Securities Class Actions and Conditional Conservatism: Evidence from Two Legal Events

(Running head: Securities Litigation and Conservatism)

Xiaomeng Chen[a, *], Meiting Lu[b], Yaowen Shan[c], Yizhou Zhang[d]

[a] Macquarie Business School
Macquarie University
Balaclava Road, North Ryde NSW 2109, Australia
Email: charlene.chen@mq.edu.au

[b] Macquarie Business School
Macquarie University
Balaclava Road, North Ryde NSW 2109, Australia
Email: meiting.lu@mq.edu.au

[c] UTS Business School
University of Technology Sydney
Broadway NSW 2007, Australia
Email: yaowen.shan@uts.edu.au

[d] Macquarie Business School
Macquarie University
Balaclava Road, North Ryde NSW 2109, Australia
Email: phoebe.zhang@mq.edu.au

17 May 2022

[*] Corresponding author. Email address: charlene.chen@mq.edu.au (X. Chen).
We appreciate the helpful comments and suggestions from Philip Brown, and the conference participants at the 2020 Accounting and Finance Association of Australia and New Zealand annual conference.

Securities Class Actions and Conditional Conservatism: Evidence from Two Legal Events

Abstract

We use two US court rulings as exogenous shocks to firms' litigation environment and examine the changes in conservative financial reporting following these court decisions. The *Silicon Graphics* ruling in 1999 imposed a heightened pleading standard and discouraged the filing of shareholder lawsuits against firms with headquarters in the Ninth Circuit. The *Tellabs* ruling in 2007, however, effectively reversed the *Silicon Graphics* ruling and made it easier to file securities litigation against Ninth Circuit firms. We predict and find that the reduced litigation risk following the *Silicon Graphics* ruling discourages conservative reporting for Ninth Circuit firms. By contrast, the elevated threat of shareholder lawsuits following the *Tellabs* ruling encourages conservative reporting for Ninth Circuit firms relative to non-Ninth Circuit firms. The disciplining effect of the threat of shareholder lawsuits on conservatism is stronger for firms facing higher *ex ante* litigation risk. The litigation-risk-induced increase (decrease) in reporting conservatism leads to higher (lower) firm valuations.

Keywords: Conditional conservatism; litigation risk; securities class actions

JEL classification: M40, G32

1. Introduction

Agency theory suggests that managers and directors have opportunistic incentives to deviate from best practices that maximize shareholder interests (Adams and Ferreira, 2007; Laux, 2008; Taylor, 2010). Shareholder class action lawsuits have been perceived to function as a useful mechanism for disciplining managers and directors (Choi, 2004; Hopkins, 2018), because they enable individual shareholders to form associations to bring suit against firms for financial misconduct and accounting fraud. Prior studies show that securities fraud allegations have negative consequences for alleged firms as a result of the lawsuit and settlement. Firms facing allegations experience a reduction in operating and investment efficiency, increased cost of capital, and a loss of reputation (McTier and Wald, 2011; Arena and Julio, 2015; Arena, 2018). Managers and directors of the alleged firms also suffer negative labor market outcomes, such as job loss, legal sanctions, and limited employment prospects (Karpoff et al., 2008a; Liu et al., 2016; Hersel et al., 2019).

In this study, we investigate how the threat of securities class actions affects a firm's conservative financial reporting. We use two US court rulings as exogenous shocks to firms' litigation environment and examine the changes in conservative financial reporting following these rulings. The first legal event is the Ninth Circuit's decision in "*In re Silicon Graphics Inc. Securities Litigation*" reported on July 2, 1999. The *Silicon Graphics* decision unexpectedly imposed a heightened pleading standard after the passage of the Private Securities Litigation Reform Act (PSLRA) 1995. The court decision made it more difficult for plaintiffs to file lawsuits against firms headquartered in the Ninth Circuit than those in other circuits that do not require plaintiffs to demonstrate the defendant's intent of deliberate recklessness.[1] The second legal event is the Supreme Court's decision in "*Tellabs, Inc. v. Makor Issues & Rights, Ltd.*" on June 21, 2007. The *Tellabs* decision lowered the stringent pleading standard previously

[1] The United States Court of Appeals for the Ninth Circuit (hereafter, Ninth Circuit) has jurisdiction over the following districts: Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington (see Appendix B for a map of the districts).

applied by the Ninth Circuit. It effectively reversed the *Silicon Graphics* ruling, encouraging the filing of securities litigation against firms with headquarters in the Ninth Circuit.

Our study investigates whether a reduced threat of securities lawsuits following the *Silicon Graphics* ruling discourages conservative accounting, and conversely, whether an increased threat of securities litigation following the *Tellabs* ruling encourages conservatism, by examining managers' reporting behavior in response to exogenous changes in firms' litigation risk. Litigation concerns have been identified as a key determinant of conservatism (Watts, 2003a). In particular, Watts (2003a, 2003b) argues that asymmetric litigation costs create incentives for managers to engage in conservative reporting practices. This phenomenon stems from the probability of securities litigation being much higher for firms that overstate income or net assets, leading to higher expected litigation costs for these firms. Prior research shows that the likelihood of lawsuits against firms increases upon their overstating income or net assets (Kellogg, 1984) or reporting substantial income-increasing accruals (Heninger, 2001). Practicing conservative accounting in the form of preemptive disclosures of bad news and/or delayed recognition of good news reduces the risk of shareholder litigation. Ettredge et al. (2016) document that firms engaging in conservative reporting face fewer securities class actions and experience more favorable litigation outcomes. Thus, managers and directors are incentivized to ensure conservative financial reporting so as to mitigate litigation risk.

Prior literature finds evidence consistent with litigation risk increasing conditional conservatism (e.g., Basu, 1997; Ball et al., 2000; Huijgen and Lubberink, 2005; Bushman and Piotroski, 2006). For example, Qiang (2007) finds that conditional conservatism increases with firm-specific proxies of litigation risk. Chung and Wynn (2008) show that managers who are covered by lower legal liability insurance practice more conservative accounting. However, the empirical findings presented to date have, at best, documented an association between litigation risk and accounting conservatism, but have failed to draw causal inferences regarding the litigation–conservatism relationship. Factors other than litigation-based demand may contribute to the variation in the degree of conservatism being observed. The difficulty of

establishing such a causal link is largely due to the endogenous nature of conservative reporting practices. Using an approach distinct from prior studies, we extend this literature by treating the Ninth Circuit's decision in *Silicon Graphics* and the Supreme Court decision in *Tellabs* as proxies of exogenous changes in firms' litigation risk exposure. These court decisions were not anticipated by managers and are unlikely to be driven by managerial reporting decisions, which enables us to mitigate the endogeneity concern in prior studies and identify a causal link between litigation risk exposure and reporting conservatism using a difference-in-differences (DiD) research design. Previous studies examining securities litigation have considered the role of one of these court cases, which further supports the validity of our empirical framework (Donelson et al., 2012; Cutler et al., 2019; Dong and Zhang, 2019; Houston et al., 2019; Griffin et al., 2021).

Using a sample of 27,925 firm-year observations over 1995–2002 for the *Silicon Graphics* ruling and a sample of 19,930 firm-years for the period 2003–2011 for the *Tellabs* ruling, we employ a DiD approach to test the causal effect of litigation risk on the conditional conservatism of financial reporting. The treated firms are those with headquarters located in the Ninth Circuit, while the control firms are those headquartered in other circuits. We use the Khan and Watts (2009) *CSCORE* construct to measure conditional conservatism. Our results reveal that, following the *Silicon Graphics* decision, Ninth Circuit firms experience a greater decline in conservative accounting practices than non-Ninth Circuit firms. By contrast, Ninth Circuit firms display an increased level of conservatism relative to non-Ninth Circuit firms after the *Tellabs* ruling. Our findings suggest that managers and directors have less (more) incentives for conservative reporting in response to reduced (heightened) litigation risk, which is consistent with a causal effect of litigation demand on accounting conservatism. The results are robust to a DiD estimation incorporating the propensity score matching approach and satisfy the parallel trends assumption.

To provide further insights, we investigate how the treatment effect of the deterrence potential of securities class actions on conditional conservatism varies with firms' *ex ante*

litigation risk. We find that the reduction in conditional conservatism resulting from the *Silicon Graphics* decision is stronger for Ninth Circuit firms facing greater *ex ante* litigation risk, since the likelihood of shareholders filing securities litigation against these firms is lower after the Ninth Circuit Court heightened the pleading standard (Choi and Pritchard, 2012). With respect to the *Tellabs* decision, we find that Ninth Circuit firms facing higher *ex ante* litigation risk to display greater conservatism following the *Tellabs* ruling, suggesting a stronger treatment effect of the threat of shareholder litigation on conservative reporting for firms facing higher *ex ante* litigation risk. Further, we show that the litigation-risk-induced increase (decrease) in reporting conservatism leads to higher (lower) firm valuations, highlighting the important role of accounting conservatism in creating values for shareholders.

Our findings are robust to the use of Basu's (1997) asymmetric timeliness approach as an alternative measure for conditional conservatism, and the use of the same treated firms affected by both court decisions to examine the extent and scale of the reversal effect. Our results continue to hold after removing Nevada and Delaware firms, or excluding high-tech firms and firms with disclosed financial assets to alleviate the confounding effect of the dot-com bubble burst and the global financial crisis, respectively. Additionally, we conduct several cross-sectional analyses to rule out alternative explanations (e.g., opportunistic earnings management and other demands for conservatism).

The contributions of this study are three-fold. First, this study presents new evidence on the litigation demand for accounting conservatism by establishing a causal relationship between litigation risk and accounting conservatism. The litigation explanation is considered a prominent driver of conservatism (Chung and Wynn, 2008; García Lara et al., 2009; Ettredge et al., 2016), however, given the endogenous nature of conservative reporting decisions, establishing the causal effect of litigation risk on conservatism is empirically challenging. In this study, we use two natural experiments to mitigate such endogeneity concerns, which allows us to attribute changes in the degree of conditional conservatism to exogenous changes in firms' litigation risk due to the two court rulings. In addition, the empirical evidence that exogenous

changes in litigation risk arising from the threat of securities class actions trigger conservative accounting practices rules out the possibility that the results are driven by confounding factors related to other demands for conservatism (Watts, 2003a).

Second, our findings show that a reduction in litigation risk influences managers' reporting behavior and, in particular, leads to less conservative financial reporting, suggesting that the deterrence potential of securities class actions effectively disciplines managers' accounting practices. Our evidence adds to the prior research examining the impact of securities litigation on other aspects of reporting practices, such as misreporting (Hopkins, 2018), real earnings management (Huang et al., 2020), voluntary disclosure (Dong and Zhang, 2019; Houston et al., 2019), and forward-looking statements (Cazier et al., 2020), and on corporate decisions and behaviors more broadly, including borrowing terms and costs (Deng et al., 2014), acquisition decisions (Chung et al., 2020), capital structure decisions (Nguyen et al., 2020), and corporate innovation (Lin et al., 2021). Thus, the findings of this study inform securities market regulators regarding the effectiveness of the deterrence potential of shareholder litigation in alleviating agency conflicts, deterring financial misconduct, and reducing accounting fraud.

