Information Production and Translation of Legalese: The Media's Role in Impounding Price Information from Case Filings

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March 2023

Abstract: We examine the importance of media coverage around litigation filings. Prior studies assume investors use filings to acquire value-relevant information and assess case merits. However, it is unclear how investors can quickly impound information given frictions to timely obtain filings and interpret complex legalese. In contrast, specialized media members have the expertise and ability to obtain filings and report on their content. We isolate the media's information production and translation roles by examining market reactions (1) after filings but before complaints become widely publicly available through the PACER system and (2) based on whether the media reports on the sued firm on the filing date. We find a significant market reaction—using absolute abnormal returns and trading volume—to litigation with media coverage, including before filings are readily available to investors, and minimal reaction to litigation without media coverage. We also find an immediate reaction to the initial litigationrelated article for firms using intraday stock prices. Our results appear driven by the media reducing investor integration costs by translating filings into more understandable information, rather than simply awareness or acquisition costs. Finally, abnormal media coverage around filings predicts case outcomes, which is important because litigation costs are mainly restricted to meritorious cases. Overall, results show the media plays a critical role in creating information about litigation to impound case information into stock prices.

Keywords: Media; Market Reaction; Securities Litigation; Securities Class Action

JEL Codes: C53; G12; G14; G18; K22; K40; L82; M40

Acknowledgments: We thank Anne Beatty, Rachel Geoffroy, Jen Glenn, Burch Kealey, Brian Monsen, Ewa Sletten, Andy Van Buskirk, Justin Walton, and workshop participants at Ohio State University for their helpful comments. We gratefully acknowledge the research support provided by the Tippie College of Business and the Mays Business School. All errors are our own.

1. Introduction

Securities litigation imposes significant costs on firms and their shareholders due to managerial distraction, reputation damage, more expensive financing, and other factors (Kim and Skinner, 2012; Deng et al., 2014; Arena and Julio, 2015). Thus, firms experience negative abnormal returns at the filing date due to expected litigation costs (Gande and Lewis, 2009), and investors call for improved information about litigation risks (CFA Institute, 2013). However, little is known about *how* investors obtain information to price the effects of litigation.

Legal filings contain value-relevant information, such as discussions about governance and internal control deficiencies, which help market participants assess litigation costs (Badawi, 2022; Carrizosa and Cazier, 2022). However, while filings are publicly available, investors face nontrivial frictions to directly obtain and evaluate them. The Public Access to Court Electronic Records (PACER) system increases public transparency for the legal system, but also imposes costs and delays on users versus other alternatives. As a result, Congress and the federal judiciary acknowledge the need to lower costs and modernize PACER to improve access to case filings (Wasser, 2020; Nardi and Kudman, 2022; U.S. Courts, 2022).

Further, filings are generally long and use complex legal jargon, making them difficult to understand (Bonsall et al., 2017; Carrizosa and Cazier, 2022; Martínez et al., 2022). Low readability increases processing costs, making it difficult for investors to promptly impound information into stock prices (You and Zhang, 2009; Lee, 2012; Blankespoor et al., 2020). While the SEC encourages companies to write disclosures that investors can understand and use to make informed decisions (SEC, 1998), lawyers focus on making persuasive cases. Thus, it is

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¹ Court clerks were initially slow to add docket entries, the dockets often lacked the underlying legal documents, and the public could only access filings at limited locations (U.S. Courts, 2000, 2013). PACER access and functionality have improved, but users still pay nontrivial fees to access what arguably should be free, public information (Johnson, 2009; Liptak, 2019). Critics also allege it is inefficient and outdated (Schwartz, 2009; Cuccia, 2020).

unclear whether investors directly use legal filings to price litigation effects.

We examine the media's role in the market reaction to litigation. We expect media coverage around initial filings may be critical to inform investors and elicit a market response. Notably, dedicated reporters cover the federal courts and monitor court dockets for new cases and filings, so the media has expertise in analyzing and using litigation filings (Van Syckle, 2020; Godlasky, 2022). The federal judiciary recognizes the "media perform an important and constitutionally protected role by informing and educating the public" about litigation (U.S. Courts, 2011). Further, the media disseminates information to the market (Fang and Peress, 2009; Bushee et al., 2010; Engelberg and Parsons, 2011) and often reveals fraud, consistent with its information creation role (Miller, 2006; Dyck et al., 2010; Heese et al., 2022).

On the other hand, there are several reasons the media may not convey useful information in our setting. The media is interested in sensational facts in its entertainment role (Jensen, 1979; Call et al., 2022), which aligns with a desire by plaintiffs' lawyers for cases with "sex appeal" (Baker and Griffith, 2010). The preference to report on controversial firms with sensational, but potentially legally irrelevant, facts may impede the market from focusing on value-relevant information (Nguyen and Pham, 2021). Also, most journalists lack legal training and/or expertise to share case insights (Drechsel, 1983; Journalist's Resource, 2011). Further, most research finds the media only affects prices through information dissemination, not production (e.g., Bushee et al., 2010; Drake et al., 2014; Blankespoor et al., 2018). Thus, the role of the media on the market reaction to litigation is an empirical question.

We obtain all securities class actions from 1998–2019 and follow Carrizosa and Cazier (2022) by examining the market reaction around the case filing. To focus on reaction magnitude, we examine absolute abnormal returns and trading volume. Consistent with their results, we find

a significant reaction on the days around filings. However, because over 70 percent of sued firms have media coverage on the filing date, it is unclear whether the market reaction is due to the filings themselves (as argued by Carrizosa and Cazier, 2022) or the associated media coverage. Stated differently, the media plays a primary role in forming market reactions even for earnings announcements, which are expected events (Drake et al., 2014). Thus, its role may be even more important in litigation, where events are unscheduled and unexpected. On the other hand, media coverage is crucial in reducing investor processing costs around earnings announcements in part because many occur on the same day (Blankespoor et al., 2020). As legal filings are less common, investors may have more capacity to review them, reducing the need for the media.

To examine the effect of the media, our primary design exploits the fact that many filings are entered into PACER after lags of several days, rather than on the filing date. Thus, for many cases, any initial widespread market reaction *cannot* be due to information in the filings themselves but could be due to related media coverage. This is a unique feature of our setting as most research on media coverage occurs concurrently with the public release of the underlying firm news, making it difficult to isolate the media's effect (Blankespoor et al., 2020). Thus, while there is often not a clear distinction between whether the media is creating content or rebroadcasting content from others (Miller and Skinner, 2015), we can examine periods where the media is more clearly creating, rather than rebroadcasting, litigation information.

We first examine whether case merits affect the delay in entering the filing into PACER to ensure our tests do not inadvertently partition on case merits, which also affect the market reaction (Biggerstaff and Moser, 2019; Donelson et al., 2022). We find that the delay is mainly driven by the court's case load (busyness) and is unassociated with case merits.

Accordingly, we re-examine the market reaction to litigation in the subset of cases where

there is a lag of two to five trading days between the filing date and when the case is entered into PACER. Any reaction to cases before they are publicly available through PACER is likely due to the media's information production. We then confirm this inference by separately estimating our tests based on whether there is media coverage on the filing date, which also allows us to examine the media's role in rebroadcasting and translating information over the following days. Our tests include firm-quarter fixed effects to control for time-invariant aspects of the firm's information and litigation environment and cross-sectional economic factors that may affect the likelihood of litigation and media coverage, as well as the market reaction to such events.

Further, cases with filing date media coverage have a significant market reaction *before* they are entered into PACER. Results are robust to excluding cases filed shortly after the class period end to ensure the media coverage and market reaction are due to the filing, rather than the bad news event at the class period end. In contrast, for cases without such media coverage, we find no significant reaction before, and a limited reaction following, a case becoming available on PACER. Thus, our findings imply that PACER alone is insufficient for an immediate, noticeable market reaction to litigation, likely because of investors' inability to translate the filings. In other words, media coverage not only reduces investor awareness and acquisition processing costs for litigation but also reduces integration costs (see Blankespoor et al., 2020).

We next examine cases entered into PACER on the filing date to test whether the media still plays a role in impounding case information into stock prices in a larger sample when investors can concurrently read the filings themselves. We find a stronger market reaction around the filing date for cases with media coverage and a *weaker* reaction for cases without it, implying investors may be waiting for additional information to respond to cases lacking media coverage.

An alternative explanation for our results is that filing date media coverage follows,

rather than causes, the market reaction (i.e., articles respond to demand and are published based on the market reaction). Also, the media may cover cases that would result in strong reactions even absent media coverage. To rule out these potential explanations, we exploit intraday stock prices to obtain a tighter measurement window. We examine cases with a litigation-related article published during trading hours on the filing date and measure stock prices in the surrounding 30 minutes. We find negative returns almost immediately after the publication.

Interestingly, when we separately examine cases with an article published during trading hours based on whether the cases are entered into PACER on the filing date, we find results are driven by cases that are *not* entered into PACER on the filing date. Further, returns begin to drop roughly 10 minutes before the article is published. This early trading could be due to news leaking from the media (see Liu et al., 1992) or from parties involved with the litigation. Overall, the media plays a critical role in creating, rebroadcasting, and translating case news to impound it into prices, while the filings themselves are generally insufficient to inform investors.

We perform several additional analyses to provide further insights. We test whether the limited reaction to the filings is due to frictions deterring investors from obtaining filings (i.e., acquisition costs) or an inability to understand them (i.e., integration costs). We exploit the staggered rollout of the Case Management/Electronic Case Files (CM/ECF) system, which significantly reduced frictions for investors to timely obtain actual case filings (Johnson, 2009; Greenwood and Bockweg, 2012). We find no evidence the new system increased the ability of filings to impact the market absent media coverage, suggesting our main results are primarily due to the inability of investors to understand legal filings. These results are consistent with the predictions of Blankespoor et al. (2019), who argue that simply reducing acquisition costs may provide limited benefit to investors in interpreting complex disclosures.

We also show the amount and nature of media coverage, rather than just its existence, is associated with a larger market reaction. Market reactions to articles disseminating press releases are limited, but reactions are greater when articles contain new content, further implying the media creates unique information that reduces investor integration costs. Testing information creation more directly, results are driven by longer articles covering only the sued firm, implying article content helps investors understand litigation.

To ensure our results are not driven by the media selection process, we repeat our main analysis using propensity score-matched and entropy-balanced samples based on observable firm and case characteristics. We also examine only cases that settle to hold unobservable case characteristics relatively constant and again obtain similar results. We also obtain similar results using signed abnormal returns and when we split our sample into early (1998–2008) and recent (2009–2019) periods. Demonstrating our results are due to media coverage making stock prices more efficient, we find no evidence of a reversal over the 31 days after the filing and cumulative returns for cases that do and do not receive filing date media coverage eventually converge.

Finally, given the apparent necessity for media coverage for litigation to rapidly affect the market, we briefly explore *why* this is the case. Although most cases take several years to resolve (Cox et al., 2005; Cornerstone Research, 2021), litigation costs are mainly restricted to cases that settle (i.e., meritorious cases—see Donelson and Yust, 2019). Thus, early information that helps investors identify case merits is value relevant, and the media may reduce investor integration costs by providing such information in more understandable language than complaints do.

We focus this analysis on *abnormal* media coverage, which is the change in the number of articles around case filing as compared to the same period in the prior year, to improve identification and control for firm media prominence. The primary advantage of this metric is

that it (or a very similar measure) is easily observable by virtually any investor. We find that abnormal media coverage is positively associated with case outcomes (i.e., whether cases settle and settlement amounts). Thus, media coverage helps investors assess expected litigation costs at the time of the filing, even though case outcomes may not be known for several years.

This study makes several contributions. Limited research examines the information content in litigation filings (Badawi, 2022; Carrizosa and Cazier, 2022), and none examines the mechanism by which such information is impounded into stocks. As filings appear too complicated to directly inform investors, media coverage is needed for litigation to quickly affect prices. Thus, we also contribute to research on the media. While the media often reveals misconduct (e.g., Miller, 2006; Dyck et al., 2010; Heese et al., 2022), we focus on how the media *informs* the market about alleged misconduct it did not reveal. Overall, litigation filings are a powerful setting to examine the effect of the media on investor processing costs for information originating *outside* the firm. We show the media informs investors and reduces integration costs outside the earnings announcement setting, complementing Guest (2021). We thus answer the call of Blankespoor et al. (2020, 32) to improve our understanding of "exactly how, why and when" the media affects investor processing costs and pricing beyond firm disclosures.

Further, we extend the findings of Blankespoor et al. (2019) on the effect of investor awareness and acquisition costs. They speculate that reducing these costs is less likely to matter for more complex disclosures but caution their results may not generalize to other types of disclosures and information. However, our analysis confirms their predictions in our setting.

Our study also has implications for accounting standard setting. Investors have criticized the quality of litigation-related disclosures (CFA Institute, 2008, 2013), but the FASB abandoned its proposals to enhance them in response to public pressure (FASB, 2008, 2010; Frankel, 2012).

Such disclosures are less critical if investors can directly understand litigation filings. However, their apparent inability to do so may support future attempts at revising these disclosures, particularly given recent criticism by the SEC Investor Advisory Committee that the FASB prioritizes the needs of preparers over investors (Foley, 2022).

Finally, our study has policy implications. Both Congress and the judiciary recognize PACER needs modernization and fees should be reduced, but they disagree over several aspects of proposed reforms (Mauskopf, 2022). Congress' proposals also entail significant net costs (CBO, 2020; Cooper and Adler, 2020). While Carrizosa and Cazier (2022) conclude the reforms would increase transparency for investors, our results imply they may have only limited success. An improved PACER would provide benefits to lawyers, academics, and others, but it is unlikely to *directly* benefit investors. Rather, our results imply courts should enhance media access to increase transparency more cost-effectively. For example, many courthouses still prohibit cell phones, laptops, and recording devices, making journalists' jobs more difficult for little security benefit (Van Syckle, 2020). Also, increased digital audio and video of hearings "could be the antidote to mainstream media's declining coverage of the courts" (U.S. Courts, 2008).

2. Background, prior research, and hypothesis development

2.1. Securities litigation and accessibility of litigation complaints

Securities class actions impose higher costs than other shareholder litigation and federal class actions, and case selection by plaintiffs' lawyers is viewed as opportunistic (Coffee, 2006; Fitzpatrick, 2010). They are generally filed under Section 10(b) of the Securities Exchange Act of 1934 and/or Rule 10b-5, which allege an intentional misstatement or omission of a material fact that causes damage (Perino, 2003; Kim and Skinner, 2012).

