The Shareholder Wealth Effects of Delaware Litigation*

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Abstract

We collect data on the record of every action in hundreds of derivative cases and merger class actions involving public companies filed in the Delaware Court of Chancery from 2004 to 2011. We use these data to analyze how markets respond to litigation in the most important court for corporate disputes in the United States. The detail in the dataset allows us to explore how case characteristics such as the timing of the filing, the presence of certain procedural motions, litigation intensity, and the judge assigned to the case relate to firm value. Unlike previous studies, we document that negative abnormal returns are associated with the filing of derivative cases, and we show that this association is particularly strong for cases that are first filed in Delaware and are not

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related to a previously disclosed government investigation. We also develop some evidence that market participants can anticipate litigation intensity and respond by valuing the firm equity less and that markets associate cases with pension fund plaintiffs with better outcomes than cases without this institutional involvement. Finally, we find little evidence of abnormal returns associated with judicial assignment at the time of filing for derivative cases, but we do observe an association between judicial assignment and case filing for merger cases.

1 Introduction

The relationship between litigation and firm value has long been a central focus for scholars of law and business. These inquiries have been limited by the difficulty of collecting large, uniform samples and the lack of detailed information about the type of cases, motions, announcements, and key milestones in a lawsuit. This study significantly expands the depth of the information available by collecting electronic docket data from the Delaware Court of Chancery, which is the leading court for corporate disputes in the United States.[1] The granular nature of the docket data allows us to precisely specify event windows and extract information about procedural tactics, litigation intensity, and judicial assignment in two of the most important types of corporate cases: derivative lawsuits and challenges to mergers. We use this additional information to analyze how these features of these two types of cases relate to firm value.

We develop three primary results regarding the relationship between Delaware derivative and merger litigation and shareholder wealth. First, we find evidence that derivative cases filed in Delaware have a negative association with firm value. This evidence is particularly strong for cases that have not involved a previously filed case or a government investigation—that is, those for which the filing of the complaint brings the greatest amount of new information to the market. This evidence is consistent with the view that the costs of derivative lawsuits—including the direct legal costs and the potential for negative publicity—outweigh shareholders' expected recovery. The documented asso-

[1]More than 50% of all public firms are incorporated in Delaware, while New York, the state with the second-highest share, attracts fewer than 5% of public firms (Daines, 2001). The judges of the Chancery Court are well versed in corporate law, and their speed and effectiveness help explain Delaware's success in attracting incorporations (Kahan, 2006).

ciation may also mean that derivative lawsuits send a negative signal about the firm's past actions and the integrity of its financials. While we cannot distinguish between these two potential channels, the evidence that the market draws a negative inference from derivative cases may mean that the threat of such suits can act as a deterrent to actions that lead to them.

Acquisition-related cases, which are another important type of Chancery Court corporate disputes, tell another story. During the time period under study, shareholder class action lawsuits were almost always filed against the boards of target companies in the wake of a merger or acquisition announcement (Cain and Davidoff, 2012). Given that the filing of the suits was a near certainty, firm equity prices should reflect the cost and impact of a potential lawsuit at the time a deal was *announced* rather than when the lawsuit was *filed*. Our data confirm this expectation, as we show that the average merger case filing produces no statistically detectable abnormal return.

Our second set of results examines the relationship between case and firm covariates and firm value. The docket data allow us to track both how intensive a case is—as measured by the number of docket entries—and the use of specific motions such as those to expedite proceedings. We find some mild evidence that cases with more docket entries have a negative association with the firm's stock price. Moreover, we find that this shift occurs at the time of the case filing. This result suggests that future docket activity is a proxy for the expectations of market observers at the time of filing.

We also find some evidence that the filing of cases by public pension fund plaintiffs produces a relative increase in firm value. These institutional plaintiffs tend to hold larger blocks of stock than individual shareholder plaintiffs, which should mean that the pension fund is more likely to internalize the costs of shareholder litigation, and should thus file higher-quality cases. This incentive alignment can help to minimize the agency costs that exist between clients and attorneys in the class action context (Macey and Miller, 1991). Some have raised concerns that public pension funds may use their institutional clout to pursue political goals, potentially at the expense of portfolio returns (Min and You, 2015). While we cannot separate out the impact of the agency cost benefit and the political goal cost, our finding suggests market participants do not view pension fund involvement as harmful relative to cases that are not brought by public pension funds.

Our final question builds on the econometric investigations of decision-

maker assignment. We investigate whether the identity of a judge who hears the case is associated with a change in firm value at the time of assignment. This kind of analysis is typically not possible in other settings (Belloni et al., 2012; Chen and Yeh, 2014; Chen and Lind, 2014; Chen and Sethi, 2011). The structure of the Court of Chancery—which has a large corporate docket, a small number of judges, and receives significant scrutiny from the business press, equity analysts, and merger arbitrageurs—presents an ideal environment for this type of analysis. We find little evidence that the market accounts for judicial identity at the time of filing for derivative suits. Instead, we find that judicial assignment has a stronger association with merger-related cases. We suggest that this difference may be because merger cases are unlikely to be subject to appeal, which may give judges more leeway to deviate from appellate court preferences.

The paper proceeds as follows. Part 2 reviews the literature on corporate litigation, which is used to develop our research questions. Part 3 describes the sample used in the study and reports descriptive statistics. Part 4 examines the simple abnormal returns associated with Delaware derivative and merger cases and also examines the relationship between case covariates and firm value. Part 5 concludes. Appendix A provides defines the variables used in the regressions, and Appendix B details our investigation of the association between motions to expedite and multijurisdictional litigation in merger cases.

2 Background and Theory Development

The Delaware Chancery Court only has jurisdiction over equitable cases, including corporate matters. The internal affairs doctrine allows certain types of corporate cases filed by (and against) firms that are incorporated in Delaware to be litigated in the Chancery Court. Most of the cases that involve public corporations fall into one of three categories: (1) derivative lawsuits; (2) shareholder class actions that challenge an acquisition; and (3) inter-firm contract disputes (Badawi, 2013). Our focus here is on the corporate law cases in the first and second of these categories. In this section we discuss the potential association between case features and firm value in the context of the literature on corporate litigation.

2.1 Case Types and Expectations

The underlying basis of our two types of cases—derivative cases and merger class actions—is quite different. The following subsection details both types of cases and discusses their potential effects on firm value.

2.1.1 Derivative Lawsuits

Derivative lawsuits allow shareholders to sue directors for harm those directors may have caused to the corporation. There has long been interest in whether derivative litigation produces benefits for shareholders. The earliest studies, from 1980s and early 1990s, find little relationship between the filing of derivative lawsuits and firm value. A pioneering paper by Romano (1991) shows no significant effect on stock price associated with the filing of 66 derivative lawsuits.[2] Likewise, she finds no significant effect when the lawsuit is reported in the *Wall Street Journal*, which occurs, on average, two weeks after filing. This null effect may be due to the small monetary awards that went to shareholders in derivative suits at that time. She finds that derivative settlements represent, on average, only 0.5% of firm assets. A related study by Fischel and Bradley (1985) looks at the effect of court rulings on motions to dismiss in derivative suits. They find a significant negative effect associated with dismissals and an insignificant positive effect when courts decline to dismiss suits, but do not find a significant effect around the filing date and conclude that any aggregate effect is likely to be negligible. As Bhagat and Romano (2002) point out, this finding is consistent with the negligible effects that Romano finds in her 1991 study. The conventional wisdom for a long time was consistent with these studies: since "the 1940s, a common theme among researchers has been that most derivative lawsuits are frivolous and motivated primarily by settlement fees" (Ferris et al., 2007).

To move forward in a derivative lawsuit, the plaintiffs must show either that (1) they demanded that the board investigate the alleged wrongdoing or that (2) such a demand would have been futile. A board's refusal to investigate alleged wrongdoing based on such a demand is subject to extreme deference to the business judgment rule. In practice, this approach means that the lawsuit will fail unless there is a plausible claim that the demand would have been

[2]West (2001) conducts a more recent investigation of derivative lawsuits in Japan. Like the other studies, he finds no stock market effect associated with the filing of these cases.

futile (Bainbridge, 2004). To prove that futility, the plaintiffs must show that a majority of the directors were implicated in the alleged wrongdoing or that they otherwise could not have acted act independently. For boards with a higher percentage of independent directors, it becomes more difficult to show that a demand for an investigation would have been futile.

One potentially significant shift that has taken place since the previous studies were conducted has been the increase in the percentage of independent directors that serve on public company boards. Some of the reasons for this shift include regulatory mandates such as the requirement under the 2002 Sarbanes-Oxley Act that public companies have audit committees comprised of independent directors, and NYSE and NASDAQ regulations that require that the majority of board members are independent (Davis Jr, 2008). As Thompson and Thomas (2004) suggest, the trend towards an increasing number of independent directors on corporate boards has likely made it more difficult to sustain a derivative lawsuit. Compared to a board that is dominated by insiders, it is substantially easier for defendant directors to get a case dismissed quickly on the basis of demand futility if a majority of the directors is independent. In order to circumvent this requirement, plaintiffs will typically need to make a substantial showing that the independent directors were complicit in the alleged wrongdoing. Gathering such evidence is likely to require the investigation of information that is not available to the broader public. Under these circumstances, the filing of a derivative suit could signal that (1) the plaintiffs have a strong case and (2) new information may be available.

There may also be a difference between derivative lawsuits filed in Delaware as opposed to those filed elsewhere. Armour, Black, and Cheffins (2012) provide evidence that derivative cases, among others, started leaving Delaware in the early 2000s. They show that this trend included option-backdating derivative cases—which many consider to have substantial merit—and suggest that Delaware's willingness to cut negotiated attorneys' fees might partly explain the exodus.[3] It is difficult to determine, however, whether this willingness to cut fees was a general, across-the-board impulse or only applied to low-merit cases. If it was the latter, plaintiffs' attorneys may have been content to litigate high-merit cases in Delaware and leave the other cases for elsewhere.[4]

[3]In a related study of cases including a private securities class action and a derivative lawsuit (several of which involved stock option backdating claims), Choi et al. (2015) provide evidence that very few of these cases get filed in Delaware.