Finally, given the globalization of trade and investment activities, investors have increasingly recognized the need to recoup investment losses arising from financial misconduct and accounting fraud internationally and become conscious of legal processes worldwide. For example, in the past two decades, 28 countries—both developed and emerging economies—have introduced representative class action procedures to some degree (Hensler, 2016). Our evidence on the effectiveness of securities class actions and litigation threats in curbing opportunistic reporting behavior has direct relevance to this evolving global trend in the enforcement of securities laws in different jurisdictions. Our findings thus add to the extensive literature on the consequences and regulation of financial misconduct and securities fraud (Karpoff and Lott, 1993; Karpoff et al., 2008b; Karpoff et al., 2017; Amiram et al., 2018).

The remainder of this paper is organized as follows. Section 2 presents a review of related literature and develops the hypothesis. Section 3 describes the regression models, sample construction, and variable measurements. Section 4 presents descriptive statistics and empirical results. Section 5 reports the results of additional analyses and robustness checks. Finally, Section 6 concludes.

2. Setting and hypothesis development

2.1. Litigation risk and conditional conservatism

Litigation-based demand is considered a significant driver of conservatism (Chung and Wynn, 2008; García Lara et al., 2009; Ettredge et al., 2016). Previous research reveals that managers and directors engage in conservative reporting practices to mitigate litigation risk. For example, Basu (1997) and Holthausen and Watts (2001) find that the level of conditional conservatism realized in financial reports increases with the degree of litigation risk faced by firms. In studying variation in conservatism across firms with differing litigation risk exposure owing to the legal regime of the country in which the firm operates, Ball et al. (2000) show that firms in common-law countries exhibit considerably greater conditional conservatism compared with firms in code-law countries, due to higher litigation costs in the former. Similarly, Huijgen and Lubberink (2005) document that UK firms cross-listed on the US stock exchanges exhibit greater conservatism than UK firms without a US cross-listing, suggesting that the exposure to a higher likelihood of securities class actions prompts these cross-listed firms to commit to more conservative financial reporting. Furthermore, Bushman and Piotroski (2006) find that variation in the legal systems and the strength of public enforcement across countries explain a significant proportion of the variations in the extent of conservatism displayed by firms in different countries. In summary, prior literature documents a positive association between litigation risk and conditional conservatism.

Nevertheless, the extant empirical findings largely fail to establish causal inferences, and it is possible that factors other than the litigation-based demand—such as other firm

characteristics or cross-country differences—drive the variation in the levels of conservatism realized in financial reports. Using an approach distinct from that of prior studies, we extend the literature by treating the Ninth Circuit's decision in *Silicon Graphics* (the Supreme Court's decision in *Tellabs*) as a proxy for plausibly exogenous changes in firms' litigation risk and investigate the changes in conservative financial reporting after the threat of securities class actions is reduced (increased).

Our study differs from several contemporaneous studies in the following respects. Unlike our study, Ettredge et al. (2016) are not able to identify exogenous events surrounding shareholder class action lawsuits to establish a causal relationship between litigation risk and conservatism. Jayaraman (2012) uses the enactment of insider trading laws in different jurisdictions as exogenous changes in the monitoring mechanism to examine its effect on conditional conservatism. His paper differs from our study, in that Jayaraman focuses on contracting-based demand and finds that the enactment of insider trading laws enhances the monitoring mechanism and thus increases the conservatism of reporting practices. Basu and Liang (2019) also focus on the contracting incentives for conservatism. Specifically, they examine how monitoring by nonofficer directors influences conservative reporting, using a setting of the staggered passage of laws that reduces nonofficer directors' legal liability. Their findings show that stakeholder contracting incentives for conservatism moderate the influence of nonofficer directors. As pointed out by Karpoff and Wittry (2018), using a one-off universal shock in the enactment of the law may not provide reliable inferences, as the institutional and legal contexts surrounding the enactment can affect the inferences. The inferences from these contemporaneous studies suffer to varying extents from failing to control for the individual firm's institutional and legal contexts, which could have first-order effects on inferences. By using exogenous changes in the litigation risk exposure of Ninth Circuit firms arising from the evolution of the legal contexts in the Ninth Circuit, our study provides direct evidence to support a causal relationship between litigation risk and conservatism.

2.2. Exogenous shocks to litigation risk arising from the Silicon Graphics decision and the Tellabs decision

In the context of federal securities laws in the US, private class actions have been used to alleviate the collective action problem faced by individual shareholders. Prior to 1995, securities class actions in the US relied upon the "fraud-on-the-market" judicial theory, which gives plaintiffs the right to pursue lawsuits if material misleading information has been distributed in the market. However, the low pleading standard resulted in many frivolous lawsuits being filed (Johnson et al., 2001). In response to concerns about abusive securities litigation and related corporate lobbying, Congress amended the federal securities laws by enacting the PSLRA, which heightened the pleading standard (Levine and Pritchard, 1998). The enactment of the PSLRA introduced a requirement for plaintiffs to demonstrate the defendant's intent of deliberate recklessness. The circuit courts have varying interpretations of the PSLRA's pleading requirements, with the Ninth Circuit's interpretation in *Silicon Graphics* being the most difficult for plaintiffs to satisfy (Johnson et al., 2000; Grundfest and Pritchard, 2002).

On July 2, 1999, the Ninth Circuit handed down its decision in "*In re Silicon Graphics Inc. Securities Litigation*," which requires plaintiffs to establish that the defendants have "a strong inference of deliberate or conscious recklessness" rather than the "motive and opportunity" that may be sufficient to meet pleading requirements in other circuits. This ruling was highly unexpected and surprising since the Ninth Circuit Court had pioneered the most plaintiff-friendly pleading standard pre-PSLRA (Johnson et al., 2000; Gibney, 2001; Pritchard and Sale, 2005). By significantly elevating the pleading burden, this ruling increases the threshold for filing a suit against firms with headquarters in this circuit (Pritchard and Sale, 2005). Empirical evidence shows that the incidence of securities litigation declined significantly after pleading requirements were elevated; accordingly, the number of securities lawsuits in the Ninth Circuit plunged by 43%, whereas it grew by 14% in other circuits following the *Silicon Graphics* decision (Crane and Koch, 2018). The Ninth Circuit also

incurred a 63% dismissal rate of securities lawsuits, far higher than the rate for other circuits, such as 36% for the Second Circuit (Pritchard and Sale, 2005).

The 2007 Supreme Court decision in "*Tellabs, Inc. v. Makor Issues & Rights, Ltd.*" reversed the Seventh Circuit's lenient pleading standard. In doing so, the Supreme Court not only signaled that circuits applying the lenient standard should be more demanding, but also instructed circuits applying the most stringent standard (i.e., Ninth Circuit) to be more generous. The *Tellabs* ruling presents the Supreme Court's interpretation of the "strong inference" standard, leading to increased uniformity in the application of pleading standards across circuits courts. This ruling effectively lowered the Ninth Circuit's stringent pleading standard and made it easier to file securities litigation against firms headquartered in the Ninth Circuit. After the *Tellabs* decision, the Ninth Circuit experienced a large decline in dismissal rates of cases and an increase in low-value settlements (Choi and Pritchard, 2012). In short, the *Tellabs* decision provides an alternative setting that exogenously changes the litigation risk exposure arising from the threat of securities litigation for Ninth Circuit firms.

Recent studies find that plausibly exogenous changes in firms' litigation risk arising from the *Silicon Graphics* decision and the *Tellabs* decision affect managers' reporting behavior, both in terms of voluntary disclosure practices (Dong and Zhang, 2019; Houston et al., 2019; Cazier et al., 2020) and mandatory financial reporting (Hopkins, 2018; Huang et al., 2020). Hopkins (2018) finds that Ninth Circuit firms have a higher likelihood of restating financial reports following the *Silicon Graphics* ruling, supporting the deterrence potential of securities class actions in disciplining managers' reporting practices. Furthermore, Huang et al. (2020) document that Ninth Circuit firms practice more real earnings management following the *Silicon Graphics* decision. Dong and Zhang (2019) reveal that Ninth Circuit firms make fewer (more) and lower-quality (higher-quality) voluntary disclosures compared with non-Ninth Circuit firms following the *Silicon Graphics* ruling (the *Tellabs* ruling). To conclude, prior literature lends support to the disciplining effect of class action lawsuits on managers' reporting behavior.

2.3. Hypothesis development

Given that managers and directors do not always act in the best interest of shareholders (Adams and Ferreira, 2007; Laux, 2008; Le et al., 2020; Shan and Walter, 2016; Taylor, 2010), securities class actions have been perceived as a mechanism for deterring opportunistic behavior of managers and directors. This mechanism is useful because class action lawsuits allow individual shareholders to form associations to bring suit against firms for misconduct allegations (Choi, 2004; Hopkins, 2018). Misconduct allegations result in negative consequences for firms alleged to have committed fraud due to the resultant suit and settlement. Firms facing allegations are found to experience a reduced level of operating efficiency, forgo corporate investments, incur higher financing costs, and suffer reputation loss (McTier and Wald, 2011; Arena and Julio, 2015; Arena, 2018). Moreover, previous studies find that the turnover rate of the CEO and executive directors of such firms increases in the wake of securities class actions (Karpoff et al., 2008a; Aharony et al., 2015). These senior executives also face adverse labor market consequences, such as legal sanctions and limited employment prospects (Liu et al., 2016; Hersel et al., 2019).

The negative consequences of securities class actions create incentives for managers and directors to engage in conservative reporting in order to minimize future litigation risk. Litigation risk produces asymmetric costs, which are closely linked to asymmetries in the loss function of managers and directors as overstating net assets or earnings is more likely than the understatement of same to result in lawsuits against managers and directors (Kellogg, 1984; Heninger, 2001; Watts, 2003a). Accounting conservatism reduces the likelihood of overstating income or net assets by disclosing bad news in a timely manner and/or delaying the recognition of good news. Thus, managers and directors are incentivized to engage in conservative reporting so as to reduce their litigation risk exposure in relation to the overstatement of assets or earnings. For example, Ettredge et al. (2016) document that firms practicing conservative accounting have a low likelihood of subsequent litigation occurrence and tend to avoid adverse securities lawsuit outcomes. On the other hand, managers and directors display a tendency to

deviate from conservative reporting practices and an increased propensity for opportunistic behavior when their litigation risk is reduced (Hopkins, 2018; Basu and Liang, 2019; Dong and Zhang, 2019; Houston et al., 2019; Huang et al., 2020).

Moreover, the assessment of the loss function depends on the extent to which the judicial system allows individual shareholders to sue the firm, managers, and directors, with the expectation that a judicial decision will favor the more vulnerable party (i.e., individual shareholders) (Huijgen and Lubberink, 2005). Erickson (2011) suggests that securities class actions are more efficacious than other forms of litigation in a litigation hierarchy within corporate law. For example, securities class actions frequently result in multimillion-dollar settlements and are more effective than other forms of litigation in making managers and directors accountable for financial misconduct and accounting fraud (Fuerman, 2016; Donelson et al., 2021). When facing a potential threat of securities litigation, managers and directors have incentives to report conservatively to reduce their litigation risk exposure (Huijgen and Lubberink, 2005). To summarize, litigation risk exposure affects the reporting incentives of managers and directors, which not only constrains the opportunistic reporting behavior of managers and directors due to asymmetric costs from potential litigation events, but also generates significant demand for financial reporting conservatism.

