were appointed lead counsel most frequently in the dataset. We expect that if there are any reciprocal deals between law firms, they will be most likely to occur between firms that act as lead counsel most frequently. For each pair of law firms, we look only at cases in which each firm was associated with separate competing motions for lead plaintiff. To ensure that there is a decision about which one should become the lead firm, we only look at cases in which one, but not both firms, is selected as lead counsel. We then sort the cases based on the lead plaintiff selection date and perform a runs test on which one of the two firms is selected. The null hypothesis is that the selection process for lead plaintiff and lead counsel in one case is independent of other cases – therefore, selection in the past should not affect the probability of selection

in a subsequent case. Table 11 presents the results from these tests, with the p-value indicating whether this null hypothesis is rejected.

[Insert Table 11 here]

For the firm combinations in our sample, the null hypothesis is rejected (at the 1% level) for two pairs of firms: Robbins Geller-Labaton Sucharow (at the 1% level) and Cohen, Milstein, Hausfeld & Toll-Kahn Gauthier Swick (at the 5% level). Robbins Geller and Labaton Sucharow, in particular, are among the largest securities class action firms, each with established relationships with substantial institutional investors. Figure 1 offers a visual depiction of the allocation between the two firms over time.

*Only cases where Robbins Geller and Labaton Sucharow are in competing motions and only one of the two firms is selected as lead counsel.

The results from the runs test for this pair is consistent with Robbins Geller and Labaton Sucharow allocating the lead counsel spot between themselves across different cases. This result is consistent with Hypothesis 4 (Tit-for-Tat), that is, these particular firms appear to be trading off the opportunity to serve as lead counsel. For most plaintiffs' law firms, however, we do not find evidence of any tit-for-tat strategy.

4. Conclusion

This paper examined relationships between plaintiffs' law firms in securities fraud class actions. Given the sizeable fees awarded in these cases, firms have substantial incentives to seek lead counsel status, either on their own or in combination with other firms. The firms typically justify combination as benefitting the class by bringing additional expertise and/or resources to the litigation.

This argument is not supported by our empirical findings. We find that law firms' decisions to combine correspond primarily to the existence of prior relationships, rather than case characteristics. We find that case characteristics, such as the types of allegations in the complaint or the amount at stake, do little to explain why some motions come with multiple proposed lead counsel. Instead, relationships matter—in the case of initial motions, the relationships between attorney firms and certain institutional investor movants for lead plaintiff. Some firms have attracted large stables of institutional clients which allows the firm to assemble plaintiff groups with substantial losses, the key determinant for awarding lead plaintiff status under the PSLRA.

When we look at how the competition among lead plaintiff motions plays out, we find that although the typical class action has several motions, many of these motions will either withdraw or combine before the judge chooses the lead plaintiff and lead counsel. When motions combine, the number of selected lead counsel typically increases. The existence of prior relationships between law firms is significantly correlated with the decision to withdraw or combine. We also find that the influence of the prior relationships between law firms on decisions to withdraw or combine does not increase with our proxies for the importance of synergies between law firms. Finally, we find some evidence that plaintiffs' firms trade off the lead counsel position in cases over time.

What are the implications of our findings for the process of selecting lead plaintiffs and lead counsel in securities fraud class actions? Given the finding in a companion paper to this piece that multiple counsel correlate with higher fees, judges tasked with awarding lead plaintiff status should be skeptical

of such combinations absent clear evidence that the class will benefit from having multiple firms working on the case. Our findings suggest that the lawyers are more likely to benefit from multiple lead counsel than the class members. More broadly, Congress may want to revisit its decision in the PSLRA to allow groups of plaintiffs to represent the class. The benefits from such groups appear hypothetical at best, while the costs, in the form of higher attorneys' fees when multiple lead counsel represent the class, are readily quantifiable.

Table 1. Case-Motion Level Variables

Motion Level Variables	N	Mean	Median	Std. Dev.
Number Proposed Lead Counsel	4637	1.188	1	0.405
Number Movants	4693	1.793	1	1.344
Number Institutional Movants	4693	0.552	0	0.851
Number Mode Movants	4693	0.282	0	0.574
Overlap	4693	0.037	0.000	0.214
Movant Losses	4546	1947983.316	190770.075	12060191.16
Number Initial Motions	4693	4.418	4.000	2.532
ln(Market Capitalization)	3776	13.475	13.231	2.028
SDNY	4693	0.292	0.000	0.455
NDCal	4693	0.105	0.000	0.307
CDCal	4693	0.089	0.000	0.285
Restatement	4677	0.253	0.000	0.435
SEC Action	4677	0.273	0.000	0.446
Other Gov Action	4677	0.274	0.000	0.446
Officer Termination	4677	0.516	1.000	0.5
Section 11	4692	0.224	0.000	0.417
Section 12	4692	0.197	0.000	0.398
Other Allegation	4692	0.017	0.000	0.13
Accounting	4677	0.252	0.000	0.434
Merger	4675	0.040	0.000	0.196
Backdating	4677	0.028	0.000	0.166
Credit Crisis	4677	0.088	0.000	0.283
FDA	4665	0.132	0.000	0.339
IPO	4677	0.112	0.000	0.315
FCPA	4677	0.020	0.000	0.141
Officer-Director	4692	5.233	4.000	4.12
Underwriter	4688	0.190	0.000	0.392

Accountant	4692	0.116	0.000	0.32
SIC 28	4693	0.097	0.000	0.297
SIC 36	4693	0.077	0.000	0.267
SIC 73	4693	0.082	0.000	0.274

Table 2: Mean Number of Proposed Lead Counsel in the Motion

	Same Mode Attorney	**Partial Overlap Mode Attorney**	**Different Mode Attorney**
2 Mode Movants	1.02	--	1.46
			[0.0000]
3 Mode Movants	1.08	1.88	2.00
		[0.6454]	[0.0005]

[] contains p-value of t-test of difference with the Same Mode Attorney number of proposed lead counsel in the motion.