In response to concerns about widespread frivolous litigation, Congress passed the Private Securities Litigation Reform Act (PSLRA) in 1995 to discourage the filing and reduce

the costs of such cases. The most important reforms of the PSLRA were the imposition of a heightened pleading standard, a stay on discovery until after the case survives a motion to dismiss, the lead plaintiff provision, and the safe harbor for forward-looking statements (Perino, 2003). After plaintiffs attempted to avoid these requirements by shifting securities litigation from federal to state courts, Congress passed the Securities Litigation Uniform Standards Act (SLUSA) of 1998 to require lawyers to file most such cases in federal courts (Serota, 2010).

A hallmark of the U.S. legal system that originates in English common law is the right of public access to court records (Apa, 1994). However, before the introduction of the PACER system in 1988, many federal court records could only be obtained at the local courthouse where they were filed, and electronic records were practically non-existent (U.S. Courts, 2000, 2020). The Judicial Conference adopted PACER in 1988 to increase public access to court records (U.S. Courts, 2020). Initially, PACER was tested by only a half dozen courts, but many more began to implement it after Congress provided funding in the Judiciary Appropriations Act of 1991, which enabled courts to invest in technology. Congress also allowed the federal judiciary to charge for the use of PACER in 1997 to fund ongoing technology enhancements, which resulted in courts making more records available electronically (U.S. Courts, 2000). However, PACER has been criticized for charging excessive fees, and the U.S. government recently agreed to pay \$125 million to refund some fees charged to users (Liptak, 2019; Raymond, 2022).

PACER's utility was limited in the early years. Users could search it to find filings and case status, but most documents were unavailable as courts lacked digital imaging and electronic filing capabilities. Further, users had to use specialized modems to directly dial a courthouse bulletin board service to access information, reducing access (U.S. Courts, 2000, 2013).

Three innovations significantly increased PACER's usefulness over time. First, the

CM/ECF system was developed in 1996 and implemented throughout the federal judiciary on a staggered basis from 1996 through 2008 (Carrizosa and Cazier, 2022). This system allowed lawyers to file case documents electronically, which significantly increased the volume of available electronic documents in the court system. It also resulted in cases being uploaded to PACER on a more timely basis (Greenwood and Bockweg, 2012). Access to electronic records remained limited in the early years because courts were slow to implement CM/ECF (e.g., only 11 of the 94 District Courts used it as of 2002), but the new system was nearly universal by 2007 (Hane, 2001; U.S. Courts, 2013). Second, the U.S. Party/Case Index (USPCI) was added to PACER in 1997. This change made it significantly easier for users to identify new filings by allowing nationwide searches, rather than having to search within each district court. Third, PACER became publicly available on the internet in 1998 (U.S. Courts, 2000). Thus, the system changed from one in which "you practically needed to be a computer expert" to one that is "very intuitive" and requires only the ability to browse the internet (U.S. Courts, 2008). Collectively, these innovations resulted in the number of registered PACER users increasing from a mere 9,000 in 1994 to more than 900,000 in 2008 (U.S. Courts, 2000, 2008).

2.2. Securities litigation research

Prior research examines returns around litigation filings to measure the cost of litigation (e.g., Griffin et al., 2004; Gande and Lewis, 2009; Haslem et al., 2017; Donelson and Yust, 2019). Isolating the effect of litigation with returns is challenging because some cases are filed shortly after their class period ends when the market may still be impounding the effects of the bad news revelation (Griffin et al., 2004; Donelson and Yust, 2019). Additionally, investors may anticipate litigation costs for peers of sued firms (Gande and Lewis, 2009; Donelson et al., 2022). While these issues make it difficult to precisely estimate the magnitude of litigation costs,

prior research consistently finds negative abnormal returns around filings.

Market participants quickly discern case merits, so litigation costs are largely restricted to settled cases (e.g., Blau and Tew, 2014; Donelson and Yust, 2019). For example, Biggerstaff and Moser (2019) find investors distinguish merits shortly after fillings, and Blau and Tew (2014) find high short selling around filings predicts case outcomes. Donelson and Yust (2019) find creditors and insurers significantly increase rates after filings for settled cases. However, it is unclear how market participants relying on public information quickly assess case merits as most cases take several years to resolve (Cox et al., 2005; Cornerstone, 2021).

One source for market participants to assess merits is legal filings. Carrizosa and Cazier (2022) find a significant market reaction around both initial and later filings, with stronger reactions when the documents contain more discussion of internal controls and factors implying systemic governance issues. They conclude filings provide useful information to investors.

Relatedly, Badawi (2022) finds the content in the initial filing predicts case outcomes.

2.3. Readability and media coverage research

While litigation filings contain useful information, the mechanism by which it reaches market participants is unclear. Legal filings are lengthy and written in complex legalese not designed to impart information to investors (Bonsall et al., 2017; Carrizosa and Cazier, 2022). Martínez et al. (2022, 1) note legal documents are "read by virtually everyone yet understood by seemingly no one, except lawyers." They test individuals' ability to comprehend legal documents and find comprehension is most harmed by the frequent use of legal jargon and a complex syntax. Clarity International (2022), an organization of legal professionals who

² Elaborating on the magnitude of the problem, the authors state, "It's not a secret that legal language is very hard to understand. It's borderline incomprehensible a lot of the time" (Trafton, 2022). In his account of the first year of law school, Turow (2010) similarly describes much of legal education as learning the language of the law.

advocate for the use of plain legal language, acknowledges that "People don't read legal documents. They're too complex." Thus, it seems unlikely that investors can quickly incorporate legal filings into stock prices, particularly because investors have limited cognitive and information-processing abilities (Hirshleifer and Teoh, 2003; Blankespoor et al., 2020).

Consistent with this, financial statements that are longer and less readable are associated with higher return volatility, delayed investor reactions, increased analyst dispersion, and less accurate analyst forecasts (You and Zhang, 2009; Lehavy et al., 2011; Lee, 2012; Loughran and McDonald, 2014; Bozanic and Thevenot, 2015). This delayed market reaction to complex financial statements appears inconsistent with the rapid market reaction to litigation.

This apparent contradiction may be due to media coverage around litigation. Lehavy et al. (2011) show investors rely more on sophisticated market participants when information is difficult to understand, making analyst reports more informative, so investors may similarly look to the media to decipher filings and estimate expected litigation costs. Validating the media's credentials for reporting litigation news, the media helps detect fraud (Miller, 2006; Dyck et al., 2010; Donelson et al., 2021a; Heese et al., 2022), and some reporters have specialized litigation knowledge (Van Syckle, 2020; Godlasky, 2022). Moreover, unlike the PACER system, media coverage is easy and cheap for investors to access (Miller and Shanthikumar, 2015), and the media can also report information directly from parties to the litigation, such as press releases from plaintiffs' lawyers (Kartapanis and Yust, 2022). Media coverage also increases the speed at which traders impound information into stock prices (Fang and Peress, 2009; Bushee et al., 2010; Engelberg and Parsons, 2011), which may explain the rapid reaction to litigation filings.

However, while most reporters believe readers are interested in corporate fraud (Call et al., 2022), it is unclear whether they have the knowledge to share case insights. Most reporters

covering the courts have no legal training and spend significant time reporting on topics other than the courts (Drechsel, 1983). Judges and lawyers complain this lack of training can result in "sensationalistic reporting that is inaccurate or short on context" (Journalist's Resource, 2011).³

Further, many studies find the media only affects prices through information dissemination, rather than production (e.g., Bushee et al., 2010; Drake et al., 2014; Blankespoor et al., 2018). Thus, it is unclear whether media coverage will help investors translate complex litigation filings into prices. While Guest (2021) finds reporters' editorial content helps investors understand, he only examines the Wall Street Journal's coverage of earnings announcements. Thus, there may be no relation between media coverage and the reaction to litigation.

Moreover, journalists are more likely to write articles about controversial companies and those with "colorful" CEOs because "CEOs are good stories. People like a story that's personalized" (Call et al., 2022). This survey evidence is consistent with the media's entertainment role, even though such information may be legally irrelevant. Thus, any reaction due to media coverage may disproportionately be due to retail traders and may impede the market's ability to impound value-relevant information on litigation (Guest, 2021). As a result, such coverage may be *negatively* associated with case merits and thus more coverage may indicate that cases are more likely to be dismissed and result in minimal firm costs.

In short, the role of media coverage around litigation filings is ultimately an empirical question. We state our hypotheses below (in the alternative form):

H1: Media coverage significantly increases the market reaction to litigation filings.

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³ For example, consider the federal sentencing guidelines. Despite the public availability of the guidelines and relevant adjustments, such as investors' losses in criminal fraud cases, reporters typically mention only a hypothetical "maximum" imprisonment term, rather than calculating the expected term (see, e.g., Griffith, 2022).

3. Research design and results

3.1. Sample construction

We begin with all securities class actions from the Stanford Class Action Clearinghouse that were filed between 1998 and 2019 against firms in Compustat. We start the sample in 1998 for two reasons. First, Factiva, our data source for media coverage, lacked intelligent indexing codes (which we use to match articles to our sample) for many firms in earlier years (Ahern and Sosyura, 2014). Second, this holds the litigation environment relatively constant because SLUSA was passed in 1998. We end the sample in 2019 to allow most cases to be resolved because we examine case outcomes. We require cases to be included on CourtListener or Audit Analytics so we can obtain case docket entries and identify when the initial complaint was entered into PACER. We require firms to have Compustat data and CRSP stock return data for the 61 days centered on the filing date. Panel A of Table 1 reports the sample construction.

3.2. Research design and results

We first follow the design of Carrizosa and Cazier (2022) to estimate the baseline market reaction to litigation filings over our sample period. We use both the absolute abnormal return (|AR|) and trading volume (Trad. Vol.) to measure the market reaction for firms in the [-30, 30] trading day window around litigation because both measures capture different dimensions of the investor response to information (Beaver et al., 2020). As discussed in Verrecchia (2001), stock returns and trading volume can proxy for the extent to which new information changes investors' opinions. Absolute abnormal returns measure the magnitude of how much a disclosure changes investors' expectations of firm value in the aggregate, while trading volume measures both

⁴ We follow Carrizosa and Cazier (2022) and use all cases as we focus on the *general* effects of litigation, but we find similar inferences if we omit cases related to IPOs and laddering (Kim and Skinner, 2012) (untabulated).

⁵ We remove 14 cases (0.3 percent of the sample) where the initial complaint is recorded as being entered into PACER more than three weeks after the filing date, which appear to be data errors.

changes in investors' expectations and differences of opinion among investors due to information asymmetry. Thus, significant returns can occur without substantial trading volume, and significant volume can occur even without substantial price revisions. Specifically, we estimate the following ordinary least squares (OLS) regression:

$$|AR| (Trad. Vol.) = \beta_0 + \beta_1 Day_{[0, 4]} + \beta_2 Class Period End_{[-1, 1]} + Firm \times Year-Qtr FE + \varepsilon$$
(1a)

where $Day_{[0,4]}$ is an indicator variable that measures the reaction to the filing and is set to one for the five-trading day window starting at the filing date. A positive and significant coefficient on β_1 indicates a strong reaction to the filing. Because there are usually large, negative returns at the class period end, when the litigation-triggering bad news is revealed, and many cases are filed quickly thereafter (NERA, 2017; Carrizosa and Cazier, 2022), we control for the market reaction at the class period end with an indicator variable set to one for the three trading days centered on the class period end (*Class Period End*). We include Firm × Year-Qtr fixed effects to control for firm and macroeconomic characteristics that may affect litigation and the market reaction. We cluster standard errors by both firm and filing dates to account for correlations across observations. We define variables in detail in the Appendix.

We show results from estimating equation (1a) in Columns 1 and 2 of Table 2. Similar to Carrizosa and Cazier (2022), we find positive and significant coefficients on $Day_{[0, 4]}$ and Class $Period\ End\ (p < 0.01)$. Because investors partially anticipate litigation (Gande and Lewis, 2009) but also may require additional time to process litigation costs (Griffin et al., 2004; Shapira, 2016), we augment equation (1a) by adding additional indicator variables to capture any reaction in the run-up to the litigation or a delayed reaction as follows:

$$|AR| (Trad. Vol.) = \beta_0 + \beta_1 Day_{[0,4]} + \beta_2 Class Period End_{[-1,1]} + \beta_3 Day_{[-10,-6]} + \beta_4 Day_{[-5,-1]} + \beta_5 Day_{[5,10]} + Firm \times Year-Qtr FE + \varepsilon$$
(1b)

We show results from estimating equation (1b) in Columns 3 and 4 of Table 2. We still

find a significant reaction to the litigation (p < 0.01) but also find a reaction both before and after the filing. As the reaction persists in the week after the filing (p < 0.01), one concern is that the filing date reaction may be an extended reaction to the class period end news. We think this is unlikely as the mean (median) period between the class period end and the filing date in our sample is 92 (15) days (untabulated), so there is sufficient time for most cases to impound the effects of the class period end news before the litigation. However, in Columns 5 and 6, we reestimate equation (1b) after dropping cases filed within five trading days of the class period end to ensure these cases are driving our results, and we find similar results (p < 0.01). Thus, we confirm the findings in Carrizosa and Cazier (2022) of a significant reaction to litigation filings.

While this reaction could be due to investors directly using the information in the filings, an alternative explanation is that it is due to media coverage. Table 3 shows 73 percent of sued firms receive media coverage on the filing date. The percentage of cases with media coverage was generally increasing through 2008 but has since decreased, potentially due to newsroom layoffs and bankruptcies (Grieco, 2020). To test this explanation, we exploit the existence of a lag between filing dates and when many cases are entered into PACER. While the mean (median) case only has a lag of 1.11 (1) days, 26 (14) percent of cases have a delay of 2 or more (3 or more) days (untabulated), showing many cases have a several-day lag before filings are publicly available. Moreover, over 85 percent of District Courts have some cases entered into PACER with a lag, so they are not isolated to a single court or geographic area (untabulated).

