

Securities Law Precedents, Litigation Risk, and Misreporting

Abstract

Using 438 circuit court precedents, we construct a measure that captures the within-country variation in court leniency on securities law violations. Case-level analyses reveal that district courts heed home circuit precedents and are more likely to dismiss pending cases when their home circuits become more lenient. Firm-level analyses show that shareholders are less likely to sue misreporting firms residing in more lenient circuits. Finally, in more lenient circuits, firms are more likely to misreport and investors react less negatively to their restatement announcements. Our findings suggest that lenient precedents lower expected litigation costs and weaken the deterrence of shareholder litigation.

JEL Classification: K22, K40, M41

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1. Introduction

Securities class action lawsuits, which allow investors to recuperate investment losses caused by securities law violations, are arguably the most significant litigation risk for firms in the United States and an essential mechanism against financial misconduct (Coffee Jr., 2006; Mahoney, 2009; Brochet and Srinivasan, 2014). Although every legal system has a legislature that passes new securities laws and statutes, in American common law, the *doctrine of stare decisis* grants judicial precedents a pivotal role in defining what qualifies as securities law violations (Shapiro, 1972; Landes and Posner, 1976; Niblett et al., 2010). Each court should apply the principles and rules established in its own or a higher court's prior rulings when deciding a case. This collection of precedents shapes firms' litigation environment and affects the deterrence of these lawsuits (Gennaioli and Shleifer, 2007; Buell, 2011; Choi and Pritchard, 2012). This study exploits the variation in securities law precedents across U.S. circuit courts to examine how such precedents affect shareholder litigation and financial misreporting.

In the U.S. federal court system, the Supreme Court has the ultimate jurisdiction over all cases, but the courts of appeals—circuit courts—and district courts—trial courts—are usually the final arbiters of securities class actions (Cross, 2007; Pritchard, 2011; Choi and Pritchard, 2012). In this hierarchy, a circuit court builds precedents that become binding for itself and the district courts under its jurisdiction (Shapiro, 1972; Perino, 2006). When a circuit court affirms a district court's dismissal decision in a securities class action lawsuit, it confirms that the case does not have sufficient merit. Such a decision sets a lenient precedent for securities law violations that increases the likelihood of dismissal for similar cases and reduces the deterrence of class action lawsuits in the circuit. In contrast, when a circuit court reverses a district court dismissal, it sets a non-lenient precedent. Because circuit courts face cases with different facts, and these facts and random factors, such as case sequence, affect case outcomes, precedents undergo an idiosyncratic and path-dependent evolution in each circuit (Gennaioli and Shleifer, 2007; Leibovitch, 2016). As a result, different circuits can diverge in their interpretations of the same securities law, resulting in within-country variation in firms' litigation risk for securities law violations (Landes and Posner, 1976; Niblett et al., 2010).¹

We use the collection of circuit court rulings to construct a time-series measure of leniency

¹We discuss diverging interpretations of securities law violation across circuits in Section 2.2.

on securities law violations in each circuit and study its effect on firms' litigation risk and misreporting. Our study joins a nascent strand of accounting and finance research that explores the consequences of court rulings. These studies typically use a prominent ruling from the Supreme Court or a circuit court, such as *Dura Pharmaceuticals* or *In re Silicon Graphics Inc.*, as the setting to examine the implications of a change in litigation risk (Bliss et al., 2018; Hopkins, 2018; Licht et al., 2018; Houston et al., 2019; Huang et al., 2020).² We consider all securities law precedents in the circuit courts for three reasons. First, legal theories dictate that the collection of precedents, rather than a single case, define the applicable law (Carpenter, 1917; Landes and Posner, 1976; Niblett et al., 2010). Second, although some precedents are more prominent than others, they cover specific facts and thus are only relevant to a subset of future cases. Third, research using a single circuit court precedent implicitly assumes that other circuits do not experience change during the period, which, as we show in Section 3, is not always true.³

We start by collecting circuit and district court rulings between 1996 and 2018 from Google Scholar Case Law Search.⁴ In case-level analyses, we study the effect of circuit court precedents on future lawsuits using district court citations and rulings. Consistent with the legal doctrine that district courts should heed home-circuit precedents, we find that district courts are 26 times more likely to cite precedents from their home circuit than those from other circuits. Furthermore, because judges draw analogies to precedents when deciding a case, we expect precedents covering more similar allegations to be more relevant and to have a greater influence than those covering less similar allegations (Carpenter, 1917; Hinkle, 2015). Consistent with this hypothesis, we find that, in district court cases with alleged Generally Accepted Accounting Principles violations (GAAP cases), courts are more than twice as likely to cite home-circuit precedents with alleged GAAP violations (GAAP precedents) than home-circuit precedents without such violations (Non-GAAP precedents).

Next, we aggregate each circuit's rulings to measure its precedent leniency on securities law

²*Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336, 125 S. Ct. 1627, 161 L. Ed. 2d 577 (2005). *In re Silicon Graphics Inc. Securities Litigation*, 183 F.3d 970 (Ninth Circuit 1999). Other rulings include *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 127 S. Ct. 2499, 168 L. Ed. 2d 179 (2007) and *Morrison v. National Australia Bank Ltd.*, 561 U.S. 247, 130 S. Ct. 2869, 177 L. Ed. 2d 535 (2010) (Huang et al., 2019; Licht et al., 2018).

³For example, in 1999, the year of *In re Silicon Graphics Inc.*, three other circuits ruled on accounting cases, including *Greebel v. FTP Software, Inc.* (First Circuit), *Stevelman v. Alias Research Inc.* (Second Circuit), and *In re Comshare Inc. Securities Litigation* (Sixth Circuit). See Section 3 for more details.

⁴See Section 3 and Appendix A for a detailed description of the data collection procedure.

violations and examine its impact on district court ruling decisions. We treat each dismissal (reversal) ruling as a shock that increases (decreases) leniency on securities law violations and use the differences between a circuit's cumulative number of prior dismissals and its cumulative number of prior reversals as the leniency measure. We separately determine the leniency of GAAP and non-GAAP precedents (*Lenient GAAP Precedents* and *Lenient Non-GAAP Precedents*, respectively) and expect the former to be more relevant to future ruling decisions in GAAP cases. Because existing precedents may affect plaintiffs' decisions to file a lawsuit, we focus on the effect of precedents decided after the lawsuit filing on district court decisions. We find that a district court is 6.92% more likely to dismiss a case when its home circuit sets an additional lenient GAAP precedent during the case pending period. We conduct two falsification tests, the first using home-circuit precedents set after the ruling date and the second using other circuits' precedents. Both tests confirm that neither time-invariant circuit-specific leniency levels nor a general trend in securities class action lawsuits affecting all circuits explain our results. In sum, the case-level analyses provide direct evidence that judges use relevant precedents in their deliberation and follow them when deciding cases.

We next use firm-level analyses to study the effects of securities law precedents on firms. Using subsequently restated financial statements to measure misreporting, we find that lenient GAAP precedents reduce the likelihood of lawsuits against misreporting firms. Specifically, we show that although misreporting firms are sued more often than other firms, misreporting firms with headquarters in circuits with more lenient precedents are significantly less likely to be sued than those in less lenient circuits.⁵ The effect of lenient precedents is economically significant. A one standard deviation increase in *Lenient GAAP Precedents* (equivalent to three additional dismissals) results in a 9.63% reduction in the odds of litigation for a misreporting firm (-1.5% compared to the misreporting firms' average litigation likelihood of 15.61%). Consistent with our case-level results, there is no effect of non-GAAP precedents.

We further classify misreporting into cases for which managers' intent to misreport is obvi-

⁵Although plaintiffs can file lawsuits in other circuits, the *doctrine of forum non conveniens* (28 U.S.C. §1404) allows defendants to relocate suits to their principal place of business. Hence, most plaintiffs file securities class action lawsuits in a defendant firm's home circuit (Cox et al., 2009). In our sample, 87.4% (84.7%) of the GAAP (non-GAAP) cases are filed in a defendant firm's home circuit, comparable to the 85% of the cases documented in Cox et al. (2009). Most of the cases not filed in the home circuits either have multiple defendants, such as IPO cases that usually include the underwriters as co-defendants, or the defendant firm has moved headquarters. When we exclude firms that have moved headquarters from the sample, 95% (88.4%) of the GAAP (non-GAAP) cases are filed in the home circuit.

ous and those for which the intent is more ambiguous. Precedent leniency should have a weaker effect when there are clear signs of managerial intent, because plaintiffs can easily argue that managers willingly defrauded investors even if precedents are lenient. Therefore, we expect plaintiffs' lawsuit filing decisions against misreporting firms to be more sensitive to precedent leniency when the managerial intent is more ambiguous. We find results consistent with this conjecture. We also explore the firm characteristics that affect the influence of GAAP precedents on lawsuit filing decisions. We find that precedent leniency affects filing decisions more when the potential lead plaintiffs are more sophisticated (i.e., firms' institutional ownership is higher) and when expected lawsuit payoffs, measured by firm size and ex-ante litigation risk, are higher. These findings are consistent with the effect of precedent leniency on firms' litigation risk depending on potential plaintiffs' ability and incentive to consider the implications of precedents for lawsuit outcomes.

Next, we analyze how precedent leniency affects investors' reactions to restatement announcements. Consistent with investors considering the lower litigation risk associated with lenient GAAP precedents when pricing restatements, investors react less negatively to restatements by firms in more lenient circuits. A one standard deviation increase in *Lenient GAAP Precedents* results in a 20.90% increase in the average market reaction in the 3-day window surrounding restatement announcements (0.40% compared to -1.92%). In line with our lawsuit likelihood results, investor reactions to restatement announcements also vary with managerial intent, potential plaintiffs' sophistication, and expected lawsuit payoffs.

Last, we turn to the effect of precedent leniency on firms' misreporting. As misreporting firms in more lenient circuits face a lower litigation risk than those in less lenient circuits, managers of firms in more lenient circuits should perceive lower litigation costs and be more likely to engage in misreporting. Consistent with this hypothesis, we document that the misreporting probability is higher for firms in more lenient circuits than for those in less lenient ones. In terms of economic magnitude, a one standard deviation increase in *Lenient GAAP Precedents* increases the odds of misreporting by firms in the circuit by 22.65% (2.22% compared to the unconditional misreporting likelihood of 9.82%). We further find that precedent leniency only affects firms' likelihood of engaging in misreporting for cases in which plaintiffs cannot easily infer managerial intent, and not for cases of misreporting that is clearly fraudulent, which suggests that managers understand the effects of leniency in different types of cases. Finally,

consistent with managers taking into account the role of firm characteristics in the effect of precedent leniency, we find that the misreporting likelihood only varies with precedent leniency when potential plaintiffs are sophisticated or expected lawsuit payoffs are high.

Our findings remain robust when we exclude firm-years surrounding prominent court rulings identified in prior studies, such as *In re Silicon Graphics Inc.*, *Dura Pharmaceuticals*, *Tellabs*, and *National Australia Bank* (e.g., Hopkins, 2018; Huang et al., 2019), which confirms that our results are not driven by a few influential rulings. We also exclude firms that moved their headquarters during our sample period to mitigate the potential endogeneity caused by firms' headquarters location choices, and we find similar results.