[4]The paper by Armour, Black, and Cheffins suggests that this concern about different

In that case, the wealth effects of Delaware cases may show the effect of a high-merit derivative case rather than a derivative case of average quality.

While Delaware cases may involve higher-quality suits, the filing of such a case does not necessarily have a definitive effect on firm value. The expense associated with the case could swamp any expected return. The costs of litigating a lower-quality case will likely be the main effect on the firm's security price.

Alternatively, high-quality derivative cases may increase firm value. Some settlements involve recoveries for shareholders from the defendant directors and officers. If the expected value of these recoveries outweighs the legal costs and other negative effects associated with the lawsuit, the net effect of filing could be positive. There are, however, several reasons why this is unlikely. First, the relief in derivative cases seldom involves a monetary component. Erickson (2010), for example, finds that less than 10% of derivative cases produce a recovery of this sort. Second, a highly effective derivative suit may expose negative information about the firm. The costs associated with these adverse inferences may exceed any expected recovery. Third, any settlement funds are likely to come out of the proceeds of directors' and officers' insurance policies, the premiums for which are likely to increase as the result of a significant derivative settlement. Equity prices should reflect these increased costs, which may undercut the positive effect associated with a derivative award to the company.

Given the potential for positive, negative, and negligible consequences associated with derivative cases, we do not formulate a hypothesis about the impact of filing a derivative lawsuit. We instead frame our analysis as a question; the only firm prediction is that we expect lawsuits that bring new information to the market (i.e., are not related to an already-filed lawsuit or a government investigation) to be more likely to have an effect when they are filed than those related to previously filed securities lawsuits (Choi et al., 2015) or derivative lawsuits that have been previously filed in another jurisdiction. We thus ask:

Question 1: *Is the filing of a new derivative lawsuit associated with an increase or decrease in firm value?*

cases going to different states is not trivial. Of the Delaware in corporate firms, about 80% of the stock option backdating cases were litigated outside Delaware. We note that this statistic may mean that there is a sample selection issue in our exclusive focus on Delaware cases.

2.1.2 Merger Class Actions

Merger class actions are lawsuits filed by an individual or institutional shareholder on behalf of all shareholders. Typically, a plaintiff alleges that the directors of the target company breached their fiduciary duties to the shareholders by failing to obtain a high enough price for the target firm.[5] Over the course of our sample, the likelihood of a lawsuit in the wake of acquisition increased from being likely to being a near certainty. Cain and Davidoff (2012) show that roughly 45% of mergers were the subject of lawsuits in 2005, compared to over 95% of mergers in 2011. Significant settlements or awards are quite rare in these cases: a large majority of these cases result in a settlement that involves additional disclosures about the merger to shareholders and a payment of relatively small fees to the plaintiffs' lawyers (Davidoff et al., 2015). The high likelihood that these cases will get filed, and the low chance of a significant recovery, suggest the uncontroversial prediction that these cases are unlikely to affect firm value. With these concerns in mind, we ask the following question:

Question 2: *Is the filing of a lawsuit against a merger target associated with an increase or decrease in firm value?*

2.2 Lawsuit Characteristics

The filing of a lawsuit can provide new information. For example, the identity of the lawyers bringing the case can signal the strength or weakness of the underlying allegations, and the content of the complaint can suggest that the litigation is likely to be hard fought and expensive. Likewise, if multiple cases are filed around the same time, this may send a signal about potential outcomes. Many case features, such as the quality of the complaint, would be very difficult to standardize and measure. Others, like the effect on the stock price of each additional case that gets filed, could theoretically be captured given a broad enough window of time. One potential problem with such a metric is well known in event study methodology: expanding the length of event windows to capture the filing of an additional case—or some other indication of quality—makes it more difficult to attribute the abnormal return to

[5]These lawsuits often have a higher chance of success if there is an element of self-dealing in the transaction, such as a management-led buyout or the involvement of a controlling shareholder.

a specific event.

We use narrow event windows, and assume that some features of the case are observable at the time of filing or shortly thereafter. We then assume that these soft features will manifest themselves in observable ways, such as the number of docket entries or the filing of certain motions, after the filing of the case. We use these observable indicators as proxies for what market participants may have been able to infer at the time of the case filing.

We focus on several case features that we can extract from the docket. The first is the overall number of docket entries, which tallies the number of filings by all parties and any actions taken by the court. This measure should capture, among other things, the expected litigation expense associated with the case. We would expect substantial expenses to have a negative effect on firm value. However, that effect may be mitigated by other factors associated with litigation intensity. For example, high-quality cases could result in more litigation activity, and may have the opposite effect on firm value. That would likely be the case for merger cases: high-quality cases should increase the chance of recovery and thus raise the share price. Because it is difficult to anticipate the net effect of the litigation intensity, we again frame the inquiry as a question.

Question 3: *Is the amount of litigation activity a suit subsequently produces associated with increase or decrease in firm value at the time the suit is filed?*

We are also able to identify when plaintiffs file a motion to expedite the case. Like litigation intensity, a motion to expedite may signal several aspects of the case. For example, filing such a motion may indicate that the plaintiffs believe they have a strong case. In order to prevail on a motion to expedite, the plaintiffs must be able to show, among other things, that there is a substantial likelihood of success on the merits. If it is costly to file such a motion, we should expect that the plaintiffs will only do so if the expected benefit of prevailing exceeds those costs. To the extent that these motions signal a high-quality case, and insofar as market participants can infer that at the time of filing, this effect may increase firm value if this indication of quality bodes well for a shareholder recovery.

At the same time, there are reasons to believe that motions to expedite dilute the effect of lawsuits. Both merger class actions and derivative law-

suits can be brought in the state of incorporation and the state of the firm's headquarters. Sometimes competing groups of plaintiffs' lawyers will file competing lawsuits in both permissible jurisdictions. Since litigation in another forum creates the risk that a settlement in the other jurisdiction will have a preclusive effect on all related cases, corporate law scholars have suggested that this dynamic can create incentives for a "reverse auction" among plaintiffs' attorneys (Coffee, 1995; Griffith and Lahav, 2013). As these different groups negotiate with the defendant, they may be willing to make lower offers with respect to damage and attorneys' fees in order to ensure that they get something for their effort. All else being equal, the terms of these settlements should be lower than if the litigation were proceeding in a single jurisdiction.

Parties may use motions to expedite as a tactic to gain leverage over a competing lawsuit. If a court grants this motion, discovery will begin quickly and the court may issue rulings in relatively short order. Progression of a case on an expedited basis can make judges elsewhere reluctant to approve a settlement, and may thus diminish incentives for a reverse auction. Conversations with Delaware attorneys suggest that plaintiffs often use motions to expedite for this precise purpose. Badawi (2013) shows that, in years in which there is an increase in multijurisdictional merger litigation, there is also an increase in motions to expedite in Delaware merger cases. If plaintiffs use motions to expedite for this purpose, their presence may indicate a lower likelihood of a substantial recovery due to the dilutive effect of a potential reverse auction.

To assess the impact of multijurisdictional litigation in derivative cases, we review the securities filings of the firms involved in derivative litigation and the complaints associated with the cases. Doing so allows us to divide our analysis between cases in which the Delaware action is first filed and those for which there is ongoing litigation. We describe the process and results of this analysis more completely below. Developing this information is more difficult for the merger cases, because the target firms (and their disclosure obligations) disappear after the transaction. In the Appendix we detail the results of a sample of securities filings for target firms and show a reasonably strong association between motions to expedite and multijurisdictional litigation.

Because we expect potentially countervailing effects for motions to expedite, we frame the analysis as a question:

Question 4: *Is the eventual presence of a motion to expedite in Delaware corporate cases associated with an increase or decrease in firm value at the*

time the suit is filed?

We also code whether the case involves at least one motion for an out-of-state lawyer to appear. This procedural device, known as a *pro hac vice* motion, allows a lawyer who is not admitted in Delaware to be admitted for the purpose of a single case. The Chancery grants these motions as a matter of course in nearly all cases (Armour et al., 2012). We speculate that the presence of an out-of state lawyer is an indication of the difficulty of the case. While a firm can mount a high-quality defense by relying on the considerable expertise of the Delaware defense bar, a complex case will typically include the involvement of a firm's regular counsel, who is usually from out of state. That regular counsel may be actively involved in the case or may only be an observer, but our review of the dockets suggests that an intensely litigated case almost always involves at least one motion to admit an out-of-state counsel.[6] This observation is borne out in the docket data. Cases that include at least one motion to admit out-of-state counsel average about 172 docket entries over the course of litigation, while those without such a motion average roughly 35 docket entries.

There is substantial variation in the use of *pro hac vice* motions. At least one of these motions gets filed in about three-quarters of merger cases and two-thirds of derivative cases. We expect that cases without such a motion are likely to be of particularly poor quality, and we speculate that this quality is observable at the time of filing. Market participants may be able to infer this quality either from the identity of the lawyers who file the case or from the underlying allegations. This observation is consistent with existing evidence that stock prices react to the reputation of the plaintiffs' lawyers in merger class actions (Badawi and Webber, 2015).