Previous research suggests that higher litigation risk motivates firms to practice more conservative accounting (e.g., Ball et al., 2000; Lu et al., 2020; Qiang, 2007; Chung and Wynn, 2008). In this study, we treat the Ninth Circuit's decision in *Silicon Graphics* and the Supreme Court decision in *Tellabs* as proxies for exogenous changes in firms' litigation risk. By tightening (lowering) pleading requirements, the *Silicon Graphics* ruling (the *Tellabs* ruling) significantly reduces (increases) the exposure to securities litigation for firms with headquarters in the Ninth Circuit compared with that of firms headquartered in other circuits. Empirical evidence shows that strengthened pleading standards reduced the incidence of class action lawsuits and lowered the voluntary disclosure quality of Ninth Circuit firms (Pritchard and Sale, 2005; Dong and Zhang, 2019; Houston et al., 2019). On the other hand, following the *Tellabs*

decision that rejected tougher pleading standards, the Ninth Circuit saw a lower dismissal rate of cases (Choi and Pritchard, 2012), while Ninth Circuit firms began to make more and higher-quality voluntary disclosures (Dong and Zhang, 2019). We argue that, when managers and directors have limited litigation risk exposure, it is likely that directors' monitoring incentives will be reduced and that managers are less prone to engage in conservative reporting practices.

By contrast, a reduced litigation risk could help firms attract and retain talented outside directors (Ballotti and Gentile, 1987; Bradley and Schipani, 1989) or more risk-averse directors, potentially strengthening board monitoring. As a result, Ninth Circuit firms may experience no changes in conservative accounting practices after the *Silicon Graphics* decision. In light of the above, given that the argument for less (more) conservatism in financial reporting post-*Silicon Graphics* (post-*Tellabs*) is more compelling, we consider that the reduced (increased) litigation risk resulting from the *Silicon Graphics* decision (the *Tellabs* decision) leads to a lower (higher) degree of conservatism, in line with which we propose the following hypothesis:

> ***H1:*** *Compared to firms with headquarters located in other circuits, firms with headquarters located in the Ninth Circuit exhibit a lower (higher) degree of conservatism than before the Silicon Graphics ruling (the Tellabs ruling).*

3. Research design

3.1. Measuring conditional conservatism

Following prior studies (e.g., Jayaraman, 2012), we measure conditional conservatism using the Khan and Watts (2009) firm-year *CSCORE* construct. The *CSCORE* construct not only captures the extent to which earnings reflect bad news during the period faster than they reflect good news in the Basu (1997) model, but also incorporates cross-sectional variation in firm-year characteristics, including firm size, market-to-book ratio, and leverage. As the first step, we estimate *CSCORE* using the Basu (1997) model as follows (with firm and year subscripts omitted for parsimony):

$$EARN = \alpha_0 + \alpha_1 NEG + \alpha_2 RET + \alpha_3 NEG \times RET + \varepsilon \quad (1)$$

where *EARN* is a firm's annual earnings divided by the lagged market value of equity, *RET* is the buy-and-hold return over the 12-month period ending at the fiscal year-end, and *NEG* is a dummy variable equal to 1 if *RET* is negative and 0 otherwise. Coefficient (α_2) on *RET* gauges the timeliness of earnings respecting good news. Coefficient (α_3) on *NEG*×*RET* gauges the incremental timeliness of earnings respecting bad news and captures the extent of asymmetric timeliness of earnings, or conditional conservatism.

Coefficients α_2 (also called the *GSCORE* measuring the timeliness of earnings respecting good news) and α_3 (also called the *CSCORE*, which measures conditional conservatism) are expressed as linear functions of specific firm-year characteristics as follows:

$$GSCORE = \alpha_2 = \mu_1 + \mu_2 SIZE + \mu_3 MB + \mu_4 LEV \quad (2)$$

$$CSCORE = \alpha_3 = \lambda_1 + \lambda_2 SIZE + \lambda_3 MB + \lambda_4 LEV \quad (3)$$

where *SIZE* is the natural logarithm of the market value of equity, *MB* is the market-to-book ratio, and *LEV* is the firm's leverage, measured as the total debts divided by the market value of equity. We replace coefficients α_2 and α_3 in Equation (1) with Equations (2) and (3), and estimate the following specification:

$$\begin{aligned} EARN = {} & \beta_0 + \beta_1 NEG + RET\,(\mu_1 + \mu_2 SIZE + \mu_3 MB + \mu_4 LEV) \\ & + NEG \times RET\,(\lambda_1 + \lambda_2 SIZE + \lambda_3 MB + \lambda_4 LEV) + (\delta_1 SIZE + \delta_2 MB \\ & + \delta_3 LEV + \delta_4 NEG \times SIZE + \delta_5 NEG \times MB + \delta_6 NEG \times LEV) + \varepsilon \end{aligned} \quad (4)$$

In accordance with Khan and Watts (2009), then we estimate *CSCORE* using Equation (3) with the estimated coefficients λ_1, λ_2, λ_3, and λ_4 from Equation (4). A higher value of *CSCORE* indicates more conservative reporting.

3.2. Identification strategy

Our empirical setting has several advantages. First, we are able to identify a natural control group to implement the DiD specification, i.e., firms affected by the Ninth Circuit's decision are the firms with headquarters in the Ninth Circuit. According to securities laws (i.e., Securities Exchange Act of 1934 and Securities Act of 1933), shareholders can file class actions

at any venue where the defendant firm has an economic presence. This raises the question of whether plaintiffs engage in forum shopping to select the most favorable jurisdiction opportunistically to gain a substantive advantage, such as the weakest fraud-pleading standards. Cox et al. (2009) investigate the forum shopping and find little evidence, with almost 85% of class-action cases filed in the defendant firm's home circuit for 1993-2006. This is because the multiple-district-litigation panel and change-of-venue provisions in Section 1404 of Title 20 of the United States Code (federal statutory law)—an essential institutional feature of the federal judicial system—allow the defendant firm to file a motion for change of venue on the grounds that most witnesses and documents are in the defendant firm's home jurisdiction. This process will result in significant delays and costs for plaintiffs, and most likely, the motion for a change of venue will be granted by the multiple-district-litigation panel. Hopkins (2018) provides further evidence suggesting that 84% of the 2,194 class actions filed in federal courts were litigated in the defendant firm's home jurisdiction for 1983-2011. Thus, the *Silicon Graphics* decision and the *Tellabs* decision are expected to affect firms headquartered in the Ninth Circuit.

Second, we utilize the Supreme Court's decision in *Tellabs* as a reverse legal event to verify our empirical results for the Ninth Court's decision in *Silicon Graphics*. Third, while prior studies may suffer from failing to control for the individual firm's institutional and legal contexts (Karpoff and Wittry, 2018), we use exogenous changes in the litigation risk exposure of Ninth Circuit firms arising from the evolution of the legal contexts in the Ninth Circuit to provides direct evidence on the causal relationship between litigation risk and accounting conservatism.

3.3. Empirical model

We employ a DiD specification to investigate how the deterrence potential of securities class action lawsuits affects accounting conservatism. In particular, we compare changes in accounting conservatism, following the *Silicon Graphics* decision and the *Tellabs* decision, of firms with headquarters located in the Ninth Circuit (Ninth Circuit firms) to those of firms

headquartered in other circuits (non-Ninth Circuit firms). We estimate the following specification:

$$CSCORE = \eta_0 + \eta_1 C9FIRM + \eta_2 POST + \eta_3 C9FIRM \times POST + Controls + \varepsilon \quad (5)$$

where *CSCORE* is the firm-year conservatism construct defined in section 3.1. *C9FIRM* is a dummy variable equal to 1 for the treated firms (i.e., Ninth Circuit firms) and 0 for the control firms (i.e., non-Ninth Circuit firms). In the specification for the *Silicon Graphics* decision, *POST1999* is a dummy variable equal to 1 for the post-*Silicon Graphics* ruling period 2000–2002 and 0 for the pre-*Silicon Graphics* ruling period 1995–1998. In the specification for the *Tellabs* decision, *POST2007* is a dummy variable equal to 1 for the post-*Tellabs* ruling period 2008–2011, and 0 for the pre-*Tellabs* ruling period 2003–2006. η_3, the coefficient of the interaction term *C9FIRM*×*POST1999* (*C9FIRM*×*POST2007*) in the regression model for the *Silicon Graphics* decision (the *Tellabs* decision), is of primary interest in our analysis because it captures the average effect of the *Silicon Graphics* decision (the *Tellabs* decision) on conservative accounting for the treated firms relative to the control firms. A negative (positive) η_3 for the regression of the *Silicon Graphics* decision (the *Tellabs* decision) supports our hypothesis that following the *Silicon Graphics* ruling (the *Tellabs* ruling), Ninth Circuit firms exhibit a greater decline (increase) in reporting conservatism than non-Ninth Circuit firms.

We control for firm characteristics associated with conservative reporting identified in previous research (e.g., Gong and Luo, 2018): size (*SIZE*), return on assets (*ROA*), firm age (*AGE*), the market-to-book ratio (*MB*), stock return volatility (*STDRET*), leverage (*LEV*), financial distress (*ALTMAN*), and audit by a Big Four accounting firm (*BIG_4*). All of the variables are measured at the beginning of the year (Lafond and Roychowdhury, 2008). We also estimate an alternative specification to include firm and year fixed effects to control for the effect of time-invariant unobservable firm characteristics and the time trend of accounting conservatism, respectively. The robust standard errors are clustered at the state level where firms are headquartered. The definitions of all variables are provided in Appendix A.

3.4. Data and the sample

We limit the sample for the *Silicon Graphics* decision to the period 1995 to 2002 and the sample for the *Tellabs* decision from 2003 to 2011. The initial sample comprises all firms with sufficient financial and stock price data available from the merged CRSP and COMPUSTAT databases. To mitigate the effects of outliers, we winsorize all continuous regression variables at the top and bottom 1%. Then, we exclude firms from the utilities and the financial service industries to eliminate the potential influence of the regulatory environment of both industries. We also exclude penny stocks (firms with stock price < US$1). In addition, we require each firm in the sample for the *Silicon Graphics* decision to have at least one observation in the pre- and the post-*Silicon Graphics* ruling period, and each firm in the sample for the *Tellabs* decision to have at least one observation in the pre- and the post-*Tellabs* ruling period. Our final sample comprises 27,925 firm-year observations for the *Silicon Graphics* decision and 19,930 firm-year observations for the *Tellabs* decision.

4. Empirical results

4.1. Descriptive statistics

Panel A of Table 1 reports descriptive statistics for the full sample of the *Silicon Graphics* decision. The sample comprises 27,925 firm-year observations. Earnings equal 0.8% of lagged market value on average and are negatively skewed, in line with the presence of conditional conservatism (Ball et al., 2000; García Lara et al., 2009). The average firm in the sample has a leverage ratio of 21.3% and earns a stock return of 15.5% and return on assets of 2.1% on average. Further, 48.5% of the sample have negative stock returns. The Big Four auditors audit most of the sample firms. Panel B presents descriptive statistics for the treated and control firms. Compared with the control firms, the treated firms have significantly lower earnings, return on assets, and leverage, and are younger, but have higher stock returns, stock return volatility, market-to-book ratios, and Altman's Z-score. Nevertheless, these firm characteristics are controlled for in the DiD estimations.

[Insert Table 1 here]

Panels C and D of Table 1 present summary statistics for the full sample of the *Tellabs* decision. This sample includes 19,930 firm-year observations. The average firm in the sample has a leverage ratio of 17.4% and earns a stock return of 23% and return on assets of 2.7% on average. In addition, 39.1% of the sample firms have negative stock returns. The differences between the treated and control firms reported in Panel D are similar to those reported in Panel B.