Because our primary identification strategy exploits this delay, we seek to better its determinants. We expect that the delay is primarily driven by how busy or distracted court clerks are, rather than case characteristics, but this is important to test because case merits may affect the market reaction and existence of media coverage (Biggerstaff and Moser, 2019; Donelson et

al., 2022). We estimate the following OLS regression:

Lag (Days Lag) = $\beta_0 + \beta_1 Ln$ Assets + $\beta_2 Acct$. 10b-5 Case + $\beta_3 Settled$ + $\beta_4 Filed$ Prior to Weekend/Federal Holiday + $\beta_5 Ln$ Weekly Cases at District Court + $\beta_6 Circuit$ 2 + $\beta_7 Circuit$ 9 + $\beta_8 Post$ CM/ECF Adopt. + Filing Year FE + ϵ (2)

where Lag is an indicator variable set to one if the case is entered into PACER with a lag, and $Days\ Lag$ is the number of business days between when a case is filed and entered into PACER. Total assets ($Ln\ Assets$) proxy for firm prominence. If clerks prioritize filings for large firms, β_1 should be negative. We control for case merits with $Acct.\ 10b-5\ Case\ (Settled)$, which is an indicator variable set to one if it alleges accounting fraud (settles) (Dyck et al., 2010; Donelson et al., 2021b). If clerks prioritize entering filings for stronger cases, β_2 and β_3 should be negative.

The remaining variables capture expected distractions and busyness for court clerks. Filed Prior to Weekend/Federal Holiday is an indicator variable set to one for cases filed on a business day immediately preceding the weekend or a federal holiday. If clerks are distracted on Fridays or before holidays, β_4 should be positive (Dellavigna and Pollet, 2009; Diestre et al., 2020). Ln Weekly Cases at District Court represents the total number of cases of any type filed at that District Court during the week ending on the filing date because a large amount of filings constrains court resources, similar to Ege et al. (2020). Circuit 2 (Circuit 9) is an indicator variable set to one for cases filed in the Second (Ninth) Circuit because they are the largest and busiest circuits, resulting in greater burdens on judges in their districts (NERA, 2022). Thus, we expect β_5 through β_7 may be positive. Post CM/ECF Adopt. is an indicator variable set to one when the litigation is filed in a District Court that has already adopted the CM/ECF system. The CM/ECF system increased the volume of electronic court records, reducing the burden on court clerks to scan documents and enter them into PACER (Hane, 2001; Greenwood and Bockweg, 2012; U.S. Courts, 2013). If CM/ECF worked as intended, we expect β_8 to be negative. Finally, we include year fixed effects to control for time trends in litigation.

Table 4 presents the results. We find no evidence that case merits are related to the delay. In contrast, each of our proxies for court busyness is positively associated with the length of the delay (p < 0.01), and *Circuit 2* is positively associated with the existence of a delay (p < 0.01). The CM/ECF system is negatively associated with both the existence and length of the delay (p < 0.05). We also find that cases against large firms have longer delays (p < 0.10), but firm size is not associated with the existence of a delay. The fact that the delay is mainly driven by court-level features, rather than case-level characteristics, indicates the use of this lag in our design is unlikely to bias the market reaction, and inferences should generalize to the full population of cases. Additionally, as larger firms have rich information environments and are more likely to be scrutinized by analysts, institutional investors, and other market participants (Chang et al., 2006), media coverage may be relatively less critical in informing the market about litigation for these firms. Thus, this research design may bias *against* finding a significant effect of the media.

Before the case is entered into PACER, there is no practical way for investors to directly obtain information from litigation filings. However, some journalists cover federal courts full-time, are physically present in the courthouse, or have relationships with court reporters and others in judges' chambers (Van Syckle, 2020; Godlasky, 2022). Thus, the media can report on litigation before it is entered into PACER. The media may also report on press releases from parties to the litigation, such as plaintiffs' lawyers (Kartapanis and Yust, 2022). Thus, a significant market reaction after the filing but before cases are entered into PACER is inconsistent with investors directly using case filings. Instead, any such reaction indicates that investors are informed about litigation by other parties, likely the media. To ensure a sufficient lag between filing and when the case is publicly available in PACER, we estimate the following

⁶ We discuss the CM/ECF system in more detail and exploit its implementation as a shock to investor acquisition processing costs in Section 4.1.

OLS regression in the subsample of cases with a lag of two to five trading days:

$$|AR|$$
 (Trad. Vol.) = $\beta_0 + \beta_1 Day_{[0, PACER-1]} + \beta_2 Day_{[PACER, 2]} + \beta_3 Class Period End_{[-1, 1]} + \beta_4 Day_{[-10, -6]} + \beta_5 Day_{[-5, -1]} + Firm \times Year-Qtr FE + \varepsilon$ (3)

where $Day_{[0, PACER-1]}$ is an indicator variable that measures the market reaction to the filing before the case is publicly available on PACER and is set to one for days starting at the filing date and ending the date before the case is filed into PACER. In contrast, $Day_{[PACER, 2]}$ is an indicator variable that measures the market reaction once filings are widely available and is set to one starting on the date that a case is entered into PACER and for the following two trading days. Other variables are as previously defined.

Column 1 of Panel A (B) of Table 5 presents results of our tests on the absolute abnormal returns (trading volume). We continue to find a significant market reaction immediately after cases are entered into PACER. We also observe a significant reaction after litigation is filed but before cases are entered into PACER (p < 0.01). This implies filings may not be the initial or primary information source for the market and may be dated once they are publicly available.

To more precisely test if the pre-PACER reaction is due to media coverage, we separately estimate equation (2) for the subsample of cases without (Column 2) and with (Column 3) media coverage on the filing date. We only examine filing date media coverage to make it less likely the coverage is due to the market reaction itself. For example, a strong reaction to litigation on the filing date may result in media coverage of that drop the next day. We find a strong reaction to litigation with media coverage pre-PACER (p < 0.01), consistent with the media creating new public information about the case. In contrast, there is no significant market reaction for cases without media coverage, and the differences are significantly different (p < 0.01). Notably, the

⁷ However, we find similar inferences if we partition the sample into cases that receive media coverage on the filing date or the following day versus those that do not (untabulated).

market reaction on the class period end is similar across the subsamples, indicating that the magnitude of the bad news underlying the litigation appears to be held relatively constant.

We continue to find positive and significant reactions to cases with media coverage after they are entered into PACER (p < 0.01), consistent with the media continuing to have an effect from further rebroadcasting or translating the litigation news. However, we only find a subsequent market reaction for cases without media coverage when proxied using trading volume (p < 0.05). We find similar inferences after excluding cases filed close to the class period end (Columns 4 and 5). Accordingly, PACER alone does not appear to inform investors, and media coverage is necessary for litigation filings to result in a significant market reaction.

One plausible reason for the limited reaction to PACER filings in prior tests is they may be considered stale as they are only available with a delay. Stock prices are less affected by stale news (Tetlock, 2011), so the market may respond less to filings released several days late. We believe this is unlikely to explain our prior results because retail investors still react to stale news (Tetlock, 2011). That said, media coverage may be relatively less important when filings are promptly available to investors. To test this, we estimate equation (1b) using cases entered into PACER with no trading day lag for cases with and without filing date media coverage.

Results are presented in Table 6. Columns 1-3 (4-6) present results examining absolute abnormal returns (trading volume). We continue to find a strong reaction to filings with media coverage (p < 0.01). However, we find a *negative* reaction to filings without media coverage (p < 0.01). This apparent underreaction may be due to investors waiting for additional information to fully process the bad news events at the class period end and litigation. Collectively, the strong market reaction to cases with media coverage, combined with the underreaction to other cases despite being publicly available, continues to imply the media is critical for impounding

litigation news, and filings may provide limited information directly to investors.

A limitation of the prior analyses is that it is unclear whether the media coverage *precedes* the market reaction. That is, media coverage may be a quick response to the significant market reaction. Further, as media coverage is not randomly assigned, the media may be more likely to cover cases that would result in strong market reactions even absent media coverage.⁸

Accordingly, we use intraday stock prices from Polygon.io to examine stock returns around the initial publication of litigation-related articles. Polygon.io data coverage begins in 2004, so we drop cases filed in earlier years from this analysis. We retain only articles on the filing date with available publication times, exclude potentially irrelevant articles that do not discuss the litigation (e.g., articles that relate to the bad news at the class period end), and concentrate on cases for which the initial relevant article is published at least 30 minutes after (before) the start (end) of market trading hours (i.e., between 10 am and 3:30 pm EST). The sample composition for this test is reported in Panel B of Table 1. We then examine the 61 minutes centered on the publication time in 2-minute increments using signed returns, so we can observe any reversal in the direction of stock prices upon the litigation filing.

We present the results in Figure 1. Before the initial articles, returns are insignificantly positive, but returns drop almost immediately after their publication. Thus, the market reaction appears causally due to the media coverage, rather than any alternative explanation.

In Figure 2, we separately examine the market reaction based on whether the case is entered into PACER on the filing date. If the reactions are due to media coverage, we expect

⁸ We explore this alternative explanation in detail in Section 4.3 using a matched sample design.

⁹ Specifically, we search for "suit", "suits", "lawsuit", "lawsuits", "litigation", "sued", "class-action", "class action" in the title or text of the articles. We then read the articles and exclude ones where the keyword is not captured in the right context (i.e., false positives). We are unable to read the articles associated with all cases in our sample, which is why we do not restrict our prior analyses to those that contain litigation-related keywords.

¹⁰ The primary reason for the small sample size in this test is that the first article about firms on the filing date occurs after the market closes for over 70 percent of cases (untabulated).

even larger negative reactions to the initial articles for cases that are not in PACER as such media coverage is publishing new information, rather than merely disseminating public information more widely. We find no significant immediate reaction before or after the article if the case is entered into PACER on the filing date, but we observe a significant decline after the publication for cases that are not entered into PACER. Thus, the media serves a vital role in information dissemination when it is the first public notice of the case.

Interestingly, returns begin to drop around 10 minutes *before* the article is published for such cases. This early reaction may be due to (1) early trading by parties to the litigation, such as investors that are members of the initial class of plaintiffs or their attorneys, (2) reporters leaking advance news of the articles, such as in the Wall Street Journal's Heard on the Street Column in the early 1980s (Liu et al., 1992), or (3) earlier published articles that do not include a time stamp or are not captured by Factiva. In untabulated analyses, we review these articles and find no discussion of earlier articles, so we believe the results are due to early trading by litigation parties or news leakage. ¹¹ Regardless, the stock price drop around the publication of articles is strong causal evidence that the media impounds litigation-related news into stock prices.

4. Additional Analysis

We perform additional analyses to provide insight into *why* media coverage is so critical for impounding the effects of litigation into stock prices. In particular, we examine whether (1) the minimal market reaction to filings absent media coverage is due to frictions for investors to obtain or interpret filings, (2) the volume, rather than just existence, and nature of media coverage matters, and (3) litigation coverage predicts litigation outcomes. We also perform

¹¹ Ben-Rephael et al. (2022) find Bloomberg disseminates news to institutional investors via its terminals before it is widely available. Thus, trading before the timestamps we see in Factiva could be due to trading from news on Bloomberg. Accordingly, we search for earlier Bloomberg articles for these sued firms and find no such articles.

several tests to ensure the robustness of our findings and their implications.

4.1. Access to complaints

There are two primary reasons that filings themselves may be insufficient to generate a market response. First, it may be too difficult for the average investor to promptly obtain them. Second, conditional on obtaining them, the complaints may be too difficult to comprehend. While the difficulty in processing complaints is constant throughout our sample period, we exploit the staggered rollout of the CM/ECF system to examine the effect of improved access to filings. As shown in Table 4, the CM/ECF system increased the timeliness of cases entering into PACER, consistent with it significantly decreasing investor acquisition costs.

Litigation complaints have always been available in person in the courthouse where they were filed, but PACER was designed to make it easier for anyone to obtain them (U.S. Courts, 2000, 2020). However, even once investors could easily access PACER over the internet to learn about the existence of a case, there was limited ability to *obtain* litigation complaints. This lack of access was because lawyers generally filed cases on paper and courthouses frequently lacked the technology and resources to quickly scan those documents into PACER. However, once District Courts implemented the CM/ECF system, litigants began to submit the initial filing and subsequent documents electronically, making it quicker and easier to obtain them in PACER (Greenwood and Bockweg, 2012; U.S. Courts, 2013). Thus, if a lack of timely access to litigation filings is the primary reason they appear to have limited ability to inform the market, filing date media coverage should be less critical for a market reaction post-CM/ECF.

We re-estimate the analysis in Table 5 but separately report the results in Table 7 before (Panel A) and after (Panel B) the implementation of CM/ECF. ¹² We find similar inferences in

¹² To ensure our fixed effects structure does not subsume any time-series change, we find similar inferences if we instead use District Court fixed effects (untabulated).

both periods. That is, we find a significant market reaction to the filing in both periods before cases are entered into PACER for those with media coverage (p < 0.01) and no reaction or significantly weaker reactions (p < 0.10) for those without. Thus, the primary reason for the limited reaction to filings themselves appears to be the inability of investors to translate and integrate litigation news without the media. In contrast, acquisition costs have minimal effect, consistent with the predictions in Blankespoor et al. (2019) for complex disclosures.

4.2. Volume and nature of media coverage

The prior tests simply partition based on whether there is *any* media coverage on the filing date. However, if the market reaction is due to the media creating and translating news, more extensive media coverage should result in a greater market reaction. Accordingly, we perform three additional analyses. First, we create two measures for the volume of sued firm articles and interact it with the day variables of interest in equation (3) as follows:

$$|AR| (Trad. Vol.) = \beta_0 + \beta_1 Day_{[-10, -6]} + \beta_{2-3} Day_{[-10, -6]} \times Media Cov. + \beta_4 Day_{[-5, -1]}$$

$$+ \beta_{5-6} Day_{[-5, -1]} \times Media Cov. + \beta_7 Day_{[0, PACER -1]} + \beta_{8-9} Day_{[0, PACER -1]} \times Media Cov.$$

$$+ \beta_{10} Day_{[PACER, 2]} + \beta_{11-12} Day_{[PACER, 2]} \times Media Cov. + \beta_{13} Class Period End_{[-1, 1]}$$

$$+ \beta_{14-15} Media Cov. + Firm \times Year-Qtr FE + \varepsilon$$

$$(4)$$

where *Media Cov.* is comprised of *Ln Articles* and *Ln Litig. Articles*. *Ln Articles* is the natural log of one plus the total articles for the sued firm on the trading day; *Ln Litig. Articles* is defined similarly but is restricted to articles that contain one of our litigation keywords. ¹³ Additional articles covering the sued firm around the filing should increase the probability investors are aware of the case and amplify the market reaction, so those articles should be more informative than the average articles about the firms during the 61-day period. Other variables are as previously defined. We expect these effects to be strongest when interacting with $Day_{[0, PACER-1]}$

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¹³ When non-trading days precede the trading day, we include articles from those non-trading days in the calculation of the current trading day's number of total articles.

as the media is the only widely available information source before the case is in PACER.