But the net effect of the need for higher-quality lawyers in a case is not clear. While it could signal that a high-quality case may result in a stockholder recovery, it might also indicate that a case will be expensive—and thus negatively influence price. To address these issues we pose the following question:

Question 5: *Is the eventual filing of at least one* pro hac vice *motion asso-*

[6]Because there are many high-quality lawyers in Delaware, we choose not to use the total number of *pro hac vice* motions in a case as an explanatory variable. A high-quality case in which a Delaware firm leads the defense may involve a relatively small number of *pro hac vice* motions, while a medium-quality case directed by an out-of-state firm may involve several such motions. As we explain below, we expect cases that involve no out-of-state counsel to be of especially low quality.

ciated with an increase or decrease in firm value?

Recent research has suggested that the presence of public pension funds and other institutional clients may improve the quality of litigation (Weiss and Beckerman, 1995). These entities tend to own large amounts of each firm in their portfolios, which may help minimize the agency costs that class action litigation can generate. To the degree that litigation harms the firm, that harm will affect an institutional plaintiff much more than an individual plaintiff who owns only a handful of shares. Delaware law addresses this concern by taking institutional status and the level of share ownership into account when deciding which party will serve as lead counsel. Some other jurisdictions, by contrast, are more likely to award lead counsel status to the first party to file a complaint in the matter. Following this logic, the presence of a public pension fund or similar type of party may signal a greater potential for a shareholder recovery, at least compared to cases that involve individual shareholders.

Alternatively, there are some concerns that public pension funds use their shareholdings to pursue goals other than maximizing the value of their portfolios. These funds may, for example, use their clout as shareholders to encourage portfolio companies to pursue more labor-friendly policies, or to punish firms that do not share their political beliefs. Therefore the presence of pension funds in litigation may mean little, or may even be a negative signal. To provide insight to this association we ask the following question:

Question 6: *Is the presence of a pension fund plaintiff associated with an increase or decrease in firm value at the time of case filing?*

2.3 Judicial Identity

The docket includes information on the chancellor or vice-chancellor assigned to the case. We use this information to assess the wealth effect of a particular judge being assigned to a case. We base this analysis on the possibility that the market price reflects expectations about the effect a judge will have on a case. For example, if a judge has a reputation for being particularly sympathetic to shareholder plaintiffs in merger suits, all else being equal, one should expect the stock price to reflect the expectation that the merger price will be adjusted upward.

Our use of this dataset to measure the stock market effect of judicial assignment appears to be novel. However, a related literature attempts to develop

empirical measures of judicial quality and prestige, perhaps the most prominent of which is the number of times judges are cited in other jurisdictions. Choi et al. (2009; 2011) have used this metric to rank judges. These authors sometimes use citations to courts outside the home state, district, or circuit as the relevant measure based on the assumption that these citations are a better measure of influence because the courts citing the opinions are not bound by them. Choi et al. have also used productivity and judicial independence—measured by a judge's willingness to disagree with judges nominated by a president or governor of the same political party—as alternative metrics to rank judges (Choi and Gulati, 2005; Choi et al., 2011, 2009). To ascertain whether there is evidence for this association we ask:

Question 7: *Is there a relationship between firm value and the assignment of judges in Delaware merger class actions and derivative cases?*

3 Data and Summary Statistics

This paper uses a dataset that begins with every docket entry in the Delaware Court of Chancery for cases categorized as "Civil" from the beginning of 2004 through the end of 2011. The Court of Chancery's jurisdiction over equitable cases means that it hears corporate matters, trust and estate cases, questions relating to purchases of real estate, and contract cases. Any firm incorporated in Delaware is subject to the jurisdiction of the Chancery Court when a case involves these subjects. Given that over 50% of public companies have incorporated in Delaware, this court frequently settles inter- and intra-corporate disputes and has a national reputation for expertise in these matters.

We obtain the data from Westlaw's electronic coverage of the Chancery Court's docket. This coverage began in October 2003, but because the 2003 entries largely involve cases that were in progress, we begin with 2004 cases. The 2004–2011 window includes 7,418 unique case numbers that involve a total of 43,441 parties. From this initial dataset, we extract a subset of cases that involve publicly traded companies. To do so, we use a "fuzzy" matching algorithm that compares the names of parties from the docket with the names of publicly available companies extracted from the US Stock database put together by the Center for Research in Security Prices. The results of the fuzzy matches were then hand checked to confirm actual matches.

The resulting subset is a large sample of public company litigation in the Chancery Court over a period of 8 years.[7] The resulting dataset includes a total of 573 publicly traded companies that appear in 1,053 cases.[8] We distinguish between "lead" cases and "follow-up" cases. Lead cases are the first-filed actions that relate to a given set of facts. If additional plaintiffs file additional cases based on the same set of facts, we designate them as follow-up cases. We examine the complaints and code cases as either lead or follow-up, and retain all cases that can be categorized as derivative or involving litigation against merger targets.[9] Our sample of lead cases includes 129 derivative cases and 536 merger cases.

We search the text of the docket entries to code the presence of certain procedural events and motions in the docket. Since the text of the entries is standardized so that frequent procedural occurrences are described in very similar ways, we have a high degree of confidence that our searches are capturing the correct events. To ascertain whether a *pro hac vice* motion has been filed—which typically allows an out-of-state lawyer to appear in the case—we search for *pro hac vice* and code whether the docket for a particular case contains that term. For motions to expedite, we search whether the docket has the term "expedite," "expedited," and/or "expedition." We randomly select cases with both positive and negative hits for both terms and find no miscodings.

The merger cases, which we restrict to lawsuits against the board members of the target, benefit from controls for the amount of the premium paid by the acquirer and the timing of the lawsuit relative to the announcement of the transaction.[10] We obtain information on premium and announcement dates from the SDC Platinum database. We use the "fuzzy" matching algorithm described above to match the cases to SDC data, and hand check each match. To be useable, the SDC data must include the transaction date and the merger premium. We use these controls for lead cases filed within five days of the deal

[7]There do not appear to be any compelling reasons to believe that the matching method would bias the sample in a discernible way. This sort of bias may be possible if the cases involving public company subsidiaries, which are sometimes difficult to pick up through fuzzy matching, tend to differ in important ways from cases that involve the parent companies.

[8]Some cases have multiple publicly traded companies as defendants, and some cases involve public companies suing each other.

[9]Some cases involve both derivative and merger-related claims. We allow those categories to overlap.

[10]We omit cases in which firms are the plaintiff, since they nearly all involve hostile takeovers, and can thus be expected to have a substantially different relationship with the stock prices of the parties because they can signal that the target is resistant to a deal.

announcement. There are 116 cases for which we have controls and that were filed within that window.

[Insert Table 1 here]

Table 1 provides summary statistics for party status, case type, judicial assignment, and case and firm characteristics. Figure 1 shows the annual trends for the "lead" cases. While the number of derivative cases stays relatively constant over the course of the sample, there is a marked increase in the number of cases against merger targets after 2008, which may be due both to a secular increase in the number of such cases as well as a return of these cases to Delaware after an apparent exodus.[11]

We also collect data on the presence of earlier litigation and government investigations, and on the underlying facts that spur derivative lawsuits.[12] For each of the 129 derivative cases, we examine the complaint and classify the case into one of five categories: insider trading, oversight, self-dealing, stock option backdating, or other. We are also interested in whether earlier litigation was filed, and whether there was a government investigation into the conduct that is the subject of the lawsuit. For some firms this information is evident from the complaint and, when it is not, we examine the 10-Qs and 10-Ks of the firms in the quarters and years after the case filing. We read the descriptions of the legal proceedings to determine whether a related suit was filed elsewhere, and whether the government investigated the conduct. This process is not perfect; we find that some firms do not disclose the Delaware litigation in their securities filings. For these firms, we further supplement our investigation by searching for the case name on Google and in the Westlaw ALLNEWS database.

Table 2 summarizes our categorization of the derivative lawsuits. The largest categories of cases allege failures of oversight (i.e., the board failed to

[11] Armour, Black, and Cheffins (2012) have documented the exit of merger cases from Delaware that occurred from the mid-1990s until 2009. There is some evidence, however, that these cases have returned (Cain and Davidoff, 2012; Badawi, 2013).

[12] We would like to conduct a similar analysis for the merger cases, but it is resource intensive to find this information. As our discussion in Appendix B suggests, when we examine a subsample of securities filings for target boards that get sued, nearly thirty percent of them do not disclose the Delaware litigation. We know for certain that this litigation took place because we have the docket data and thus view the securities filings for targets as insufficiently reliable. To obtain this information we would need to search the dockets of the state court for the target's headquarters. These dockets are difficult to search in a thorough way because they are not always publicly available and are not always accessible through Lexis or Westlaw. For these reasons, we forego this analysis.

detect illegal activity by the firm) and self-dealing. Stock option backdating cases represent about 15% of the sample. Our case topic categories are mutually exclusive in the sense that if there was a government investigation, we put a case in that category regardless of whether multiple cases were filed. About a quarter of the cases involve a government investigation, and the bulk of those allege oversight failures. Twenty-one of the cases do not involve a government investigation, but did have a case filed outside of Delaware prior to the Delaware action. In a little less than 60% of the cases, there is no government action and the Delaware case is first filed. Over half of the cases in this category involve allegations of self-dealing. As the table shows, self-dealing cases are rarely related to a government investigation or to suits outside of Delaware, which suggests that these sorts of lawsuits are likely to bring the most new information to market participants.

[Insert Table 2 here]

The docket data also note the judge who has been assigned to the case. As in other courts of equity, there are no juries in the Court of Chancery. Each case is decided by either the chancellor, the equivalent of the chief judge, or one of the vice-chancellors (collectively referred to as judges for convenience). The chancellor and vice-chancellors are nominated by the governor and confirmed by the Delaware Senate for 12-year terms. The chancellor is responsible for assigning the cases to individual vice-chancellors or to himself or herself.[13] With the exception of the last five months of the study period, William B. Chandler III served as the chancellor. On June 22, 2011, Vice-Chancellor Leo Strine was elevated to the position of Chancellor.