4.2. Main results

Panel A of Table 2 reports the main regression results for the *Silicon Graphics* decision. The coefficient on *C9FIRM×POST1999* is significantly negative in Column (1), indicating that compared with non-Ninth Circuit firms, Ninth Circuit firms practice less conservative reporting after the *Silicon Graphics* decision than before it. Column (2) reports the result of the alternative specification that includes firm and year fixed effects. The standalone terms of *C9FIRM* and *POST1999* in Equation (5) are subsumed by firm and year fixed effects. The result is consistent with that reported in Column (1). The control variables, *SIZE*, *ROA*, *AGE*, *MB*, *STDRET*, *LEV*, *ALTMAN*, and BIG_4, show significant and expected signs across both columns in accordance with prior literature. Overall, the results for the *Silicon Graphics* decision suggest that managers and directors of Ninth Circuit firms are less prone to engage in conservative reporting practices since the likelihood of shareholders filing securities litigation against their firms is lower following the stringent pleading standard adopted by the Ninth Circuit.

[Insert Table 2 here]

Panel B of Table 2 presents the main regression results for the *Tellabs* decision. It reveals that the coefficients on *C9FIRM×POST2007* are statistically significantly positive in Columns (1) and (2), indicating that following the *Tellabs* ruling, Ninth Circuit firms experience a larger increase in conservative accounting practices compared with non-Ninth Circuit firms,

consistent with litigation risk causally increasing accounting conservatism.[2] By utilizing the Supreme Court decision in *Tellabs* as a reverse legal event, we find that managers and directors of Ninth Circuit firms have more incentives for conservative accounting when the threat of securities class actions rises, which confirms the main results reversely. In short, our findings support H1, indicating that Ninth Circuit firms, on average, exhibit a greater decline (increase) in accounting conservatism following the *Silicon Graphics* decision (the *Tellabs* decision) than non-Ninth Circuit firms do.

4.3. Testing the parallel trends assumption

The validity of our DiD estimation is conditional on the parallel trends assumption, which posits that the levels of conditional conservatism do not differ between firms across different circuits in the absence of the *Silicon Graphics* ruling and the *Tellabs* ruling. To verify this assumption, we replace *C9FIRM×POST1999* in Equation (5) for the sample of *Silicon Graphics* decision with $C9FIRM \times RULING1999^{-2}$, $C9FIRM \times RULING1999^{-1}$, C9FIRM×$RULING1999^{+1}$, and C9FIRM×$RULING1999^{+2}$, which are pre- or post-*Silicon Graphics* ruling period indicators. For example, $C9FIRM \times RULING1999^{-1}$ ($C9FIRM \times RULING1999^{+1}$) indicates that it is one year before (after) the *Silicon Graphics* ruling year. We also replace *C9FIRM×POST2007* in Equation (5) for the sample of the *Tellabs* decision with $C9FIRM \times RULING2007^{-2}$, $C9FIRM \times RULING2007^{-1}$, C9FIRM×$RULING2007^{+1}$, and C9FIRM×$RULING2007^{+2}$, which are pre- or post-*Tellabs* ruling period indicators.

Panel A of Table 3 shows that the coefficients on the pre-*Silicon Graphics* ruling period indicators $C9FIRM \times RULING1999^{-2}$ and $C9FIRM \times RULING1999^{-1}$ are statistically insignificant, whereas the coefficient on the post-*Silicon Graphics* ruling period indicator $C9FIRM \times RULING1999^{+1}$ is significantly positive. The results suggest that the levels of

[2] As a robustness check, we also use firms with headquarters located in circuits other than the First, Fourth, and Sixth Circuits as the control firms (Houston et al., 2019). Because those three circuits applied a similar higher pleading standard as the Ninth Circuit, these circuits are likely to lower their standard after the Supreme Court's *Tellabs* opinion (Choi and Pritchard, 2012). Our inferences are unchanged using this alternative control group.

conditional conservatism do not differ between Ninth Circuit firms and non-Ninth Circuit firms before the *Silicon Graphics* decision. Only after the court ruling, the decline in conservative reporting practices experienced by Ninth Circuit firms is greater than that experienced by non-Ninth Circuit firms. Panel B reveals that the coefficients on the pre-*Tellabs* ruling period indicators $C9FIRM \times RULING2007^{-2}$ and $C9FIRM \times RULING2007^{-1}$ are statistically insignificant, whereas the coefficient on the post-*Tellabs* ruling period indicator $C9FIRM \times RULING2007^{+1}$ is significantly positive. The results indicate that Ninth Circuit firms practice greater conditional conservatism than non-Ninth Circuit firms after the *Tellabs* decision, but not before. Thus, the parallel trends assumption holds in both settings.

[Insert Table 3 here]

4.4. Propensity score matching

To mitigate the concern that our main results may be explained by other observable differences between the treated and control firms prior to the *Silicon Graphics* decision and the *Tellabs* decision, we adopt the propensity score matching procedure to match each Ninth Circuit firm in the year prior to the ruling (i.e., 1998) with non-Ninth Circuit firms on several firm characteristics. Specifically, we first estimate a probit model with industry and year fixed effects to estimate the probability of being a treated firm, using the set of firm characteristics in Equation (5). Next, we estimate the propensity score for each treated firm using the predicted probability from the probit model and match each treated firm to a control firm using the closest estimated propensity score without replacement.

Panel A of Table 4 reports the results of the differences test of the mean values of firm characteristics for the treated firms and the propensity score matched control firms for the *Silicon Graphics* decision. The *p*-values from the *t*-tests of differences indicate that the differences between the treated and matched control firms are insignificant. Panel B shows the univariate comparison of *CSCORE* between the treated and matched control firms. The *CSCORE* of the treated firms is not statistically different from that of the matched control firms in the pre-*Silicon Graphics* ruling period, but is substantially different from that of the matched

control firms at the 1% level in the post-*Silicon Graphics* ruling period. Then, we re-estimate Equation (5) using the propensity score matched sample. Panel C reveals that the regression results are the same as the main results using the full sample reported in Panel A of Table 2, indicating that our results are not driven by other observable differences between the treated and control firms.

[Insert Table 4 here]

We also use the propensity score matching procedure to match each Ninth Circuit firm in the year prior to the *Tellabs* decision (i.e., 2006) with non-Ninth Circuit firms on several firm characteristics. We follow the same procedure to match each treated firm to a control firm using the closest estimated propensity score without replacement. Panel D of Table 4 reveals no significant differences in the mean values of firm characteristics between the treated firms and the propensity score matched control firms. As reported in Panel E, the univariate comparison of *CSCORE* between the treated and matched control firms indicates that the *CSCORE* of the treated firms is not statistically different from that of the matched control firms in the pre-*Tellabs* ruling period, but is substantially different in the post-*Tellabs* ruling period. Panel F reports the regression results, similar to the results using the full sample reported in Panel B of Table 2.

5. Additional analyses

5.1. Exposure to ex ante litigation risk

Previous studies suggest that firm-specific characteristics, including industry membership, size, growth, stock performance, and stock price volatility, affect the *ex ante* litigation risk faced by firms (Francis et al., 1994; Kim and Skinner, 2012). We expect that the reduction in conditional conservatism resulting from the *Silicon Graphics* decision is more pronounced for Ninth Circuit firms facing greater *ex ante* litigation risk, because the likelihood of shareholders filing securities litigation against these firms is lower after the Ninth Circuit Court heightened the pleading standard (Choi and Pritchard, 2012). As regards the *Tellabs*

decision, we expect Ninth Circuit firms facing greater *ex ante* litigation risk to practice more reporting conservatism following the *Tellabs* ruling, since the ruling encourages the filing of securities litigation against firms with headquarters located in the Ninth Circuit.

The sample firms are partitioned into high and low litigation risk groups conditional on whether a firm's *ex ante* litigation risk is above and below the sample median, respectively. We employ the Kim and Skinner (2012) model to estimate a firm's *ex ante* litigation risk in the year before the *Silicon Graphics* decision or the *Tellabs* decision. Using the subsamples with high and low *ex ante* litigation risk, we re-estimate Equation (5) separately. Table 5 shows the results. The coefficient on *C9FIRM×POST1999* is significantly negative for the high litigation risk group in Column (1). This result suggests that following the *Silicon Graphics* decision, Ninth Circuit firms with higher *ex ante* litigation risk exhibit a larger decline in conditional conservatism in reporting practices compared with non-Ninth Circuit firms. Conversely, the coefficient on *C9FIRM×POST1999* for the low litigation risk group is statistically insignificant in Column (2), indicating that the effect of the *Silicon Graphics* decision on reporting conservatism is insignificant for Ninth Circuit firms facing lower *ex ante* litigation risk.

[Insert Table 5 here]

With respect to the *Tellabs* decision, the coefficient on *C9FIRM×POST2007* is significantly positive for the high litigation risk group in Column (3). The coefficient on *C9FIRM×POST2007* is statistically insignificant for the low litigation risk group in Column (4). The results suggest that after the *Tellabs* ruling, Ninth Circuit firms facing higher *ex ante* litigation risk increase their propensity to practice conservative accounting to a greater extent than firms in other circuits. By contrast, Ninth Circuit firms facing lower *ex ante* litigation risk experience no changes in conservative accounting practices. Wald tests show statistically significant differences in conditional conservatism across the groups of high versus low *ex ante* litigation risk following the *Silicon Graphics* decision and the *Tellabs* decision.

5.2. Firm valuation

In this section, we examine whether the observed increased (decreased) accounting conservatism resulting from exogenous changes in firms' litigation risk affects firm value. Gaio and Raposo (2011) find that firms with higher earnings quality have higher valuations. Balakrishnan et al. (2016) provide evidence that more conservative firms face a lower degree of a negative shock to their stock performance during the global financial crisis. Both studies highlight an important role of accounting conservatism in reducing capital suppliers' asymmetric payoffs concerning net assets, thereby lowering firms' cost of capital and strengthening their funding ability. Drawing upon the above findings, we expect that a litigation-risk-induced increase (decrease) in reporting conservatism leads to higher (lower) firm valuations.

We use Tobin's Q as a measure for firm valuation. Tobin's Q has been used as a valuation proxy in prior studies that examine the relationship between accounting conservatism and firm value (e.g., Gaio and Raposo, 2011; Balakrishnan et al., 2016). We re-estimate Equation (5) by replacing *CSCORE* with *TOBINQ*, where *TOBINQ* equals a firm's market value of equity plus book value of liabilities divided by its total assets. We use the same set of control variables in Equation (5) except for *MB*, since *TOBINQ* and *MB* are highly correlated. The results in Table 6 show that the coefficient on *C9FIRM×POST1999* in Column (1) is significantly negative, while the coefficient on *C9FIRM×POST2007* in Column (2) is significantly positive. The finding suggests that the observed increased (decreased) accounting conservatism enhances (reduces) firm value, supporting the notion that firms with more conservative reporting practices induced by exogenous changes in litigation risk enjoy higher firm valuations.

[Insert Table 6 here]

5.3. Alternative conditional conservatism measure

We use Basu's (1997) asymmetric timeliness coefficient as an alternative conditional conservatism measure for robust inferences. Following Basu and Liang (2019) and Lai et al.