Our study makes three contributions to the literature. First, we contribute to the literature on how the common law tradition facilitates the development of capital markets through its effect on private litigation (e.g., La Porta et al., 1997; Beck et al., 2003; Leuz et al., 2003; Beck et al., 2005; La Porta et al., 2006). Prior studies rely on cross-country differences in legal origins, statutory securities laws, or enforcement mechanisms or use the passage of a new statutory law in a country to analyze the effects of the legal system on capital markets and firm behavior (e.g., Johnson et al., 2000; Ali and Kallapur, 2001; Johnson et al., 2001, 2007; Siegel, 2005; Burgstahler et al., 2006; Srinivasan et al., 2015; Karpoff and Wittry, 2018).⁶ We document substantial variation in judicial precedents within one country and under the same statutory law, and, more importantly, we find that such variation leads to differences in the private enforcement of securities law and firms' tendency to misreport. Our findings have implications for investors and regulators alike because cross-circuit differences in litigation risk inform investment and enforcement decisions.

Second, we introduce a litigation risk measure based on how lenient each circuit has been on securities law violations. Built on relevant precedents, this measure is well-grounded in legal theory and supported by empirical evidence. We show that precedent leniency on GAAP allegations is related not only to future case outcomes but also to the likelihood of lawsuits against misreporting firms.⁷ Our measure captures a distinct dimension of firms' litigation risk

⁶An exception is Filip et al. (2015), who use common law–civil law variation in Canada as a setting and find that the French civil law environment encourages firms to publish higher-quality accounting data.

⁷Prior studies rely only on anecdotal evidence to argue that single court rulings result in a change in litigation risk (Cazier et al., 2017; Crane and Koch, 2018; Hopkins, 2018; Huang et al., 2020). An exception is Houston et al. (2019), who document a decrease in the number of class actions in the Ninth Circuit following the *In re Silicon Graphics Inc.* ruling in 1999.

and complements other proxies based on firm and industry characteristics (Francis et al., 1994; Cheng et al., 2010; Kim and Skinner, 2012) and judge characteristics (Huang et al., 2019). Empirically, the measure enables researchers to identify cross-circuit and over-time variations in court leniency. Our results further show that precedent types vary in their relevance for firms' litigation risk, emphasizing the importance of using relevant precedents in the measurement.

Third, our work extends law and accounting research on the effects of circuit court rulings. Prior studies focus on a single circuit court ruling, such as *In re Silicon Graphics Inc.*, to examine the effect of judicial decisions on firms, and assume that other circuits experience no concurrent change in litigation risk (Cazier et al., 2017; Crane and Koch, 2018; Hopkins, 2018; Houston et al., 2019; Huang et al., 2020). However, our circuit court precedent data show that this assumption is not always valid. As we consider the rulings from all circuits over an extended period, our findings are less confounded by events that influence one region during the period of a single court ruling, such as the Internet bubble during the *In re Silicon Graphics Inc.* ruling. Thus, we provide a comprehensive picture of how court rulings affect firms' litigation risk and misreporting decisions.

2. Background and hypothesis development

2.1. *The role of judicial precedents under common law*

Developed in court rulings, case law—that is, judge-made law—supplements the statutes and regulations introduced by the legislator and is a major source of law in common law systems. Common law's *doctrine of stare decisis* requires courts to follow judicial precedents and apply the law as set in its own or in a higher court's prior rulings (Shapiro, 1972; Landes and Posner, 1976; Niblett et al., 2010). Specifically, when judges interpret applicable statutes and decide a case, they draw an analogy to prior cases and follow the principles and rules established in those cases (Carpenter, 1917; Cross, 2007).⁸

In the U.S., the federal court jurisdictions consist of three levels. There are 94 geographically divided districts at the lowest level, each with a district court that exercises original (first

⁸In addition to the fact that the legal doctrine requires it, precedents affect future cases by providing legal arguments that shape how judges make decisions (Lamond, 2016).

instance) jurisdiction.⁹ The second level has 12 circuit courts that exercise appellate jurisdiction to affirm, amend, or overrule the decisions of the district courts in its jurisdiction. Each circuit court sets precedents that are binding for itself and its lower district courts. Figure 1 depicts the 12 circuits and the 94 districts. At the top level is the Supreme Court, which has ultimate (and largely discretionary) appellate jurisdiction over all federal cases.

The Supreme Court receives a large number of requests and selectively reviews fewer than 1% of them each year (e.g., it reviewed only 73 out of 7,622 requests in its 2018 term), making circuit courts the final arbiters for most lawsuits.¹⁰ This observation is consistent with Cross's (2007, p. 2) conclusion that "it is the Circuit Courts that create U.S. law. They represent the true iceberg, of which the Supreme Court is but the most visible tip. The Circuit Courts play by far the greatest legal policymaking role in the United States judicial system."

Each circuit court develops its own precedents based on the cases in its jurisdiction. Because cases have different facts, and because these facts and random factors, such as case sequences or even judges' emotional states, can affect case outcomes (Leibovitch, 2016; Eren and Mocan, 2018), each circuit's precedents develop in an idiosyncratic and path-dependent fashion (Holmes Jr, 1897; Easterbrook, 1988; Hathaway, 2003; Niblett, 2013). As a result, judicial interpretations of the same statutory law can diverge across circuits, leading to variations in litigation risk (Landes and Posner, 1976; Gennaioli and Shleifer, 2007).

2.2. *Judicial precedents and securities class action lawsuits*

Securities class action lawsuits are a major mechanism for enforcing securities laws, and they play a crucial role in deterring financial misconduct (Mahoney, 2009; Hopkins, 2018). The Securities and Exchange Commission (SEC) views private litigation as "a necessary supplement to the Commission's own enforcement efforts [that acts] as a deterrent against securities fraud" (see 58 SEC Docket 697 (Dec. 15, 1994)). Likewise, the Supreme Court notes that "[j]udicial interpretations and application, legislative acquiescence, and the passage of time has removed any doubt that a private cause of action [...] constitutes an essential tool for enforcement of the

⁹Although district court decisions also become precedents, they have less weight than circuit court precedents for two reasons. First, district court precedents only apply to future cases in the same district. Other districts, even in the same circuit, are not obligated to follow these precedents. Second, when there is a discrepancy between circuit court and district court precedents, the former supersedes the latter (Dobbins, 2009).

¹⁰Anecdotal evidence also suggests that Supreme Court justices have limited expertise and interest in securities class action lawsuits (Pritchard, 2011; Choi and Pritchard, 2012).

1934 Act's requirements" (*Basic, Inc. v. Levinson*, 1988).¹¹

Under the Private Securities Litigation Reform Act of 1995 (PSLRA), the motion to dismiss is the most important procedural hurdle in securities class action lawsuits because only after a case survives this motion can plaintiffs engage in discovery, which is the costliest part of litigation for defendants (Sale, 1998; Choi and Pritchard, 2012). Cases that are not dismissed invariably settle before trial, which is regarded as a win for plaintiffs (Pritchard and Sale, 2005; Johnson et al., 2007). To survive the motion to dismiss, plaintiffs must convincingly argue that a case has merit by showing that the defendant acted with scienter—the intent to deceive (Choi, 2007; Johnson et al., 2007). However, Congress did not state what constitutes an intent to deceive in the PSLRA, leaving it to the courts to define (Walker and Seymour, 1998). As a result, the outcome and deterrence of securities class action lawsuits depend on how courts interpret scienter (Pritchard and Sale, 2005).

When filing a class action lawsuit, plaintiffs regularly use GAAP violations as evidence of managerial intent to deceive. Some legal scholars argue that when firms provide a financial report that violates GAAP, their managers must have intentionally misled the market, and that these cases therefore have merit (Pritchard and Sale, 2005; Choi, 2007; Choi et al., 2009). Several circuit courts have accepted this argument and allowed cases with GAAP violations to survive the motion to dismiss (Thompson and Sale, 2003; Pritchard and Sale, 2005).¹² However, other courts have disagreed that GAAP violations are sufficient to show managerial intention and regularly dismiss such cases.¹³ Compared to the former circuits, the latter set precedents that are more lenient on misreporting firms, lowering the hurdle to dismiss future cases against such firms.

Because legal doctrines require district courts to heed relevant home-circuit precedents, district courts should be more lenient on misreporting firms when their home circuits have more

¹¹*Basic Inc. v. Levinson*, 485 U.S. 224, 108 S. Ct. 978, 99 L. Ed. 2d 194 (1988). The Supreme Court used a similar wording in more recent rulings, such as *Dura Pharmaceuticals, Inc. v. Broudo* (2005) and *Tellabs, Inc. v. Makor Issues & Rights, Ltd.* (2007).

¹²For example, *In re Daou Systems, Inc.* (Ninth Circuit, 2005), in deciding not to dismiss the case, the court states, “These allegations include specific descriptions of how Daou allegedly violated GAAP procedures and, in so doing, misled present and potential investors by artificially inflating Daou’s revenues above what should have been reported. [...]” and “Plaintiffs’ complaint, although lengthy and often repetitive, states a sufficiently particularized claim for accounting fraud under the heightened pleading standards of the PSLRA.”

¹³For example, in *Greebel v. FTP Software, Inc.* (First Circuit, 1999), in its ruling to dismiss the case, the court states, “It is equally possible to conclude that FTP made some incorrect accounting decisions regarding a limited number of transactions. Seeing fraud, however, requires too great of an inferential leap.”

lenient GAAP precedents. Not following precedents can impose high costs on district court judges, such as reputation cost or potential reversals by the home-circuit court (Shapiro and Levy, 1994; Gulati and McCauliff, 1998). However, judges may have incentives to deviate from precedents, such as personal political ideology or pragmatism (Posner, 2008; Huang et al., 2019). Given the complexity of securities class action lawsuits, judges can justify a different ruling by arguing that the case on hand is sufficiently different from the precedents (Gennaioli and Shleifer, 2007). Thus, whether district courts follow relevant precedents set by their home-circuit courts in securities class action lawsuits is an empirical question. We formally state our hypotheses as follows:

Hypothesis 1a: *District courts are more likely to cite home-circuit GAAP precedents than home-circuit non-GAAP precedents when deciding GAAP cases.*

Hypothesis 1b: *District courts are more likely to dismiss GAAP cases when their home-circuit courts have more lenient GAAP precedents.*

If potential plaintiffs understand the implications of judicial leniency on case outcomes, they should anticipate lower lawsuit payoffs and be less likely to sue misreporting firms with headquarters in circuits that are more lenient on misreporting.¹⁴ However, it is possible that plaintiffs always sue when there is evidence of misreporting (Choi, 2007). In sum, whether differences in precedent leniency across circuits translate into economically meaningful variations in litigation risk for misreporting firms is an empirical question. We formally state our hypothesis as follows:

Hypothesis 2: *Misreporting firms are less likely to be sued when their headquarters' circuits have more lenient GAAP precedents.*

Our first and second hypotheses imply that misreporting firms' expected litigation costs vary with the leniency of their home-circuits' GAAP precedents. If managers understand this effect, they should be less concerned about litigation costs and more likely to engage in misreporting when their circuit has precedents showing greater leniency on GAAP violations. Nonetheless, managers might deem other factors, such as compensation, career prospects, or scrutiny from

¹⁴As discussed in Footnote 5, most plaintiffs file securities class action lawsuits in a defendant firm's home circuit because of the civil procedure and the *doctrine of forum non conveniens* (28 U.S.C. §1404).

sophisticated investors, as more important when deciding whether to misreport, or they might not follow case-law developments closely enough to consider precedents. We state our last hypothesis in the alternative form:

Hypothesis 3: *Firms are more likely to misreport when their headquarters' circuits have more lenient GAAP precedents.*

3. Securities law precedent data and measurement

This section briefly describes how we collect circuit court precedents for securities class action lawsuits and use them to construct a measure of circuit leniency in securities law precedents.