Table 3: OLS Linear Probability Model for Presence of Multiple Proposed Lead Counsel in the Initial Motion for Lead Plaintiff

	(1) Multiple Proposed Lead Counsel	(2) Multiple Proposed Lead Counsel
Number Movants	0.0713**	0.0631**
	(7.23)	(6.31)
Number Institutional Movants	0.0815**	0.0863**
	(8.06)	(7.46)
Overlap	-0.199**	-0.221**
	(-7.02)	(-6.38)
Movant Losses	1.32e-09+	1.31e-09
	(1.93)	(1.43)
Number Initial Motions	-0.0127**	
	(-3.69)	
ln(Market Capitalization)	-0.0140**	
	(-4.52)	
SDNY	-0.0107	
	(-0.70)	
NDCal	0.0120	
	(0.53)	
CDCal	-0.0195	
	(-0.80)	
Restatement	-0.0142	
	(-0.78)	
SEC Action	0.0123	
	(0.68)	
Other Gov Action	0.0210	
	(1.26)	
Officer Termination	0.0195	
	(1.43)	
Section 11	-0.0427	
	(-1.45)	
Section 12	-0.00620	
	(-0.26)	
Other Allegation	0.0491	
	(0.72)	

Credit Crisis	0.00696 (0.24)	
FDA	-0.0405* (-2.01)	
IPO	-0.00261 (-0.11)	
FCPA	0.00866 (0.17)	
Officer-Director	0.00281 (1.33)	
Underwriter	0.0592+ (1.83)	
Accountant	-0.00466 (-0.17)	
Constant	0.201** (3.23)	0.0242 (1.44)
Industry Controls	Yes	No
Year Effects	Yes	No
Case Effects	No	Yes
N	3624	4529
pseudo R^2	0.107	0.088

t statistics in parentheses; + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Models estimated on case-motion level data. Errors clustered by case.

Table 4. Case Level Summary Statistics

Case Level Variables	N	Mean	Median	Std. Dev.
Number Initial Motions	1579	2.942	2.000	2.060
Combine	1579	0.098	0.000	0.305
Combine-Fail	1579	0.007	0.000	0.083
Withdraw	1579	1.277	1.000	1.574
Fight	1579	0.567	0.000	1.037
Number Final Motions	1592	1.569	1.000	1.046
Motion Reduction	1575	0.338	0.444	0.320
Number Lead Plaintiffs	1590	1.869	1.000	1.282
Number Inst Lead Plaintiffs	1589	0.843	1.000	1.032
ln(Market Capitalization)	1421	13.639	13.468	2.045
SDNY	1703	0.268	0.000	0.443
NDCal	1703	0.095	0.000	0.293
CDCal	1703	0.089	0.000	0.284
Restatement	1693	0.229	0.000	0.420
SEC Action	1693	0.228	0.000	0.420
Other Gov Action	1693	0.249	0.000	0.433
Officer Termination	1693	0.454	0.000	0.498
Section 11	1703	0.187	0.000	0.390
Section 12	1703	0.166	0.000	0.372
Other Allegation	1703	0.029	0.000	0.167
Accounting	1693	0.250	0.000	0.433
Merger	1692	0.051	0.000	0.221
Backdating	1693	0.023	0.000	0.150
Credit Crisis	1693	0.083	0.000	0.275
FDA	1692	0.120	0.000	0.325
IPO	1693	0.106	0.000	0.308
FCPA	1693	0.019	0.000	0.136
Num Officer-Director Defendants	1703	4.707	3.000	3.751
Underwriter Defendant	1702	0.147	0.000	0.355
Accountant Defendant	1703	0.083	0.000	0.276
SIC 28	1703	0.088	0.000	0.283
SIC 36	1703	0.070	0.000	0.256
SIC 73	1703	0.087	0.000	0.282

Table 5: OLS Linear Probability Regression for Multiple Lead Counsel

	(1) Multiple Lead Counsel	(2) Multiple Lead Counsel
Number Initial Motions	-0.0245** (-3.26)	
Motion Reduction	0.176** (3.88)	
Combine		0.510** (15.89)
Combine-Fail		-0.0727 (-0.61)
Withdraw		-0.0195** (-2.66)
Fight		-0.0236* (-2.16)
Number Lead Plaintiffs	0.145** (12.81)	0.108** (9.55)
Number Inst Lead Plaintiffs	0.0163 (1.14)	0.0215 (1.63)
ln(Market Capitalization)	0.0124+ (1.91)	0.00822 (1.32)
SDNY	-0.0220 (-0.79)	-0.0130 (-0.49)
NDCal	-0.0172 (-0.41)	0.00469 (0.12)
CDCal	-0.0483 (-1.11)	-0.0405 (-1.05)
Restatement	-0.000571 (-0.02)	0.00476 (0.15)
SEC Action	0.0432 (1.26)	0.0286 (0.91)
Other Gov Action	-0.0172 (-0.58)	-0.00174 (-0.06)
Officer Termination	0.0520*	0.0541*

	(2.03)	(2.27)
Section 11	-0.0581	-0.0393
	(-1.05)	(-0.77)
Section 12	0.0265	0.0410
	(0.53)	(0.89)
Other Allegation	0.133	0.134
	(1.57)	(1.58)
Accounting	-0.0146	-0.00719
	(-0.48)	(-0.25)
Merger	0.104	0.127*
	(1.57)	(1.98)
Backdating	0.00868	0.00691
	(0.10)	(0.08)
Credit Crisis	-0.0201	-0.00262
	(-0.42)	(-0.06)
FDA	0.0285	0.0361
	(0.65)	(0.92)
IPO	0.0453	0.0439
	(0.91)	(0.95)
FCPA	0.00433	0.0170
	(0.05)	(0.22)
Num Officer-Director Defendants	0.00225	0.00301
	(0.56)	(0.77)
Underwriter Defendant	0.0469	0.0349
	(0.76)	(0.60)
Accountant Defendant	0.0991+	0.0881+
	(1.77)	(1.69)
Constant	-0.208+	-0.144
	(-1.96)	(-1.44)
Industry Controls	Yes	Yes
Year Effects	Yes	Yes
N	1313	1316
adj. R^2	0.189	0.297

t statistics in parentheses; $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Models estimated on case level data. The models use robust standard errors.