We present the results in Table 8. The interactions between $Day_{[0, PACER-1]}$ and each variable in $Media\ Cov$. are positive and significant (p < 0.05). That is, more media coverage pre-PACER is associated with larger reactions. These results further validate that the market reaction before a case is publicly available is primarily due to the media's information production. The number of articles published post-PACER does not incrementally affect the reaction (p = 0.19).

Second, we re-perform the analyses from Table 5, but we separate cases into four groups: cases that receive (1) no media coverage on the filing date (i.e., Column 2 of Table 5), (2) only press release coverage, (3) only traditional media coverage, and (4) both types of coverage. If the results in Table 5 are only due to the media reducing investor awareness and acquisition processing costs, the nature of the coverage should not matter. However, if the results are due to the media providing information that reduces investor integration costs (e.g., explaining the complex legalese in the filings), press releases would be insufficient to cause a market reaction.

Table 9 presents the results examining absolute abnormal returns (Columns 1-4) and trading volume (Columns 5-8). Only cases that have both press release media coverage *and* original journalists' content result in a quick reaction that affects prices (p < 0.01). However, we observe a monotonically larger reaction using trading volume as more information is provided by the media (i.e., moving from Column 6 to 8) (p < 0.10). Thus, it is clear that new information provided by the media affects the market reaction. ¹⁴

Finally, to more directly show that the prior results are driven by journalists' editorial content, we exploit differences in how focused and extensive the articles are within the subset of traditional media coverage. We define extensive filing date coverage as an article that only

¹⁴ Moreover, the significant negative reaction to litigation-related articles in Figures 1 and 2 is due to traditional media articles, while the reaction to press releases is insignificantly different from zero (untabulated).

reports on the sued firm and is longer than 200 words to exclude news flashes (Drake et al., 2014). We then perform an analysis similar to Table 5 within the subsample of cases with and without extensive media coverage. In other words, the media reduces both awareness and acquisition processing costs in each subsample, but only those with extensive media coverage should reduce integration costs. Accordingly, we expect to find larger effects in this subsample.

Table 10 presents the results. We find strong market reactions to the litigation before and after it is entered into PACER for cases with extensive media coverage (p < 0.01) but significantly smaller or nonexistent market reactions for cases that do not (p < 0.01). Collectively, results seem clear that PACER alone is insufficient to impound litigation news into prices, so the media is critical to help investors translate the complaints to make investment decisions by providing new information.

4.3. Determinants of media coverage

Our main tests exploit plausibly exogenous variation in the cases posted to PACER with a delay, but the media coverage itself is not random. As a result, a potential concern is that factors that attracted the media coverage may be an alternative explanation for our results if they are positively associated with larger market reactions to the case even absent media coverage. We think this explanation is unlikely because we find similar class period end reactions for cases with and without media coverage, and it cannot explain our prior intraday tests.

However, to formally address this concern, we first estimate a model on the determinants of filing date media coverage. Given that prior results are largely driven by traditional media articles, we estimate the following model both for all cases with filing date coverage and then separately based on whether the media coverage is a press release or traditional article:

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AnyCov (Trad. Media Cov) [PR Cov] = \beta_0 + \beta_1 Ln Assets + \beta_2 ROA + \beta_3 Tobin's Q + \beta_4 Ln Analysts + \beta_5 Instit. Own + \beta_6 Max Damages + \beta_7 Acct. 10b-5 Case + \beta_8 IPO Case + \beta_9 Laddering Case + \beta_{10} Friday Filing + \beta_{11} Ln Weekly Cases at District Court + \beta_{12} Circuit 2 + \beta_{13} Circuit 9 + \beta_{14} CAR Filing Date<sub>[-10,-1]</sub> + \beta_{15} CAR Class Period End<sub>[-1,1]</sub> + Filing Year FE + \varepsilon (5)
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where *AnyCov* (*Trad. Media Cov*) [*PR Cov*] is an indicator variable set to one if there is any (traditional article) [press release] filing date media coverage. We include controls from prior research related to firm and case characteristics that may both be correlated with media coverage and case merits (Choi et al., 2009; Bushee et al., 2010; Donelson et al., 2015). We control for maximum shareholder damages (*Max Damages*), firm size (*Ln Assets*), performance (*ROA*), valuation (*Tobin's Q*), analyst coverage (*Ln Analysts*), and institutional ownership (*Instit. Own*). Further, we control for whether the case includes accounting fraud allegations (*Acct. 10b-5 Case*) or is related to an IPO (*IPO Case*) or laddering (*Laddering Case*), as proxies for observable case merits at the time of the filing. We also control for whether the case is filed on a Friday (*Friday Filing*) and our proxies for district court busyness (*Ln Weekly Cases at District Court, Circuit 2*, and *Circuit 9*), which may also affect journalists that cover the affected courthouses. Finally, we control for the abnormal return around the class period end (*CAR Class Period End*[-1, 1]) and leading up to the filing date (*CAR Filing Date*[-10, -1]) because greater bad news may motivate journalists to report on the firm, as well as filing year fixed effects.

Results are presented in Table 11. Unsurprisingly, larger firms are more likely to be subject to traditional filing date media coverage (p < 0.01), and firms with higher valuations are more likely to be covered in each type of article (p < 0.01). We also find that firms with higher analyst coverage are more likely to have both types of media coverage (p < 0.10), consistent with journalists and analysts being attracted to the same types of companies. We also find that larger drops in stock prices over the class period, at the end of the class period, and immediately

preceding the filing date increase the likelihood of both types of media coverage (p < 0.01). However, while the magnitude of the bad news underlying the litigation affects the existence of media coverage, we find limited evidence that case characteristics or merits affect it. Whether the case is an IPO or laddering case has no effect on media coverage, and whether the case alleges accounting fraud only positively affects press release coverage (p < 0.01). We also find some evidence that busier case dockets (*Circuit 2* and *Ln Weekly Cases at District Court*) are positively associated with media coverage but only for press release articles (p < 0.05).

Because the media coverage is related to some firm characteristics and stock price declines that may also affect the market reaction to litigation, we use this determinants model to create a matched sample. We first re-estimate equation (5) without filing year fixed effects within our sample of cases that are entered into PACER with a lag (i.e., our sample in Table 5) and create a matched sample of cases that receive and lack filing date media coverage. Because over 70 percent of the cases in our sample receive filing date coverage, we match cases without coverage to those that do without replacement using a caliper of 0.03 (Shipman et al., 2017). We then re-estimate equation (3) in this matched sample. Results are shown in Panel A of Table 12. We find similar inferences to our main results.

Alternatively, we use entropy balancing to create a matched sample that preserves the entire sample (Hainmueller 2012; McMullin and Schonberger 2020). We reweight observations within the sample of cases that are entered into PACER with a lag such that their reweighted distribution is matched on the first three moments jointly for all control variables from equation

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¹⁵ We obtain similar results if we propensity-score match and entropy balance in the population of cases before conditioning on whether the case is entered into PACER with a lag (untabulated).

¹⁶ We do not obtain covariate balance across all variables due to the small sample and number of variables on which we match. Thus, we use a smaller caliber (0.0005) and find similar results (untabulated), but we still lack covariate balance and significantly reduce our sample size. However, the entropy balance analysis helps alleviate this issue.

(5). Results are presented in Panel B. We continue to find similar inferences. Thus, the market reaction before cases are entered into PACER appears due to the media coverage itself, rather than an alternative explanation resulting from the non-random selection of cases by journalists.

4.4. Additional robustness

We perform several tests to provide further insights and ensure the robustness of our main results. First, we examine abnormal signed, rather than absolute, returns. We use absolute returns in our main tests both to follow Carrizosa and Cazier (2022) and because we are focused on a reaction to the litigation, rather than the direction of that reaction. However, prior research shows these average returns are significantly negative (Griffin et al., 2004; Gande and Lewis, 2009). Thus, to ensure the robustness of our results and reconcile them to these prior papers, we modify equation (3) to use signed abnormal returns. Results are presented in Panel A of Table 13. We find significantly negative returns after the filing but before cases are entered into PACER for cases with media coverage (p < 0.01) but no abnormal returns for cases without.

We next re-estimate our main analysis from Table 5 but require the filing date media coverage to contain litigation-related keywords. While this test has both false positives and negatives, as we do not manually validate each article's classification, we expect larger market reactions to media coverage before a case is entered into PACER in this analysis, relative to Table 5. Such findings would further validate that our prior results are driven by articles that provide information on the cases themselves that can reduce investors' processing costs.

Results are presented in Panel B. We continue to find a strong market reaction to cases with media articles with litigation-related keywords (p < 0.01). Notably, the magnitude of these estimated coefficients is over 10 percent larger than in Table 5. The no media coverage subsample in this test is less diagnostic as many of these cases have media coverage—which is

why the size of this subsample is 68 percent larger than Table 5—and many of these articles likely discuss the case or its allegations but are not captured by our keywords. Nonetheless, we continue to find no significant reaction to these cases using absolute abnormal returns. While we find a significant market reaction to these cases using trading volume (p < 0.01), the magnitude of the reaction is around a third of that for cases with media coverage with our litigation-related keywords, and the difference is significantly different (p < 0.01, untabulated).

Our matched samples in Table 12 ensure that cases (and the sued firms) with and without media coverage are similar on observable dimensions, but there may be unobservable differences related to case merits which could affect the market reaction. As an alternative way to hold observable *and* unobservable case merits relatively constant, we re-estimate equation (5) using only settled cases. Results are in Panel C of Table 13. We find a significantly larger market reaction around the filing date for cases with, but not without, media coverage (p < 0.01). ¹⁷

We also examine the robustness of our results over time. There are many changes in the litigation and media environments over our sample period, as well as the frequency with which cases are entered into PACER with a lag. To ensure our results are still informative and persistent over time, we split our sample into two periods: 1998–2008 and 2009–2019. We then re-estimate the analysis from Table 5 in these two sub-samples. Results are presented in Panel D and E of Table 12, respectively. We find similar inferences in each period.

4.5. Longer-term implications of filing date media coverage

While the prior analyses demonstrate a significant short-run market reaction to filing date media coverage of litigation, it is unclear whether the media coverage is increasing the speed by which litigation news is impounded into prices or is resulting in an over-reaction and thus may

¹⁷ We find similar inferences, but smaller magnitudes, using instead the population of dismissed cases (untabulated).

be subsequently reversed (i.e., increasing versus harming market efficiency). The distinction is important because it informs on whether the media coverage is net good or bad for the market.

As we want to identify any subsequent reversals, we use signed abnormal returns in this test and separately graph 31-day cumulative abnormal returns beginning on the filing date for firms that do and do not receive media coverage on the filing date. The results are shown in Figure 3. We observe no subsequent reversal for firms that receive media coverage, so returns are insignificantly more negative at the end of the period than on the filing date. On the other hand, returns for firms without media coverage drift negatively over this period and are insignificantly different from cases with media coverage by the end of the period.

Thus, it appears media coverage improves market efficiency by incorporating litigation news into prices that would *eventually* be impounded, whether due to later media coverage or other sources. However, while average returns converge, it is notable that the confidence interval for cases without media coverage is around double that of cases with such media coverage. This implies that returns may be over- or under-impounding litigation news for some firms without media coverage due to increased uncertainty about the nature of those litigation costs.

4.6. Case merits

Finally, we examine whether the media helps investors assess case merits. The costs of litigation are mainly restricted to meritorious cases (Donelson and Yust, 2019), but merits can only be confirmed after cases are resolved. However, media coverage may help investors predict those case outcomes to discern expected litigation costs, which would significantly reduce investor translation costs. Given our focus on case outcomes in this analysis, we exclude ongoing cases as of the beginning of June 2022 and drop additional cases that lack necessary data for control variables. We report the sample construction for these tests in Panel C of Table 1.

Because the amount of coverage increases the market reaction, we similarly examine the number of articles in these tests, but we expand the window to include media coverage over the one week starting on filing day to allow more time for journalists to report on facts from the complaints. However, because some firms have a higher media prominence (McShane et al., 2012), we focus on *abnormal* media coverage, which is calculated as the change in the number of articles around the filing compared to the same period in the prior year (*Abn. Cov*). We use the same period in the prior year, rather than the prior week, for our baseline of "normal" firm media coverage because many cases are triggered by earnings announcements (Rogers et al., 2011), which occur at similar times each year. Because the variable is highly skewed, we take the log transformation of one plus the absolute value of the difference and multiply it by a negative one in cases where there are more articles in the prior year.

We expect abnormal media coverage may predict litigation outcomes given prior results, but it is less clear whether it will have a positive or negative relation with future case outcomes, particularly whether the case settles. The media serves both an information and entertainment role (Jensen, 1979; Miller, 2006; Baker and Griffith, 2010; Dyck et al., 2013), and both (non-exclusive) roles could cause the significant short-term market reaction we find in prior tests. However, these distinct roles result in different predicted relations with settlement outcomes.

From an information role, media coverage may report new facts or enhance the credibility of existing facts by rebroadcasting known information (Miller, 2006; Donelson et al., 2021a), resulting in a positive relation with future settlement outcomes (i.e., it is more likely to be settled and settle for larger amounts). From an entertainment view, the media's interest in sensational facts may align with the plaintiff-lawyer desire to find cases with high "sex appeal" (Jensen, 1979; Baker and Griffith, 2010). While such articles may thus not be related to merits,

making it more likely that the litigation will be dismissed, they may still be positively associated with settlement amounts, due to their ability to influence a hypothetical jury (Donelson and Hopkins, 2016). We expect the former given the market reaction to litigation filings appears relatively efficient (Figure 3), but it is an empirical question. To assess which view dominates in this setting and whether the apparent reliance on the media by investors to discern litigation costs appears rational, we estimate the following OLS regression:

Settled (Ln Settl. Amt) =
$$\beta_0 + \beta_1 Abn$$
. Cov. + $\beta_2 Max$ Damages + $\beta_3 Ln$ Assets
+ $\beta_4 ROA + \beta_5 Tobin$'s $Q + \beta_6 Ln$ Analysts + $\beta_7 Instit$. Own. + $\beta_8 Acct$. 10b-5 Case
+ $\beta_9 IPO$ Case + $\beta_{10} Laddering$ Case + Year FE + Industry FE + ε (6)

where *Settled* is an indicator variable set to one for cases that survive the motion to dismiss and are settled, zero otherwise, and *Ln Settl. Amt* is the natural log of one plus any settlement amounts. We include the same controls from equation (5) of firm and case characteristics that may be correlated with media coverage and case merits (Choi et al., 2009; Bushee et al., 2010; Donelson et al., 2015). Because we control for observable merits factors, a positive (negative) *Abn. Cov.* coefficient implies that not only does the information (entertainment) role of the media dominate, but also it has *incremental* predictive ability over other case merit proxies.