To obtain securities law precedents, we first use Google Scholar Case Law Search to search the full text of circuit court precedents for phrases related to securities lawsuits, such as “In re securities litigation,” “securities litigation GAAP,” and “securities litigation PSLRA.” We limit the search to precedents with ruling dates between January 1996 and May 2018 because Congress passed the PSLRA in November 1995.¹⁵ This step yields an initial sample of 2,026 precedents. We remove 993 precedents that do not cover securities fraud and 226 precedents that are non-class action, i.e., those that do not contain phrases such as “Rule 10b(5)” or “Securities Exchange Act” in the ruling text.¹⁶ We also remove 228 precedents for which the district court ruling under question is not a motion to dismiss and are thus not related to circuit courts’ interpretations of case merit; these include, for example, plaintiffs challenging settlements or hearing petitions. Next, we remove 43 rulings that have no precedential value, such as summary orders and memoranda.¹⁷ Finally, when there are multiple rulings on a case, including its primary ruling, subsequent updates, and amendments, we identify and keep its primary ruling, removing 98 rulings. Our final sample consists of 438 circuit court precedents. We summarize our sample selection procedure in Table 1, Panel A and provide the full details in Appendix A.

Next, we code precedents’ decisions and determine their allegation types. We label a precedent as a reversal if a circuit court precedent reverses a district court’s dismissal decision on the

¹⁵We also use two databases in subsequent analyses, namely the Securities Class Action Clearinghouse and Audit Analytics, both of which begin in 1996.

¹⁶Non-class action securities fraud cases include lawsuits brought by individual investors, the SEC, and the Department of Justice.

¹⁷See Footnote 79 in McAlister (2020) for a comprehensive list of judicial decisions, local rules, and internal operating procedures from the circuits determining that such rulings have no precedential value.

alleged securities law violations, and as a dismissal otherwise, i.e., if it affirms the dismissal decision.¹⁸ Last, we classify precedents into GAAP and non-GAAP precedents based on whether the allegations cover GAAP violations. To do so, we first search for combinations of GAAP violation and misreporting keywords and then manually verify the search results, as suggested by Donelson et al. (2020).¹⁹ We classify 121 precedents as GAAP precedents and 317 as non-GAAP precedents (a full list of both types of precedents is provided in Internet Appendix B). We also read the GAAP precedents and identify their specific allegations (tabulated in Table 1, Panel B). Most GAAP precedents (110) concern misstated income statement items, with 82 (67%) involving revenues. Only 11 (9%) refer to misstatements outside the income statement, most of which occur on the balance sheet. Untabulated analysis shows that consistent with the empirical observation of Pritchard and Sale (2005), dismissal rates are similar across cases with different types of misstated accounts. For example, misstated revenue allegations have a 63.4% dismissal rate, which is not significantly different from that of non-revenue misreporting allegations (61.5%).

Panels A and B of Table 2 present the precedents by year and circuit, respectively. As Panel A shows, there are 8 to 34 precedents each year (an average of 19.9), with the number being higher during the post-Internet bubble period (2002–2004) and the financial crisis period (2008–2009). More than half of the precedents (66.4%) affirm district court dismissals. The 1997–1999 period has elevated dismissal rates, with approximately 78% (32 of 41) of the precedents affirming the district court decisions. The higher dismissal rates suggest that the circuit courts have been more lenient with defendants when they developed new case-law precedents after the enactment of the PSLRA (Thurm, 1999). Similar to Pritchard and Sale (2005), we do not observe statistically different dismissal rates for precedents that cover alleged GAAP violations (76 out of 121, or 62.8%) and those that do not (215 out of 317, or 67.8%).

Panel B breaks down the precedents by circuit and allegation type. Consistent with Choi and Pritchard (2012), the Second and Ninth circuits have the highest number of precedents (89 and 82, respectively), and the DC Circuit has the lowest (3). This distribution is likely due to the differences in the number of firms residing in these circuits and the firms' likelihood of being

¹⁸When a precedent affirms or reverses a district court's ruling in part, we read the precedent to determine whether it affirms or reverses the dismissal decision on the alleged securities law violations.

¹⁹In manual verification, we reclassify four precedents that only cite GAAP precedents but do not involve GAAP violations themselves as non-GAAP precedents.

sued.²⁰ The other circuits have between 15 and 42 precedents. The proportions of dismissals and reversals vary between circuits. Several circuits, such as the First, Fourth, Sixth, Seventh, Eighth, Tenth, and Eleventh Circuits, show more than twice as many dismissals as reversals. Others, such as the Ninth Circuit, have similar numbers of dismissals and reversals.²¹ Some circuits exhibit different proportions of dismissals and reversals for GAAP and non-GAAP allegations. For instance, the Second Circuit appears to be more lenient on non-GAAP allegations (dismissing 46 out of 69 appeals) but less lenient on GAAP allegations (dismissing 6 out of 20 appeals).

To capture the circuits' evolving leniency on GAAP violations, we aggregate the precedents in each circuit court at each point in time. Each time that a circuit court affirms (reverses) a district court's GAAP allegation dismissal ruling, the circuit accumulates principles and rules that increase (decrease) the hurdle that plaintiffs must overcome in future GAAP cases. Thus, we measure each circuit's precedent leniency on GAAP violations at a specific date (*Lenient GAAP Precedents*) as its cumulative number of dismissal affirmations minus that of reversals prior to that date.²²

To measure each circuit's time trend in precedent leniency that is not specific to misreporting, e.g., allegations related to management forecasts or non-GAAP earnings, we construct a non-GAAP variant of our leniency measure using non-GAAP precedents (*Lenient Non-GAAP Precedents*). Because these precedents are less likely to contain principles and rules concerning misreporting, they should be less relevant to future lawsuits with GAAP allegations.

Figure 2 depicts the time series of *Lenient GAAP Precedents* and *Lenient Non-GAAP Precedents*. Both measures show considerable variation within and across circuits. Most circuits, such as the First, Second, and Ninth Circuits, exhibit diverging trends. For example, in the years surrounding the prominent non-GAAP ruling of *In re Silicon Graphics Inc.* (1999, Ninth Circuit), the Ninth Circuit affirmed one district court dismissal decision on GAAP allegations

²⁰For example, the Ninth Circuit, which includes the states of California and Washington, is home to many high-tech firms that are subject to more litigation than firms in other industries (Francis, Philbrick, and Schipper, 1994). We control for circuit fixed effects and high litigation risk industries in our analyses.

²¹The Ninth Circuit had a high dismissal rate prior to 2010 and reversed course afterward, especially for non-GAAP allegations. This finding is consistent with Choi and Pritchard's (2012) observation that the Ninth Circuit had the highest pleading standard before the Supreme Court ruling on *Tellabs* in 2007 (see Figure 2).

²²This approach is equivalent to taking the sum over an indicator variable for each precedent in a circuit, with the variable taking a value of 1 if the circuit court affirms a dismissal and -1 if it reverses a dismissal. This approach is used by Simintzi et al. (2015) to measure employment protection legislations in various countries.

and reversed two others.²³ Several circuits, such as the First, Second, Fifth, and Ninth Circuits, show periods of increasing and decreasing leniency during our sample period.²⁴

Importantly, precedent leniency on GAAP allegations develops differently across circuits. Between 2002 and 2005, the Third, Fourth, Sixth, and Eighth Circuits became more lenient (with increases in *Lenient GAAP Precedents* from 0 to 3, 0 to 3, 1 to 5, and 2 to 5, respectively). In contrast, the Ninth and Tenth Circuits became less lenient (with decreases in *Lenient GAAP Precedents* from 0 to -4 and from 0 to -2, respectively). Each year in our sample period, an average of two (up to six) circuits become more lenient on GAAP violations, whereas an average of one (up to four) circuit becomes less lenient. These findings indicate that the implicit assumption of single court ruling studies that other circuits experience no concurrent change in litigation risk is often violated.²⁵

4. Securities law precedents and litigation risk

4.1. Precedents' effect on district court cases

In this section, we provide case-level empirical evidence of how precedents affect firms' litigation risk. We start by analyzing district court citation patterns to show that district courts use arguments from existing precedents to support their legal reasoning (Lamond, 2016). We search for citations of the 438 circuit court precedents in district court rulings in securities class action cases obtained from Google Scholar Case Law Search (1,221 district court cases in total, including 516 GAAP cases and 705 non-GAAP cases), yielding 9,239 citations.²⁶

Table 3 presents the univariate statistics on precedent citations in district courts. Panel A shows the district court citations of circuit court precedents. We present both the number of

²³*In re Silicon Graphics* concerns the plaintiffs' allegation that the managers knew that the company would miss revenue forecasts but failed to warn investors.

²⁴In robustness tests, we use a log-transformed version to mitigate the influence of circuits with extreme values. Specifically, we apply the following transformation: $\text{Sign}(\text{Lenient Precedents}) \times \text{Log}(\text{Abs}(\text{Lenient Precedents}) + 1)$. We obtain similar results (see Internet Appendix Table IA1).

²⁵In a sensitivity test, we exclude firm-years surrounding court rulings singled out in prior studies, such as *In re Silicon Graphics Inc.*, *Dura Pharmaceuticals*, *Tellabs*, and *National Australia Bank* (Bliss et al., 2018; Hopkins, 2018; Huang et al., 2019; Licht et al., 2018). Specifically, we exclude firm-years in the Ninth Circuit between 1998 and 2000 (related to the *In re Silicon Graphics Inc.* circuit court ruling), in the Ninth Circuit between 2004 and 2006 (related to the *Dura Pharmaceuticals* Supreme Court ruling), in the Seventh Circuit between 2006 and 2008 (related to the *Tellabs* Supreme Court ruling), and in the Second Circuit between 2007 and 2009 (related to the *National Australia Bank* Supreme Court ruling). As we obtain similar results (tabulated in Internet Appendix Table IA2), we conclude that our findings are not driven by a few influential rulings.