(2013), we interact every term in Equation (1) with *C9FIRM*×*POST1999* and *Controls* in Equation (5), and estimate the specification below:

$$EARN = \gamma_0 + \gamma_1 NEG + \gamma_2 RET + \gamma_3 NEG \times RET + \gamma_4 C9FIRM \times POST1999 + C9FIRM \times POST1999 \times (\gamma_5 NEG + \gamma_6 RET + \gamma_7 NEG \times RET) + Controls + Controls \times (NEG + RET + NEG \times RET) + FIRM\ FE + YEAR\ FE + \varepsilon \quad (6)$$

Our primary interest is γ_7, which gauges the incremental timeliness of earnings in recognizing bad news relative to the incremental timeliness of earnings in recognizing good news. Consistent with H1, we predict γ_7 to be negative. Table 7 presents the results. γ_7 is significantly negative in Column (1), indicating that Ninth Circuit firms exhibit a larger decline in conservatism realized in financial reports than non-Ninth Circuit firms following the *Silicon Graphics* decision. As Column (2) shows, we include an additional fixed-effects structure by interacting both state fixed effects and year fixed effects with *NEG*, *RET*, and *NEG*×*RET*. This fixed-effects structure is used to account for any state-level trend and yearly variation in state-level regulation that might affect firms' conservative accounting (Basu and Liang, 2019). The results in Column (2) are consistent with those reported in Column (1).

[Insert Table 7 here]

Next, we replace *POST1999* with *POST2007* in Equation (6) to investigate how the *Tellabs* ruling alters Ninth Circuit firms' propensity to engage in conservative reporting practices. γ_7 is statistically significantly positive in Column (3) of Table 7, suggesting that, compared with non-Ninth Circuit firms, Ninth Circuit firms engage in more conservative accounting practices after the Supreme Court's decision in *Tellabs* than before the ruling. In Column (4), we also add the fixed-effects structure with the set of state-level interaction terms. The results in Column (4) are similar to those reported in Column (3). Overall, our main inferences are unchanged using the alternative measure of conditional conservatism.

5.4. Robustness checks

We perform several robustness tests to check whether our inferences are driven by other factors. First, one potential issue is that the timing of the *Silicon Graphics* ruling in 1999 and

the *Tellabs* ruling in 2007 closely precede two major financial meltdowns—the burst of the dot-com bubble in 2000 and the global financial crisis in 2008, respectively, which can potentially introduce confounding factors into our research design. It is important to acknowledge that we include firm and year fixed effects in most regression models. To the extent that the effects of the confounding factors pertaining to the dot-com bubble or the global financial crisis are either year-specific or firm-specific but time-invariant, the inclusion of year and firm fixed effects in our analyses can largely mitigate the potential bias induced by these confounding factors.

To further alleviate the confounding effect of the dot-com bubble burst that affects high-tech firms across states and years, we follow Houston et al. (2019) and exclude high-tech firms from the *Silicon Graphics* decision sample and re-estimate Equation (5). High-tech firms are defined as those operating in electrical equipment and drug industries based on the Fama-French 48 industry classifications and those identified by Hand (2000) as internet firms (Houston et al., 2019). As shown in Panel A of Table 8, the results continue to hold after excluding high-tech firms. The financial service industry is the industry severely impacted by the global financial crisis. We have excluded the financial service industry in our sample selection process for both the *Silicon Graphics* decision and the *Tellabs* decision samples. We further exclude firms with disclosed financial assets from the *Tellabs* decision sample to ensure that the *Tellabs* decision sample has a minimal exposure of financial assets in the global financial crisis.[3] We find our results (untabulated) remain similar after excluding firms with disclosed financial assets.

[Insert Table 8 here]

Second, since the two court decisions both affect firms headquartered in the Ninth Circuit, and the *Tellabs* decision increases litigation risk, whereas the *Silicon Graphics* decision reduces litigation risk, we isolate the same treated firms affected by both court decisions and examine

[3] Firms with disclosed financial assets are those with non-zero total investment securities (IST) or firms with non-missing gain or loss from total investment securities (ISGT).

the extent and scale of the reversal effect of shareholder litigation threat on accounting conservatism. We identify 369 Ninth Circuit firms appearing in both the *Silicon Graphics* decision and the *Tellabs* decision samples, and re-estimate Equation (5) based on these treated firms. As shown in Panel B of Table 8, the negative coefficient on *C9FIRM×POST1999* and the positive coefficient *C9FIRM×POST2007* are statistically significant. The magnitude of both coefficients is similar to those reported in Table 3. The results suggest that the extent and the scale of the reversal effect continue to hold for the Ninth Circuit firms affected by both court decisions.

Third, we remove firms incorporated in Nevada and Delaware from the sample for the *Silicon Graphics* decision. Given that many US listed firms incorporate in Nevada or Delaware to take advantage of corporate law institutions and reforms (Barzuza, 2012), the self-selection of the state of incorporation possibly confounds the treatment effect of litigation risk on conditional conservatism. As shown in Panel C of Table 8, Columns (1) and (2) reveal that the coefficients on *C9FIRM×POST1999* are significantly negative for both non-Nevada and non-Delaware sample firms, consistent with our main results. We also remove firms incorporated in Nevada or Delaware from the sample of the *Tellabs* decision to check the robustness of our inferences. In Columns (3) and (4) of Panel C, the significantly positive coefficients on *C9FIRM×POST2000* for both non-Nevada and non-Delaware subsamples indicate that our inferences remain unchanged.

Last, we limit the sample period to three years before and three years following the *Silicon Graphics* decision and the *Tellabs* decision to ensure that the pre- and post-court decision periods have the same length. The coefficient on *C9FIRM×POST1999* (*C9FIRM×POST2007*) remains significantly negative (positive) in Panel D of Table 8, indicating that our results are unchanged when using an even window.

5.5. Alternative explanations

We perform several cross-sectional tests to rule out alternative explanations. Prior research has taken small positive earnings surprises and the discontinuities around zero and

prior year earnings as evidence of earnings management practices (Burgstahler and Eames, 2006; Jacob and Jorgensen, 2007). If our results are driven by opportunistic earnings management to avoid missing earnings benchmarks, we can expect the treatment effect of the deterrence potential of securities class actions on conservative financial reporting to be stronger for firms narrowly meeting or beating analysts' earnings expectations, or narrowly avoiding reporting losses or earnings decreases. We partition the sample firms into subsamples conditional on whether the firm narrowly meets or beats analysts' forecast earnings per share by US$0.01 or less, whether the firm's net profit before tax divided by total assets is between 0 and US$0.005, or whether the change in net profit divided by the market value of equity is between 0 and US$0.01. We re-estimate Equation (5) using these subsamples, and find that the coefficients on *C9FIRM×POST1999* (*C9FIRM×POST2007*) remain significantly negative (positive) in all subsamples, and the empirical results do not support this prediction (untabulated).

Next, we consider the role of analysts as external monitors against earnings management. Yu (2008) finds evidence suggesting that analysts have more sophisticated skills and resources to detect opportunistic earnings management relative to conventional governance devices. If our results are driven by managers' earnings management decisions, we expect firms with lower analyst coverage to have a greater treatment effect. We partition the sample firms into high and low analyst coverage groups conditional on whether the number of analysts following the firm is above and below the sample median, respectively. We re-estimate Equation (5) using these two subsamples. As before, our empirical results indicate significantly negative (positive) coefficients on *C9FIRM×POST1999* (*C9FIRM×POST2007*) for both subsamples, which do not support this prediction (untabulated).

Last, we investigate whether other demand explanations for conservatism drive our results. If yes, we expect firms with greater contracting incentives, higher tax or regulation costs to have a stronger treatment effect. With respect to contracting incentives for conservatism, we employ institutional ownership as a proxy for the pressures from institutional

investors on managers and directors for conservative reporting. We partition the sample firms into high and low levels of institutional ownership groups, depending on whether the proportion of institutional shareholdings is above and below the sample median, respectively. To investigate taxation-driven incentives for conservatism, we use the proxy for tax costs of García Lara et al. (2009) and Qiang (2007), and partition the sample firms into high and low tax cost groups conditional on whether the average over three years of the current income tax to tax expense ratio is between 0.8 and 1.2. To examine the regulation-based demand for conservatism, we employ the proxy for regulation costs of García Lara et al. (2009) and Qiang (2007), and partition the sample firms into high and low regulation cost groups depending on whether the firm's sales divided by the industry's total sales over the number of firms in the industry ratio is in the top quartile of the sample. We re-estimate Equation (5) using these subsamples of high and low institutional ownership, tax cost, and regulation cost groups. The untabulated results show that the coefficients on *C9FIRM×POST1999* (*C9FIRM×POST2007*) remain significantly negative (positive) for all subgroups, and all inferences are unchanged in these cross-sectional tests. Thus, we rule out that the other demand explanations for conservatism—contracting, taxation, and regulation—could drive our results. As demonstrated by Erickson (2001), securities class actions consistently outperform other litigation in a litigation hierarchy within corporate law, which makes exogenous increases in litigation risk arising from the threat of securities class actions effective in triggering conservative accounting practices.

6. Conclusion

We use two US court rulings as exogenous shocks to firms' litigation environment and investigate how conservative financial reporting changes following these court decisions. We use the Ninth Circuit's decision in *Silicon Graphics* and the Supreme Court's decision in *Tellabs* as proxies for exogenous changes in firms' litigation risk to examine whether a reduced (increased) threat of class action lawsuits discourages (encourages) conservative accounting

practices. We employ a DiD research design and find that following the *Silicon Graphics* decision (the *Tellabs* decision), Ninth Circuit firms experience a greater decline (increase) in conservative reporting practices compared with non-Ninth Circuit firms, indicating that litigation risk causally increases the conditional conservatism of financial reporting. Our results are robust to a DiD estimation incorporating the propensity score matching procedure.

Moreover, we show that firms facing higher *ex ante* litigation risk have a stronger treatment effect. The litigation-risk-induced increase (decrease) in reporting conservatism leads to higher (lower) firm valuations, highlighting the important role of accounting conservatism in creating values for shareholders. Our findings are robust to using Basu's (1997) asymmetric timeliness coefficient as an alternative conditional conservatism measure and alternative sample specifications. In addition, we perform several cross-sectional analyses to rule out alternative explanations of opportunistic earnings management and other demands for conservatism.

The two natural experiments utilized in this study mitigate endogeneity concerns and enable us to attribute the changes in the degree of conditional conservatism following the court decisions to exogenous changes in firms' litigation risk. By demonstrating that the exogenous changes in litigation risk influence managers' conservative reporting, our findings suggest that the deterrence potential of securities class actions is effective in disciplining managers' accounting practices and triggering conservative reporting. Our evidence adds to the prior studies examining the deterrence potential of securities litigation on other aspects of reporting practices and, more broadly, corporate decisions and behaviors. Thus, the findings of this study inform securities market regulators about the effectiveness of deterrence potential of shareholder litigation in alleviating agency conflicts and deterring financial misconduct and accounting fraud.