We first report descriptive statistics for this sample separately by whether the case is dismissed or settled in Panel A of Table 14. Notably, *Abn. Cov.* is significantly larger for cases that settle (p < 0.01), implying the media's information role may dominate, and more extensive coverage may signal a case is meritorious. Also consistent with this, *Abn. Cov.* is positively associated with the probability a case settles and settles for larger amounts in Panel B (p < 0.01).

We report the results of estimating equation (6) in Table 15. In Column 1, we find Abn. Cov. is positively associated with settlement outcomes (p < 0.01). In Column 2 (3) we estimate the relation of Abn. Cov. with settlement amounts after setting settlement amounts to be zero for dismissed cases (within the subset of cases that settle). In both cases, we find Abn. Cov. is

positively associated with settlement amounts (p < 0.01). Thus, the reason media coverage seems largely deterministic of whether litigation results in a market reaction in earlier tests is because the media not only informs the market about case existence but helps investors translate complex case facts into their implications for firm value.

5. Conclusion

This study examines the role of the media in the market reaction to litigation filings. We find compelling evidence that media coverage of litigation is deterministic of whether there is a market reaction to the filing. Our results appear due to the average investor's inability to read and understand litigation complaints to assess case merits, whereas the media possesses expertise in accessing and understanding filings that reduce investor integration processing costs.

Our results provide new evidence that the media serves a vital role concerning alleged corporate misconduct because it is clear media coverage is needed for investors to timely impound case information into stock prices. Because the direct costs of litigation to firms are minimal (Donelson and Yust, 2019), one of the main deterrent effects of litigation is the negative market reaction to filings. Thus, the deterrent effect of litigation may be lower for firms that are less likely to receive media coverage (Pritchard, 2002). Moreover, the reduction in newsroom employment and the many newspaper bankruptcies (Grieco, 2020) implies that cases may increasingly go unreported, further reducing the deterrent effect of litigation on fraud.

Additionally, while managers are concerned that media coverage may cause litigation (Graham et al., 2005), our results show media coverage of the litigation itself has significant effects on firm value. Thus, just as firms use investor relations strategically (Bushee and Miller, 2012; Brown et al., 2019), firms may want to take a more active role concerning media relations.

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Appendix: Variable Definitions

Variable	Definition
AR	Absolute value of the market-adjusted daily returns multiplied by 100.
Abn. Cov.	Natural logarithm of one plus the absolute value of the difference between the number of media articles about the company for the one-week period starting on the litigation filing date, less the number of articles about the company over the same corresponding period in the prior year. If this difference is negative, we multiply the natural logarithm by a negative one. To calculate the number of articles, we limit our search to the U.S. region and exclude press release wires to avoid excessive influence by the firm itself.
Acct. 10b-5 Case	An indicator variable set to one if the case involves accounting allegations and raises Rule 10b-5 violations; zero otherwise.
$CAR\ Filing\ Date_{[-10,-1]}$	Cumulative market-adjusted returns for trading days -10 to -1 relative to the filing date.
$CAR\ Class\ Period\ End_{[-1,1]}$	Cumulative market-adjusted returns for the three trading days centered on the filing date.
Circuit 2	An indicator variable set to one for securities class actions filed in the Second Circuit; zero otherwise. The Second Circuit is comprised of District Courts in Connecticut, New York, and Vermont.
Circuit 9	An indicator variable set to one for securities class actions filed in the Ninth Circuit; zero otherwise. The Ninth Circuit is comprised of District Courts in Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Washington, Guam, and the Marina Islands.
Class $Period\ End_{[-1,\ 1]}$	An indicator variable set to one for the three trading days centered on the class period end; zero otherwise.
<i>Day</i> [-10, -6]	An indicator variable set to one for trading days –10 to –6 relative to filing date; zero otherwise.
$Day_{[-5, -1]}$	An indicator variable set to one for trading days –5 to –1 relative to filing date; zero otherwise.
$Day_{[0, 4]}$	An indicator variable set to one for trading days 0 to 4 relative to filing date; zero otherwise.
$Day_{[5, 10]}$	An indicator variable set to one for trading days 5 to 10 relative to filing date; zero otherwise.
$Day_{[0, PACER - 1]}$	An indicator variable set to one for trading days starting at the filing date and ending the date before the case is entered into PACER; zero otherwise.
$Day_{[PACER, 2]}$	An indicator variable set to one for trading days starting at the date a case is entered into PACER and for the following two trading days; zero otherwise.
Days Lag	Number of business days between the securities class action filing dat and when the case is entered into PACER. Federal holidays are excluded from the calculation.
Filed Prior to Weekend/Federal Holiday	An indicator variable set to one for securities class actions filed on a business day immediately preceding a weekend or federal holiday; zero otherwise.
Friday Filing	An indicator variable set to one for securities class actions that are file on a Friday; zero otherwise.

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Variable	Definition
Instit. Own.	Ratio of institutional ownership to total shares outstanding as of the most recent fiscal-year end before the filing date.
IPO Case	An indicator variable set to one if the securities class action is related to an IPO; zero otherwise.
Laddering Case	An indicator variable set to one if the securities class action is a laddering cases; zero otherwise.
Ln Analysts	Natural logarithm of one plus the number of analysts issuing an annual forecast for the most recent fiscal year-end before the filing date. Missing values are replaced with zero.
Ln Articles	Natural logarithm of one plus the number of articles published regarding the firm on a given trading day. In cases where non-trading days precede the trading day, we include those articles in the calculation of the current trading day's total articles. To calculate the number of news articles, we limit our search to the U.S. region.
Ln Assets	Natural logarithm of total assets in millions as of the most recent fiscal year end before the filing date.
Ln Litig. Articles	Defined similarly to <i>Ln Articles</i> after limiting articles to those discussing litigation-related information. To identify those articles, we search the title and top part of the article's text for any of the following keywords: "suit", "suits", "lawsuit", "lawsuits", "litigation", "sued", "class-action", and "class action".
Ln Settl. Amt	Natural logarithm of one plus the settlement amount in dollars. For dismissed cases, the settlement amount is set to zero.
Ln Weekly Cases at District Court	Natural logarithm of the total cases of any type filed in the District Court during the week ending on the filing date. We include all litigation with available filing dates using data retrieved from CourtListener.
Max Damages	Natural logarithm of an estimate of the potential damages in thousands based on the total decline in the market value of equity from the highest value during the class period as identified in the first identified complaint to the first trading day after the class period end. We set the value to zero for cases where the estimated potential damage is negative.
Media Cov.	A vector comprised of <i>Ln Articles</i> and <i>Ln Litig. Articles</i> .
Post CM/ECF Adopt.	An indicator variable set to one if the securities class action is filed after the District Court has adopted the Case Management/ Electronic Case Files (CM/ECF) system; zero otherwise.
ROA	Income before extraordinary items, divided by total assets as of the
Settled	most recent fiscal year-end before the filing date. An indicator variable set to one if the securities class action eventually settles; zero otherwise.
Tobin's Q	The sum of the market value of the common stock, preferred stock, and firm debt, scaled by total assets as of the most recent fiscal year-end before the filing date. Preferred stock and debt are assumed to have a market value equal to book value. Missing values for preferred stock and firm debt are set to zero.
Trad. Vol.	Daily trading volume, scaled by total shares outstanding.

Figure 1
Returns around the Initial Publication of Litigation-Related Articles on Filing Dates

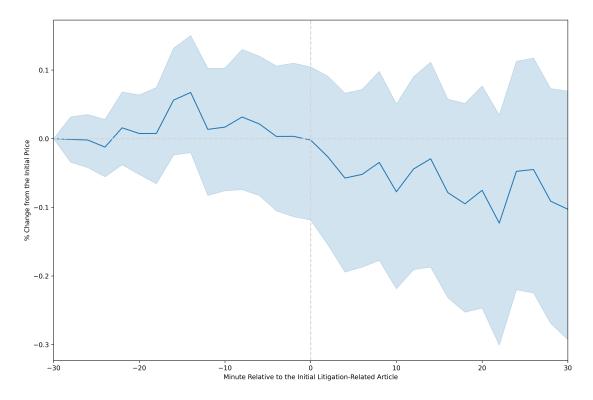


Figure 1 presents the signed abnormal returns for sued firms on the filing date during the 61-*minute* window centered on the publication of the initial litigation-related article. The data is summarized at 2-minute intervals, and interval zero is the 2-minute window in which the article was published. Refer to Panel B of Table 1 for the sample construction of the 257 cases in this analysis. The shaded areas present a 90 percent confidence interval calculated using bootstrap resampling.

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Figure 2

Returns around the Initial Publication of Litigation-Related Articles on Filing Dates—
Separated based on whether the Case is Entered into PACER on the Filing Date

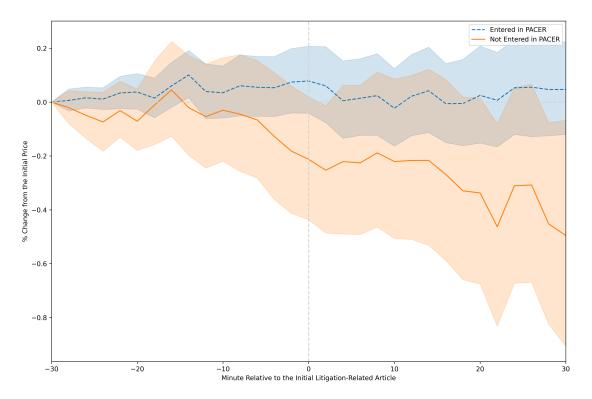


Figure 2 presents signed abnormal returns for sued firms on the filing date during the 61-*minute* window centered on the publication of the initial litigation-related article. Returns are separately presented for cases based on whether they are entered into PACER on the filing date. The data is summarized at 2-minute intervals, and interval zero is the 2-minute window in which the article was published. Refer to Panel B of Table 1 for the sample construction. There are 186 cases entered in PACER on the same day, and 71 cases entered on PACER with a lag. The shaded areas present a 90 percent confidence interval calculated using bootstrap resampling.

Figure 3Returns over the 31-Day Period Starting on the Filing Date

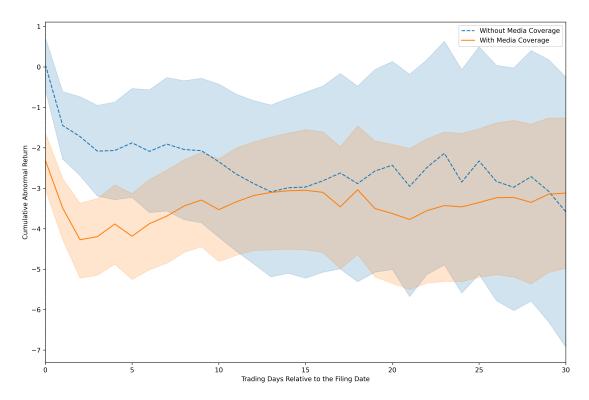


Figure 3 presents signed cumulative abnormal returns for sued firms during the 31-trading day window beginning on the litigation filing date. Returns are separately presented for cases based on whether they receive media coverage on the filing date. Refer to Panel A of Table 1 for the sample construction. There are 599 cases that receive filing date media coverage, and 265 cases that do not. The shaded areas present a 90 percent confidence interval calculated using bootstrap resampling.

Table 1Sample Construction

Panel A: Securities Class Action Sample

Description	Cases
Securities Class Actions for Firms with a GVKEY filed between 1998–2019	5,020
Linked to CourtListener or Audit Analytics	4,895
Docket List Available on CourtListener or Audit Analytics	4,827
Initial Complaint Identified from Docket List	4,605
Excluding Cases Missing Required Compustat Data	4,060
Excluding Cases Missing CRSP Return Data for the 61 days Centered on the Filing Date	3,594
Omitting Cases for Firms Missing Factiva ID	3,593

Panel B: Intraday Market Reaction to the First Litigation Article Sample

Description	Cases	Articles
Starting Securities Class Action Sample	3,593	
Excluding Cases Filed Before 2004	2,550	
Factiva Articles Available on Days [-1, 1]	2,313	46,629
Having at least One Litigation-Related Article per our Keywords	1,836	8,287
Having at least One such Article Published on the Filing Date	1,536	3,625
Having at least One such Article with Available Publication Time	1,443	2,818
Having the Earliest Publication Time Between 10:00 am and 3:30 pm EST	292	292
Excluding Cases with False Positives for Litigation Keywords	257	257

Panel C: Media Coverage and Case Outcomes Sample

Description	Cases
Starting Securities Class Action Sample Excluding On-going Cases Excluding Cases Missing Required Data	3,593 3,488 3,030

Table 1 presents the sample construction. Panel A presents the construction of the starting sample of securities class actions for Tables 2–13 and Figure 3. Some of those tables impose additional restrictions, such as a lag in entering the litigation complaint into PACER. Panel B presents the construction of the intraday sample of securities class actions for Figures 1 and 2. Panel C presents the construction of the securities class action sample for our tests on case outcomes for Tables 14 and 15.