²⁶When a district court ruling cites a precedent more than once, we count it as one citation. In Internet Appendix Table IA3, Panel A, we provide an overview of the sample selection for the district court ruling sample.

citations per precedent and each precedent’s citation likelihood, which is calculated as the number of citations scaled by the number of district court rulings after the precedent’s publication date. On average, each precedent is cited by 21.1 district court rulings, a citation likelihood of 2.80%. We also separate home-circuit citations (i.e., when a district court cites a precedent from its home circuit) and non-home-circuit citations. Consistent with home-circuit precedents being more important than non-home-circuit precedents in district courts’ deliberations, circuit court precedents are around 26 times more likely to be cited by district courts in the same circuit (19.75%) than by those in outside circuits (0.76%). Panel B tabulates citations for home-circuit precedents by precedent and case type. GAAP precedents are more than twice as likely as non-GAAP precedents to be cited by district courts (a 31.47% versus 15.28% citation likelihood; this difference is significant at the 1% level). Consistent with GAAP precedents being more relevant for GAAP cases, the difference is substantially higher when we only consider district court cases covering GAAP allegations (23.12% in GAAP cases versus 12.91% in non-GAAP cases; this difference is significant at the 1% level).

We further conduct a regression analysis at the case–precedent level to control for other factors, such as judge ideology and circuit and over-time patterns, that may affect citations. We match each district court case with all of the home-circuit precedents that it can cite (i.e., those decided prior to the district court ruling date) and obtain 40,999 case–precedent pairs. We estimate the following linear probability regression model:²⁷

$$Cited = f(GAAP\ Precedent, GAAP\ Case, Controls_Citation) + \varepsilon, \quad (1)$$

where *Cited* is an indicator variable that equals 1 if the district court ruling cites the precedent, and 0 otherwise. The variable of interest is the interaction term of *GAAP Precedent* and *GAAP Case*. We control for the base terms of the interaction, whether the district court judge presiding over the case was nominated by a Democratic president (*Liberal District Judge*, following Huang et al. (2019)), and whether the precedent affirms a district court dismissal (*Dismissal Precedent*). We also include whether the district court judge’s ideology is consistent with the precedent (*Consistent Ideology*) to control for judges’ tendency to cite precedents that are con-

²⁷We use a linear probability model because logit models with a large number of fixed effects introduce a potential incidental parameter problem (Lancaster, 2000; Hsiao, 2003; Greene, 2004). The results of the logit models (tabulated in Internet Appendix Table IA4) are qualitatively similar.

sistent with their ideology (Niblett and Yoon, 2015).²⁸ We further include circuit, precedent year, and case year fixed effects. Detailed variable definitions are presented in Appendix B. We cluster standard errors by precedent.

Table 4 presents the results. Consistent with our univariate results, district courts cite GAAP precedents considerably more often when deciding a GAAP case (the interaction term of *GAAP Precedent* and *GAAP Case* is 0.084, significant at the 1% level). In terms of economic magnitude, a GAAP precedent shows a 126.77% higher likelihood than a non-GAAP precedent to be cited by a GAAP case (18.14% compared to 14.31%). We find similar results when we include case and precedent fixed effects (column (2)). For the control variables, we find that non-GAAP cases are more likely to cite GAAP precedents than non-GAAP precedents (*GAAP Precedent*, significant at the 1% level) and that GAAP cases are more likely to cite precedents than non-GAAP cases (*GAAP Case*, significant at the 1% level). In sum, the citation analyses show that compared with non-GAAP precedents, GAAP precedents have a greater influence on district court cases, especially on those that also allege GAAP violations.

Although these results suggest that district court judges consider circuit court precedents when arguing a case, they are also consistent with judges' first deciding on a case and then searching for citations to justify their decisions. Thus, we also test whether circuit court precedents affect district court decisions. Specifically, we analyze whether district courts are more likely to dismiss cases after their home circuits have established more lenient precedents. Because circuit court precedents can affect plaintiffs' decisions on whether to file a lawsuit in a district court (Field et al., 2005; Cotropia et al., 2017), we focus on the effect of home-circuit precedents made after plaintiffs file a case in the district court.

We merge the district court decisions from Google Scholar Case Law Search with the complaint filings from Stanford Law School's Securities Class Action Clearinghouse (SCAC) dataset and CRSP using the defendant company name. We match the district court decisions with the circuit court home-circuit precedents based on the jurisdiction and the case pending window (i.e., the period between the case filing date and the district court decision date). The final sample includes 440 district court case decisions.

²⁸In Internet Appendix Table IA3, Panel B, we provide descriptive statistics for all variables in the district court citation analysis sample.

We estimate the following linear probability regression model:²⁹

$$\begin{aligned} \text{Dismissed} = f(\text{Lenient GAAP Precedents}, \text{Lenient Non-GAAP Precedents}, \\ \text{Controls_Decision}) + \varepsilon. \end{aligned} \quad (2)$$

The dependent variable, *Dismissed*, is an indicator variable that equals 1 if a district court dismisses a case, and 0 otherwise. Our variables of interest are the leniency of GAAP precedents (*Lenient GAAP Precedents_{pending}*) and non-GAAP precedents (*Lenient Non-GAAP Precedents_{pending}*). We expect both coefficients to be positive—that is, we expect that more lenient precedents increase the likelihood that district courts dismiss pending cases. We also include interactions of case type (*GAAP Case*) and precedent leniency to examine whether the effect of precedent leniency on case outcomes varies with case type. We control for the case type (*GAAP Case*), the ideology of the judges that may handle the appeal from the district court case (*Liberal Circuit_{at ruling}*), the ideology of the district court judge assigned to the case (*Liberal District Judge*), and case merit using the market reaction surrounding the lawsuit filing date (*Filing CAR*).³⁰ We further include year and circuit fixed effects to control for macroeconomic trends and cross-circuit differences, such as demographics and growth potential, both of which might affect case outcomes. We cluster standard errors by circuit.

Table 5 presents the results. In line with the citation analysis, GAAP precedents influence district court rulings. The base term *Lenient GAAP Precedents_{pending}* is positive and significant at the 1% level, as shown in column (1). A district court is more likely to dismiss a case if its home circuit accumulates more lenient GAAP precedents during the case pending period. The economic magnitude of the effect of new GAAP precedents is sizable: one additional dismissal affirmation by the circuit court during the case pending window increases the likelihood of the district court dismissing the case at hand by 6.92% (relative to the unconditional likelihood of dismissal of 81.14%). We do not find that GAAP precedent leniency has different effects in GAAP and non-GAAP cases (*GAAP Case* × *Lenient GAAP Precedents_{pending}* is not significant). We observe no effect for non-GAAP precedents, regardless of the case type, which suggests that non-GAAP precedents are less influential on future cases.

We conduct two placebo tests to ensure that the results are driven by home-circuit precedents

²⁹In Internet Appendix Table IA5, we present qualitatively similar results obtained using logit models.

³⁰In Internet Appendix Table IA3, Panel C, we provide descriptive statistics for all variables in the district court decision analysis sample.

during the case pending period. First, to verify that time-invariant circuit-specific leniency levels do not explain our results, we use home-circuit precedents occurring in a pseudo window of 19 months (the median length of a district court case pending period in our sample) beginning from one year after the ruling date (*Lenient GAAP Precedents_{post}*). Second, we randomly assign a non-home circuit to a district court case and use that circuit's precedents during the case pending window (*Lenient GAAP Precedents_{non-home}*) to ascertain whether our results capture a general trend in securities class action lawsuits affecting all circuits. The insignificant coefficients in both placebo tests (tabulated in columns (2) and (3)) support that it is indeed the home-circuit precedents developed during the case pending period that influence the district court outcomes.

Taken together, the district court citation and decision tests show that home-circuit precedents on alleged GAAP violations affect district court decision-making, especially in cases that also allege GAAP violations.

4.2. *Precedents' effect on firm litigation risk*

To empirically test our hypothesis on the relationship between securities law precedents and firms' litigation risk, we assign each firm-year to a circuit based on the firm's historical headquarters location.³¹ We extract firms' historical headquarters from their 10-K filings, downloaded from the SEC's EDGAR database. We then match the securities class action lawsuit data from SCAC with Compustat and CRSP data using tickers and stock names. We define an indicator variable, *Sued*, as 1 if a firm-year overlaps with the class period of a securities class action lawsuit, and 0 otherwise.

To identify misreporting firm-years, we use data from the Audit Analytics Non-Reliance Restatement File. For each firm-year, we set an indicator variable, *Misreport*, which takes a value of 1 if a firm subsequently restates its financial statements for that year, and 0 otherwise. Prior to filing a lawsuit, plaintiffs use public information, such as restatement announcements and SEC investigations, to infer managers' intention to misreport (Donelson et al., 2020). Therefore, we further classify each misreporting based on whether plaintiffs can infer managerial inten-

³¹Following the applicable civil procedures (28 U.S. Code §1391; 1404) and prior studies (Cox et al., 2009; Huang et al., 2019), we assume that plaintiffs file securities class action lawsuits in a firm's headquarters circuit. While firms can change headquarters, such a move is costly, and circuit leniency is likely to be only one of many factors. Nonetheless, to mitigate endogeneity, we limit our sample to firms that have not changed their headquarters circuit during our sample period, and we find similar results (tabulated in Internet Appendix Table IA6).

tion when they decide whether to file a lawsuit.³² We label misreporting as clearly intentional (*Clear Intent*) if the restatement announcement mentions fraud or a SEC investigation, according to Audit Analytics. We label other misreporting as ambiguous in intent (*Ambiguous Intent*). For misreporting that we label as clearly intentional, plaintiffs can make a stronger argument that managers have willingly defrauded investors. These allegations should be less likely to be dismissed based on scienter regardless of a court’s leniency on misreporting. In contrast, circuit courts’ precedent leniency should have more influence on plaintiffs’ lawsuit filing decisions when managers’ intention is more ambiguous (Donelson et al., 2013). The remaining variables are as defined in Appendix B. We obtain the financial statement data from Compustat, the stock price data from CRSP, the institutional holdings data from Thomson Reuters Finance, the analyst data from IBES, the executive and compensation data from ExecuComp, and the board composition data from RiskMetrics. We exclude firms from financial and utilities industries, as such firms face a different regulatory structure and legal environment.

Table 6 provides descriptive statistics for the variables used in the firm-level analysis. Continuous firm-level variables are winsorized at the top and bottom 1% levels to mitigate the influence of outliers. Our variable of interest, *Lenient GAAP Precedents*, shows reasonable variation at the firm-year level, with a standard deviation of 3.13 and an interquartile range between –1 and 2. Untabulated results show that the correlation between the two precedent variables (*Lenient GAAP Precedents* and *Lenient Non-GAAP Precedents*) is negative and statistically significant at –28.83%. The average firm-year observation has a market value of US\$332.29 million, a debt-to-asset ratio of 21.7%, and sales growth of 13.0%. Overall, 9.8% of the firm-years are associated with financial misreporting, with 1.3% classified as clearly intentional and 8.5% as ambiguous concerning intent.