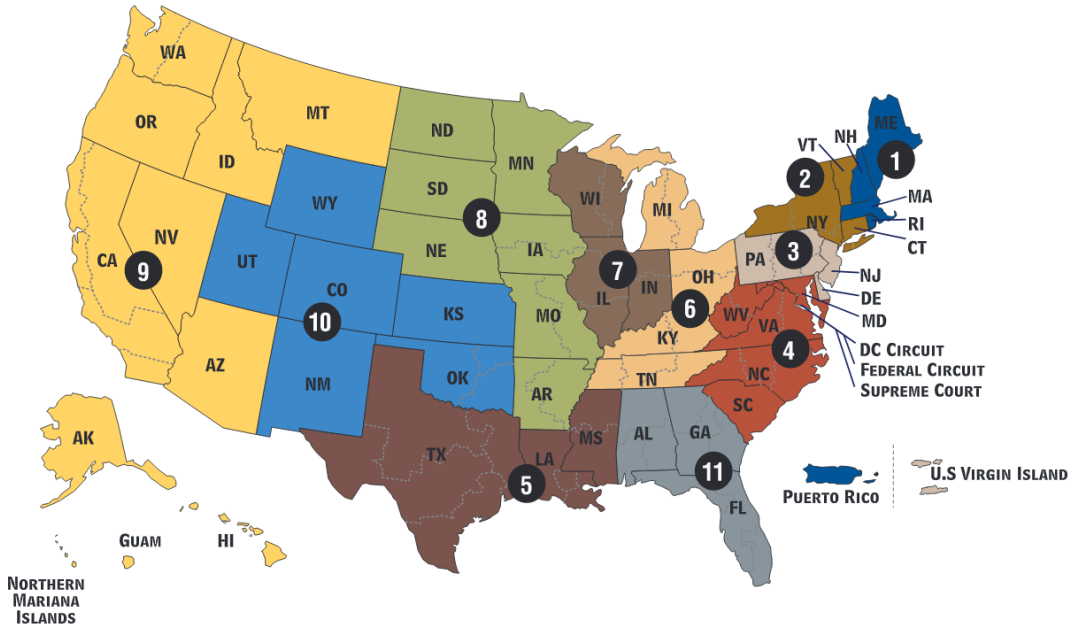
Last, given the globalization of trade and investment activities, investors have increasingly recognized the need to recoup investment losses arising from financial misconduct and accounting fraud internationally and become conscious of legal processes worldwide.

Class actions have been permitted to some degree by both developed and emerging economies in the past 20 years. Our evidence on the effectiveness of the deterrent potential of securities class actions in curbing opportunistic reporting behavior has direct relevance to the global trend of using securities class actions to enforce securities laws in different jurisdictions.

Appendix A: Variable Definitions

Variable	Definition
Legal changes	
C9FIRM	A dummy variable equal to 1 for firms headquartered within the Ninth Circuit and 0 for firms headquartered in other circuits
POST1999	A dummy variable equal to 1 for the post-*Silicon Graphics* ruling period 2000–2002 and 0 for the pre-*Silicon Graphics* ruling period 1995–1998
POST2007	A dummy variable equal to 1 for the post-*Tellabs* ruling period 2008–2011 and 0 for the pre-*Tellabs* ruling period 2003–2006
Accounting conservatism measures	
CSCORE	The Khan and Watts (2009) firm-year measure of conditional conservatism. The estimation procedure is outlined in Section 3.1
EARN	Net income before extraordinary items, scaled by lagged market value of equity
RET	The buy-and-hold return over the 12-month period ending at the fiscal year-end
NEG	A dummy variable equal to 1 if *RET* is negative and 0 otherwise
Firm-level variables	
SIZE	Natural logarithm of market value of equity
ROA	Return on assets, calculated as net income divided by total assets
AGE	Natural logarithm of a firm's age, measuring the age as the number of years for which the firm has been listed in the Center for Research in Security Prices (CRSP) database
MB	The market-to-book ratio, measured as the market value of equity divided by the book value of equity
STDRET	Stock return volatility, measured by the standard deviation of monthly stock returns over the past fiscal year
LEV	Total debts divided by market value of equity
ALTMAN	Altman's Z-score, measured using 1.2 × (net working capital/total assets) + 1.4 × (retained earnings/total assets) + 3.3 × (earnings before interest and taxes/total assets) + 0.6 × (market value of equity/book value of liabilities) + 1.0 × (sales/total assets)
BIG_4	A dummy variable equal to 1 if a firm is audited by a Big Four accounting firm and 0 otherwise
TOBINQ	Market value of equity plus book value of liabilities divided by total assets

Appendix B: The United States Federal Courts Circuit Map (Geographic boundaries of the United States Courts of Appeals and the United States District Courts)



Source: The US Courts (http://www.uscourts.gov/about-federal-courts/court-role-and-structure)

References

Adams, R. B., and D. Ferreira, 2007, A theory of friendly boards, *The Journal of Finance* 62, 217-250.

Aharony, J., C. Liu, and A. Yawson, 2015, Corporate litigation and executive turnover, *Journal of Corporate Finance* 34, 268-292.

Amiram, D., Z. Bozanic, J. D. Cox, Q. Dupont, J. M. Karpoff, and R. Sloan, 2018, Financial reporting fraud and other forms of misconduct: A multidisciplinary review of the literature, *Review of Accounting Studies* 23, 732-783.

Arena, M., and B. Julio, 2015, The effects of securities class action litigation on corporate liquidity and investment policy, *Journal of Financial and Quantitative Analysis*, 251-275.

Arena, M. P., 2018, Corporate litigation and debt, *Journal of Banking & Finance* 87, 202-215.

Balakrishnan, K., R. Watts, and L. Zuo, 2016, The effect of accounting conservatism on corporate investment during the global financial crisis, *Journal of Business Finance & Accounting* 43, 513-542.

Ball, R., S. Kothari, and A. Robin, 2000, The effect of international institutional factors on properties of accounting earnings, *Journal of Accounting and Economics* 29, 1-51.

Ballotti, R. F., and M. J. Gentile, 1987, Elimination or limitation of director liability for Delaware corporations, *Delaware Journal of Corporate Law* 12, 5-23.

Barzuza, M., 2012, Market segmentation: The rise of Nevada as a liability-free jurisdiction, *Virginia Law Review* 98, 935-1000.

Basu, S., 1997, The conservatism principle and the asymmetric timeliness of earnings, *Journal of Accounting and Economics* 24, 3-37.

Basu, S., and Y. I. Liang, 2019, Director–Liability–Reduction laws and conditional conservatism, *Journal of Accounting Research* 57, 889-917.

Bradley, M., and C. A. Schipani, 1989, The relevance of the duty of care standard in corporate governance, *Iowa Law Review* 75, 1-74.

Burgstahler, D., and M. Eames, 2006, Management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises, *Journal of Business Finance & Accounting* 33, 633-652.

Bushman, R. M., and J. D. Piotroski, 2006, Financial reporting incentives for conservative accounting: The influence of legal and political institutions, *Journal of Accounting and Economics* 42, 107-148.

Cazier, R. A., K. J. Merkley, and J. S. Treu, 2020, When are firms sued for qualitative disclosures? Implications of the safe harbor for forward-looking statements, *The Accounting Review* 95, 31-55.

Choi, S. J., 2004, The evidence on securities class actions, *Vanderbilt Law Review* 57, 1465-1525.

Choi, S. J., and A. C. Pritchard, 2012, The Supreme Court's impact on securities class actions: An empirical assessment of Tellabs, *Journal of Law, Economics, and Organization* 28, 850-881.

Chung, C. Y., I. Kim, M. K. Rabarison, T. Y. To, and E. Wu, 2020, Shareholder litigation rights and corporate acquisitions, *Journal of Corporate Finance* 62, 101599.

Chung, H. H., and J. P. Wynn, 2008, Managerial legal liability coverage and earnings conservatism, *Journal of Accounting and Economics* 46, 135-153.

Cox, J. D., R. S. Thomas, and L. Bai, 2009, Do differences in pleading standards cause forum shopping in securities class actions: Doctrinal and empirical analyses, *Wisconsin Law Review* 421-453.

Crane, A. D., and A. Koch, 2018, Shareholder litigation and ownership structure: Evidence from a natural experiment, *Management Science* 64, 5-23.

Cutler, J., A. K. Davis, and K. Peterson, 2019, Disclosure and the outcome of securities litigation, *Review of Accounting Studies* 24, 230-263.

Deng, S., R. H. Willis, and L. Xu, 2014, Shareholder litigation, reputational loss, and bank loan contracting, *Journal of Financial and Quantitative Analysis* 49, 1101-1132.

Donelson, D. C., L. Kettell, J. McInnis, and S. Toynbee, 2021, The need to validate exogenous shocks: Shareholder derivative litigation, universal demand laws and firm behavior, *Journal of Accounting and Economics*, Forthcoming.

Donelson, D. C., J. M. McInnis, and R. D. Mergenthaler, 2012, Rules-based accounting standards and litigation, *The Accounting Review* 87, 1247-1279.

Dong, H., and H. Zhang, 2019, Litigation risk and corporate voluntary disclosure: Evidence from two quasi-natural experiments, *European Accounting Review* 28, 873-900.
Erickson, J. M., 2011, Overlitigating corporate fraud: An empirical examination, *Iowa Law Review* 97, 49-100.
Ettredge, M. L., Y. Huang, and W. Zhang, 2016, Conservative reporting and securities class action lawsuits, *Accounting Horizons* 30, 93-118.
Francis, J., D. Philbrick, and K. Schipper, 1994, Shareholder litigation and corporate disclosures, *Journal of Accounting Research* 32, 137-164.
Fuerman, R. D., 2016, Securities class actions compared to derivative lawsuits: Evidence from the stock option backdating litigation on their relative disciplining of fraudster executives, *Journal of Forensic and Investigative Accounting* 8, 198-217.
Gaio, C., and C. Raposo, 2011, Earnings quality and firm valuation: international evidence, *Accounting & Finance* 51, 467-499.
García Lara, J. M., B. García Osma, and F. Penalva, 2009, The economic determinants of conditional conservatism, *Journal of Business Finance & Accounting* 36, 336-372.
Gibney, B. C., 2001, The end of the unbearable lightness of pleading: Scienter after Silicon Graphics, *UCLA Law Review* 48, 973-1015.
Gong, G., and S. Luo, 2018, Lenders' experience with borrowers' major customers and the debt contracting demand for accounting conservatism, *The Accounting Review* 93, 187-222.
Griffin, P. A., H. A. Hong, Y. Liu, and J. W. Ryou, 2021, The dark side of CEO social capital: Evidence from real earnings management and future operating performance, *Journal of Corporate Finance* 68, 101920.
Grundfest, J. A., and A. C. Pritchard, 2002, Statutes with multiple personality disorders: The value of ambiguity in statutory design and interpretation, *Stanford Law Review*, 627-736.
Hand, J. R. M., 2000, The Role of Economic Fundamentals, Web Traffic, and Supply and Demand in the Pricing of U.S. Internet Stocks (Working Paper, Available at SSRN 221232).
Heninger, W. G., 2001, The association between auditor litigation and abnormal accruals, *The Accounting Review* 76, 111-126.
Hensler, D. R., 2016, Comparative law and regulation, *Can private class actions enforce regulations? Do they? Should they?* (Edward Elgar Publishing, Northampton, Massachusetts).
Hersel, M. C., C. A. Helmuth, M. L. Zorn, C. Shropshire, and J. W. Ridge, 2019, The corrective actions organizations pursue following misconduct: A review and research agenda, *Academy of Management Annals* 13, 547-585.
Holthausen, R. W., and R. L. Watts, 2001, The relevance of the value-relevance literature for financial accounting standard setting, *Journal of Accounting and Economics* 31, 3-75.
Hopkins, J., 2018, Do securities class actions deter misreporting?, *Contemporary Accounting Research* 35, 2030-2057.
Houston, J. F., C. Lin, S. Liu, and L. Wei, 2019, Litigation risk and voluntary disclosure: Evidence from legal changes, *The Accounting Review* 94, 247-272.
Huang, S., S. Roychowdhury, and E. Sletten, 2020, Does litigation deter or encourage real earnings management?, *The Accounting Review* 95, 251-278.
Huijgen, C., and M. Lubberink, 2005, Earnings conservatism, litigation and contracting: The case of cross‐listed firms, *Journal of Business Finance & Accounting* 32, 1275-1309.
Jacob, J., and B. N. Jorgensen, 2007, Earnings management and accounting income aggregation, *Journal of Accounting and Economics* 43, 369-390.
Jayaraman, S., 2012, The effect of enforcement on timely loss recognition: Evidence from insider trading laws, *Journal of Accounting and Economics* 53, 77-97.
Johnson, M. F., R. Kasznik, and K. K. Nelson, 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., K. K. Nelson, and A. C. Pritchard, 2000, In Re Silicon Graphics Inc.: Shareholder wealth effects resulting from the interpretation of the Private Securities Litigation Reform Act's pleading standard, *Southern California Law Review* 73, 773-810.