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Table 2Market Reaction to Litigation Filings

	(1)	(2)	(3)	(4)	(5)	(6)
	()	· /	、 /	()	Excl. Quick Fil.	Excl. Quick Fil.
VARIABLES	AR	Trad. Vol.	AR	Trad. Vol.	AR	Trad. Vol.
Dav_{1} to all			0.049	0.174***	-0.017	0.183***
$Day_{[-10, -6]}$			(0.032)	(0.027)	(0.042)	(0.033)
$Day_{[-5, -1]}$			0.341***	0.503***	0.325***	0.473***
2 [3, 1]			(0.037)	(0.034)	(0.044)	(0.040)
$Day_{[0, 4]}$	0.138***	0.323***	0.192***	0.406***	0.235***	0.239***
	(0.037)	(0.033)	(0.039)	(0.036)	(0.042)	(0.029)
$Day_{[5, 10]}$			0.134***	0.132***	0.105***	0.056**
• [-7 -]			(0.030)	(0.022)	(0.039)	(0.024)
Class Period $End_{[-1, 1]}$	3.714***	2.662***	3.601***	2.479***	4.779***	3.334***
[1, 1]	(0.086)	(0.073)	(0.086)	(0.070)	(0.113)	(0.098)
Constant	2.739***	1.730***	2.693***	1.660***	2.897***	1.586***
	(0.008)	(0.005)	(0.010)	(0.009)	(0.012)	(0.009)
Observations	219,173	219,173	219,173	219,173	140,239	140,239
R-squared	0.253	0.446	0.253	0.448	0.245	0.458
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 2 presents results on the market reaction to litigation filings, similar to Table 3 of Carrizosa and Cazier (2022). Columns 1, 3, and 5 (2, 4, and 6) examine absolute abnormal returns (trading volume). Columns 5 and 6 require that the filing date is at least five trading days after the class period end. Refer to Panel A of Table 1 for the sample construction. Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

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 Table 3

 PACER Posting Lags and Filing Date Media Coverage

		Entered in PACER with Lag	ER with Lag Days to Entering Filing in PACER				Media Coverage on the Filing Day	
Filing Year	N	Mean	Mean	S.D.	P25	Median	P75	Mean
1998	146	0.84	1.47	1.26	1.00	1.00	2.00	0.53
1999	129	0.87	1.88	1.67	1.00	1.00	3.00	0.60
2000	134	0.87	1.91	1.71	1.00	1.00	3.00	0.60
2001	346	0.95	2.66	2.05	1.00	2.00	4.00	0.46
2002	161	0.92	1.99	1.50	1.00	2.00	3.00	0.75
2003	127	0.89	1.72	1.79	1.00	1.00	2.00	0.65
2004	164	0.90	1.59	1.23	1.00	1.00	2.00	0.75
2005	127	0.83	1.49	1.31	1.00	1.00	2.00	0.76
2006	86	0.86	1.57	1.39	1.00	1.00	2.00	0.79
2007	122	0.79	1.93	2.27	1.00	1.00	2.00	0.75
2008	140	0.71	1.26	1.08	0.00	1.00	2.00	0.89
2009	88	0.61	1.08	1.07	0.00	1.00	2.00	0.88
2010	116	0.50	0.73	0.97	0.00	0.50	1.00	0.79
2011	119	0.61	0.91	0.92	0.00	1.00	1.00	0.79
2012	96	0.48	0.97	1.36	0.00	0.00	1.00	0.85
2013	125	0.59	1.06	1.15	0.00	1.00	2.00	0.90
2014	132	0.43	1.02	1.48	0.00	0.00	2.00	0.86
2015	166	0.18	0.23	0.54	0.00	0.00	0.00	0.84
2016	200	0.06	0.07	0.30	0.00	0.00	0.00	0.83
2017	284	0.13	0.15	0.45	0.00	0.00	0.00	0.76
2018	285	0.08	0.09	0.31	0.00	0.00	0.00	0.71
2019	300	0.19	0.21	0.46	0.00	0.00	0.00	0.76
Overall	3,593	0.55	1.11	1.52	0.00	1.00	2.00	0.73

Table 3 provides yearly descriptive statistics for (1) the average number of cases entered with lag into PACER, (2) the number of days between the filing date and the date when the securities class action was entered into PACER, and (3) the average number of cases that receive media coverage on the filing day. Refer to Panel A of Table 1 for the sample construction.

Table 4Determinants of Cases being Entered into PACER with a Lag

(1)	(2)
Lag	Days Lag
0.003	0.018*
(0.003)	(0.009)
0.003	0.010
(0.016)	(0.050)
0.004	0.004
(0.015)	(0.048)
0.001	-0.020
(0.015)	(0.047)
0.009	0.074***
(0.011)	(0.027)
0.134***	0.509***
(0.018)	(0.059)
0.008	0.310***
(0.017)	(0.056)
-0.065**	-0.480***
(0.026)	(0.150)
0.496***	0.714***
(0.066)	(0.178)
3,185	3,185
0.464	0.346
Yes	Yes
	0.003 (0.003) 0.003 (0.016) 0.004 (0.015) 0.001 (0.015) 0.009 (0.011) 0.134*** (0.018) 0.008 (0.017) -0.065** (0.026) 0.496*** (0.066)

Table 4 presents results examining the determinants of the existence (Column 1) and length (Column 2) of any lag between the complaint filing and when the case is entered into PACER. Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

 Table 5

 Market Reaction to Litigation Filings—Exploiting PACER Posting Lags to Examine the Role of the Media

Panel A: Absolute Abnormal Returns

	(1)	(2)	(3)	(4)	(5)
				Excl. Quick Fil.	Excl. Quick Fil.
		No Media Cov	With Media Cov	No Media Cov	With Media Cov
VARIABLES	AR	AR	AR	AR	AR
D	0.007	0.220*	0.112	0.275**	0.070
$Day_{[-10, -6]}$	0.007	-0.230*	0.113	-0.275**	0.078
	(0.070)	(0.119)	(0.086)	(0.134)	(0.105)
$Day_{[-5, -1]}$	0.255***	-0.019	0.384***	-0.121	0.231**
, ,	(0.081)	(0.142)	(0.096)	(0.144)	(0.106)
$Day_{[0, PACER -1]}$	0.461***	-0.248	0.796***	-0.205	0.511***
	(0.111)	(0.178)	(0.138)	(0.189)	(0.128)
$Day_{[PACER, 2]}$	0.345***	0.093	0.456***	0.046	0.182
	(0.090)	(0.155)	(0.106)	(0.174)	(0.114)
Class Period $End_{[-1, 1]}$	4.569***	4.803***	4.469***	5.538***	4.514***
	(0.208)	(0.457)	(0.227)	(0.572)	(0.295)
Constant	3.296***	3.885***	3.036***	4.049***	3.095***
	(0.019)	(0.032)	(0.020)	(0.035)	(0.022)
$Day_{[0, PACER -1]}$ Diff.		1.04	14***	0.71	6***
χ^2		21.69			.98
Observations	52,704	16,165	36,539	13,786	25,803
R-squared	0.230	0.192	0.244	0.182	0.242
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes

Panel B: Trading Volume

	(1)	(2)	(3)	(4)	(5)
	(-)	(-)	(-)	Excl. Quick Fil.	Excl. Quick Fil.
		No Media Cov	With Media Cov	No Media Cov	With Media Cov
VARIABLES	Trad. Vol.	Trad. Vol.	Trad. Vol.	Trad. Vol.	Trad. Vol.
$Day_{[-10, -6]}$	0.114**	0.122	0.112*	0.130	0.184**
	(0.052)	(0.080)	(0.065)	(0.089)	(0.076)
$Day_{[-5, -1]}$	0.462***	0.251***	0.557***	0.131	0.434***
	(0.067)	(0.096)	(0.086)	(0.087)	(0.090)
$Day_{[0, PACER -1]}$	0.734***	0.191	0.991***	0.044	0.401***
	(0.095)	(0.121)	(0.122)	(0.081)	(0.087)
$Day_{[PACER, 2]}$	0.428***	0.155**	0.549***	0.099	0.216***
	(0.066)	(0.065)	(0.089)	(0.067)	(0.072)
Class Period End $_{[-1, 1]}$	3.141***	3.068***	3.137***	3.480***	3.279***
	(0.172)	(0.331)	(0.198)	(0.420)	(0.279)
Constant	1.658***	1.319***	1.809***	1.248***	1.718***
	(0.013)	(0.019)	(0.017)	(0.018)	(0.016)
$Day_{[0, PACER -1]}$ Diff.		0.80	00***	0.35	57**
χ^2		21.97			83
Observations	52,704	16,165	36,539	13,786	25,803
R-squared	0.491	0.469	0.493	0.484	0.509
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes

Table 5 presents results on how media coverage affects the market reaction to litigation filings. Panel A (B) presents tests of absolute abnormal returns (trading volume). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing is not entered into PACER until between two to five trading days after the filing date, inclusive. Column 1 examines the overall effect; Columns 2 and 4 examine cases with no media coverage on the filing date; and Columns 3 and 5 examine cases with media coverage on the filing date. Columns 5 and 6 require that the filing date is at least five trading days after the class period end. Variables are defined in the Appendix. We use simultaneous estimation to test for coefficient equality in the media coverage and non-media coverage samples. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively. F-tests on the equality of coefficients have been performed using regressions that cluster only at the firm level.

 Table 6

 Market Reaction to Litigation Filings—The Role of the Media with No PACER Lags

	(1)	(2)	(3)	(4)	(5)	(6)
		No Media Cov	With Media Cov		No Media Cov	With Media Cov
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.
$Day_{[-10, -6]}$	0.029	-0.131*	0.046	0.182***	0.018	0.206***
, ,	(0.040)	(0.075)	(0.047)	(0.042)	(0.070)	(0.050)
$Day_{[-5, -1]}$	0.366***	-0.146*	0.476***	0.529***	0.002	0.647***
- [- /]	(0.052)	(0.087)	(0.061)	(0.052)	(0.081)	(0.060)
$Day_{[0, 4]}$	0.061	-0.311***	0.233***	0.285***	-0.216***	0.467***
• [*, -]	(0.049)	(0.097)	(0.056)	(0.051)	(0.075)	(0.061)
$Day_{[5, 10]}$	0.086**	-0.109	0.141***	0.084**	-0.216***	0.165***
- [-7 -]	(0.037)	(0.067)	(0.043)	(0.033)	(0.049)	(0.039)
Class Period $End_{[-1, 1]}$	3.036***	1.227***	3.564***	1.987***	0.725***	2.375***
. , ,	(0.109)	(0.200)	(0.123)	(0.085)	(0.152)	(0.098)
Constant	2.187***	2.004***	2.232***	1.726***	1.347***	1.823***
	(0.012)	(0.018)	(0.014)	(0.013)	(0.016)	(0.015)
$Day_{[0, 4]}$ Diff.		0.54	14***		0.68	83***
χ^2		23	3.79		50	0.74
Observations	98,027	20,435	77,592	98,027	20,435	77,592
R-squared	0.244	0.238	0.248	0.447	0.281	0.468
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 6 presents results on how media coverage affects the market reaction to litigation filings when there is no lag entering the case into PACER. Columns 1-3 (4-6) present tests of absolute abnormal returns (trading volume). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information is entered into PACER on the filing date. Columns 1 and 4 examine the overall effect; Columns 2 and 5 examine cases with no media coverage on the filing date; and Columns 3 and 6 examine cases with media coverage on the filing date. Variables are defined in the Appendix. We use simultaneous estimation to test for coefficient equality in the media coverage and non-media coverage samples. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively. F-tests on the equality of coefficients have been performed using regressions that cluster only at the firm level.

 Table 7

 The Effect of the Implementation of Case Management/Electronic Case Filing Systems (CM/ECF) on the Market Reaction to Litigation Filings

Panel A: Prior to the Implementation of CM/ECF							
	(1)	(2)	(3)	(4)	(5)	(6)	
MADIADIEC	اما	No Media Cov	With Media Cov	T 1 1/1	No Media Cov	With Media Cov	
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.	
$Day_{[-10, -6]}$	-0.073	-0.377***	0.160	0.125**	0.029	0.201**	
, ,	(0.105)	(0.144)	(0.149)	(0.063)	(0.074)	(0.095)	
$Day_{[-5, -1]}$	0.139	-0.011	0.268*	0.390***	0.219**	0.532***	
. [. /]	(0.117)	(0.181)	(0.152)	(0.088)	(0.101)	(0.133)	
$Day_{[0, PACER - 1]}$	0.497***	-0.163	1.009***	0.756***	0.210	1.179***	
1 [0,1110211 1]	(0.164)	(0.215)	(0.231)	(0.135)	(0.132)	(0.204)	
$Day_{[PACER, 2]}$	0.305**	0.133	0.435**	0.322***	0.078	0.506***	
, [1 110 B10, 2]	(0.138)	(0.203)	(0.176)	(0.074)	(0.065)	(0.115)	
Class Period End $[-1, 1]$	5.074***	5.304***	4.916***	3.346***	3.426***	3.249***	
[-1, 1]	(0.314)	(0.728)	(0.328)	(0.245)	(0.434)	(0.292)	
Constant	3.956***	4.351***	3.659***	1.303***	1.107***	1.452***	
	(0.030)	(0.041)	(0.033)	(0.017)	(0.019)	(0.025)	
Observations	27,511	11,834	15,677	27,511	11,834	15,677	
R-squared	0.182	0.160	0.197	0.418	0.395	0.422	
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes	

Panel B: After the Implementation of CM/ECF							
	(1)	(2)	(3)	(4)	(5)	(6)	
		No Media Cov	With Media Cov		No Media Cov	With Media Cov	
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.	
$Day_{[-10, -6]}$	0.090	0.160	0.075	0.101	0.369*	0.044	
	(0.089)	(0.199)	(0.099)	(0.083)	(0.215)	(0.088)	
$Day_{[-5, -1]}$	0.375***	-0.038	0.459***	0.537***	0.345	0.573***	
. [-, -]	(0.109)	(0.187)	(0.124)	(0.105)	(0.233)	(0.115)	
$Day_{[0, PACER - 1]}$	0.421***	-0.467*	0.608***	0.708***	0.166	0.827***	
7 [0, 1 ACE II -1]	(0.139)	(0.269)	(0.161)	(0.129)	(0.278)	(0.145)	
$Day_{[PACER, 2]}$	0.386***	-0.014	0.470***	0.544***	0.366**	0.581***	
EW [FACER, 2]	(0.110)	(0.159)	(0.128)	(0.110)	(0.160)	(0.130)	
Class Period End $[-1, 1]$	4.196***	4.311***	4.186***	2.991***	2.684***	3.069***	
Class 1 Crioa Ena [=1, 1]	(0.257)	(0.505)	(0.287)	(0.229)	(0.487)	(0.254)	
Constant	2.576***	2.611***	2.568***	2.047***	1.898***	2.078***	
Constant	(0.022)	(0.038)	(0.025)	(0.021)	(0.048)		
	(0.022)	(0.038)	(0.023)	(0.021)	(0.048)	(0.022)	
Observations	25,193	4,331	20,862	25,193	4,331	20,862	
R-squared	0.258	0.218	0.266	0.521	0.518	0.522	
Firm x Year-Otr FE	Yes	Yes	Yes	Yes	Yes	Yes	
THIII A TOUL QUILD	103	103	103	103	103	103	