Hypothesis 2 predicts that misreporting firms are less likely to be sued when the home circuit has more lenient GAAP precedents. To test this hypothesis, we estimate the following linear probability model:³³

$$Sued = f(\textit{Lenient GAAP Precedents}, \textit{Lenient Non-GAAP Precedents}, \textit{Misreport}, \textit{Controls_Sued}) + \varepsilon, \quad (3)$$

³²We do not use lawsuit outcomes to define managerial intention for two reasons. First, we focus on plaintiffs’ lawsuit filing decisions. Second, as we show in case-level analyses, lawsuit outcomes depend on court leniency on misreporting.

³³In Internet Appendix Table IA7, we present qualitatively similar results using logit models.

where our main variable of interest is the interaction term of *Misreport* and *Lenient GAAP Precedents*. Hypothesis 2 predicts a negative coefficient. We expect a weaker effect for the interaction term of *Misreport* and *Lenient Non-GAAP Precedents*, because these precedents are less relevant to the plaintiffs' decision to file a complaint against a misreporting firm. The coefficient of *Misreport* captures the average effect of misreporting on the likelihood of being sued by shareholders.

Following the literature (e.g., Kim and Skinner, 2012; Hopkins, 2018), we include the following firm characteristics to control for firms' litigation risk: *Litigious Industry*, *Size*, *Sales Growth*, *Book-to-Market*, Δ *Return on Assets*, *Buy-and-Hold Return*, *Volatility*, *Skewness*, *Turnover*, *IO*, *Leverage*, and *Financing*. To control for changes in state securities laws that may affect firms' litigation risk, we include an indicator variable for the existence of universal demand laws in a firm's state of incorporation (*UD Law*) (Bourveau et al., 2018; Appel, 2019). Following Huang et al. (2019), we control for circuit court judge ideology (*Liberal Circuit*), state-level demographic and economic variables, and the state's political leaning (*GDP Growth*, *Unemployment*, *Blue State*). We cluster standard errors by circuit-year.³⁴

Table 7 provides the results. In column (1), the coefficient of *Misreport* is significant and positive. The coefficient's magnitude (0.101) shows that misreporting increases firm-years' likelihood of being sued by 190% relative to that of an average non-misreporting firm-year (10.1% compared to the 5.31% litigation likelihood of firm-years without misreporting), in line with misreporting triggering shareholder lawsuits (Johnson et al., 2007). Importantly, consistent with Hypothesis 2, the estimated coefficient of the interaction term between *Misreport* and *Lenient GAAP Precedents* (−0.004) is negative and significant at the 1% level. That is, misreporting firms are less likely to be sued if they reside in a circuit with more lenient GAAP precedents. The moderating effect of lenient precedents is economically meaningful. A one standard deviation increase in *Lenient GAAP Precedents*, which represents three additional dismissals, results in a 9.63% reduction in the odds of litigation against an average misreporting firm in our sample (−1.5% compared to 15.61%). For example, our results imply that misreporting firms in the Ninth Circuit faced a 6.97% increase in litigation risk from 2002 to 2007 (1.44% compared to 20.69%), when the circuit's *Lenient GAAP Precedents* decreased from 0 to −3. The coefficient of the interaction term of *Misreport* and *Lenient Non-GAAP Precedents* is also negative but

³⁴In Internet Appendix Tables IA8 and IA9, we present qualitatively similar results using state fixed effects and circuit clustering, respectively.

not significant, which is consistent with non-GAAP precedents being less relevant to plaintiffs' filing decisions. The estimated coefficient of *Liberal Circuit* is positive and significant, which is consistent with the role of liberal ideology in increasing litigation risk (Huang et al., 2019). This evidence, combined with the significant effect of lenient GAAP precedents, suggests that both judicial precedents and judge ideology affect firms' litigation environment (Epstein and Knight, 2013). The estimated coefficients of other control variables, such as *Litigious Industry*, *Size*, *Sales Growth*, *Volatility*, *Skewness*, and *Turnover* are in line with the findings of Kim and Skinner (2012).

In the remaining columns of Table 7, we separately examine the effects of lenient GAAP precedents on firms involved in the two different misreporting types. We expect the effect of lenient precedents to be stronger for cases that are more ambiguous with respect to managerial intention than for clearly intentional misreporting cases. The results in columns (2) and (3) are consistent with this intuition. First, both types of misreporting increase litigation risk, but the effect of clearly intentional misreporting is stronger (as shown in columns (2) and (3), *Ambiguous Intent* and *Clear Intent* are both significant and positive; the difference between them is also significant at the 1% level). Second, and more importantly, the effect of lenient GAAP precedents on misreporting firms' litigation is driven only by misreporting with more ambiguous managerial intent. Specifically, the interaction term between *Ambiguous Intent* and *Lenient GAAP Precedents* in column (2) is negative and significant at the 5% level. In contrast, the interaction between *Clear Intent* and *Lenient GAAP Precedents* in column (3) is not significant. Similar to before, the coefficients of *Lenient Non-GAAP Precedents* and its interactions are not significant in both specifications. Last, we observe the same pattern when we consider both types of misreporting in one regression. The coefficients in column (4) show that in terms of economic magnitude, for firms with misreporting of ambiguous intention, a one standard deviation increase in *Lenient GAAP Precedents* results in a 10.49% reduction in the litigation probability (−1.38% compared to 13.17%).

In sum, the results in Table 7 show that circuit court leniency on alleged GAAP violations reduces misreporting firms' likelihood of being sued, especially when managerial intention is more difficult to judge before a lawsuit is filed. This finding is consistent with the argument that plaintiffs incorporate the effect of lenient precedents into their lawsuit filing decisions.

4.3. *Precedents' effect on firm litigation risk – Cross-sectional analyses*

We conduct three analyses to investigate the cross-sectional variations in the effect of judicial precedents on litigation risk. We expect the effect to vary depending on the potential plaintiffs' ability and incentive to consider the precedents' implications for their lawsuit outcomes.

First, when potential plaintiffs are more sophisticated, they should be better equipped to incorporate precedents into their filing decisions. Following Cheng et al. (2010), we measure the potential plaintiffs' sophistication level through their firms' institutional ownership stakes.³⁵ Institutional investors have more resources to monitor a case and are more experienced in securities litigation (Weiss and Beckerman, 1994; Perino, 2003, 2012).

Second, plaintiffs should have more incentives to consider all factors, including precedents, in their filing decisions when they anticipate higher payoffs from potential lawsuits. We measure expected lawsuit payoffs using firm size and firms' ex-ante litigation risk. Larger firms are more likely to settle a case and are better able to pay settlements, both of which increase the lawsuits' expected payoffs (Choi and Pritchard, 2012). This observation is consistent with a deep-pocket strategy, as plaintiffs routinely file lawsuits against large firms (Kaszniak and Lev, 1995; Skinner, 1997). Prior studies also show that investors expect higher payoffs from lawsuits against firms with higher predicted litigation risk (Finnerty and Pushner, 2002), which we measure following Kim and Skinner (2012).

We estimate Equation (3) separately for subsamples with values above and below the median of the aforementioned variables. Table 8 reports the results. As expected, the coefficient of the interaction term of *Misreport* and *Lenient GAAP Precedents* is significant (at the 1% level) for firms that are more likely to have sophisticated investors as the lead plaintiff, i.e., those with high institutional ownership, but insignificant for those with low institutional ownership (difference in the coefficients significant at the 1% level). For the expected lawsuit payoffs, the interaction term of *Misreport* and *Lenient GAAP Precedents* is significant for firms with deep pockets, i.e., large firms, and firms with high ex-ante litigation risk (both at the 1% level). In contrast, smaller firms and firms with lower ex-ante litigation risks show no significant effect (differences in the coefficients significant at the 5% and 1% levels, respectively). It is worth noting that although the interaction terms of *Misreport* and *Lenient Non-GAAP Precedents* are

³⁵The PSLRA's lead plaintiff provision dictates that the most adequate plaintiff—usually the one with the largest financial interest—is to be assigned as the lead plaintiff and is to retain counsel to represent the class (Choi and Pritchard, 2012).

also only negative and significant in the respective high groups, their magnitudes are smaller than those of the interaction terms of *Misreport* and *Lenient GAAP Precedents* (differences in the coefficients significant at the 5% level at least). The smaller magnitudes of the non-GAAP precedent related variables are consistent with non-GAAP precedents being less relevant for lawsuits related to misreporting.

Overall, the cross-sectional results show that the effect of leniency in GAAP precedents on litigation risk is stronger for firms with potential plaintiffs that are better able to and have more incentives to consider the implications of precedents for lawsuit outcomes.

5. Influence of securities law precedents on investor reactions and financial misreporting

5.1. Precedents' effect on investors' reactions to restatement announcements

In the previous section, we show that plaintiffs adjust their lawsuit filing decisions against misreporting firms according to the precedents set in circuit courts. We further explore whether investors incorporate precedents into their valuations when firms restate their financial reports. Prior research finds a significant negative market reaction to restatement announcements, which is consistent with diminished firm prospects and increased uncertainty from litigation (Palmrose et al., 2004; Files et al., 2009; Burks, 2011). Because lenient precedents reduce restating firms' potential litigation costs, we conjecture that investors' reactions to restatement announcements are less negative for firms residing in more lenient circuits. Note that we do not examine investors' reactions to precedent leniency itself, but rather their differential reactions to restatement announcements based on precedent leniency.

We estimate the following linear regression model:

$$CAR = f(\text{Lenient GAAP Precedents}, \text{Lenient Non-GAAP Precedents}, \text{Controls_CAR}) + \varepsilon, \quad (4)$$

where *CAR* is the market reaction to the restatement announcement, measured by the 3-day market-adjusted return.³⁶ Following the literature, we control for whether misreporting is presumably intentional (*Clear Intent*) and whether the earnings impact of the restatement is non-negative (*Overstatement*). We also control for firm characteristics such as *Size*, *IO*, and *Analysts*.

³⁶In untabulated tests, we use size-adjusted returns and Fama–French three-factor adjusted returns (Fama and French, 1993), and we find similar results.

We exclude restatements that are announced with earnings announcements, i.e., that occur within two days, to reduce noise in measuring investors' reactions to restatements. We cluster standard errors by circuit-year.

Table 9 reports the results. Consistent with investors expecting lower litigation costs for misreporting firms in lenient circuits, *Lenient GAAP Precedents* is positively associated with *CAR* in column (1) (at the 1% level). A one standard deviation increase in *Lenient GAAP Precedents* results in a 20.90% increase in the average announcement return (0.40% compared to -1.92%). The coefficient of *Lenient Non-GAAP Precedents* is not significant. The restatement-level controls behave as expected: misreporting that is more severe and overstatements are associated with more negative returns. In columns (2) and (3), we separate clearly intentional misreporting from more ambiguous cases and find that *Lenient GAAP Precedents* has a significant coefficient only for misreporting with ambiguous intent, which is consistent with our previous finding that leniency only affects litigation risk when managers' intent to misreport is more difficult to judge.