We must be cautious in making inferences about the relationship between equity prices and judicial assignment because the assignment process in the Court of Chancery is not random: the chancellor assigns cases as they arrive, and Chancellor Chandler suggested that he sought to balance caseloads in assigning cases (Marcus, 2011). Our data allow some assessment of the degree to which the assignment process is significantly non-random. To test the distribution of cases, we regress the market capitalization, pension fund, docket count, motion to expedite, *pro hac vice*, and the industry fixed-effects variables against the judge fixed effects, controlling for year and case-type fixed

[13]Some cases are assigned to case masters, who are the equivalent of magistrates. We retain these cases in the dataset for most of our analyses, but omit them when we perform the judge-focused regressions.

effects. We then run a joint test of the judge fixed effects. In these unreported regressions, two of the fifteen joint tests are statistically significant—one at the ten-percent level (the industry fixed effect for the Business Equipment category and one at the five-percent level (the presence of a motion to expedite). In our analysis of judicial assignment, we run additional robustness checks to account for any concerns raised by these diagnostics.

4 Shareholder Wealth and Delaware Litigation

This section details our event study methodology and discusses the results of applying it to the Delaware data.

4.1 Estimating Cumulative Abnormal Returns

We use a standard event study methodology to analyze the relationship between Delaware litigation and equity prices. This approach assumes that stock returns follow a market model,

$$r_t = \alpha + \beta r_t^m + \varepsilon_t \ , \tag{1}$$

where r_t is the return on a particular stock at time t, r_t^m is the compounded return on a market portfolio, and ϵ_t is a stochastic error. If an event, such as a lawsuit filing, occurs on day T, then there may be an "abnormal return" on a particular stock on that day. This can be captured by first calculating the predicted return during the event period, which we call r_t^*, using the constant and coefficient calculated in Equation 1. To calculate the cumulative abnormal returns for firm i we subtract the actual cumulative return during the event window from the predicted return during the event window: $CAR_i = r_t - r_t^*$. We use event periods of varying lengths, as detailed below, and a 255-day pre-event window consisting of $T - 300$ to $T - 46$.

We want to obtain a representative estimate of the abnormal returns from lawsuit filings for multiple stocks, under the assumption that these represent independent events and that they share the same underlying "true" mean. We use both unweighted and weighted means to estimate the "average abnormal return." For the weighted mean, the weight for each observation is the inverse of the variance of the predictive residual used to calculate the abnormal return.

We also conduct a number of analyses relating the abnormal return to

the characteristics of the lawsuit being filed. To do so, we conduct two types of regressions using different approaches to correct for potential heteroskedasticity. The first type is ordinary least square regressions with robust (hetereoscedasticity-consistent) standard errors. The second type is weighted least squares (WLS) regressions, which have been used in event study analysis as an alternative approach to correct for hetereoscedasticity (Shahrur, 2005; Dutordoir and Van de Gucht, 2007). The weights in the WLS regressions are the inverse of the variance of the predictive residual. In both types of regressions we use the cumulative abnormal return as the dependent variable and the case characteristics as the independent variables:

$$CAR_i = \gamma + \kappa X_i + \omega_i \ , \tag{2}$$

where CAR_i is the cumulative average return for firm i, κ is the coefficient of interest, X_i is a vector of case covariates, and ω_i is a stochastic error.

4.2 Case-Type Regressions

This subsection discusses the stock price reaction to the filing of the two major types of case types in the sample: derivative lawsuits and merger class actions. We define the date the plaintiff filed the complaint as the date of filing indicated on the docket.

4.2.1 Derivative Lawsuits

We begin our analysis with derivative lawsuits. As noted in Section 2, previous studies have not shown a relationship between share prices and the filing of derivative lawsuits. Our data allow us to conduct a more fine-grained analysis of the question by differentiating between derivative cases (1) for which the information disclosed in the filing was likely known to the market prior to the filing of the Delaware case and (2) those for which the case filing was likely to impart new knowledge. Figure 2 shows the cumulative abnormal return for derivative cases for which there was a previously filed case elsewhere and/or the allegations were the subject of a previous government investigation. Figure 3 shows the same measure for derivative cases for which the Delaware case was first filed and where there was no previous government investigation. Both figures show the window four days prior to filing and four days after filing.

Figure 2 shows a steep decline in firm value prior to the filing of the Delaware case. After filing, however, firm value is more or less level. Figure 3, in contrast, shows a generally flat trend prior to filing, followed by a marked drop in firm value after filing. Though we must be cautious about interpreting the steep decline in Figure 2, one possibility is that the news of a government investigation and/or other filing(s) affects the value of some firms prior to the filing of the Delaware suit. In the cases that bring new information to the market, however, the decline in firm value happens at the time of filing rather than beforehand.

The regression results in Table 3 confirm the patterns suggested by Figures 2 and 3.[14] For Delaware derivative lawsuits for which there was a previously filed case and/or a previous government investigation, we do not observe cumulative abnormal returns that are significantly different from zero in any of the weighted regressions. We do, however, observe negative associations for these cases that are statistically significant in the weighted regressions. For the cases filed first in Delaware for which there was no government investigation, we find statistically significant, negative associations in the (0,+2), (0,+3), and (0,+4) windows for the unweighted regressions.

[Insert Table 3 here]

Table 3 does not, of course, establish that there is a meaningful difference between Delaware cases for which there was a previous case or government investigation filed, on the one hand, and those that bring new information to the market, on the other hand. For the unweighted analysis, the value of the constant is larger for the Delaware-first cases than for the other group in the (0,+2), (0,+3), and (0,+4) windows. However, when we conduct two-tailed t-tests to compare these groups, the differences are not statistically significant.

The evidence related to derivative cases, while not overwhelming, suggests that Delaware cases that bring new allegations to the attention of the market are negatively associated with firm value relative to Delaware cases that are follow-on filings. There are two possible reasons for this apparent negative

[14]We omit an extreme outlier that is in the sample of all derivative cases, but was not first filed in Delaware, due to concerns that including it could confound the results for some of our derivative case analysis. The case involves American International Group, Inc. (AIG). The plaintiffs filed the case against AIG on September 17, 2008, which was contemporaneous with the decision to bail out the company. On the day of the lawsuit, the abnormal return was substantially negative, but the stock price more than doubled in the [+1,+4] window. We do not believe these dramatic swings, which dwarf those seen in any other case, were attributable to the filing of the lawsuit.

relationship. First, the filing of derivative lawsuits provides a negative signal about the quality of management and/or board oversight, and the loss in firm value is the result of the market punishing the firm accordingly. If a firm faces the prospect of losing value, this relationship may deter the type of wrongdoing that derivative lawsuits target. Second, derivative suits can entail significant legal costs, as the firm must pay for its own defense and, if the case settles, the firm will usually also pay the fees of the plaintiffs' attorneys.[15] In general, we can conclude that investors are unlikely to believe that derivative litigation is likely to result in a positive recovery for shareholders, given that the only statistically significant coefficients in our analysis are negative.

4.2.2 Acquisition-Related Cases

Acquisition-related lawsuits have been the subject of extensive recent research. Researchers have examined how multijurisdictional dynamics may affect litigation (Cain and Davidoff, 2013), whether there has been an increase in the *number* of challenges (as opposed to the percentage of mergers challenged) (Thomas and Thompson, 2012), and how the presence of institutional parties affects features of these cases Webber (2013). But the relationship between this litigation and equity prices has not yet been analyzed.

Conducting merger litigation event studies is complicated by the fact that plaintiffs often file cases right after the announcement of a merger (Fletcher et al., 2012). Stock price movements may thus be a product of the announcement rather than the litigation. We address this concern in two ways. First, we analyze cases that were filed five or more trading days after the announcement of the merger. By that time, the abnormal return associated with the price paid by the acquirer should be fully incorporated into the stock price in a way that does not overlap with the event windows. As the first two columns of Table 4 show, none of the results is statistically significant. This evidence provides some support for the expected result that the average merger lawsuit is uninformative to the market. Figure 3 further supports this finding: the

[15]Insurance policies may cover attorneys' fees in these cases, which might mute the effect of an award on firm value (see, e.g., *XL Spec. Ins. Co. v. Loral Space & Comm., Inc.*, 011 WL 537161 (N.Y. App. Div. Feb. 17, 2011), which held that a directors' and officers' insurance policy covers the attorneys' fees in a derivative action). Significant costs arising out of derivative litigation may lead to a large increase in premiums, which may have an adverse relationship with firm value. Market anticipation of this increase in premiums when a lawsuit is filed could produce negative abnormal returns.

cumulative abnormal return is quite flat around the window of filing for cases filed five or more trading days after the announcement.

There are several potential objections to this first approach. One is that the cases filed quickly are different from those filed less than five trading days after announcement of the deal. For example, higher-quality cases may get filed more quickly than lower-quality cases (or vice versa). Another potential problem is that the additional time may allow the market to incorporate both the expected lawsuit and the expected effect of the lawsuit into the stock price.

[Insert Table 4 here]

To address these concerns, our second type of analysis includes acquisition cases filed at any time after the announcement. We include controls for deal timing and the premium paid. Specifically, we use indicator variables for cases filed the same day as the announcement (sameday) or the day after the announcement (nextday), the merger premium, and interactions between sameday and the premium and nextday and the premium. These controls should account for the premium's effect on stock price, albeit at the cost of restricting our sample size because we do not have this information for all cases.

The third and fourth columns in Table 4 report the results of these regressions, and we find no statistically significant abnormal returns. This evidence is consistent with expectations. Merger litigation is almost a foregone conclusion, especially toward the end of our sample period. Market participants should expect this litigation to occur, and should factor the average effect of this litigation into the target's equity price. If the lawsuit provides some indication that there is likely to be a recovery for shareholders, the market may reflect that fact, but that is an above-average result in these cases (Davidoff et al., 2015). We attempt to control for some of these factors in the analysis below, but the evidence developed in the present analysis supports the expected inference that average cases have no statistically detectable relationship with firm value at the time of filing.