Table 7 presents results on how reduced investor acquisition costs affect the market reaction to litigation filings. We separately estimate the analysis from Table 5 before (Panels A) and after (Panels B) the District Courts implemented the CM/ECF system. Columns 1-3 (4-6) present tests of absolute abnormal returns (trading volume). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information is not entered into PACER until between two to five trading days after the filing date, inclusive. Columns 1 and 4 examine the overall effect; Columns 2 and 4 examine cases with no media coverage on the filing date; and Columns 3 and 6 examine cases with media coverage on the filing date. Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Table 8

Market Reactions to Litigation Filings—The Effect of the Volume and Nature of Media Coverage

	(1)	(2)	(2)	(4)
VADIADI EC	(1)	(2)	(3)	(4) Turnel Well
VARIABLES	AR	Trad. Vol.	AR	Trad. Vol.
Day	-0.065	0.112**	-0.323***	-0.104**
$Day_{[-10, -6]}$	(0.078)	(0.047)	(0.079)	(0.049)
Day y La Antialas	0.200***	0.047)	(0.079)	(0.049)
$Day_{[-10, -6]} \times Ln \ Articles$				
Dan y In Litia Anticles	(0.074)	(0.058)	0.508***	0.343***
$Day_{[-10, -6]}$ x Ln Litig. Articles				
Dan	0.028	0.252***	(0.083) 0.275***	(0.064) 0.490***
$Day_{[-5, -1]}$	-0.028			
D I A 1	(0.088) 0.368***	(0.063) 0.271***	(0.082)	(0.069)
$Day_{[-5, -1]} \times Ln Articles$				
	(0.081)	(0.074)	0.040	0.225
$Day_{[-5, -1]} \times Ln \ Litig. \ Articles$			0.040	-0.235
D	0.20.4**	0.176*	(0.264)	(0.190) 0.324***
$Day_{[0, PACER - 1]}$	-0.294**	0.176*	0.117	
	(0.137)	(0.093)	(0.130)	(0.088)
$Day_{[0, PACER -1]} \times Ln Articles$	0.371***	0.242***		
	(0.110)	(0.081)	0.741**	0.701***
$Day_{[0, PACER -1]} \times Ln \ Litig. \ Articles$			0.541**	0.721***
D	0.053	0.222***	(0.212)	(0.163)
$Day_{[PACER, 2]}$	0.053	0.223***	0.219**	0.315***
D	(0.109)	(0.071)	(0.101)	(0.064)
$Day_{[PACER, 2]}$ x Ln Articles	0.090	0.034		
	(0.076)	(0.073)		
Day _[PACER, 2] x Ln Litig. Articles			0.243	0.217
		0.044444	(0.190)	(0.164)
Ln Articles	1.131***	0.941***		
	(0.050)	(0.048)	0.050111	
Ln Litig. Articles			0.358***	0.327***
			(0.099)	(0.088)
Class Period $End_{[-1, 1]}$	3.760***	2.490***	4.527***	3.115***
	(0.187)	(0.153)	(0.206)	(0.171)
Constant	2.491***	0.989***	3.264***	1.629***
	(0.041)	(0.038)	(0.021)	(0.016)
	50 50 1	50 50 4	50 504	50.704
Observations	52,704	52,704	52,704	52,704
R-squared	0.257	0.530	0.232	0.495
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes

Table 8 presents results examining the effect of additional media coverage on the market reaction to litigation filings. Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information is not entered into PACER until between two to five trading days after the filing date, inclusive. Columns 1 and 3 (2 and 4) examine absolute abnormal returns (trading volume). Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

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 Table 9

 Market Reaction to Litigation Filings—The Role of the Media Disaggregated into Components based on its Nature

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Cov	Only PR Cov	Only Trad. Media Cov	Both Cov	No Cov	Only PR Cov	Only Trad. Media Cov	Both Cov
VARIABLES	AR	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.	Trad. Vol.
Day	-0.230*	0.012	0.061	0.183	0.122	0.219*	0.145	0.037
$Day_{[-10, -6]}$	(0.119)	(0.167)	(0.161)	(0.128)	(0.080)	(0.125)	(0.110)	(0.099)
$Day_{[-5, -1]}$	-0.019	0.401*	0.429**	0.355**	0.251***	0.538***	0.620***	0.546***
, ,	(0.142)	(0.204)	(0.165)	(0.140)	(0.096)	(0.170)	(0.164)	(0.125)
$Day_{[0, PACER -1]}$	-0.248	0.099	0.419	1.342***	0.191	0.233*	0.662**	1.541***
- [-/]	(0.178)	(0.198)	(0.308)	(0.205)	(0.121)	(0.127)	(0.259)	(0.194)
$Day_{[PACER, 2]}$	0.093	0.548**	-0.011	0.620***	0.155**	0.397***	0.220*	0.776***
/]	(0.155)	(0.216)	(0.189)	(0.148)	(0.065)	(0.152)	(0.130)	(0.144)
Class Period $End_{[-1, 1]}$	4.803***	5.087***	3.789***	4.476***	3.068***	3.529***	2.999***	3.009***
[-, -]	(0.457)	(0.430)	(0.471)	(0.313)	(0.331)	(0.427)	(0.443)	(0.247)
Constant	3.885***	3.379***	3.000***	2.874***	1.319***	1.584***	1.812***	1.923***
	(0.032)	(0.037)	(0.036)	(0.027)	(0.019)	(0.027)	(0.029)	(0.025)
Observations	16,165	9,577	8,418	18,544	16,165	9,577	8,418	18,544
R-squared	0.192	0.200	0.230	0.273	0.469	0.420	0.478	0.523
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 9 presents results on how the nature of media coverage affects the market reaction to litigation filings. Columns 1-4 (5-8) present tests of absolute abnormal returns (trading volume). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information is not entered into PACER until between two to five trading days after the filing date, inclusive. Columns 1 and 5 examine cases with no media coverage on the filing date; Columns 2 and 6 examine cases with media coverage that simply disseminates press releases; Columns 3 and 7 examine cases with only traditional media coverage; Columns 4 and 8 examine cases with both press release-related coverage and traditional media coverage. Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Table 10

Market Reaction to Litigation Filings—The Role of Traditional Media Articles
Disaggregated based on Article Characteristics

	(1)	(2)	(3)	(4)
	` /	ling Date Coverage	1 1	Coverage
VARIABLES	AR	Trad. Vol.	AR	Trad. Vol.
$Day_{[-10, -6]}$	0.150	-0.012	0.150	0.192*
, ,	(0.143)	(0.105)	(0.136)	(0.112)
$Day_{[-5, -1]}$	0.472***	0.599***	0.276**	0.548***
, ,	(0.160)	(0.146)	(0.137)	(0.137)
$Day_{[0, PACER -1]}$	1.667***	1.640***	0.298	0.817***
	(0.247)	(0.233)	(0.214)	(0.195)
$Day_{[PACER, 2]}$	0.756***	0.856***	-0.013	0.278**
	(0.172)	(0.166)	(0.157)	(0.120)
Class Period End $_{[-1, 1]}$	4.438***	2.981***	4.019***	3.062***
	(0.354)	(0.282)	(0.384)	(0.348)
Constant	2.982***	2.066***	2.820***	1.653***
	(0.030)	(0.027)	(0.029)	(0.028)
$Day_{[0, PACER -1]}$ Diff.	1.369***	0.823***		
χ^2	17.43	7.42		
Observations	15,372	15,372	11,468	11,468
R-squared	0.288	0.554	0.214	0.416
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes

Table 10 presents results on how variation in the actual content of traditional media articles affects the market reaction to litigation filings. Columns 1 and 3 (2 and 4) present tests of absolute abnormal returns (trading volume). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information is not entered into PACER until between two to five trading days after the filing date, inclusive, and cases that contain at least one traditional media article. Columns 1-2 (3-4) examine cases that contain at least one traditional media article that reports on only the sued firm and has more than 200 words (the remaining cases with at least one traditional media article but are 200 or fewer words or report on multiple companies). Variables are defined in the Appendix. We use simultaneous estimation to test for coefficient equality in the sample containing at least one traditional media article that reports on only the sued firm and has more than 200 words versus the remaining cases that are reported on in shorter articles or those discussing multiple firms. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively. F-tests on the equality of coefficients have been performed using regressions that cluster only at the firm level.

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Table 11Determinants of Media Coverage—Press Releases versus Traditional Coverage

	(1)	(2)	(2)
VARIABLES	(1) Any Cov	(2) Trad. Media Cov	(3) PR Cov
VARIABLES	Any Cov	Traa. Meala Cov	T K COV
Ln Assets	0.025***	0.070***	0.001
Lit Assets	(0.005)	(0.006)	(0.006)
ROA	0.003)	-0.034	0.057**
KOA			
T-ling O	$(0.028) \\ 0.021***$	(0.030) 0.020***	(0.027) 0.014***
Tobin's Q			
T 4 T .	(0.003)	(0.004)	(0.004)
Ln Analysts	0.029**	0.041***	0.021*
	(0.012)	(0.014)	(0.012)
Instit. Own.	0.007	0.001	-0.028
	(0.031)	(0.036)	(0.034)
Max Damages	0.026***	0.015***	0.040***
	(0.004)	(0.004)	(0.004)
Acct. 10b-5 Case	0.054***	0.005	0.095***
	(0.017)	(0.020)	(0.019)
IPO Case	0.015	-0.034	0.024
	(0.031)	(0.036)	(0.035)
Laddering Case	-0.041	-0.015	-0.071
8	(0.065)	(0.063)	(0.066)
Friday Filing	0.034**	0.026	0.023
,8	(0.016)	(0.018)	(0.018)
Ln Weekly Cases at District Court	0.024**	0.005	0.028**
En weenly cases at Bish tet court	(0.011)	(0.012)	(0.012)
Circuit 2	0.042**	0.016	0.078***
Circuit 2	(0.020)	(0.024)	(0.022)
Circuit 9	0.028	0.036	0.032
Circuit	(0.019)	(0.022)	(0.021)
$CAR\ Filing\ Date_{[-10,-1]}$	-0.001***	-0.001***	-0.002***
CIRT IIII Butt[=10,-1]	(0.000)	(0.000)	(0.000)
CAR Class Period $End_{[-1,1]}$	-0.002***	-0.002***	-0.003***
CAR Class I eriod $End_{[-1,1]}$	(0.002)	(0.000)	(0.000)
Constant	-0.120*	-0.369***	-0.270***
Constant	(0.068)	(0.071)	(0.071)
	(0.008)	(0.071)	(0.071)
Observations	3,104	3,104	3,104
	0.194	0.202	0.211
R-squared		0.202 Yes	
Filing Year FE	Yes	res	Yes

Table 11 presents results examining the determinants of filing date media coverage. Column 1 (2) [3] presents tests of the determinants of any (traditional) [press release] media coverage. Refer to Panel A of Table 1 for the sample construction. Variables are defined in the Appendix. Standard errors are presented in parenthesis and are clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Table 12Matched Sample Design

Panel	Δ.	Propensity-score	Match

	(1)	(2)	(3)	(4)	(5)	(6)
	(1)	No Media Cov	With Media Cov	(.)	No Media Cov	With Media Cov
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.
_						0.00011
$Day_{[-10, -6]}$	-0.008	-0.228	0.215	0.182**	0.100	0.266**
į , į	(0.108)	(0.142)	(0.167)	(0.071)	(0.096)	(0.105)
$Day_{[-5, -1]}$	0.237*	-0.027	0.513***	0.423***	0.213*	0.637***
- [- /]	(0.125)	(0.165)	(0.186)	(0.096)	(0.115)	(0.152)
$Day_{[0, PACER -1]}$	0.304*	-0.134	0.757***	0.519***	0.139	0.914***
. [0,]	(0.155)	(0.206)	(0.227)	(0.128)	(0.149)	(0.199)
$Day_{[PACER, 2]}$	0.164	0.134	0.195	0.286***	0.101	0.470***
	(0.125)	(0.171)	(0.174)	(0.086)	(0.068)	(0.155)
Class Period End $_{[-1, 1]}$	4.976***	5.089***	4.829***	3.353***	3.275***	3.365***
[-, -]	(0.324)	(0.544)	(0.383)	(0.258)	(0.378)	(0.344)
Constant	3.690***	3.896***	3.485***	1.415***	1.318***	1.512***
	(0.028)	(0.035)	(0.036)	(0.018)	(0.022)	(0.028)
Observations	23,424	11,712	11,712	23,424	11,712	11,712
R-squared	0.198	0.202	0.195	0.426	0.413	0.433
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes

D1	D.	Entropy	D-1	
Panei	B.	Enirony	Balance	

		ranci b. Entrop	y Daiance			
	(1)	(2)	(3)	(4)	(5)	(6)
		No Media Cov	With Media Cov		No Media Cov	With Media Cov
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.
_						
$Day_{[-10, -6]}$	-0.048	-0.188	0.091	0.184*	0.256	0.114
. , ,	(0.114)	(0.209)	(0.094)	(0.104)	(0.190)	(0.070)
$Day_{[-5, -1]}$	0.250*	0.151	0.360***	0.478***	0.429*	0.535***
> [0, 1]	(0.150)	(0.270)	(0.106)	(0.136)	(0.255)	(0.093)
$Day_{[0, PACER - 1]}$	0.684***	0.469	0.917***	0.810***	0.526	1.112***
7 [0, 1 ACER -1]	(0.258)	(0.480)	(0.153)	(0.210)	(0.372)	(0.138)
$Day_{[PACER, 2]}$	0.531***	0.605*	0.458***	0.353***	0.144	0.563***
V[FACER, 2]	(0.177)	(0.337)	(0.115)	(0.110)	(0.182)	(0.098)
Class Period $End_{[-1, 1]}$	4.656***	4.747***	4.531***	3.137***	3.147***	3.081***
[-1, 1]	(0.346)	(0.624)	(0.260)	(0.306)	(0.562)	(0.214)
Constant	3.138***	3.228***	3.048***	1.753***	1.728***	1.779***
Constant	(0.032)	(0.058)	(0.022)	(0.029)	(0.055)	(0.018)
	()	()	` ' /		()	()
Observations	44,408	13,969	30,439	44,408	13,969	30,439
R-squared	0.256	0.261	0.250	0.450	0.401	0.492
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 12 presents results similar to those reported in Table 5 using a propensity-matched sample (Panel A) and entropy balanced sample (Panel B). The model used for the propensity-score match and to entropy balance is similar to the that presented in Table 11 after excluding the year fixed effects and restricting the sample to only cases for which the filing is not entered into PACER until between two to five trading days after the filing date, inclusive. For propensity score matching, we use a caliper of 0.03 and match without replacement. Columns 1-3 (4-6) present tests of absolute abnormal returns (trading volume). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information is not entered into PACER until between two to five trading days after the filing date, inclusive. It also requires non-missing data for all the variables included in Table 11. Columns 1 and 4 examine the overall effect; Columns 2 and 4 examine cases with no media coverage on the filing date; and Columns 3 and 6 examine cases with media coverage on the filing date. Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Table 13Robustness Tests