Karpoff, J. M., A. Koester, D. S. Lee, and G. S. Martin, 2017, Proxies and databases in financial misconduct research, *The Accounting Review* 92, 129-163.
Karpoff, J. M., D. S. Lee, and G. S. Martin, 2008a, The consequences to managers for financial misrepresentation, *Journal of Financial Economics* 88, 193-215.
Karpoff, J. M., D. S. Lee, and G. S. Martin, 2008b, The cost to firms of cooking the books, *Journal of Financial and Quantitative Analysis* 43, 581-611.
Karpoff, J. M., and J. R. J. Lott, 1993, The reputational penalty firms bear from committing criminal fraud, *The Journal of Law and Economics* 36, 757-802.
Karpoff, J. M., and M. D. Wittry, 2018, Institutional and legal context in natural experiments: The case of state antitakeover laws, *The Journal of Finance* 73, 657-714.
Kellogg, R. L., 1984, Accounting activities, security prices, and class action lawsuits, *Journal of Accounting and Economics* 6, 185-204.
Khan, M., and R. L. Watts, 2009, Estimation and empirical properties of a firm-year measure of accounting conservatism, *Journal of Accounting and Economics* 48, 132-150.
Kim, I., and D. J. Skinner, 2012, Measuring securities litigation risk, *Journal of Accounting and Economics* 53, 290-310.
Lafond, R., and S. Roychowdhury, 2008, Managerial ownership and accounting conservatism, *Journal of Accounting Research* 46, 101-135.
Lai, C., M. Lu, and Y. Shan, 2013, Has Australian financial reporting become more conservative over time?, *Accounting & Finance 53*(3), 731-761.
Laux, V., 2008, Board independence and CEO turnover, *Journal of Accounting Research* 46, 137-171.
Le, C.H.A., Y. Shan, and S. Taylor, 2020, Executive compensation and financial performance measures: Evidence from significant financial institutions, *Australian Accounting Review 30*(3), 159-177.
Levine, D. M., and A. C. Pritchard, 1998, The securities litigation uniform standards act of 1998: The sun sets on California's blue sky laws, *Business Lawyer* 54, 1-54.
Lin, C., S. Liu, and G. Manso, 2021, Shareholder litigation and corporate innovation, *Management Science* 67, 3346-3367.
Liu, C., J. Aharony, G. Richardson, and A. Yawson, 2016, Corporate litigation and changes in CEO reputation: Guidance from US Federal Court lawsuits, *Journal of Contemporary Accounting & Economics* 12, 15-34.
Lu, M., Y. Shan, S. Wright, and Y. Yu, 2020, Operating cash flow asymmetric timeliness in Australia, *Accounting & Finance* 60, 587-627.
McTier, B. C., and J. K. Wald, 2011, The causes and consequences of securities class action litigation, *Journal of Corporate Finance* 17, 649-665.
Nguyen, N. H., H. V. Phan, and E. Lee, 2020, Shareholder litigation rights and capital structure decisions, *Journal of Corporate Finance* 62, 101601.
Pritchard, A. C., and H. A. Sale, 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.
Qiang, X., 2007, The effects of contracting, litigation, regulation, and tax costs on conditional and unconditional conservatism: Cross‐sectional evidence at the firm level, *The Accounting Review* 82, 759-796.
Shan, Y. and T. and Walter, 2016, Towards a set of design principles for executive compensation contracts, *Abacus* 52(4), 619-684.
Taylor, L. A., 2010, Why are CEOs rarely fired? Evidence from structural estimation, *The Journal of Finance* 65, 2051-2087.
Watts, R. L., 2003a, Conservatism in accounting part I: Explanations and implications, *Accounting Horizons* 17, 207-221.
———, 2003b, Conservatism in accounting part II: Evidence and research opportunities, *Accounting Horizons* 17, 287-301.
Yu, F. F., 2008, Analyst coverage and earnings management, *Journal of Financial Economics* 88, 245-271.

Table 1

Descriptive statistics

Panel A: Sample for the *Silicon Graphics* decision

Variable	N	Mean	Std. Dev	P25	Median	P75
EARN	27,925	0.008	0.177	-0.021	0.041	0.080
RET	27,854	0.155	0.704	-0.291	0.016	0.386
NEG	27,854	0.485	0.500	0.000	0.000	1.000
CSCORE	27,925	0.123	0.108	0.065	0.118	0.168
SIZE	27,925	5.145	2.005	3.658	4.992	6.475
ROA	27,925	0.021	0.139	-0.020	0.040	0.092
AGE	27,925	4.650	1.007	3.892	4.663	5.442
MB	27,925	3.083	3.804	1.143	1.955	3.437
STDRET	27,925	0.164	0.081	0.106	0.148	0.202
LEV	27,925	0.213	0.191	0.028	0.184	0.345
ALTMAN	27,925	5.819	7.444	2.453	3.807	6.142
BIG_4	27,925	0.833	0.373	1.000	1.000	1.000

Panel B: Treated and control firms of the sample for the *Silicon Graphics* decision

	Treated firms (i.e., Ninth Circuit firms) (N=5178)		Control firms (i.e., non-Ninth Circuit firms) (N=22747)		
Variable	Mean	Median	Mean	Median	Diff. in Mean
EARN	0.000	0.028	0.010	0.043	-0.010***
RET	0.207	0.004	0.144	0.019	0.064***
NEG	0.495	0.000	0.483	0.000	0.013
CSCORE	0.114	0.111	0.125	0.120	-0.011***
SIZE	5.175	5.014	5.138	4.983	0.038
ROA	0.012	0.035	0.023	0.041	-0.011***
AGE	4.502	4.500	4.683	4.718	-0.182***
MB	3.639	2.238	2.957	1.898	0.682***
STDRET	0.190	0.175	0.158	0.142	0.032***
LEV	0.165	0.093	0.224	0.203	-0.059***
ALTMAN	7.273	4.460	5.490	3.702	1.783***
BIG_4	0.884	1.000	0.822	1.000	0.062***

Table 1 (contd.)

Panel C: Sample for the *Tellabs* decision

Variable	N	Mean	Std. Dev	P25	Median	P75
EARN	19,930	0.003	0.183	-0.013	0.042	0.073
RET	19,879	0.230	0.657	-0.167	0.115	0.453
NEG	19,879	0.391	0.488	0.000	0.000	1.000
CSCORE	19,930	0.114	0.187	0.027	0.114	0.213
SIZE	19,930	6.169	1.924	4.833	6.171	7.447
ROA	19,930	0.027	0.133	-0.012	0.045	0.093
AGE	19,930	5.058	0.881	4.533	5.112	5.687
MB	19,930	3.036	3.434	1.344	2.096	3.438
STDRET	19,930	0.158	0.076	0.104	0.141	0.193
LEV	19,930	0.174	0.176	0.003	0.135	0.284
ALTMAN	19,930	5.176	6.032	2.428	3.831	6.101
BIG_4	19,930	0.777	0.416	1.000	1.000	1.000

Panel D: Treated and control firms of the sample for the *Tellabs* decision

	Treated firms (i.e., Ninth Circuit firms) (N=3792)		Control firms (i.e., non-Ninth Circuit firms) (N=16138)		
Variable	Mean	Median	Mean	Median	Diff. in Mean
EARN	-0.015	0.026	0.007	0.046	-0.022***
RET	0.230	0.085	0.230	0.122	-0.000
NEG	0.422	0.000	0.384	0.000	0.038***
CSCORE	0.101	0.102	0.117	0.118	-0.016***
SIZE	6.225	6.183	6.156	6.168	0.068**
ROA	0.009	0.036	0.032	0.047	-0.023***
AGE	4.940	4.990	5.086	5.147	-0.146***
MB	3.311	2.283	2.971	2.059	0.340***
STDRET	0.171	0.154	0.155	0.138	0.016***
LEV	0.131	0.047	0.184	0.155	-0.053***
ALTMAN	5.890	4.347	5.008	3.759	0.883***
BIG_4	0.803	1.000	0.771	1.000	0.032***

Panels A and B of this table report descriptive statistics for the sample for the *Silicon Graphics* decision for the period 1995–2002, excluding 1999 (the year of the *Silicon Graphics* decision). Panels C and D of this table report descriptive statistics for the sample for the *Tellabs* decision for the period 2003–2011, excluding 2007 (the year of the *Tellabs* decision). Treated firms are firms with headquarters in the states within the Ninth Circuit, and control firms are firms with headquarters outside the Ninth Circuit. All continuous variables are winsorized at the top and bottom 1%. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 2

Effect of litigation risk on conditional conservatism

Panel A: Effect of the *Silicon Graphics* decision on conditional conservatism		
	CSCORE	CSCORE
	(1)	(2)
C9FIRM	0.007**	
	(0.015)	
POST1999	0.095***	
	(0.000)	
C9FIRM×POST1999	-0.016**	-0.017***
	(0.017)	(0.009)
SIZE	-0.027***	-0.027***
	(0.000)	(0.000)
ROA	0.022***	0.023***
	(0.000)	(0.000)
AGE	0.003***	0.010***
	(0.000)	(0.000)
MB	-0.005***	-0.005***
	(0.000)	(0.000)
STDRET	0.066***	0.058***
	(0.000)	(0.000)
LEV	0.247***	0.243***
	(0.000)	(0.000)
ALTMAN	0.001***	0.001***
	(0.000)	(0.000)
BIG_4	0.009***	0.007***
	(0.000)	(0.003)
Firm fixed effects	No	Yes
Year fixed effects	No	Yes
N	27,925	27,925
Adj. R^2	0.513	0.545

Table 2 (contd.)