4.3 Case Covariates

This subsection examines the inclusion of case covariates in the estimates of abnormal returns. As discussed in Section 2, these covariates include indications of litigation intensity and potential measures of case quality. Tables

5 and 6 present these results for regressions that use the (0,+2) cumulative abnormal return as the dependent variable.

4.3.1 Derivative Cases

Table 5 presents the results for derivative filings. The first three regressions analyze all derivative filings, while the last two regressions limit the sample to the 76 cases for which there was no previously filed case and no government investigation. The results of these regressions are quite mild, so we are cautious not to infer too much from them. Nevertheless, we observe a negative association with the number of docket entries related to the case in the weighted regressions using all cases.[16] The coefficient is significant at the 10% level both with and without controls for the Fama-French 10 industry controls. This result provides some evidence that cases that will involve substantial litigation can be identified at the time of filing, and that investors view them negatively. As discussed in Section 2, there are several potential sources for this adverse inference. One is that intensely litigated derivative cases are expensive because they entail defense costs as well as the possibility of having to pay for the plaintiffs' attorneys' fees. Intensely litigated cases may also have merit (i.e., show some degree of wrongdoing by directors). The potential for this wrongdoing may send a negative signal about the quality of those directors, which in turn have a negative relationship with firm value.

[Insert Table 5 here]

There is also some mild evidence that the presence of pension funds in derivative cases has a relationship with firm value. The coefficient on the pension fund variable is positive and statistically significant for the weighted regression in the sample of cases that bring the most new information to the market. We view this result as providing some support for the view that the presence of pension funds in derivative litigation increases the chance of recovery for shareholders. This result is consistent with the view that minimizing agency costs between shareholders and plaintiffs' attorneys can improve litigation outcomes for shareholders.

We find no statistically significant relationships between abnormal returns and the *pro hac vice* and motion to expedite variables. As explained above, these variables may also be a proxy for litigation intensity, which may be most

[16] This result persists with highly similar coefficients and standard errors when we use the cumulative abnormal return for the (0,+1) window as the dependent variable.

accurately captured by the number of docket entries.[17] Regardless of their import, we do not find support for the view that these indicators improve or diminish the outlook for shareholder recoveries.

4.3.2 Merger Cases

Table 6 reports the results from the regressions on the (0,+2) cumulative abnormal returns from merger case filings with case covariates. The results provide some additional evidence that litigation intensity and the involvement of pension funds in litigation affects firm value. The signs on these coefficients—negative for the number of docket entries and positive for the involvement of pension funds—are the same as those found in the analysis of derivative litigation.

[Insert Table 6 here]

The litigation intensity result is stronger for merger litigation than it is for the derivative litigation regressions. The coefficient is significant for both the weighted and unweighted regressions for the sample of cases filed five or more days after the announcement of the transaction. This result, while not overwhelmingly strong, implies that market participants have some insight regarding whether a case will result in substantial litigation. It appears that they view this fact negatively when it comes to the market value of the firm, and expectation of substantial litigation leads market participants to devalue a firm's market value.

There are several possible reasons for the negative reaction associated with anticipated litigation intensity. One is that market participants are concerned about the cost that this litigation will impose on the firm. This explanation seems unlikely, however, because in most cases the litigation fees will be paid out of a directors' and officers' insurance policy, and if the merger closes, there

[17] There is a substantial correlation between the docket count variable and the *pro hac vice* and expedite variables (the Pearson correlation coefficient for expedite and *pro hac vice* is 0.26, for expedite and docket count is 0.44, and for *pro hac vice*and docket count is 0.42 for all the derivative cases). This creates some concern that the results related to the docket count variable are a product of multicollinearity. However, when we run the variable inflation factor (VIF) diagnostic, none of the VIFs is greater than 2. In addition, when we omit one or both of the *pro hac vice* and expedite variables, we get highly similar coefficients for the second and third set of regressions in Table 5. Excluding only the *pro hac vice* variable results in the docket count coefficient being statistically significant at the 5% level; when leaving out the expedite variable, the docket count coefficient is not statistically significant. When we omit both variables, the docket count coefficient is significant at the 10% level.

will be no entity to pay increased premiums.

A more plausible scenario is that cases in which the market anticipates relatively intense litigation may also signal that the deal may fall through. For example, if the case has substantial merit, such as viable allegations of self-dealing, there may be an expectation that an increase in consideration would be warranted. The parties might have to negotiate a settlement, and it may be that an increase that would be large enough to be approved by the court would be more than the buyer is willing to pay. That risk could threaten the closure of the deal, which is likely to have an adverse effect on stock price.

We also find additional evidence that the involvement of pension funds is associated with an increase in firm value. The coefficient for the unweighted regressions is positive and significant at the 5% level for the sample of cases filed five or more days after the announcement of the transaction. This finding provides some support for the theory that large blockholders have incentives to bring higher-quality litigation. The market may react to this phenomenon by expecting pension funds' lawyers to be more likely to secure an increase in consideration.

As with the derivative cases, we find no statistically significant relationship between firm value and the filing of cases that (1) have motions to expedite filed *and* (2) have at least one *pro hac vice* motion filed. To the degree that these measures reflect both the quality and cost of litigation, the number of docket entries may be a more precise measure of these aspects of the case.[18]

4.4 Equity Prices and Judicial Assignment

The docket includes information on the chancellor or vice-chancellor assigned to the case. We use this information to assess the relationship between equity prices and a particular judge being assigned to a case when that assignment becomes public.[19]

[18]There is a low level of collinearity between the docket count, motion to expedite, and *pro hac vice* motions. None of the correlation coefficients is over 0.25. When we run regressions that successively omit each of these variables, we find little difference in the coefficients and standard errors.

[19]Some cases are assigned to case masters, which are roughly the equivalent of magistrates. We keep these cases in the dataset for all of the analyses above, but we limit the analysis in this section to cases assigned to the chancellor and vice-chancellors. Vice-Chancellor Glasscock was the only new judge who came into the sample during the analysis period. He was confirmed in 2011, near the end of the sample. Because he appears in so few cases, we omit him from the analysis.

Table 7 shows the derivative case results for these unweighted and weighted regressions. Columns 1 and 2 include all derivative cases, and Columns 3 and 4 include derivative cases that do not have a similar case already filed elsewhere or a related government investigation. We focus on the [+1, +4] event window for case filing because a judge is not usually assigned to a case until several business days after filing. The regressions include all of the variables in the case covariates analyses in Tables 5 and 6. Vice-Chancellor Parsons is the omitted category.

[Insert Table 7 here]

Table 7 shows very little evidence of an association between judicial assignment and firm value.[20] Of the 20 coefficients reported in Table 7, only one is statistically significant, and only at the 10% level.[21] The lack of any relationship would be consistent with models of judging that view lower courts as relatively faithful agents of appellate courts when the costs of appellate review are low (McNollgast, 1994). In these models the primary motivation for trial court judges (or intermediate appellate judges) is to avoid reversal by a higher court. As long as reviewing opinions is not costly, trial courts will not deviate from appellate court preferences, and there will be very little variation in the outcomes produced by lower court judges. If, however, the costs of review are significant, or if judges have motivations other than avoiding reversal, there is likely to be variation among the decisions of lower court judges (Kim, 2007).

While it is difficult to quantify the degree to which the threat motivates Chancery Court judges, that threat of reversal is palpable. Unlike the US Supreme Court, the Delaware Supreme Court must review cases appealed from the Chancery. Derivative cases, which have no deal deadline to create an intense pressure to settle, are relatively likely to be appealed. If this threat of policing by the Delaware Supreme Court is substantial enough, that could explain why there is minimal evidence of a relationship between equity prices

[20] This table uses a subsample that omits the cases assigned to case masters and to Vice-Chancellor Glasscock, which explains the different numbers of observations.

[21] As discussed above, we run diagnostic regressions to try and ascertain whether any case covariates are associated with the assignment of particular judges. In those diagnostics we found that a joint test of the judicial indicator variables was statistically significant when the expedite variable was regressed on the judge variables (and case type and year indicator variables). To address this concern we run unreported regressions that are the same as those in Table 7, but omit the expedite covariate. When we do so, the Strine result in the third column of Table 7 is no longer statistically significant, but we do observe results that are significant at the ten-percent level for Chandler and Lamb for the weighted versions of the regressions that focus on new information cases.

and judicial assignment. There are, of course, other possibilities. For example, the market may not be sufficiently attuned to the differences between individual judges. Alternatively, it could be that there are substantive differences between judges, but we are unable to discern them with our data. One methodological difficulty is the variation in the time of judicial assignment. The docket does not provide information about the date that the judge assigned to the case was made public. Conversations with Delaware lawyers suggest that the average time between filing and assignment is roughly two to three days, but we cannot verify that claim. Therefore, we must use a relatively long window (four days), which makes the analysis less precise.

Table 8 presents the judicial analysis for merger cases. The first two columns display cases filed five days or more after the deal announcement, and the last two columns include cases filed less than five days after the deal announcement. All of the regressions include the case covariates used in Tables 5 and 6, and the cases filed less than five days after the announcement include the same case covariates as well as the controls for the deal premium, sameday, nextday, and related interaction variables. These results show stronger evidence of an association between judicial assignment and firm value. In Column 1, the coefficients for Strine and Noble are positive and statistically significant, and in similar weighted regressions, the coefficient for Strine is positive and statistically significant.[22] For columns 3 and 4, the only statistically significant coefficient is the weighted one for Chancellor Chandler.