Panel A: Signed Returns

	Panel A: Signed Retu	IFNS	
	(1)	(2)	(3)
		No Media Cov	With Media Cov
VARIABLES	AR	AR	AR
$Day_{[-10, -6]}$	-0.071	0.031	-0.117
- 1	(0.080)	(0.147)	(0.094)
$Day_{[-5, -1]}$	-0.133	0.004	-0.194*
· [· · · · -]	(0.085)	(0.149)	(0.104)
$Day_{[0, PACER -1]}$	-0.531***	-0.235	-0.672***
, [0,]	(0.118)	(0.197)	(0.144)
$Day_{[PACER, 2]}$	-0.076	-0.015	-0.102
) [1 110 E10, 2]	(0.103)	(0.176)	(0.125)
Class Period $End_{[-1, 1]}$	-4.281***	-4.061***	-4.324* [*] *
[+, +]	(0.218)	(0.495)	(0.240)
Constant	-0.121***	-0.159***	-0.105***
	(0.025)	(0.042)	(0.024)
Observations	52,704	16,165	36,539
R-squared	0.035	0.025	0.041
Firm x Year-Qtr FE	Yes	Yes	Yes

Panel B. Litigation Related Media Coverage

	Pane	i B. Linganon Kei	ated Media Coverag	,e		
	(1)	(2)	(3)	(4)	(5)	(6)
		No Media Cov	With Media Cov		No Media Cov	With Media Cov
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.
-						
$Day_{[-10, -6]}$	0.007	-0.132	0.156	0.114**	0.154**	0.073
	(0.070)	(0.089)	(0.110)	(0.052)	(0.066)	(0.080)
$Day_{[-5, -1]}$	0.255***	0.090	0.428***	0.462***	0.369***	0.558***
, , -1	(0.081)	(0.107)	(0.122)	(0.067)	(0.081)	(0.107)
$Day_{[0, PACER -1]}$	0.461***	0.025	0.944***	0.734***	0.391***	1.113***
, [0,]	(0.111)	(0.150)	(0.163)	(0.095)	(0.114)	(0.146)
$Day_{[PACER, 2]}$	0.345***	0.124	0.578***	0.428***	0.226***	0.642***
y [1 110 210, 2]	(0.090)	(0.121)	(0.126)	(0.066)	(0.061)	(0.116)
Class Period End $[-1, 1]$	4.569***	4.354***	4.716***	3.141***	3.002***	3.241***
[-1, -1	(0.208)	(0.309)	(0.261)	(0.172)	(0.243)	(0.228)
Constant	3.296***	3.488***	3.094***	1.658***	1.541***	1.783***
	(0.019)	(0.024)	(0.023)	(0.013)	(0.016)	(0.020)
	(*** *)		()		(' -)	(-)
Observations	52,704	27,084	25,620	52,704	27,084	25,620
R-squared	0.230	0.216	0.245	0.491	0.499	0.484
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes

	•	٠	١	

Panel C: Within Settled Cases										
	(1)	(2)	(3)	(4)	(5)	(6)				
	1.451	No Media Cov	With Media Cov		No Media Cov	With Media Cov				
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.				
$Day_{[-10, -6]}$	-0.135	-0.255*	-0.068	0.057	0.162*	0.002				
- 5 [-10, -0]	(0.096)	(0.151)	(0.123)	(0.067)	(0.093)	(0.089)				
$Day_{[-5, -1]}$	0.215**	0.035	0.323**	0.384***	0.217**	0.480***				
7[0, 1]	(0.107)	(0.171)	(0.135)	(0.084)	(0.096)	(0.119)				
$Day_{[0, PACER -1]}$	0.733***	-0.048	1.186***	0.892***	0.191	1.298***				
	(0.154)	(0.216)	(0.203)	(0.127)	(0.127)	(0.178)				
$Day_{[PACER, 2]}$	0.466***	0.197	0.614***	0.465***	0.107	0.662***				
	(0.128)	(0.201)	(0.156)	(0.087)	(0.076)	(0.126)				
Class Period End _[-1, 1]	5.370***	5.597***	5.271***	3.514***	3.310***	3.533***				
	(0.262)	(0.573)	(0.293)	(0.213)	(0.380)	(0.248)				
Constant	3.702***	4.243***	3.403***	1.638***	1.185***	1.889***				
	(0.026)	(0.040)	(0.028)	(0.017)	(0.020)	(0.022)				
Observations	32,574	11,590	20,984	32,574	11,590	20,984				
R-squared	0.204	0.157	0.226	0.510	0.455	0.514				
Firm x Year-Otr FE	Yes	Yes	Yes	Yes	Yes	Yes				

Panel D: Early Period (1998–2008)										
	(1)	(2)	(3)	(4)	(5)	(6)				
		No Media Cov	With Media Cov		No Media Cov	With Media Cov				
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.				
_	0.010	0.1.00	0.0==		0.004	2 2 4 4				
$Day_{[-10, -6]}$	-0.018	0.160	0.075	0.077	0.369*	0.044				
	(0.082)	(0.199)	(0.099)	(0.057)	(0.215)	(0.088)				
$Day_{[-5, -1]}$	0.259***	-0.038	0.459***	0.459***	0.345	0.573***				
• [•, -]	(0.094)	(0.187)	(0.124)	(0.076)	(0.233)	(0.115)				
$Day_{[0, PACER -1]}$	0.596***	-0.467*	0.608***	0.842***	0.166	0.827***				
1	(0.131)	(0.269)	(0.161)	(0.111)	(0.278)	(0.145)				
$Day_{[PACER, 2]}$	0.411***	-0.014	0.470***	0.469***	0.366**	0.581***				
	(0.108)	(0.159)	(0.128)	(0.074)	(0.160)	(0.130)				
Class Period $End_{[-1, 1]}$	5.098***	4.311***	4.186***	3.496***	2.684***	3.069***				
. , ,	(0.256)	(0.505)	(0.287)	(0.210)	(0.487)	(0.254)				
Constant	3.556***	2.611***	2.568***	1.571***	1.898***	2.078***				
	(0.023)	(0.038)	(0.025)	(0.015)	(0.048)	(0.022)				
Observations	41,297	4,331	20,862	41,297	4 221	20,862				
			,	, ,	4,331					
R-squared	0.218	0.218	0.266	0.496	0.518	0.522				
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes				

		Tallel E. Late I ell	lou (2007 2017)			
	(1)	(2)	(3)	(4)	(5)	(6)
		No Media Cov	With Media Cov		No Media Cov	With Media Cov
VARIABLES	AR	AR	AR	Trad. Vol.	Trad. Vol.	Trad. Vol.
		· · ·	· · ·			
$Day_{[-10, -6]}$	0.095	-0.377***	0.160	0.246**	0.029	0.201**
, , , ,	(0.130)	(0.144)	(0.149)	(0.124)	(0.074)	(0.095)
$Day_{[-5, -1]}$	0.167	-0.011	0.268*	0.422***	0.219**	0.532***
7[0, 1]	(0.153)	(0.181)	(0.152)	(0.143)	(0.101)	(0.133)
$Day_{[0, PACER -1]}$	0.031	-0.163	1.009***	0.373**	0.210	1.179***
- [0,]	(0.180)	(0.215)	(0.231)	(0.167)	(0.132)	(0.204)
$Day_{[PACER, 2]}$	0.104	0.133	0.435**	0.281**	0.078	0.506***
, [, -]	(0.130)	(0.203)	(0.176)	(0.132)	(0.065)	(0.115)
Class Period $End_{[-1, 1]}$	3.311***	5.304***	4.916***	2.304***	3.426***	3.249***
[-, -]	(0.330)	(0.728)	(0.328)	(0.289)	(0.434)	(0.292)
Constant	2.351***	4.351***	3.659***	1.975***	1.107***	1.452***
	(0.029)	(0.041)	(0.033)	(0.027)	(0.019)	(0.025)
Observations	11,407	11,834	15,677	11,407	11,834	15,677
R-squared	0.232	0.160	0.197	0.474	0.395	0.422
Firm x Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 13 presents results similar to those reported in Table 5 after adjusting for various robustness tests and additional analyses. Panel A presents results using *signed*, rather than absolute, abnormal returns as the dependent variable. Panel B presents results after redefining filing date media coverage to only include litigation related coverage using keyword searches. Panel C presents results after including only cases that eventually settle to hold merits relatively constant. Panels D and E present results after splitting our sample period into two periods: 1998–2008 (Panel D) and 2009–2019 (Panel E). Refer to Panel A of Table 1 for the sample construction. This sample includes only cases for which the filing information was not entered into PACER until between two to five trading days after the filing date, inclusive. Columns 1 and 4 examine the overall effect; Columns 2 and 4 examine cases with no media coverage on the filing date; and Columns 3 and 6 examine cases with media coverage on the filing date. Variables are defined in the Appendix. Standard errors are presented in parenthesis and are clustered at the firm and date level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

 Table 14

 Media Coverage and Case Outcomes—Descriptive Statistics and Correlations

Panel A: Descriptive Statistics

	Dismissed (N=1,587)			Se	Diff		
	SD	Mean	Median	SD	Mean	Median	
Ln Settl. Amt	0.00	0.00	0.00	1.88	15.62	15.62	-15.62
Abn. Cov.	1.90	0.74	1.10	1.76	0.90	1.10	-0.16**
Max Damages	3.33	12.53	13.06	2.06	13.66	13.62	-1.13***
Ln Assets	2.31	7.23	7.08	2.24	6.63	6.23	0.60***
ROA	0.30	-0.07	0.02	0.33	-0.12	-0.00	0.05***
Tobin's Q	2.43	2.26	1.36	2.50	2.30	1.45	-0.04
Ln Analysts	0.90	2.00	2.08	0.87	1.86	1.95	0.13***
Instit. Ówn.	0.29	0.64	0.70	0.30	0.53	0.53	0.11***
Acct. 10b-5 Case	0.44	0.26	0.00	0.50	0.47	0.00	-0.21***
IPO Case	0.20	0.04	0.00	0.42	0.23	0.00	-0.19***
Laddering Case	0.06	0.00	0.00	0.36	0.15	0.00	-0.15***

Panel B:	Univaria	te Correla	ations					
(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Settled	1.00										
(2) Ln Settl. Amt	0.99*	1.00									
(3) Abn. Cov.	0.04*	0.07*	1.00								
(4) Max Damages	0.20*	0.23*	0.14*	1.00							
(5) Ln Assets	-0.13*	-0.08*	0.15*	0.37*	1.00						
(6) ROA	-0.09*	-0.06*	0.05*	0.05*	0.38*	1.00					
(7) Tobin's Q	0.01	0.01	0.04*	0.06*	-0.37*	-0.15*	1.00				
(8) Ln Analysts	-0.07*	-0.03*	0.08*	0.39*	0.58*	0.23*	-0.02	1.00			
(9) Instit. Own.	-0.18*	-0.14*	0.08*	0.09*	0.41*	0.35*	-0.08*	0.47*	1.00		
(10) Acct. 10b-5 Case	0.22*	0.25*	0.11*	0.15*	0.06*	0.12*	-0.10*	-0.04*	0.03	1.00	
(11) IPO Case	0.28*	0.23*	-0.09*	0.11*	-0.18*	-0.15*	0.02	-0.11*	-0.28*	-0.18*	1.00
(12) Laddering Case	0.28*	0.22*	-0.14*	0.15*	-0.17*	-0.20*	-0.00	-0.06*	-0.27*	-0.20*	0.71*

Panel A of Table 14 presents descriptive statistics for the main variables used in the case outcome analysis, separately for settled and dismissed cases. Refer to Panel C of Table 1 for the sample construction. *t*-tests are used to test for significant differences between the means of the two samples. Panel B of Table 14 presents Pearson correlations. Variables are defined in the Appendix. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively, in Panel A. * indicates statistical significance at the 10 percent or smaller levels in Panel B.

Table 15Media Coverage and Case Outcomes

	(1)	(2)	(3)
VARIABLES	Settled	Ln Settl. Amt	Ln Settl. Amt
Abn. Cov.	0.017***	0.317***	0.114***
	(0.005)	(0.073)	(0.023)
Max Damages	0.031***	0.557***	0.306***
	(0.003)	(0.056)	(0.026)
Ln Assets	-0.035***	-0.470***	0.092***
	(0.005)	(0.087)	(0.028)
ROA	0.002	-0.166	-0.094
	(0.029)	(0.465)	(0.129)
Tobin's Q	-0.009**	-0.123**	0.035**
	(0.004)	(0.061)	(0.017)
Ln Analysts	0.007	0.204	0.218***
•	(0.013)	(0.202)	(0.061)
Instit. Own.	-0.109***	-1.505***	0.308*
	(0.033)	(0.526)	(0.158)
Acct. 10b-5 Case	0.262***	4.381***	0.441***
	(0.018)	(0.290)	(0.085)
IPO Case	0.206***	3.218***	0.127
	(0.035)	(0.556)	(0.145)
Laddering Case	0.330***	3.539***	-1.863***
C	(0.046)	(0.740)	(0.180)
Constant	0.232***	1.646**	10.101***
	(0.045)	(0.719)	(0.283)
Observations	3,030	3,028	1,441
R-squared	0.211	0.192	0.418
Filing Year FE	Yes	Yes	Yes
SIC2 FE	Yes	Yes	Yes

Table 15 presents results examining whether media coverage around the filing date is associated with future case outcomes. Columns 1 and 2 use all securities class actions and examine whether a case settles (Column 1) and the settlement amount (Column 2), where the settlement amount is set to zero for dismissed cases. Column 3 restricts the sample to settled cases and examines settlement amount. Refer to Panel C of Table 1 for the sample construction. Variables are defined in the Appendix. Standard errors are presented in parenthesis and clustered at the firm level. To minimize the influence of outliers, all continuous variables are winsorized at the 1 percent and 99 percent levels. ***, **, * indicate statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.