We further conduct three cross-sectional analyses, as in Section 4.3. We expect investors to anticipate that the effect of precedent leniency on firm litigation risk will be stronger when firms have sophisticated potential plaintiffs and when potential lawsuits offer higher expected payoffs. We therefore estimate Equation (4) separately for subsamples with values above and below the medians of potential plaintiffs' sophistication levels (institutional ownership) and expected lawsuit payoffs (firm size and firms' ex-ante litigation risk).

Table 10 reports the results. We find evidence suggesting that investors' pricing is more likely to take precedent leniency into account when leniency has a stronger effect on litigation risk. The coefficient of *Lenient GAAP Precedent* is significant for firms with high institutional ownership (at the 1% level), deep pockets (at the 1% level), and high ex-ante litigation risk (at the 10% level), but is not significant in the corresponding low groups. The difference in the coefficients across the groups is significant for institutional ownership (at the 5% level). The coefficients of *Lenient Non-GAAP Precedents* show no effect in any of the subgroups.

In sum, the evidence suggests that investors incorporate the impact of GAAP precedents on firms' expected litigation costs into their valuation of restatement announcements.

5.2. *Precedents' effect on firms' financial misreporting decisions*

Hypothesis 3 predicts that if firms understand the moderating effects of lenient precedents on the expected litigation costs associated with misreporting, firms in more lenient circuits will be

more inclined to misreport. To test this hypothesis, we estimate the following linear probability model:³⁷

$$\begin{aligned} \text{Misreport} = f(\text{Lenient GAAP Precedents}, \text{Lenient Non-GAAP Precedents}, \\ \text{Controls_Misreport}) + \varepsilon. \end{aligned} \quad (5)$$

We control for firm characteristics related to litigation and state-level and circuit-level variables, as well as for determinants of misreporting, such as misreporting incentives and monitoring. We use *RSST Accruals*, Δ *Receivable*, Δ *Inventory*, Δ *Cash Sales*, and *Soft Assets* to control for accrual quality (Dechow et al., 2011); *High LTG*, *High Buy*, *Strong Buy*, and *High PE* to control for market pressure from analysts and investors; and *Overconfidence*, *PPS*, *Pay Slice*, *Independent Board*, *CEO Chair*, and *BeatPCT* to control for managerial compensation characteristics and expectations (Chu et al., 2019).³⁸ We cluster standard errors by circuit-year.

Table 11 reports the results. Consistent with Hypothesis 3, *Lenient GAAP Precedents* is positively associated with *Misreport* in column (1) (at the 1% level). The economic significance is sizable: a one standard deviation increase in *Lenient GAAP Precedents* increases the odds of misreporting by firms in the circuit by 22.65% (2.22% compared to the unconditional misreporting likelihood of 9.82%). Managers appear not to consider non-GAAP precedents when deciding whether to misreport, as the coefficient of *Lenient Non-GAAP Precedents* is insignificant. The control variables behave as expected. For instance, firms with more independent boards are less likely to misreport, whereas firms with more soft assets or that are under pressure from analysts show a higher likelihood of misreporting.

In columns (2) and (3), we separate clearly intentional misreporting from ambiguous cases. In line with our previous results, lenient GAAP precedents increase firms' tendency to produce misreporting in which the intention is more difficult to determine (significant at the 1% level). In contrast, lenient GAAP precedents do not affect clearly intentional misreporting. As such, when managers face more lenient precedents, they increasingly engage in less severe misreporting for which intent to deceive is more ambiguous and thus more difficult for potential plaintiffs to judge. We interpret this finding as that managers strategically vary misreporting decisions to take advantage of precedent leniency.

³⁷In Internet Appendix Table IA7, we present qualitatively similar results obtained using logit models.

³⁸Including market pressure and manager-related controls reduces our sample size from 58,576 to 10,425. In a sensitivity test, we rerun the misreporting analysis without these variables and find qualitatively similar results (tabulated in Internet Appendix Table IA10).

Last, we estimate Equation (5) separately for the subsamples with values above and below the medians of potential plaintiffs' sophistication levels (institutional ownership) and expected lawsuit payoffs (firm size and firms' ex-ante litigation risk). If managers understand that the effect of precedent leniency on litigation risk varies with these factors, their misreporting decisions should react more to precedent leniency when it has a stronger influence on their firms' litigation risk.

Table 12 reports the results. Consistent with the intuition, we observe that managers' misreporting decisions are more likely to take precedent leniency into account when its effect on litigation risk is more pronounced. The coefficient of *Lenient GAAP Precedents* is significant for firms with high institutional ownership, deep pockets, and high ex-ante litigation risk (all at the 1% level) but not for firms with corresponding lower values, which is consistent with our litigation risk results. Chi-square tests show that the differences in the coefficients across the groups are significant (all at the 1% level). Similar to the results shown in Table 11, we observe mostly significant but weaker results for *Lenient Non-GAAP Precedents*.

Overall, the results suggest that more lenient judicial precedents increase managers' tendency to engage in misreporting by lowering expected litigation costs, especially for cases of misreporting that are more difficult for potential plaintiffs to judge managerial intent.

6. Summary

Under common law, precedents are principles and rules established in court rulings that constrain courts' future decision-making and are an essential part of firms' litigation environment. This study provides systematic evidence that securities law precedents affect shareholder litigation and firms' financial misreporting.

We examine a comprehensive set of circuit court precedents on alleged securities law violations and find that courts differ significantly in their tendencies to dismiss securities class action lawsuits. Using case-level analyses, we find that district courts heed their circuit courts' precedents and are more likely to dismiss pending cases when circuit courts dismiss similar allegations. Firm-level analyses reveal that shareholders are less likely to sue misreporting firms in circuits with precedents that are more lenient on alleged GAAP violations, especially when it is more difficult to judge whether managers intentionally misled investors. The effect of precedents on litigation risk is more pronounced in the presence of sophisticated potential plaintiffs

and higher expected lawsuit payoffs. Consistent with lenient precedents lowering expected litigation costs, in lenient circuits, investors react less negatively to restatement announcements and firms misreport more often. Firms are particularly more likely to engage in the type of misreporting for which plaintiffs will have difficulty establishing managerial intent when filing a lawsuit. Investors and managers are also more likely to take precedent leniency into account when it has a stronger effect on litigation risks. Both investors' reactions to and firms' likelihood of engaging in misreporting vary with potential plaintiffs' sophistication and expected lawsuit payoffs.

In sum, our results suggest that securities law precedents induce heterogeneity in firms' securities litigation risk, thus affecting their financial reporting quality.

References

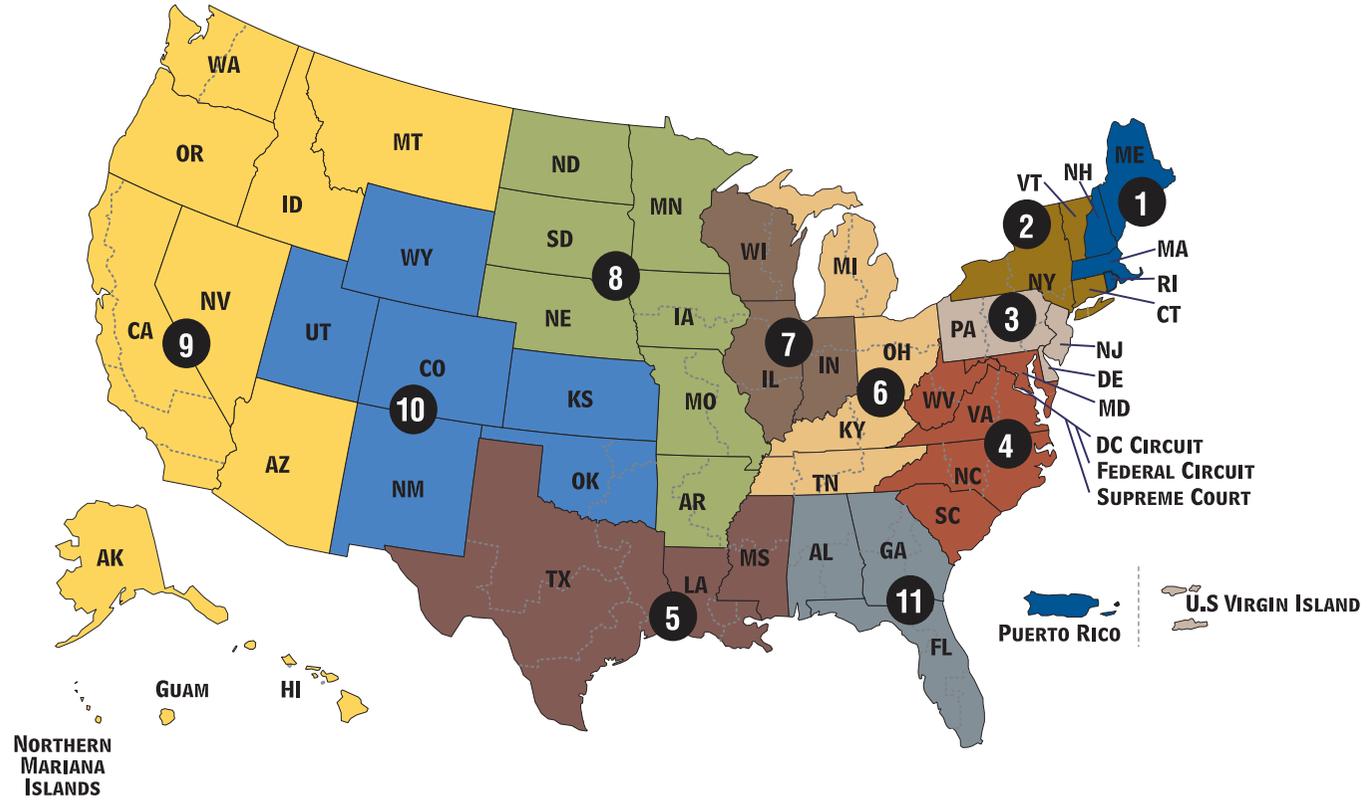
- Ali, A., Kallapur, S., 2001. Securities price consequences of the Private Securities Litigation Reform Act of 1995 and related events. *The Accounting Review* 76, 431–460.
- Appel, I., 2019. Governance by litigation, available at SSRN 2532278.
- Beck, T., Demirguc-Kunt, A., Levine, R., 2003. Law and finance: Why does legal origin matter? *Journal of Comparative Economics* 4, 653–675.
- Beck, T., Demirguc-Kunt, A., Levine, R., 2005. Law and firms' access to finance. *American Law and Economics Review* 7, 211–252.
- Bliss, B. A., Partnoy, F., Furchtgott, M., 2018. Information bundling and securities litigation. *Journal of Accounting and Economics* 65, 61–84.
- Bourveau, T., Lou, Y., Wang, R., 2018. Shareholder litigation and corporate disclosure: Evidence from derivative lawsuits. *Journal of Accounting Research* 56, 797–842.
- Brochet, F., Srinivasan, S., 2014. Accountability of independent directors: Evidence from firms subject to securities litigation. *Journal of Financial Economics* 111, 430–449.
- Buell, S., 2011. What is securities fraud? *Duke Law Journal* 61, 511–581.
- Burgstahler, D. C., Hail, L., Leuz, C., 2006. The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review* 81, 983–1016.
- Burks, J. J., 2011. Are investors confused by restatements after Sarbanes-Oxley? *The Accounting Review* 86, 507–539.
- Carpenter, C. E., 1917. Court decisions and the common law. *Columbia Law Review* 17, 593–607.
- Cazier, R. A., Christensen, T. E., Merkley, K. J., Treu, J., 2017. Litigation risk and the regulation of Non-GAAP reporting, available at SSRN 2928260.
- Cheng, C. A., Huang, H. H., Li, Y., Lobo, G., 2010. Institutional monitoring through shareholder litigation. *Journal of Financial Economics* 95, 356–383.
- Choi, S. J., 2007. Do the merits matter less after the Private Securities Litigation Reform Act? *Journal of Law, Economics, & Organization* 23, 598–626.
- Choi, S. J., Nelson, K. K., Pritchard, A. C., 2009. The screening effect of the Private Securities Litigation Reform Act. *Journal of Empirical Legal Studies* 6, 35–68.
- Choi, S. J., Pritchard, A. C., 2012. The Supreme Court's impact on securities class actions: An empirical assessment of Tellabs. *Journal of Law, Economics, & Organization* 28, 850–881.
- Chu, J., Dechow, P. M., Hui, K. W., Wang, A. Y., 2019. Maintaining a reputation for consistently beating earnings expectations and the slippery slope to earnings manipulation. *Contemporary Accounting Research* 36, 1966–1998.
- Coffee Jr., J. C., 2006. Reforming the securities class action: An essay on deterrence and its implementation. *Columbia Law Review* 106, 1534–1586.
- Cotropia, C. A., Kesan, J. P., Rozema, K., Schwartz, D. L., 2017. Endogenous litigation costs: An empirical analysis of patent disputes. *Northwestern Law & Economics Research Paper* 17–01 .
- Cox, J. D., Thomas, R. S., Bai, L., 2009. Do differences in pleading standards cause forum shopping in securities class actions: Doctrinal and empirical analyses. *Wisconsin Law Review* 2009, 421.
- Crane, A. D., Koch, A., 2018. Shareholder litigation and ownership structure: Evidence from a natural experiment. *Management Science* 64, 5–23.
- Cross, F. B., 2007. *Decision making in the U.S. Courts of Appeals*. Stanford, CA: Stanford University Press.
- Dechow, P. M., Ge, W., Larson, C. R., Sloan, R. G., 2011. Predicting material accounting misstatements. *Contemporary Accounting Research* 28, 17–82.