Table 6: Case-Competing Motion Level Summary Statistics

Competing Motion Level Variables	N	Mean	Median	Std. Dev.
Prior Cooperation	3053	0.120	0.000	0.300
Loss Difference ($)	2986	4426880	603820	16939897
Prior Fight Differential	2217	0.031	0.030	0.208
Prior Competing-Dominant Fight Rate	1694	0.270	0.189	0.301
Prior Dominant-Competing Fight Rate	1492	0.296	0.200	0.324
Small Firm Pair	3013	0.035	0.000	0.183
Prior Set Amt Difference ($ millions)	3013	1235.857	374.974	3922.909
Number Initial Motions	3056	5.134	5.000	2.387
ln(Market Capitalization)	2555	13.603	13.476	1.975
SDNY	3056	0.300	0.000	0.458
NDCal	3056	0.112	0.000	0.315
CDCal	3056	0.087	0.000	0.282
Restatement	3046	0.258	0.000	0.438
SEC Action	3046	0.291	0.000	0.454
Other Gov Action	3046	0.281	0.000	0.450
Officer Termination	3046	0.540	1.000	0.499
Section 11	3056	0.239	0.000	0.426
Section 12	3056	0.209	0.000	0.407
Other Allegation	3056	0.014	0.000	0.116
Accounting	3046	0.254	0.000	0.435
Merger	3045	0.035	0.000	0.185
Backdating	3046	0.032	0.000	0.175
Credit Crisis	3046	0.088	0.000	0.284
FDA	3035	0.142	0.000	0.349
IPO	3046	0.116	0.000	0.320
FCPA	3046	0.021	0.000	0.143
Officer-Director	3056	5.465	4.000	4.287
Underwriter	3053	0.209	0.000	0.407
Accountant	3056	0.128	0.000	0.334
SIC 28	3056	0.103	0.000	0.304
SIC 36	3056	0.072	0.000	0.259
SIC 73	3056	0.087	0.000	0.282

Table 7: OLS Linear Probability Models for Decision to Cooperate

	(1) Cooperate	(2) Cooperate	(3) Cooperate	(4) Cooperate	(5) Cooperate
Prior Cooperation	0.103**	0.0885**	0.0998**	0.0896**	0.0890*
	(4.11)	(3.30)	(3.62)	(2.79)	(2.55)
Loss Difference	8.76e-10	3.10e-09*	2.77e-09**	3.42e-09**	3.95e-09**
	(1.46)	(2.48)	(2.65)	(3.31)	(2.93)
Number Initial Motions	-0.0133**				
	(-2.63)				
ln(Market Capitalization)	0.00904				
	(1.60)				
SDNY	-0.0425+				
	(-1.70)				
NDCal	0.0927**				
	(2.80)				
CDCal	-0.00650				
	(-0.17)				
Restatement	-0.0323				
	(-0.99)				
SEC Action	0.0154				
	(0.56)				
Other Gov Action	-0.00837				
	(-0.32)				
Officer Termination	-0.0179				
	(-0.77)				
Section 11	0.0535				
	(1.06)				
Section 12	0.0353				
	(0.71)				
Other Allegation	0.0190				
	(0.21)				
Accounting	0.00827				
	(0.28)				
Merger	-0.0708				
	(-1.15)				

Backdating	-0.0297 (-0.33)				
Credit Crisis	-0.0584 (-1.24)				
FDA	0.0246 (0.68)				
IPO	-0.0615 (-1.47)				
FCPA	0.0443 (0.79)				
Officer-Director	-0.00680* (-1.97)				
Underwriter	-0.0250 (-0.56)				
Accountant	-0.0335 (-0.77)				
Prior Fight Differential			0.314** (4.25)		
Prior Competing-Dominant Fight Rate				-0.0988* (-1.96)	
Prior Dominant-Competing Fight Rate					-0.0491 (-1.03)
Constant	0.658** (7.47)	0.697** (113.35)	0.716** (105.09)	0.757** (47.41)	0.728** (42.96)
Industry Controls	Yes	No	No	No	No
Year Effects	Yes	No	No	No	No
Case Effects	No	Yes	Yes	Yes	Yes
N	2479	2984	2198	1682	1481
pseudo R^2	0.047	0.010	0.025	0.017	0.016

t statistics in parentheses; $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Models estimated on Case-Competing Motion level data. Errors clustered by case.

Table 8: Multinomial Logit Model for Competing Motion Decisions

	(1) Competing Motion Outcome	(2) Competing Motion Outcome	(3) Competing Motion Outcome	(4) Competing Motion Outcome
Withdraw				
Prior Cooperation	0.645**	0.698**	0.617**	0.668**
	(3.43)	(3.44)	(2.75)	(2.94)
Prior Fight Differential		0.868**		
		(2.79)		
Prior Competing-Dominant Fight Rate			-0.576*	
			(-2.54)	
Prior Dominant-Competing Fight Rate				-0.0142
				(-0.06)
Loss Difference	3.97e-09	5.36e-09	4.31e-09	5.18e-09
	(1.16)	(1.29)	(0.82)	(0.78)
Number Initial Motions	0.0372	0.0242	0.0102	0.0219
	(1.21)	(0.68)	(0.25)	(0.51)
ln(Market Capitalization)	-0.0411	-0.0481	-0.0639+	-0.0687+
	(-1.57)	(-1.63)	(-1.89)	(-1.92)
SDNY	-0.221+	-0.306*	-0.236	-0.134
	(-1.72)	(-2.04)	(-1.38)	(-0.75)
NDCal	0.590**	0.311	0.395	0.462+
	(2.64)	(1.41)	(1.49)	(1.82)
CDCal	-0.00969	-0.00429	0.151	0.132
	(-0.05)	(-0.02)	(0.50)	(0.45)
Restatement	-0.190	-0.173	-0.120	-0.187
	(-1.26)	(-0.99)	(-0.59)	(-0.90)
SEC Action	0.0593	0.0804	-0.00557	-0.0892
	(0.42)	(0.49)	(-0.03)	(-0.43)
Other Gov Action	-0.0228	-0.110	-0.0332	0.00662
	(-0.17)	(-0.72)	(-0.18)	(0.04)
Officer Termination	-0.0843	-0.0756	0.00472	0.0176
	(-0.68)	(-0.51)	(0.03)	(0.10)
Section 11	0.277	0.0647	0.334	0.0689
	(1.07)	(0.20)	(0.87)	(0.21)