[Insert Table 8 here]

This evidence provides a stronger suggestion than Table 7 that there is an association between the assignment of which judge and the value of the merger target. The coefficients for Leo Strine, who served as both vice-chancellor and chancellor during the sample period and is now the Chief Justice of the Delaware Supreme Court, show the most robust relationship. It is also worth noting that the only statistically significant relationship with the derivative case regressions was also associated with Strine. To the extent that these results reflect a market reaction to his assignment to a case, this relationship could be because he is one of the most well-known and outspoken Chancery jurists, and has decided some landmark cases in favor of shareholders. For

[22]When we omit the expedite variable to address the concerns that we raised in the previous footnote, the statistically significant results remain significant at same level and there are no additional results that are statistically significant.

example, Strine wrote both the *In re Oracle Corp.* opinion,[23] which took a substantially stricter approach to director independence than then-existing Delaware law, and the Chancery Court opinion in the Southern Peru Copper case, which awarded $1.26 billion to minority shareholders in a controlling shareholder transaction.[24]

To the degree that the evidence establishes differences between judges in the merger context, it suggests that the Delaware Supreme Court may face more impediments to policing merger cases than derivative cases. This difference may be because merger cases have a lower chance of appeal. As alluded to above, there is intense pressure to dispense with outstanding litigation prior to closing a merger transaction. This preference nearly always results in a settlement prior to a substantive decision being rendered in the Chancery Court—an outcome that will preclude an appeal. Knowing this, the Chancery Court judges might believe that they have more leeway in making early determinations in the case, such as whether to grant a motion to expedite or certain discovery motions. The outcome of those decisions could give the plaintiffs more settlement leverage, which increases the chance for a shareholder recovery.

5 Conclusion

This study uses a novel dataset to examine the relationship between Delaware corporate litigation and firm value. Unlike previous studies on derivative litigation, we find evidence of a negative relationship between the filing of derivative lawsuits and firm stock price. This evidence suggests that, on average, these lawsuits are not expected to provide a benefit to shareholders. The negative relationship may, however, deter the directors of other firms from engaging in conduct that could initiate a derivative lawsuit. We observe little association between equity prices and the filing lawsuits against the boards of merger targets. We attribute this unsurprising result to the high likelihood of this type of lawsuit during the sample period.

When we analyze case covariates, we find some evidence, albeit mild, that litigation intensity is observable at case filing—for both derivative cases and merger cases—and has a negative relationship with firm value. This suggests

[23] 867 A.2d 904 (2004).
[24] 52 A.3d 761 (2011).

that the potential for costly litigation weighs on the minds of stock market participants. We also find limited evidence that the participation of pension funds in corporate litigation can affect firm value. When these institutional parties appear as plaintiffs, there is some evidence of an increase in stock price. This association suggests that the ability of these players to better police the agency costs of class litigation may increase the prospects of an award for shareholders.

Finally, we examine the relationship between the assignment of judges in corporate litigation and firm value. For derivative cases, we find that the identity of the judge assigned to a particular case has little relationship on firm value. While we are especially cautious about making inferences from null results, we note that this lack of an relationship would be consistent with the threat of a low-cost review by an appellate court. The assignment of judges has some association with firm value in merger litigation, which may be evidence that market participants expect judges to vary in their treatment of cases when there is little chance of an appeal.

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Appendix A: Variable Definitions

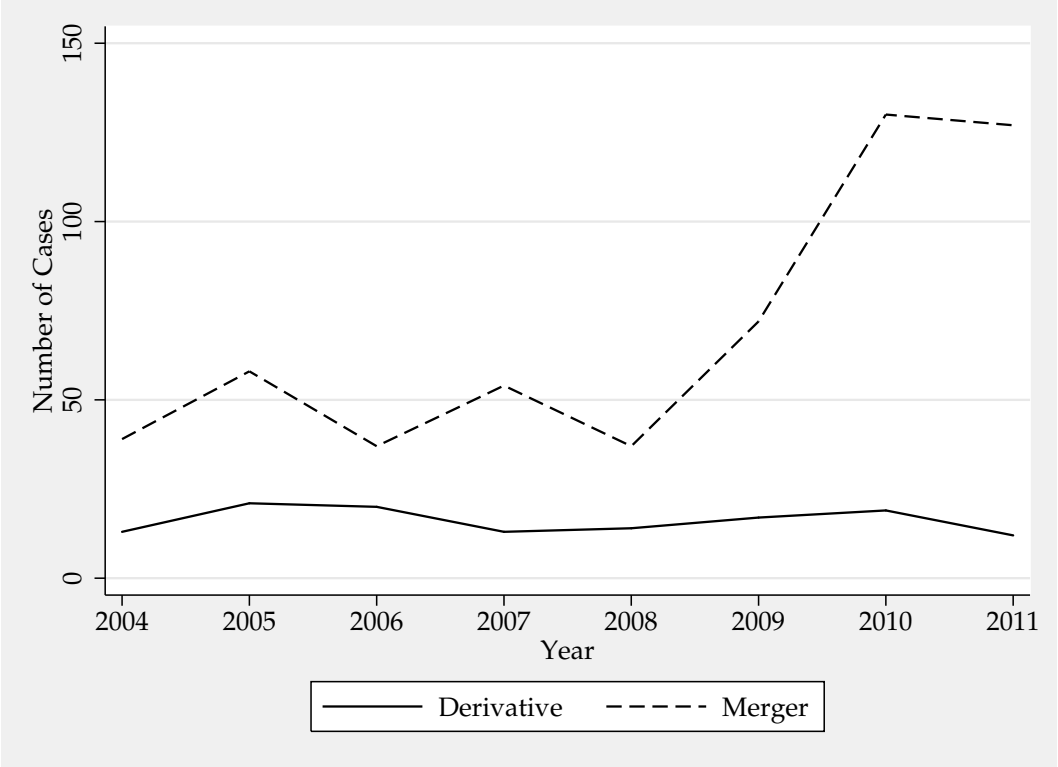
Variable	Definition
Deal Premium	The deal premium measured as of one day prior to the deal announcement (as reported in the SDC Platinum database)
ln(Market Cap.)	Natural logarithm of the market capitalization as reported in Compustat at the end of the quarter in which the complaint was filed.
Pension Fund	Pension fund appears as a plaintiff.
Pro Hac Vice Motion Filed	The docket shows that at least one *pro hac vice* motion was filed during the course of the litigation.
Motion to Expedite Filed	The docket shows that at least one motion to expedite proceedings was filed during the course of litigation.
Total Complaints Filed	The total number of complaints filed that allege a similar claim based on a similar set of facts.
Docket Count	The number of docket entries that appear in the case.
Chandler	The case was initially assigned to Chancellor Chandler.
Laster	The case was initially assigned to Vice Chancellor Laster.
Noble	The case was initially assigned to Vice Chancellor Noble.
Strine	The case was initially assigned to then-Vice Chancellor Strine.
Lamb	The case was initially assigned to Vice Chancellor Lamb.

Appendix B:
Motions to Expedite and Multijurisdictional Litigation

As discussed in Section 2.2, conversations with Delaware lawyers and some empirical evidence suggest that competing litigation in other jurisdictions may motivate a motion to expedite. We investigate that relationship in this appendix by ascertaining whether cases that involved a motion to expedite were, in fact, being litigated on multiple fronts. To do so, we examine the sued or suing firm's 10-Q, 10-K, and related securities filings for the period after the filing of the Delaware case. We obtain these filings from the U.S. Securities and Exchange Commission's EDGAR database. Firms are required to disclose "material" information, including lawsuits, and most 10-Q and 10-K filings have a subsection labeled "Litigation" or similar. We assume that if the company discloses the Delaware case it will disclose related litigation elsewhere, but that if it does not disclose the Delaware case, it will not disclose other similar cases in other jurisdictions. The company may not disclose these cases because it deems them not "material."

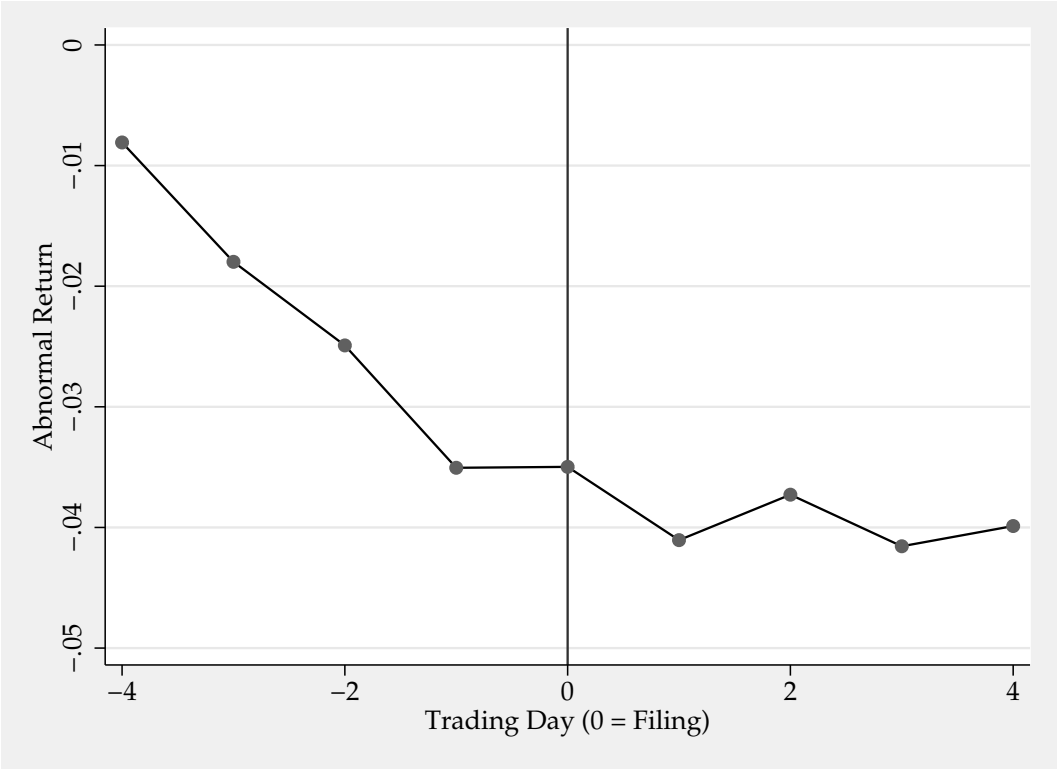
We randomly select a subsample of the merger cases and read the related securities filings. We limit the subsample to cases in which the shareholders sue the directors of the target in an active deal, because there is almost always an attorney's fee to be had in these cases (Cain & Davidoff, 2012). Cases involving failed mergers and those suing bidders have far worse prospects and are unlikely to produce the fee that drives multijurisdictional competition. Of the 76 merger cases we examined, we were unable to find a disclosure of the Delaware case for 21 of them. For the remaining 55 cases, the Pearson correlation coefficient for the presence of multijurisdictional litigation and a motion to expedite is 0.558. More concretely, of the 38 cases that involve a motion to expedite, 31 of them have a similar case proceeding in at least one other jurisdiction. Of the 17 cases without a motion to expedite, only four involve litigation in another jurisdiction.