- Dobbins, J. C., 2009. Structure and precedent. *Michigan Law Review* 108, 1453–1496.
- Donelson, D. C., Kartapanis, A., McInnis, J., Yust, C. G., 2020. Measuring accounting fraud and irregularities using public and private enforcement. *The Accounting Review* Forthcoming.
- Donelson, D. C., McInnis, J. M., Mergenthaler, R. D., 2013. Discontinuities and earnings management: Evidence from restatements related to securities litigation. *Contemporary Accounting Research* 30, 242–268.
- Easterbrook, F. H., 1988. Stability and reliability in judicial decisions. *Cornell Law Review* 73, 422–433.
- Epstein, L., Knight, J., 2013. Reconsidering judicial preferences. *Annual Review of Political Science* 16, 11–31.
- Eren, O., Mocan, N., 2018. Emotional judges and unlucky juveniles. *American Economic Journal: Applied Economics* 10, 171–205.
- Fama, E. F., French, K. R., 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics* 3, 3–56.
- Feng, M., Ge, W., Luo, S., Shevlin, T., 2011. Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics* 51, 21–36.
- Field, L., Lowry, M., Shu, S., 2005. Does disclosure deter or trigger litigation? *Journal of Accounting and Economics* 39, 487–507.
- Files, R., Swanson, E. P., Tse, S., 2009. Stealth disclosure of accounting restatements. *The Accounting Review* 84, 1495–1520.
- Filip, A., Labelle, R., Rousseau, S., 2015. Legal regime and financial reporting quality. *Contemporary Accounting Research* 32, 280–307.
- Finnerty, J., Pushner, G., 2002. An improved two-trader model for measuring damages in securities fraud class actions. *Stanford Journal of Law Business & Finance* 8, 213.
- Francis, J., Philbrick, D., Schipper, K., 1994. Shareholder litigation and corporate disclosures. *Journal of Accounting Research* 32, 137–164.
- Gennaioli, N., Shleifer, A., 2007. The evolution of common law. *Journal of Political Economy* 115, 43–68.
- Greene, W., 2004. The behaviour of the maximum likelihood estimator of limited dependent variable models in the presence of fixed effects. *The Econometrics Journal* 7, 98–119.
- Gulati, M., McCauliff, C. M., 1998. On “not” making law. *Law and Contemporary Problems* 61, 157–227.
- Hathaway, O. A., 2003. Path dependence in the law: The course and pattern of legal change in a common law system, John M. Olin Center for Studies in Law, Economics, and Public Policy Working Papers. Paper 270.
- Hinkle, R. K., 2015. Legal constraint in the US Courts of Appeals. *Journal of Politics* 77, 721–735.
- Hirshleifer, D., Low, A., Teoh, S. H., 2012. Are overconfident CEOs better innovators? *The Journal of Finance* 67, 1457–1498.
- Holmes Jr, O. W., 1897. The path of the law. *Harvard Law Review* 10, 460–61.
- Hopkins, J., 2018. Do securities class actions deter misreporting? *Contemporary Accounting Research* 35, 2030–2057.
- Houston, J. F., Lin, C., Liu, S., Wei, L., 2019. Litigation risk and voluntary disclosure: Evidence from legal changes. *The Accounting Review* 94, 247–272.
- Hsiao, C., 2003. Fixed-effects models. *Analysis of Panel Data* pp. 95–103.
- Huang, A., Hui, K. W., Li, R. Z., 2019. Federal judge ideology: A new measure of ex-ante litigation risk. *Journal of Accounting Research* 57, 431–489.
- Huang, S., Roychowdhury, S., Sletten, E., 2020. Does litigation deter or encourage real earnings management? *The Accounting Review* 95, 251–278.
- Johnson, M. F., Kasznik, R., Nelson, K. K., 2000. Shareholder wealth effects of the Private Securities Litigation Reform Act of 1995. *Review of Accounting Studies* 5, 217–233.

- Johnson, M. F., Kasznik, R., Nelson, K. K., 2001. The impact of securities litigation reform on the disclosure of forward-looking information by high technology firms. *Journal of Accounting Research* 39, 297–327.
- Johnson, M. F., Nelson, K. K., Pritchard, A. C., 2007. Do the merits matter more? The impact of the Private Securities Litigation Reform Act. *Journal of Law, Economics, & Organization* 23, 627–652.
- Karpoff, J. M., Wittry, M. D., 2018. Institutional and legal context in natural experiments: The case of state anti-takeover laws. *The Journal of Finance* 73, 657–714.
- Kasznik, R., Lev, B., 1995. To warn or not to warn: Management disclosures in the face of an earnings surprise. *The Accounting Review* 70, 113–134.
- Kim, I., Skinner, D. J., 2012. Measuring securities litigation risk. *Journal of Accounting and Economics* 53, 290–310.
- La Porta, R., Lopez-de Silanes, F., Shleifer, A., 2006. What works in securities laws? *Journal of Finance* 61, 1–32.
- La Porta, R., Lopez-de Silanes, F., Shleifer, A., Vishny, R. W., 1997. Legal determinants of external finance. *Journal of Finance* 52, 1131–1150.
- Lamond, G., 2016. Precedent and Analogy in Legal Reasoning. In: Zalta, E. N. (ed.), *The Stanford Encyclopedia of Philosophy*, Metaphysics Research Lab, Stanford University, spring 2016 ed.
- Lancaster, T., 2000. The incidental parameter problem since 1948. *Journal of Econometrics* 95, 391–413.
- Landes, W. M., Posner, R. A., 1976. Legal precedent: A theoretical and empirical analysis. *Journal of Law and Economics* 19, 249–307.
- Leibovitch, A., 2016. Relative judgments. *Journal of Legal Studies* 45, 281–330.
- Leuz, C., Nanda, D., Wysocki, P. D., 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics* 69, 505–527.
- Licht, A. N., Poliquin, C., Siegel, J. I., Li, X., 2018. What makes the bonding stick? A natural experiment testing the legal bonding hypothesis. *Journal of Financial Economics* 129, 329–356.
- Mahoney, P. G., 2009. The development of securities law in the United States. *Journal of Accounting Research* 47, 325–347.
- McAlister, M. E., 2020. Downright indifference: Examining unpublished decisions in the federal courts of appeals. *Mich. L. Rev.* 118, 533.
- Niblett, A., 2013. Case-by-case adjudication and the path of the law. *Journal of Legal Studies* 42, 303–330.
- Niblett, A., Posner, R. A., Shleifer, A., 2010. The evolution of a legal rule. *Journal of Legal Studies* 39, 325–358.
- Niblett, A., Yoon, A. H., 2015. Friendly precedent. *William & Mary Law Review* 57, 1789.
- Palmrose, Z.-V., Richardson, V. J., Scholz, S., 2004. Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics* 37, 59–89.
- Perino, M., 2012. Institutional activism through litigation: An empirical analysis of public pension fund participation in securities class actions. *Journal of Empirical Legal Studies* 9, 368–392.
- Perino, M. A., 2003. Did the Private Securities Litigation Reform Act work? *University of Illinois Law Review* 4, 914–978.
- Perino, M. A., 2006. Law, ideology, and strategy in judicial decision making: Evidence from securities fraud actions. *Journal of Empirical Legal Studies* 3, 497–524.
- Posner, R. A., 2008. *How judges think*. Harvard University Press.
- Pritchard, A. C., 2011. Securities law in the Roberts court: Agenda or indifference. *Journal of Corporate Law* 37, 105–145.
- Pritchard, A. C., Sale, H. A., 2005. What counts as fraud? An empirical study of motions to dismiss under the Private Securities Litigation Reform Act. *Journal of Empirical Legal Studies* 2, 125–149.
- Richardson, S. A., Sloan, R. G., Soliman, M. T., Tuna, I., 2005. Accrual reliability, earnings persistence and stock prices. *Journal of Accounting and Economics* 39, 437–485.