Section 12	0.206 (0.87)	0.212 (0.70)	0.0350 (0.10)	0.0596 (0.18)
Other Allegation	0.150 (0.32)	-0.0143 (-0.03)	0.657 (0.97)	1.036 (1.33)
Credit Crisis	-0.215 (-1.01)	-0.150 (-0.62)	-0.00788 (-0.03)	0.130 (0.41)
FDA	0.137 (0.68)	0.239 (1.06)	0.383 (1.52)	0.342 (1.36)
IPO	-0.365^{+} (-1.68)	-0.352 (-1.43)	-0.460 (-1.54)	-0.649* (-2.32)
FCPA	0.237 (0.66)	0.352 (0.94)	0.239 (0.56)	0.146 (0.33)
Officer-Director	-0.0354* (-2.14)	-0.0300 (-1.55)	-0.0346 (-1.41)	-0.0622* (-2.37)
Underwriter	-0.128 (-0.59)	0.0362 (0.15)	-0.0430 (-0.15)	0.681* (2.32)
Accountant	-0.150 (-0.78)	-0.308 (-1.29)	-0.362 (-1.27)	-0.186 (-0.56)
Constant	0.448 (0.97)	0.734 (1.31)	1.118^{+} (1.69)	0.673 (0.99)
Combine				
Prior Cooperation	1.147** (3.86)	1.085** (3.16)	1.345** (3.54)	1.090** (2.76)
Prior Fight Differential		-0.704 (-1.19)		
Prior Competing-Dominant Fight Rate			-0.203 (-0.44)	
Prior Dominant-Competing Fight Rate				-0.399 (-0.87)
Loss Difference	7.36e-09 (1.22)	7.67e-09 (0.97)	-9.52e-09 (-0.87)	-6.71e-09 (-0.63)
Number Initial Motions	0.104* (2.09)	0.110 (1.62)	0.0762 (0.96)	0.102 (1.27)
ln(Market Capitalization)	-0.390** (-5.75)	-0.383** (-4.59)	-0.352** (-3.62)	-0.350** (-3.59)

SDNY	-0.357	-0.699*	-0.545	-0.421
	(-1.61)	(-2.22)	(-1.46)	(-1.18)
NDCal	0.272	-0.661	-0.364	-0.497
	(0.75)	(-1.28)	(-0.69)	(-0.87)
CDCal	-0.0526	0.00629	0.233	0.126
	(-0.15)	(0.02)	(0.49)	(0.27)
Restatement	-0.119	-0.212	-0.597	-0.330
	(-0.46)	(-0.57)	(-1.23)	(-0.75)
SEC Action	0.212	0.136	0.386	0.213
	(0.90)	(0.41)	(1.04)	(0.55)
Other Gov Action	-0.159	-0.280	-0.374	-0.479
	(-0.68)	(-0.94)	(-1.07)	(-1.34)
Officer Termination	-0.196	-0.0417	0.0294	0.0788
	(-0.97)	(-0.16)	(0.10)	(0.25)
Section 11	-0.0741	0.121	0.223	0.114
	(-0.16)	(0.19)	(0.25)	(0.14)
Section 12	-0.209	-0.530	-0.384	-0.104
	(-0.57)	(-0.96)	(-0.54)	(-0.14)
Other Allegation	0.0353	0.352	1.289	1.430
	(0.04)	(0.41)	(0.91)	(0.74)
Credit Crisis	-0.514	-0.470	-0.187	-0.368
	(-1.33)	(-0.92)	(-0.31)	(-0.58)
FDA	0.0926	0.629	0.799+	0.464
	(0.24)	(1.48)	(1.71)	(0.92)
IPO	0.0825	0.0898	-0.131	-0.143
	(0.22)	(0.20)	(-0.24)	(-0.27)
FCPA	0.0463	0.609	0.790	-0.137
	(0.06)	(0.73)	(0.89)	(-0.11)
Officer-Director	-0.0368	-0.0371	-0.0288	-0.0391
	(-1.12)	(-0.81)	(-0.52)	(-0.67)
Underwriter	0.415	0.292	0.0754	0.244
	(0.83)	(0.38)	(0.07)	(0.23)
Accountant	-0.246	-0.196	-0.252	0.478
	(-0.64)	(-0.37)	(-0.31)	(0.70)
Constant	-0.369	-1.269	-0.952	-1.418
	(-0.49)	(-1.22)	(-0.72)	(-1.12)

Industry Controls	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes
N	2480	1823	1416	1240
pseudo R^2	0.070	0.066	0.067	0.067

z statistics in parentheses; $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Models estimated on Case-Competing Motion level data. Errors clustered by case.

Table 9: OLS Linear Probability Model for Decision to Cooperate with Synergy Variables

	(1) Cooperate	(2) Cooperate	(3) Cooperate	(4) Cooperate
Prior Cooperation	0.331	0.0916**	0.115**	0.153**
	(1.50)	(3.41)	(4.06)	(4.04)
Loss Difference	2.85e-09*	3.27e-09**	3.05e-09**	3.08e-09*
	(2.46)	(2.76)	(2.90)	(2.48)
Prior Cooperation x ln(Market Capitalization)	-0.0177			
	(-1.11)			
Small Market Share Pair		0.00218		
		(0.04)		
Prior Cooperation x Small Market Share Pair		-0.404+		
		(-1.92)		
Prior Set Amt Difference			0.0000148**	
			(3.55)	
Prior Cooperation x Prior Set Amt Difference			-0.00000394	
			(-0.57)	
Prior Cooperation x SDNY				-0.116+
				(-1.93)
Prior Cooperation x NDCal				-0.104
				(-1.00)
Prior Cooperation x CDCal				-0.0933
				(-1.17)
Constant	0.704**	0.696**	0.677**	0.696**
	(120.92)	(109.34)	(85.51)	(114.30)
Case Effects	Yes	Yes	Yes	Yes
N	2498	2972	2972	2984
pseudo R^2	0.010	0.010	0.018	0.011

t statistics in parentheses; + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Errors clustered by case.