Figure 1: Annual Trends For Each Case Category



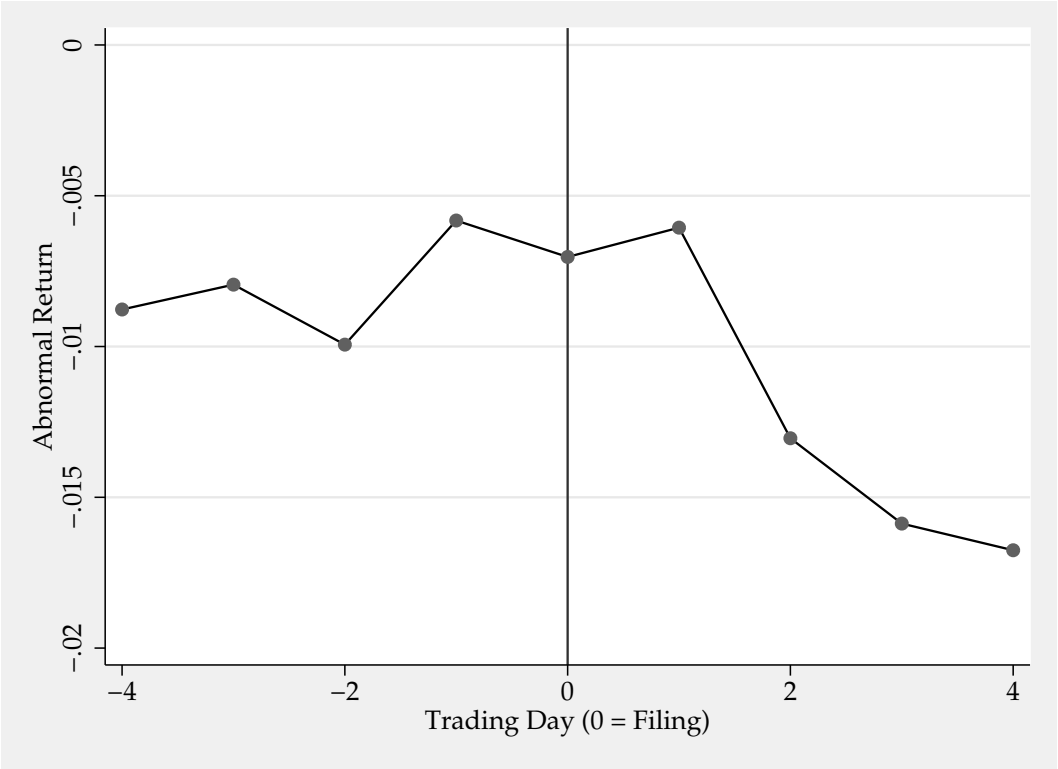
This figure displays the case counts for derivative and merger cases filings in Delaware by year.

Figure 2: Cumulative Abnormal Return at Derivative Case Filing For Cases Either First Filed in Delaware or Related to a Government Investigation



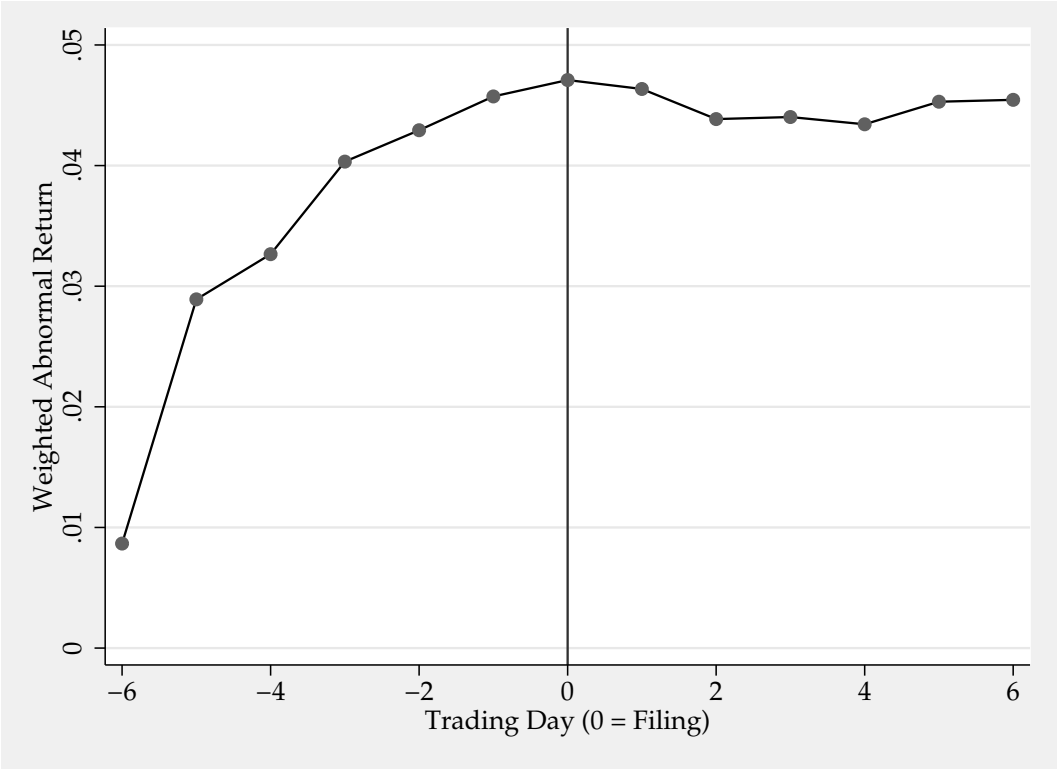
This figure charts the average, equal-weighted cumulative abnormal return for the 53 Delaware derivative cases that had a related case filed earlier in another jurisdiction and/or involved a government investigation. The cumulative returns begin four days prior to filing and run through four days after filing.

Figure 3: Cumulative Abnormal Return at Derivative Case Filing for Cases First-Filed in Delaware and with No Previous Government Investigation



This figure charts the average, equal-weighted cumulative abnormal return for the 76 Delaware derivative cases that were first-filed in Delaware and did not involve a previous government investigation. The cumulative returns begin four days prior to filing and run through four days after filing.

Figure 4: Cumulative Abnormal Return at Merger Case Filing for Cases Filed Five or More Days After Deal Annoucement



This figure charts the average, equal-weighted cumulative abnormal return for the 420 Delaware merger cases that were filed five or more days after the announcement of the transaction. The cumulative returns begin four days prior to filing and run through four days after filing.

Table 1: Summary Statistics for Case Filings

	Mean	SD	Count
Judges			
Parsons	0.132		85
Laster	0.0903		58
Noble	0.134		86
Strine	0.299		192
Lamb	0.118		76
Chandler	0.218		140
Case Type			
Derivative	0.199		129
Merger	0.828		536
Merger (SDC matched)	0.179		116
Case Covariates			
ln(Market Cap)	7.471	2.178	
Pension Fund	0.224		145
Total Complaints Filed	1.586	1.365	
Motion to Expedite Filed	0.501		324
Number of Docket Entries	137.0	149.1	
Pro Hac Vice Motion Filed	0.743		481
Industry			
Consumer Non-Durables	0.0433		28
Consumer Durables	0.0139		9
Manufacturing	0.0680		44
Oil, Gas, Coal	0.0680		44
Business Equipment	0.213		138
Telephone and Television	0.0711		46
Wholesale	0.0835		54
Healthcare	0.128		83
Utilities	0.0294		19
Other	0.281		182

This table presents the summary statistics for the variables used in the paper. There are 642 cases with judge information and 647 filed complaints in the final dataset (five cases do not have judge information in the docket). We allow merger and derivative cases to overlap when the derivative case involves a merger. This categorization explains why the sum of the merger and derivative cases exceeds 647.

Table 2: Derivative Case Types

Topic	Gov. Investigation N	Case Filed Outside Del N	Del. First Filed N	Total N
Insider Trading	4	2	1	7
Oversight	18	8	15	41
Self-Dealing	1	4	43	48
Backdating	9	3	6	18
Other	0	4	11	15
Total	32	21	76	129

This table presents our categorization of the derivative cases based on a review of the complaint, the securities filings of the involved firm, and internet searches. The case topic categories are mutually exclusive: if there was a government investigation, we put a case in that category regardless of whether multiple cases were filed.