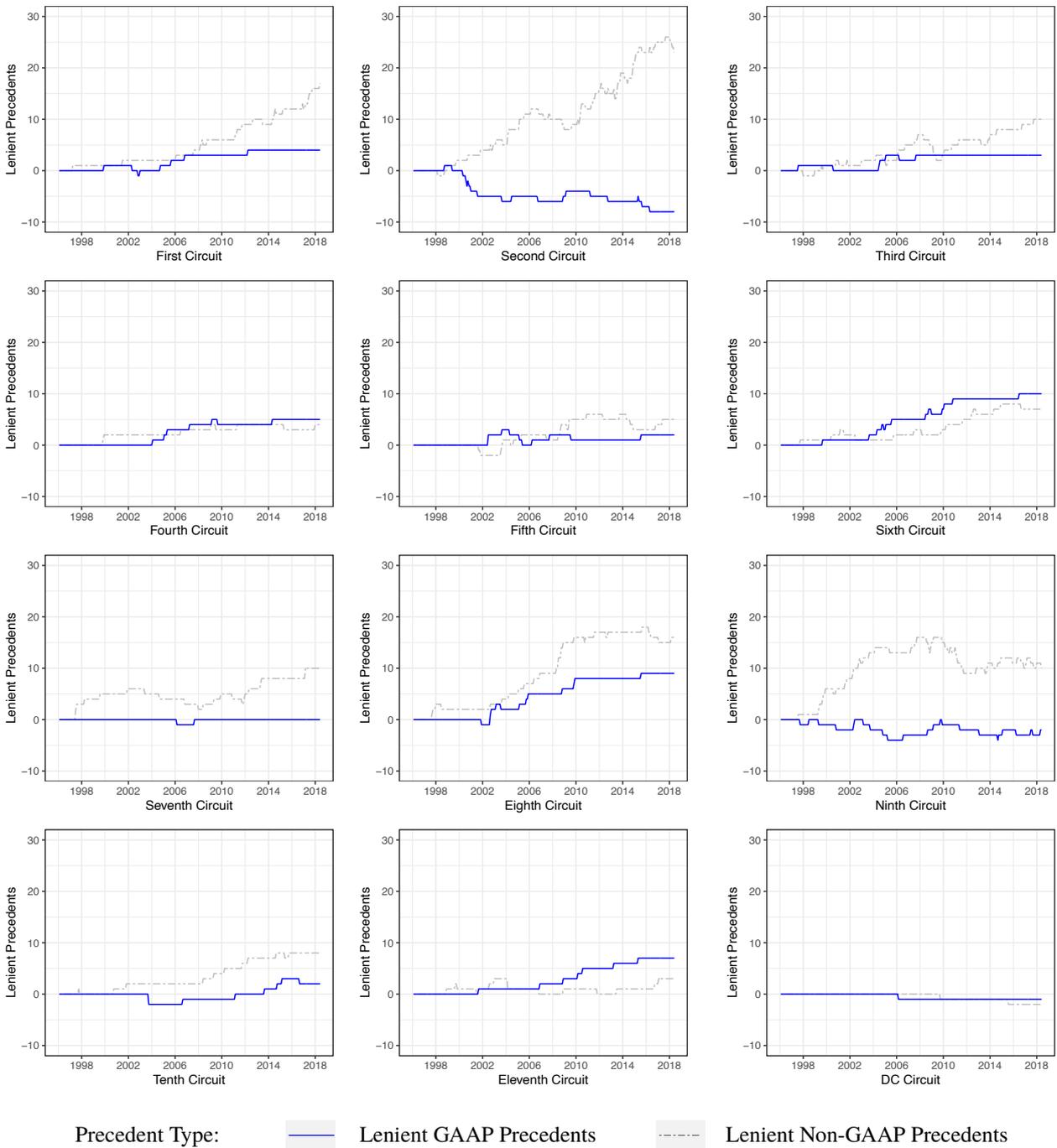
- Sale, H. A., 1998. Heightened pleading and discovery stays: An analysis of the effect of the PSLRA's internal-information standard on '33 and '34 Act claims. *Washington University Law Review* 76, 537.
- Shapiro, M., 1972. Toward a theory of "stare decisis". *Journal of Legal Studies* 1, 125–134.
- Shapiro, S. A., Levy, R. E., 1994. Judicial incentives and indeterminacy in substantive review of administrative decisions. *Duke Law Journal* 44, 1051.
- Siegel, J., 2005. Can foreign firms bond themselves effectively by renting US securities laws? *Journal of Financial Economics* 75, 319–359.
- Simintzi, E., Vig, V., Volpin, P., 2015. Labor protection and leverage. *The Review of Financial Studies* 28, 561–591.
- Skinner, D. J., 1997. Earnings disclosures and stockholder lawsuits. *Journal of Accounting and Economics* 23, 249–282.
- Srinivasan, S., Wahid, A. S., Yu, G., 2015. Admitting mistakes: Home country effect on the reliability of restatement reporting. *The Accounting Review* 90, 1201–1240.
- Thompson, R. B., Sale, H. A., 2003. Securities fraud as corporate governance: Reflections upon federalism. *Vanderbilt Law Review* 56, 859–910.
- Thurm, S., 1999. Appeals court sets high standards for shareholders in stock-fraud suits. *Wall Street Journal—Eastern Edition* 234.
- Walker, R. H., Seymour, J. G., 1998. Recent judicial and legislative developments affecting the private securities fraud class action. *Arizona Law Review* 40, 1003–1038.
- Weiss, E. J., Beckerman, J. S., 1994. Let the money do the monitoring: How institutional investors can reduce agency costs in securities class actions. *Yale Law Journal* 104, 2053–2127.

Figure 1: Geographic Boundaries of United States Courts of Appeals and United States District Courts



Source: http://www.uscourts.gov/sites/default/files/u.s._federal_courts_circuit_map_1.pdf

Figure 2: Time Series of Lenient GAAP and Non-GAAP Precedents by Circuit



This figure shows the time series of GAAP and Non-GAAP precedent leniency by circuits. The variable definitions are in Appendix B. A detailed description of the sample selection procedure is in Appendix A.

Table 1: Circuit Court Precedents – Sample Selection and Composition

This table reports the circuit court precedents sample selection process (Panel A) and breakdown by allegation types (Panel B). A detailed description of the sample selection procedure is in Appendix A.

Panel A: Circuit Court Precedents Sample Selection

	# Precedents
Google Scholar results for circuit court rulings between 1996 and 2018	2,026
Less: non-Rule 10b(5) securities fraud cases	(993) 1,033
Less: non-class action cases (e.g., SEC, DOJ, or individuals plaintiffs)	(226) 807
Less: rulings not on motion to dismiss (e.g., rehearings, settlements)	(228) 579
Less: non-precedential rulings (e.g., summary orders or memoranda)	(43) 536
Less: duplicated rulings	(98) 438
Number of circuit court precedents:	438
GAAP precedents	121
Non-GAAP precedents	317

Panel B: Circuit Court GAAP Precedents by Allegation Type

	# Precedents
With alleged income statement misreporting:	110
Revenue	82
Non-revenue income statement accounts	28
Without alleged income statement misreporting	11
Number of circuit court GAAP precedents	121

Table 2: Circuit Court Precedents – Distribution by Year and by Circuits

This table reports the distribution of circuit court precedents by year (Panel A) and by circuit (Panel B).

Panel A: Circuit Court Precedents by Year									
Year	All Precedents			GAAP Precedents			Non-GAAP Precedents		
	#	Dismissals	Reversals	#	Dismissals	Reversals	#	Dismissals	Reversals
1997	14	11	3	2	1	1	12	10	2
1998	9	7	2	2	2	0	7	5	2
1999	18	14	4	4	2	2	14	12	2
2000	15	6	9	8	1	7	7	5	2
2001	19	11	8	3	1	2	16	10	6
2002	25	19	6	10	8	2	15	11	4
2003	19	11	8	10	4	6	9	7	2
2004	26	17	9	12	9	3	14	8	6
2005	19	15	4	9	6	3	10	9	1
2006	18	11	7	9	5	4	9	6	3
2007	18	13	5	4	4	0	14	9	5
2008	34	24	10	7	6	1	27	18	9
2009	29	19	10	11	8	3	18	11	7
2010	23	15	8	3	3	0	20	12	8
2011	23	15	8	3	1	2	20	14	6
2012	18	10	8	3	1	2	15	9	6
2013	21	16	5	2	2	0	19	14	5
2014	26	18	8	5	4	1	21	14	7
2015	17	10	7	7	5	2	10	5	5
2016	22	11	11	4	1	3	18	10	8
2017	17	13	4	2	1	1	15	12	3
2018	8	5	3	1	1	0	7	4	3
Total	438	291	147	121	76	45	317	215	102

Panel B: Circuit Court Precedents by Circuit									
Circuit	All Precedents			GAAP Precedents			Non-GAAP Precedents		
	#	Dismissals	Reversals	#	Dismissals	Reversals	#	Dismissals	Reversals
1st	33	27	6	8	6	2	25	21	4
2nd	89	52	37	20	6	14	69	46	23
3rd	41	27	14	7	5	2	34	22	12
4th	15	12	3	7	6	1	8	6	2
5th	33	20	13	10	6	4	23	14	9
6th	31	24	7	14	12	2	17	12	5
7th	24	17	7	2	1	1	22	16	6
8th	42	34	8	13	11	2	29	23	6
9th	82	45	37	24	11	13	58	34	24
10th	21	16	5	8	5	3	13	11	2
11th	24	17	7	7	7	0	17	10	7
DC	3	0	3	1	0	1	2	0	2
Total	438	291	147	121	76	45	317	215	102

Table 3: District Court Citation of Circuit Court Precedents

This table reports the district court citation of home-circuit and non-home-circuit precedents (Panel A) and in the home-circuit by precedent and case type (Panel B). Citations per precedent are calculated as the number of district court citations scaled by the number of circuit court precedents. The citation likelihood is calculated as the number of district court citations scaled by the number of district court rulings after a precedent’s publication date. Significance of differences are calculated based on two-tailed *t*-test clustered at the precedent level. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively.

Panel A: District Court Citation of Home-Circuit and Non-Home-Circuit Precedents

		All Circuit Citation		Home-Circuit Citation		Non-Home-Circuit Citation	
		Per Precedent	Likelihood	Per Precedent	Likelihood	Per Precedent	Likelihood
All Precedents	438	21.1	2.80%	15.9	19.75%	5.2	0.76%
Home-circuit precedent citation likelihood – Non-home-circuit precedent citation likelihood:							18.99%***

Panel B: Home-Circuit Precedent Citation by Circuit Court Precedent and District Court Case Type

		Citation by All Cases		Citation by GAAP Cases		Citation by Non-GAAP Cases	
		Per Precedent	Likelihood	Per Precedent	Likelihood	Per Precedent	Likelihood
GAAP Precedents	121	25.6	31.47%	12.1	39.64%	13.5	27.35%
Non-GAAP Precedents	317	12.1	15.28%	5.1	16.52%	7.0	14.44%
GAAP – Non-GAAP Precedents			16.19%***		23.12%***		12.91%***
GAAP precedent citation likelihood by GAAP cases – GAAP precedent citation likelihood by Non-GAAP cases:							12.29%***
Non-GAAP precedent citation likelihood by GAAP cases – Non-GAAP precedent citation likelihood by Non-GAAP cases:							2.07%
Difference in GAAP cases’ precedent citation likelihood – Difference in Non-GAAP cases’ precedent citation likelihood:							10.21%***