Table 10: Multinomial Logit Model for Competing Motion Decisions with Synergy Variables

	(1) Competing Motion Outcome	(2) Competing Motion Outcome	(3) Competing Motion Outcome	(4) Competing Motion Outcome
Withdraw				
Prior Cooperation	2.783^{+}	0.628**	0.665**	1.254**
	(1.90)	(3.33)	(3.47)	(3.46)
Prior Cooperation x ln(Market Capitalization)	-0.154			
	(-1.47)			
Small Market Share Pair		-0.367		
		(-1.38)		
Prior Cooperation x Small Market Share Pair		0.205		
		(0.08)		
Prior Set Amt Difference			0.0000503**	
			(3.68)	
Prior Cooperation x Prior Set Amt Difference			0.0000176	
			(0.38)	
Prior Cooperation x SDNY				-1.038*
				(-2.36)
Prior Cooperation x NDCal				-1.208
				(-1.59)
Prior Cooperation x CDCal				-0.273
				(-0.36)
Loss Difference	4.10e-09	4.19e-09	3.74e-09	4.05e-09
	(1.22)	(1.22)	(1.14)	(1.21)
Number Initial Motions	0.0527^{+}	0.0370	0.0270	0.0371
	(1.65)	(1.21)	(0.88)	(1.21)
ln(Market Capitalization)	-0.0407	-0.0429	-0.0500^{+}	-0.0427
	(-1.55)	(-1.64)	(-1.89)	(-1.63)
SDNY	-0.223^{+}	-0.217^{+}	-0.233^{+}	-0.133
	(-1.73)	(-1.69)	(-1.79)	(-1.00)
NDCal	0.586**	0.608**	0.671**	0.687**
	(2.64)	(2.70)	(2.96)	(2.83)
CDCal	-0.00471	-0.0208	0.0115	-0.0146
	(-0.02)	(-0.10)	(0.06)	(-0.07)
Restatement	-0.193	-0.194	-0.191	-0.195

	(-1.27)	(-1.29)	(-1.26)	(-1.29)
SEC Action	0.0541	0.0647	0.0792	0.0710
	(0.38)	(0.46)	(0.56)	(0.50)
Other Gov Action	-0.0156	0.00415	-0.000288	-0.0299
	(-0.12)	(0.03)	(-0.00)	(-0.22)
Officer Termination	-0.0774	-0.0899	-0.113	-0.0890
	(-0.62)	(-0.72)	(-0.90)	(-0.72)
Section 11	0.287	0.278	0.204	0.278
	(1.11)	(1.08)	(0.78)	(1.08)
Section 12	0.198	0.195	0.153	0.195
	(0.83)	(0.82)	(0.63)	(0.82)
Other Allegation	0.134	0.178	0.121	0.185
	(0.28)	(0.38)	(0.25)	(0.39)
Credit Crisis	-0.212	-0.207	-0.196	-0.221
	(-1.00)	(-0.97)	(-0.92)	(-1.03)
FDA	0.129	0.135	0.140	0.145
	(0.64)	(0.68)	(0.69)	(0.72)
IPO	-0.353	-0.386^{+}	-0.349	-0.366^{+}
	(-1.64)	(-1.77)	(-1.62)	(-1.69)
FCPA	0.244	0.212	0.296	0.246
	(0.68)	(0.59)	(0.81)	(0.70)
Officer-Director	-0.0356*	-0.0358*	-0.0347*	-0.0360*
	(-2.15)	(-2.17)	(-2.13)	(-2.17)
Underwriter	-0.134	-0.106	-0.0724	-0.130
	(-0.61)	(-0.49)	(-0.33)	(-0.60)
Accountant	-0.152	-0.146	-0.113	-0.138
	(-0.79)	(-0.75)	(-0.58)	(-0.72)
Constant	0.238	0.479	0.566	0.430
	(0.50)	(1.03)	(1.20)	(0.93)
Combine				
Prior Cooperation	2.058	1.127**	1.132**	2.161**
	(1.09)	(3.79)	(3.76)	(4.69)
Prior Cooperation x ln(Market Capitalization)	-0.0656			
	(-0.49)			
Small Market Share Pair		-0.842		
		(-1.25)		

Prior Cooperation x Small Market Share Pair		-45.36** (-9.40)		
Prior Set Amt Difference			-0.0000253 (-1.07)	
Prior Cooperation x Prior Set Amt Difference			-0.0000240 (-0.34)	
Prior Cooperation x SDNY				-1.780** (-2.71)
Prior Cooperation x NDCal				-2.005+ (-1.77)
Prior Cooperation x CDCal				-1.772 (-1.45)
Loss Difference	7.39e-09 (1.22)	7.30e-09 (1.20)	6.88e-09 (1.15)	7.68e-09 (1.31)
Number Initial Motions	0.103+ (1.83)	0.103* (2.06)	0.106* (2.08)	0.105* (2.08)
ln(Market Capitalization)	-0.390** (-5.75)	-0.388** (-5.70)	-0.391** (-5.66)	-0.397** (-5.79)
SDNY	-0.358 (-1.61)	-0.357 (-1.61)	-0.356 (-1.58)	-0.141 (-0.59)
NDCal	0.267 (0.74)	0.288 (0.79)	0.257 (0.71)	0.523 (1.28)
CDCal	-0.0455 (-0.13)	-0.0403 (-0.12)	-0.0258 (-0.07)	0.193 (0.53)
Restatement	-0.118 (-0.46)	-0.120 (-0.46)	-0.109 (-0.41)	-0.120 (-0.46)
SEC Action	0.212 (0.91)	0.208 (0.89)	0.192 (0.82)	0.227 (0.97)
Other Gov Action	-0.156 (-0.67)	-0.135 (-0.58)	-0.133 (-0.56)	-0.171 (-0.74)
Officer Termination	-0.198 (-0.98)	-0.196 (-0.97)	-0.196 (-0.96)	-0.209 (-1.04)
Section 11	-0.0778 (-0.17)	-0.0478 (-0.10)	-0.0954 (-0.21)	-0.0704 (-0.15)
Section 12	-0.209 (-0.57)	-0.218 (-0.59)	-0.177 (-0.49)	-0.229 (-0.62)