Table 3: Abnormal Return to Derivative Case Filing

	Previous Case Filed And/Or Gov. Investigation		No Previously Filed Case and No Gov. Investigation	
	Unweighted	Weighted	Unweighted	Weighted
(0,+1) CAR	-0.00600	-0.0129	-0.000236	-0.00175
	(0.00752)	(0.00888)	(0.00330)	(0.00219)
(0,+2) CAR	-0.00223	-0.0194	-0.00722	-0.00288
	(0.00928)	(0.0106)*	(0.00357)**	(0.00251)
(0,+3) CAR	-0.00651	-0.0194	-0.0101	0.000404
	(0.00891)	(0.01000)*	(0.00445)**	(0.00267)
(0,+4) CAR	-0.00483	-0.0183	-0.0109	-0.000573
	(0.00993)	(0.0109)*	(0.00557)*	(0.00316)
Observations	53	53	76	76

This table presents results from OLS (unweighted) and WLS (weighted) regressions that use the cumulative abnormal return in the indicated window as the dependent variable. Day zero is the day the first complaint is filed against the target firm. The value reported is the value of the constant. The unweighted regressions use robust standard errors. In the weighted regressions, the weight is the inverse of the variance associated with estimate of the cumulative abnormal return. The standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% confidence levels, respectively.

Table 4: Abnormal Return to Merger Case Filing

	Filed 5 or more days after announcement		Filed within 5 days (with SDC controls)	
	Unweighted	Weighted	Unweighted	Weighted
(0,+1) CAR	0.000692	0.000197	-0.00184	0.00769
	(0.00193)	(0.00144)	(0.0153)	(0.0137)
(0,+2) CAR	-0.00159	-0.000405	-0.00420	0.00636
	(0.00217)	(0.00158)	(0.0152)	(0.0137)
(0,+3) CAR	-0.00162	-0.00142	-0.00426	0.00641
	(0.00247)	(0.00182)	(0.0155)	(0.0139)
(0,+4) CAR	-0.00236	-0.00110	-0.00836	0.00819
	(0.00268)	(0.00193)	(0.0161)	(0.0146)
Observations	420	420	116	116

This table presents results from OLS (unweighted) and WLS (weighted) regressions that use the cumulative abnormal return in the indicated window as the dependent variable. The value reported is the value of the constant. Day zero is the day the first complaint is filed against the target firm. The first two columns include all cases filed five or more trading days after the announcement of the merger. The second two columns include all cases filed less than five days after announcement. These regressions include controls for the merger premium, indicator variables for whether the plaintiffs filed the lawsuit on the same day as the announcement of the transaction (sameday), the day after the transaction (nextday), and interaction variables for premium*sameday, and premium*nextday. The unweighted regressions use robust standard errors. In the weighted regressions, the weight is the inverse of the variance associated with estimate of the cumulative abnormal return. The standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% confidence levels, respectively.

Table 5: Cumulative Abnormal Return and Case Characteristics in the [0,+2] Window for Derivative Filings

	All Cases			No Previously Filed Case and No Gov. Investigation	
	Unweighted	Weighted	Weighted	Unweighted	Weighted
ln(Market Cap)	-0.00391	-0.00399	-0.00386	0.00160	-0.00169
	(0.00302)	(0.00253)	(0.00231)*	(0.00214)	(0.00143)
Pension Fund	0.00514	0.0103	0.0122	0.00218	0.0166
	(0.0114)	(0.0121)	(0.0102)	(0.0110)	(0.00735)**
Number of Docket Entries	-0.0000325	-0.0000434	-0.0000432	0.000000780	-0.00000127
	(0.0000327)	(0.0000232)*	(0.0000224)*	(0.0000244)	(0.0000141)
Motion to Expedite Filed	0.0120	0.0140	0.0164	0.00794	-0.00366
	(0.0134)	(0.0129)	(0.0123)	(0.00919)	(0.00682)
Pro Hac Vice Motion Filed	-0.00935	-0.00600	-0.00659	-0.00547	-0.00658
	(0.0102)	(0.0130)	(0.0119)	(0.0114)	(0.00812)
Observations	129	129	129	76	76
R^2	0.137	0.294	0.271	0.083	0.172
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	No	No	No

This table presents results from OLS (unweighted) and WLS (weighted) regressions that use the cumulative abnormal return in the indicated window as the dependent variable. The value reported is the value of the constant. Day zero is the day the first complaint is filed against the firm. The unweighted regressions use robust standard errors. In the weighted regressions, the weight is the inverse of the variance associated with estimate of the cumulative abnormal return. The standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% confidence levels, respectively.

Table 6: Cumulative Abnormal Return and Case Characteristics in the [0,+2] Window for Merger Filings

	Filed 5 or more days after annoucement		Filed within 5 days (with SDC controls)	
	Unweighted	Weighted	Unweighted	Weighted
ln(Market Cap)	0.00171	0.000870	0.00512	0.00485
	(0.00119)	(0.000822)	(0.00410)	(0.00423)
Pension Fund	0.0137	0.00557	0.00835	0.00957
	(0.00580)**	(0.00401)	(0.0159)	(0.0195)
Number of Docket Entries	-0.0000716	-0.0000325	0.00000366	-0.00000716
	(0.0000407)*	(0.0000133)**	(0.0000710)	(0.0000574)
Motion to Expedite Filed	0.00242	0.00440	0.0144	-0.00334
	(0.00478)	(0.00360)	(0.0141)	(0.0144)
Pro Hac Vice Motion Filed	0.00514	0.00213	0.0186	0.0233
	(0.00684)	(0.00451)	(0.0156)	(0.0185)
Observations	420	420	116	116
R^2	0.125	0.087	0.684	0.696
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes

This table presents results from OLS (unweighted) and WLS (weighted) regressions that use the cumulative abnormal return in the indicated window as the dependent variable. The first two columns include all cases filed five or more trading days after the announcement of the merger. The second two columns include all cases filed less than five days after announcement. These regressions include controls for the merger premium, indicator variables for whether the plaintiffs filed the lawsuit on the same day as the announcement of the transaction (sameday), the day after the transaction (nextday), and interaction variables for premium*sameday, and premium*nextday. The unweighted regressions use robust standard errors. In the weighted regressions, the weight is the inverse of the variance associated with estimate of the cumulative abnormal return. The standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% confidence levels, respectively.

Table 7: Abnormal Returns to Derivative Case Filing with No Prior Case and No Government Investigation in the [+1,+4] Window with Judge Fixed Effects (relative to Parsons)

	All Cases		No Previously Filed Case and No Gov. Investigation	
	Unweighted	Weighted	Unweighted	Weighted
Chandler	-0.000117	0.0211	0.0353	0.0273
	(0.0222)	(0.0168)	(0.0239)	(0.0164)
Laster	0.0167	0.0174	0.0157	0.00336
	(0.0262)	(0.0215)	(0.0296)	(0.0296)
Noble	-0.0219	0.0128	0.0192	0.0189
	(0.0221)	(0.0192)	(0.0249)	(0.0160)
Strine	-0.00253	0.0187	0.0315	0.0251
	(0.0211)	(0.0173)	(0.0180)*	(0.0159)
Lamb	0.0110	0.0234	0.0321	0.0292
	(0.0245)	(0.0186)	(0.0207)	(0.0192)
Observations	127	127	75	75
R^2	0.068	0.185	0.256	0.235
Case Controls	Yes	Yes	Yes	Yes

This table presents results from unweighted and weighted OLS regressions that use the cumulative abnormal return in the indicated window as the dependent variable. Day zero is the day the first complaint is filed against the target firm. The standard errors are reported in parentheses. The case controls include the same as those in Tables 4 and 5 (the presence of pension funds, the total number of docket entries, the presence of a pro hac vice motion, and the presence of a motion to expedite). The unweighted regressions use robust standard errors. In the weighted regressions, the weight is the inverse of the variance associated with estimate of the cumulative abnormal return. The standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% confidence levels, respectively.

Table 8: Abnormal Returns to Merger Case Filing [+1,+4] Window with Judge Fixed Effects (relative to Parsons)

	Filed 5 or more days after announcement		Filed within 5 days (with SDC controls)	
	Unweighted	Weighted	Unweighted	Weighted
Chandler	0.00651	0.00658	-0.0165	-0.0182
	(0.00813)	(0.00650)	(0.0117)	(0.0102)*
Laster	0.0124	0.00246	-0.0209	-0.0180
	(0.00936)	(0.00734)	(0.0156)	(0.0151)
Noble	0.0154	0.00950	-0.00972	-0.0190
	(0.00813)*	(0.00637)	(0.0134)	(0.0123)
Strine	0.0149	0.00973	-0.000891	-0.00606
	(0.00718)**	(0.00547)*	(0.0108)	(0.00946)
Lamb	-0.00161	0.00347	0.00236	-0.0106
	(0.0106)	(0.00787)	(0.0130)	(0.0112)
Observations	417	417	116	116
R^2	0.053	0.051	0.205	0.220
Case Controls	Yes	Yes	Yes	Yes

This table presents results from unweighted and weighted OLS regressions that use the cumulative abnormal return in the indicated window as the dependent variable. Day zero is the day the first complaint is filed against the target firm. The first two columns include all cases filed five or more trading days after the announcement of the merger. The second two columns include all cases filed less than five days after announcement. All of the regressions include case controls, which are the same as those in Tables 4 and 5 (the presence of pension funds, the total number of docket entries, the presence of a pro hac vice motion, and the presence of a motion to expedite). The regressions for the cases filed within five days of deal announcement also include controls for the merger premium, indicator variables for whether the plaintiffs filed the lawsuit on the same day as the announcement of the transaction (sameday), the day after the transaction (nextday), and interaction variables for premium*sameday, and premium*nextday. The unweighted regressions use robust standard errors. In the weighted regressions, the weight is the inverse of the variance associated with estimate of the cumulative abnormal return. The standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% confidence levels, respectively.