Other Allegation	0.0544	0.136	0.0803	0.0870
	(0.06)	(0.16)	(0.09)	(0.10)
Credit Crisis	-0.509	-0.525	-0.518	-0.512
	(-1.32)	(-1.35)	(-1.34)	(-1.31)
FDA	0.0958	0.0921	0.0913	0.109
	(0.25)	(0.24)	(0.24)	(0.28)
IPO	0.0842	0.0490	0.0696	0.0741
	(0.22)	(0.13)	(0.18)	(0.19)
FCPA	0.0481	0.0161	0.113	0.0785
	(0.06)	(0.02)	(0.14)	(0.10)
Officer-Director	-0.0363	-0.0350	-0.0353	-0.0396
	(-1.10)	(-1.06)	(-1.08)	(-1.21)
Underwriter	0.415	0.399	0.441	0.429
	(0.83)	(0.79)	(0.89)	(0.85)
Accountant	-0.250	-0.240	-0.244	-0.240
	(-0.65)	(-0.62)	(-0.64)	(-0.62)
Constant	-0.354	-0.323	-0.380	-0.409
	(-0.42)	(-0.42)	(-0.49)	(-0.53)
Industry Controls	Yes	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes
N	2480	2469	2469	2480
pseudo R^2	0.071	0.071	0.077	0.073

z statistics in parentheses; $^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Models estimated on Case-Competing Motion level data. Errors clustered by case.

Table 11. Runs Test P-value

	Robbins Geller	Labaton Sucharow	Bernstein Litowitz	Glancy Binkow	Pomerantz Haudek	Rosen Law Firm	Kessler Topaz Meltzer & Check	Levi & Korsinsky	Cohen, Milstein Hausfeld & Toll	Kahn Gauthier Swick
Robbins Geller	.									
Labaton Sucharow	0.010	.								
Bernstein Litowitz	0.248	0.233	.							
Glancy Binkow	0.971	0.434		.						
Pomerantz Haudek	0.158	0.979	0.679	0.735	.					
Rosen Law Firm	0.391	0.705	--	0.153	0.700	.				
Kessler Topaz Meltzer & Check	0.412	0.872	0.705	0.299	0.266	0.166	.			
Levi & Korsinsky	0.973	0.670		0.250	0.788	0.916	0.280	.		
Cohen, Milstein Hausfeld & Toll	0.163	0.027	0.191	0.716	1.000	0.394	0.428	--	.	
Kahn Gauthier Swick	0.150	0.637	0.752	0.750	0.206	0.338	0.582	0.724	0.039	.

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Appendix. Variable Definitions

Case Level Variables	Source	Definition
Number Initial Motions	Court filings	Number of initial motions for lead plaintiff in the class action
Combine	Court filings	Number of initial motions that combined with the dominant motion into a single motion by the time the court decides on the lead plaintiff decision where the court accepted proposed combined lead plaintiffs and lead counsel firms
Combine-Fail	Court filings	Number of initial motions that combine with the dominant motion into a single motion by the time the court decides on the lead plaintiff decision where the court rejected some aspect of the combined motion (i.e., rejected a proposed lead plaintiff or lead counsel)
Withdraw	Court filings	Number of initial motions that withdrew prior to the court's decision on lead plaintiff
Fight	Court filings	Number of initial motions that remained in competition with the dominant motion at the time of the court's decision on lead plaintiff
Final Motions	Court filings	Number of motions still competing at the time of the court's decision on lead plaintiff
Motion Reduction	Court filings	Percentage reduction in motions from the initial filing to the time of the court's decision on lead plaintiff
Number Lead Plaintiffs	Court filings	Number of selected lead plaintiffs in the class action
Number Inst Lead Plaintiffs	Court filings	Number of selected lead plaintiffs that are institutional investors in the class action.
ln(Market Capitalization)	CRSP	Log of the market capitalization of the corporation at issue in the litigation measured on the last day of the class period
SDNY	Court filings	Equal to 1 if the federal district court for the litigation is the Southern District of New York and 0 otherwise
NDCal	Court filings	Equal to 1 if the federal district court for the litigation is the Northern District of California and 0 otherwise
CDCal	Court filings	Equal to 1 if the federal district court for the litigation is the Central District of California and 0 otherwise
Restatement	Court filings	Equal to 1 if the complaint mentions a restatement by the corporation at issue in the litigation and 0 otherwise
SEC Action	Court filings	Equal to 1 if the complaint mentions an SEC investigation or enforcement action and 0 otherwise

Other Gov Action	Court filings	Equal to 1 if the complaint mentions a government (other than SEC) investigation or enforcement action and 0 otherwise
Officer Termination	Court filings	Equal to 1 if the complaint mentions the termination of a Top Officer and 0 otherwise. Top Officer includes Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Treasurer, Chief Technology Officer, Chief Information Officer, Chief Compliance Officer, President, and General Counsel.
Section 11	Court filings	Equal to 1 if the cause of action involves a Section 11 of the Securities Act allegation and 0 otherwise
Section 12	Court filings	Equal to 1 if the cause of action involves a Section 12 of the Securities Act allegation and 0 otherwise
Other Allegation	Court filings	Equal to 1 if the cause of action involves an allegation other than under Section11 of the Securities Act, Section 12 of the Securities Act, or Rule 10b-5 (and Section 10(b) of the Exchange Act) and 0 otherwise
Accounting	Court filings	Equal to 1 if the subject matter of the action involves an accounting issue (other than option backdating) and 0 otherwise
Merger	Court filings	Equal to 1 if the subject matter of the action involves a merger and 0 otherwise
Backdating	Court filings	Equal to 1 if the subject matter of the action involves option backdating and 0 otherwise
Credit Crisis	Court filings	Equal to 1 if the subject matter of the action involves the late 2000s credit crisis and 0 otherwise
FDA	Court filings	Equal to 1 if the subject matter of the action involves a disclosure relating to the Food and Drug Administration and 0 otherwise
IPO	Court filings	Equal to 1 if the subject matter of the action involves an initial public offering and 0 otherwise
FCPA	Court filings	Equal to 1 if the subject matter of the action involves the Foreign Corrupt Practices Act and 0 otherwise
Num Officer-Director Defendants	Court filings	Number of defendants who are either a director or officer of the corporation at issue in the litigation
Underwriter Defendant	Court filings	Equal to 1 if an underwriter for an offering is a defendant and 0 otherwise
Accountant Defendant	Court filings	Equal to 1 if an accounting firm is a defendant and 0 otherwise

SIC 28	CRSP	Equal to 1 if the corporate defendant is in SIC code 28 and 0 otherwise
SIC 36	CRSP	Equal to 1 if the corporate defendant is in SIC code 36 and 0 otherwise
SIC 73	CRSP	Equal to 1 if the corporate defendant is in SIC code 73 and 0 otherwise

Competing Motion Level Variables	Source	Definition
Prior Cooperation	Court filings	We define Prior Cooperation as equal to 1 if any of the attorney firm pairs between the dominant motion and a particular competing motion were together at least once as proposed co-lead counsel in an initial motion for lead plaintiff during the three years prior to the specific case. For example, if Labaton Sucharow-Chitwood Harley and Milberg Weiss-Chitwood Harley are the two dominant attorney firm-competing attorney firm pairs for a dominant motion and a specific competing motion in the class action in question, we assign a value of 1 to Prior Cooperation if Labaton Sucharow-Chitwood Harley or Milberg Weiss-Chitwood Harley are proposed as co-lead counsel in at least one initial motion in a class action in the prior three years.
Loss Difference ($)	Court filings	The potential recoverable losses for the dominant motion minus the competing motion
Prior Fight Differential	Court filings	For each attorney pair between a dominant motion and a specific competing motion, we compute the fraction of cases in the prior three years when the dominant firm was associated with a competing motion and decided to fight against the dominant motion. For example, if Labaton Sucharow-Chitwood Harley is a specific dominant attorney-competing attorney pair, we compute the fraction of cases that Labaton Sucharow appeared in a class action in the prior three years where Labaton Sucharow was associated with a competing motion that decided to fight the dominant motion. We compute the same fraction for the competing firm in the pair. Continuing the example, we tabulate the fraction of cases that Chitwood Harley appeared in a class action in the prior three years where Chitwood Harley was associated with a competing motion that decided to fight the dominant motion. We compute the difference in the fractions for the dominant and competing attorney firms in the pair. If the fraction for Labaton Sucharow is 0.6 and the fraction for Chitwood Harley is 0.4 we compute a value of 0.2. We define Prior Fight Differential as the average of these computed values for all attorney firm pairs between the dominant motion and a specific competing motion.
Prior Competing-Dominant Fight Rate	Court filings	For each attorney pair between a dominant motion and a specific competing motion, we count the number of cases in the prior three years when the dominant attorney-competing attorney pair was present in the prior case in

		the same dominant-competing motion relationship. For example, if Labaton Sucharow-Chitwood Harley is a specific dominant attorney-competing attorney pair, we count the number of times the same Labaton Sucharow-Chitwood Harley pair appeared in a class action in the prior three years where Labaton Sucharow was associated with the dominant motion and Chitwood Harley was associated with the competing motion. We then computed the fraction of these prior cases when the competing attorney firm decided to fight in the prior case. For example, if the Labaton Sucharow-Chitwood Harley appeared in 10 prior cases in the same dominant motion-competing motion relationship and in 7 of those cases the competing motion (i.e., those associated with Chitwood Harley) decided to fight against the dominant motion, we computed a value of 0.7 for the Labaton Sucharow-Chitwood Harley pair for the specific class action. We then define Prior Competing-Dominant Pair Fight Rate as the average of the computed values for all attorney firm pairs between the dominant motion and a particular competing motion.
Prior Dominant-Competing Fight Rate	Court filings	For each attorney pair between a dominant motion and a specific competing motion, we count the number of cases in the prior three years when the dominant attorney-competing attorney pair was present in the prior case in the reverse competing-dominant motion relationship. For example, if Labaton Sucharow-Chitwood Harley is a specific dominant attorney-competing attorney pair, we count the number of times the same Labaton Sucharow-Chitwood Harley pair appeared in a class action in the prior three years where Labaton Sucharow was associated with the competing motion and Chitwood Harley was associated with the dominant motion. We then computed the fraction of these prior cases when the competing attorney firm decided to fight in the prior case. For example, if the Labaton Sucharow-Chitwood Harley appeared in 10 prior cases in the reverse competing motion-dominant motion relationship and in 4 of those cases the competing motion (i.e., those associated with Labaton Sucharow) decided to fight against the dominant motion, we computed a value of 0.4 for the Labaton Sucharow-Chitwood Harley pair for the specific class action. We then define Prior Dominant-Competing Pair Fight Rate as the average of the computed values for all attorney firm pairs between the dominant motion and a particular competing motion.
Small Market Share Pair	Court filings	We define Small Market Share as an indicator variable coded as 1 if a law firm with fewer than 100 cases in the dataset where the firm was selected lead counsel. We determine whether each dominant attorney and competing attorney pair involves a Small Market Share –

		Small Market Share Pair and code this as 1 and 0 otherwise. We then define Infrequent Firm Pair as the average for all dominant attorney and competing attorney pairs in a dominant motion and specific competing motion pair.
Prior Set Amt Difference ($ millions)	Court filings	The difference in aggregate settlement amounts obtained by the dominant attorney firm and the competing firm in all prior class actions where each was lead counsel in the prior three years.
Number Initial Motions	Court filings	Number of initial motions for lead plaintiff in the class action
ln(Market Capitalization)	CRSP	Log of the market capitalization of the corporation at issue in the litigation measured on the last day of the class period
SDNY	Court filings	Equal to 1 if the federal district court for the litigation is the Southern District of New York and 0 otherwise
NDCal	Court filings	Equal to 1 if the federal district court for the litigation is the Northern District of California and 0 otherwise
CDCal	Court filings	Equal to 1 if the federal district court for the litigation is the Central District of California and 0 otherwise
Restatement	Court filings	Equal to 1 if the complaint mentions a restatement by the corporation at issue in the litigation and 0 otherwise
SEC Action	Court filings	Equal to 1 if the complaint mentions an SEC investigation or enforcement action and 0 otherwise
Other Gov Action	Court filings	Equal to 1 if the complaint mentions a government (other than SEC) investigation or enforcement action and 0 otherwise
Officer Termination	Court filings	Equal to 1 if the complaint mentions the termination of a Top Officer and 0 otherwise. Top Officer includes Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Treasurer, Chief Technology Officer, Chief Information Officer, Chief Compliance Officer, President, and General Counsel.
Section 11	Court filings	Equal to 1 if the cause of action involves a Section 11 of the Securities Act allegation and 0 otherwise

Section 12	Court filings	Equal to 1 if the cause of action involves a Section 12 of the Securities Act allegation and 0 otherwise
Other Allegation	Court filings	Equal to 1 if the cause of action involves an allegation other than under Section11 of the Securities Act, Section 12 of the Securities Act, or Rule 10b-5 (and Section 10(b) of the Exchange Act) and 0 otherwise
Accounting	Court filings	Equal to 1 if the subject matter of the action involves an accounting issue (other than option backdating) and 0 otherwise
Merger	Court filings	Equal to 1 if the subject matter of the action involves a merger and 0 otherwise
Backdating	Court filings	Equal to 1 if the subject matter of the action involves option backdating and 0 otherwise
Credit Crisis	Court filings	Equal to 1 if the subject matter of the action involves the late 2000s credit crisis and 0 otherwise
FDA	Court filings	Equal to 1 if the subject matter of the action involves a disclosure relating to the Food and Drug Administration and 0 otherwise
IPO	Court filings	Equal to 1 if the subject matter of the action involves an initial public offering and 0 otherwise
FCPA	Court filings	Equal to 1 if the subject matter of the action involves the Foreign Corrupt Practices Act and 0 otherwise
Officer-Director	Court filings	Number of defendants who are either a director or officer of the corporation at issue in the litigation
Underwriter	Court filings	Equal to 1 if an underwriter for an offering is a defendant and 0 otherwise
Accountant	Court filings	Equal to 1 if an accounting firm is a defendant and 0 otherwise
SIC 28	CRSP	Equal to 1 if the corporate defendant is in SIC code 28 and 0 otherwise
SIC 36	CRSP	Equal to 1 if the corporate defendant is in SIC code 36 and 0 otherwise

SIC 73	CRSP	Equal to 1 if the corporate defendant is in SIC code 73 and 0 otherwise

Motion Level Variables	Source	Definition
Number Proposed Lead Counsel	Court filings	Number of proposed lead counsel in the specific initial motion for lead plaintiff
Number Movants	Court filings	Number of movants for lead plaintiff in the specific initial motion for lead plaintiff
Number Institutional Movants	Court filings	Number of institutional movants for lead plaintiff in the specific initial motion for lead plaintiff
Number Mode Movants	Court filings	Number of Mode Movants in the specific initial motion for lead plaintiff. We define Mode Movant and Mode Attorney as follows. We look only at the motions for which a particular institutional investor was the only movant. We only look at institutional investors with at least two motions in the dataset. If the institution proposes the same lead counsel more than 50% of the time in these motions, we code the institution as a Mode Movant and the associated law firm the Mode Attorney
Overlap	Court filings	The number of mode movants in a specific initial motion for lead plaintiff with the same mode attorney. We define Mode Movant and Mode Attorney as follows. We look only at the motions for which a particular institutional investor was the only movant. We only look at institutional investors with at least two motions in the dataset. If the institution proposes the same lead counsel more than 50% of the time in these motions, we code the institution as a Mode Movant and the associated law firm the Mode Attorney
Movant Losses	Court filings	Losses for the movants in the specific initial motion for lead plaintiff
Number Initial Motions	Court filings	Number of initial motions for lead plaintiff in the class action
ln(Market Capitalization)	CRSP	Log of the market capitalization of the corporation at issue in the litigation measured on the last day of the class period
SDNY	Court filings	Equal to 1 if the federal district court for the litigation is the Southern District of New York and 0 otherwise

NDCal	Court filings	Equal to 1 if the federal district court for the litigation is the Northern District of California and 0 otherwise
CDCal	Court filings	Equal to 1 if the federal district court for the litigation is the Central District of California and 0 otherwise
Restatement	Court filings	Equal to 1 if the complaint mentions a restatement by the corporation at issue in the litigation and 0 otherwise
SEC Action	Court filings	Equal to 1 if the complaint mentions an SEC investigation or enforcement action and 0 otherwise
Other Gov Action	Court filings	Equal to 1 if the complaint mentions a government (other than SEC) investigation or enforcement action and 0 otherwise
Officer Termination	Court filings	Equal to 1 if the complaint mentions the termination of a Top Officer and 0 otherwise. Top Officer includes Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Treasurer, Chief Technology Officer, Chief Information Officer, Chief Compliance Officer, President, and General Counsel.
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Other Allegation	Court filings	Equal to 1 if the cause of action involves an allegation other than under Section11 of the Securities Act, Section 12 of the Securities Act, or Rule 10b-5 (and Section 10(b) of the Exchange Act) and 0 otherwise
Accounting	Court filings	Equal to 1 if the subject matter of the action involves an accounting issue (other than option backdating) and 0 otherwise
Merger	Court filings	Equal to 1 if the subject matter of the action involves a merger and 0 otherwise
Backdating	Court filings	Equal to 1 if the subject matter of the action involves option backdating and 0 otherwise
Credit Crisis	Court filings	Equal to 1 if the subject matter of the action involves the late 2000s credit crisis and 0 otherwise
FDA	Court filings	Equal to 1 if the subject matter of the action involves a disclosure relating to the Food and Drug Administration and 0 otherwise
IPO	Court filings	Equal to 1 if the subject matter of the action involves an initial public offering and 0 otherwise
FCPA	Court filings	Equal to 1 if the subject matter of the action involves the Foreign Corrupt Practices Act and 0 otherwise

Officer-Director	Court filings	Number of defendants who are either a director or officer of the corporation at issue in the litigation
Underwriter	Court filings	Equal to 1 if an underwriter for an offering is a defendant and 0 otherwise
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SIC 28	CRSP	Equal to 1 if the corporate defendant is in SIC code 28 and 0 otherwise
SIC 36	CRSP	Equal to 1 if the corporate defendant is in SIC code 36 and 0 otherwise
SIC 73	CRSP	Equal to 1 if the corporate defendant is in SIC code 73 and 0 otherwise