Panel B: Effect of the *Tellabs* decision on conditional conservatism		
	CSCORE	CSCORE
	(1)	(2)
C9FIRM	-0.023***	
	(0.000)	
POST2007	-0.052***	
	(0.000)	
C9FIRM×POST2007	0.038***	0.017***
	(0.000)	(0.001)
SIZE	-0.039***	-0.039***
	(0.000)	(0.000)
ROA	0.018**	0.034***
	(0.050)	(0.000)
AGE	0.004***	0.001
	(0.001)	(0.588)
MB	-0.002***	-0.002***
	(0.000)	(0.000)
STDRET	0.186***	0.029
	(0.000)	(0.161)
LEV	0.157***	0.155***
	(0.000)	(0.000)
ALTMAN	-0.000*	-0.001***
	(0.050)	(0.000)
BIG_4	0.010***	-0.001
	(0.000)	(0.800)
Firm fixed effects	No	Yes
Year fixed effects	No	Yes
N	19,930	19,930
Adj. R^2	0.209	0.407

Panel A of this table reports DiD estimates from regressions examining the effect of the Ninth Circuit's decision in *Silicon Graphics* on conditional conservatism for the period 1995–2002, excluding 1999 (the year of the *Silicon Graphics* decision). Panel B of this table reports DiD estimates from regressions examining the effect of the Supreme Court's decision in *Tellabs* on conditional conservatism for the period 2003–2011, excluding 2007 (the year of the *Tellabs* decision). All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 3

Testing for the parallel trends assumption

Panel A: Testing for the parallel trends assumption for the sample of *Silicon Graphics* decision

	CSCORE
C9FIRM×RULING1999^{-2}	-0.002
	(0.394)
C9FIRM×RULING1999^{-1}	0.016
	(0.216)
C9FIRM×RULING1999^{+1}	-0.012***
	(0.003)
C9FIRM×RULING1999^{+2}	-0.007
	(0.215)
Controls	Yes
Firm fixed effects	Yes
Year fixed effects	Yes
N	27,925
Adj. R^2	0.608

Panel B: Testing for the parallel trends assumption for the sample of *Tellabs* decision

	CSCORE
C9FIRM×RULING2007^{-2}	-0.003
	(0.176)
C9FIRM×RULING2007^{-1}	-0.021
	(0.115)
C9FIRM×RULING2007^{+1}	0.043***
	(0.001)
C9FIRM×RULING2007^{+2}	0.004
	(0.290)
Controls	Yes
Firm fixed effects	Yes
Year fixed effects	Yes
N	19,930
Adj. R^2	0.412

Panel A of this table reports the timing of changes in conditional conservatism in year −2, −1, 1, and 2 relative to the year of the *Silicon Graphics* decision. Panel B of this table report reports the timing of changes in conditional conservatism in year −2, −1, 1, and 2 relative to the year of the *Tellabs* decision. All regressions contain the same set of control variables as in Table 2. All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 4

Propensity score matching

Panel A: Post-matching differences for the sample of the *Silicon Graphics* decision

	Control firms	Treated firms	*t*-statistic	*p*-value
CSCORE	0.129	0.125	2.29	0.022
SIZE	5.270	5.323	-1.21	0.226
ROA	0.025	0.028	-0.88	0.382
AGE	4.524	4.528	-0.19	0.853
MB	3.253	3.272	-0.23	0.822
STDRET	0.180	0.183	-1.60	0.110
LEV	0.158	0.158	-0.19	0.852
ALTMAN	7.070	7.226	-0.81	0.418
BIG_4	0.867	0.880	-1.53	0.126

Panel B: Univariate comparison for the sample of the *Silicon Graphics* decision

	Control firms	Treated firms	*t*-statistic	*p*-value
Pre-*Silicon Graphics* ruling				
CSCORE	0.169	0.164	1.100	0.271
Post-*Silicon Graphics* ruling				
CSCORE	0.097	0.089	2.843	0.005

Panel C: Difference-in-Differences estimation for the sample of the *Silicon Graphics* decision

	CSCORE
C9FIRM×POST1999	-0.018**
	(0.017)
Controls	Yes
Firm fixed effects	Yes
Year fixed effects	Yes
N	6,968
Adj. R^2	0.664

Table 4 (contd.)

Panel D: Post-matching differences for the sample of the *Tellabs* decision

	Control firms	Treated firms	*t*-statistic	*p*-value
CSCORE	0.091	0.098	-2.71	0.007
SIZE	6.346	6.279	1.35	0.178
ROA	0.024	0.021	0.21	0.836
AGE	4.954	4.942	0.94	0.348
MB	3.272	3.252	0.29	0.773
STDRET	0.157	0.164	-1.09	0.274
LEV	0.135	0.131	0.48	0.632
ALTMAN	6.047	6.108	-0.32	0.748
BIG_4	0.794	0.806	-1.17	0.243

Panel E: Univariate comparison for the sample of the *Tellabs* decision

	Control firms	Treated firms	*t*-statistic	*p*-value
Pre-*Tellabs* ruling				
CSCORE	0.085	0.088	-0.747	0.455
Post-*Tellabs* ruling				
CSCORE	0.107	0.112	-2.141	0.032

Panel F: Difference-in-Differences estimation for the sample of the *Tellabs* decision

	CSCORE
C9FIRM×POST2007	0.014***
	(0.001)
Controls	Yes
Firm fixed effects	Yes
Year fixed effects	Yes
N	6,716
Adj. R^2	0.408

Panel A of this table presents the post-matching differences of the mean values of the firm characteristics of the treated firms and the propensity score matched control firms for the sample of the *Silicon Graphics* decision. Panel B provides the univariate comparison of conditional conservatism (*CSCORE*) for both pre- and post-*Silicon Graphics* ruling periods. Panel C reports DiD estimates from regressions examining the effect of the Ninth Circuit's decision in *Silicon Graphics* on conditional conservatism using the propensity score matched sample. Panel D presents the post-matching differences of the mean values of the firm characteristics of the treated firms and the propensity score matched control firms for the sample of the *Tellabs* decision. Panel E provides the univariate comparison of conditional conservatism (*CSCORE*) for both pre- and post-*Tellabs* ruling periods. Panel F reports DiD estimates from regressions examining the effect of the Supreme Court's decision in *Tellabs* on conditional conservatism using the propensity score matched sample. All regressions contain the same set of control variables as in Table 2. All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 5

Exposure to *ex ante* litigation risk

	High CSCORE	Low CSCORE	High CSCORE	Low CSCORE
	(1)	(2)	(3)	(4)
C9FIRM×POST1999	-0.019**	0.117		
	(0.011)	(0.299)		
C9FIRM×POST2007			0.036***	0.001
			(0.002)	(0.968)
Wald statistic	6.72***		2.94***	
Controls	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	6,458	6,506	5,963	6,155
Adj. R^2	0.672	0.438	0.447	0.526

Columns (1) and (2) of this table report DiD estimates from regressions examining the effect of the Ninth Circuit's decision in *Silicon Graphics* on conditional conservatism for high and low *ex ante* litigation risk groups, respectively. Columns (3) and (4) of this table report DiD estimates from regressions examining the effect of the Supreme Court's decision in *Tellabs* on conditional conservatism for high and low *ex ante* litigation risk groups, respectively. We sort firms into high and low *ex ante* litigation risk groups based on whether the firm's *ex ante* litigation risk is above and below the sample median, respectively. We follow Kim and Skinner (2012) to estimate the firm's *ex ante* litigation risk in the year before the *Silicon Graphics* decision and the *Tellabs* decision. The Wald test is used to test the difference between the estimated coefficients for the subsamples. All regressions contain the same set of control variables as in Table 2. All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 6

Firm valuation

	TOBINQ (1)	TOBINQ (2)
C9FIRM×POST1999	-0.127***	
	(0.008)	
C9FIRM×POST2007		0.184***
		(0.000)
Controls	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	25,574	19,930
Adj. R^2	0.492	0.399

Column (1) of this table reports DiD estimates from regressions examining the effect of the Ninth Circuit's decision in *Silicon Graphics* on firm valuation for the period 1995–2002, excluding 1999 (the year of the *Silicon Graphics* decision). Column (2) of this table reports DiD estimates from regressions examining the effect of the Supreme Court's decision in *Tellabs* on firm valuation for the period 2003–2011, excluding 2007 (the year of the *Tellabs* decision). All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. All regressions contain the same set of control variables as in Table 2 except for *MB*. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 7

Alternative conservatism measure

Panel A: the *Silicon Graphics* decision		
	EARN	EARN
	(1)	(2)
NEG	-0.024***	0.269***
	(0.000)	(0.000)
RET	0.020***	0.410***
	(0.001)	(0.000)
NEG×RET	0.129***	-0.443**
	(0.000)	(0.012)
C9FIRM×POST1999	-0.049***	-0.026***
	(0.000)	(0.000)
C9FIRM×POST1999×NEG	-0.004	0.071***
	(0.502)	(0.000)
C9FIRM×POST1999×RET	-0.009	0.086***
	(0.330)	(0.000)
C9FIRM×POST1999×NEG×RET	-0.112***	-0.113***
	(0.008)	(0.005)
Controls	Yes	Yes
Controls×NEG	Yes	Yes
Controls×RET	Yes	Yes
Controls×NEG×RET	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
State fixed effects×(NEG, RET, NEG×RET)	No	Yes
Year fixed effects×(NEG, RET, NEG×RET)	No	Yes
N	25,590	25,590
Adj. R^2	0.085	0.082

Table 7 (contd.)

Panel B: the *Tellabs* decision

	EARN	EARN
	(1)	(2)
NEG	-0.053	-0.506***
	(0.101)	(0.000)
RET	-0.072	-0.608***
	(0.100)	(0.000)
NEG×RET	0.389***	0.562**
	(0.001)	(0.044)
C9FIRM×POST2007	-0.001	-0.001
	(0.852)	(0.812)
C9FIRM×POST2007×NEG	0.001	-0.072***
	(0.893)	(0.000)
C9FIRM×POST2007×RET	-0.029**	-0.127***
	(0.014)	(0.000)
C9FIRM×POST2007×NEG×RET	0.051**	0.098**
	(0.036)	(0.032)
Controls	Yes	Yes
Controls×NEG	Yes	Yes
Controls×RET	Yes	Yes
Controls×NEG×RET	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
State fixed effects×(NEG, RET, NEG×RET)	No	Yes
Year fixed effects×(NEG, RET, NEG×RET)	No	Yes
N	17,888	17,888
Adj. R^2	0.234	0.238

Panel A of this table reports DiD estimates from regressions examining the effect of the Ninth Circuit's decision in *Silicon Graphics* on conditional conservatism using Basu's (1997) asymmetric timeliness coefficient as an alternative conditional conservatism measure. Panel B of this table reports DiD estimates from regressions examining the effect of the Supreme Court's decision in *Tellabs* on conditional conservatism using Basu's (1997) asymmetric timeliness coefficient as an alternative conditional conservatism measure. All regressions contain the same set of control variables as in Table 2. All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.

Table 8

Robustness checks

Panel A: Excluding high-tech firms

	CSCORE
C9FIRM×POST1999	-0.017**
	(0.013)
Controls	Yes
Firm fixed effects	Yes
Year fixed effects	Yes
N	24,740
Adj. R^2	0.543

Panel B: Same treated firms affected by both court decisions

	CSCORE	CSCORE
	(1)	(2)
C9FIRM×POST1999	-0.014***	
	(0.009)	
C9FIRM×POST2007		0.019***
		(0.002)
Controls	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	5,676	5,615
Adj. R^2	0.516	0.204

Table 8 (contd.)

Panel C: Removing Nevada and Delaware firms

	non-Nevada CSCORE	non-Delaware CSCORE	non-Nevada CSCORE	non-Delaware CSCORE
	(1)	(2)	(3)	(4)
C9FIRM×POST1999	-0.008***	-0.002***		
	(0.004)	(0.009)		
C9FIRM×POST2007			0.016***	0.017***
			(0.000)	(0.002)
Controls	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	18,912	8,867	14,841	6,078
Adj. R^2	0.653	0.657	0.391	0.415

Panel D: Even windows

	CSCORE	CSCORE
	(1)	(2)
C9FIRM×POST1999	-0.014***	
	(0.000)	
C9FIRM×POST2007		0.020***
		(0.000)
Controls	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
N	21,598	14,960
Adj. R^2	0.592	0.356

Panel A of this table reports DiD estimates from regressions examining the effect of the Ninth Circuit's decision in *Silicon Graphics* on conditional conservatism, excluding high-tech firms. Panel B reports DiD estimates from regressions examining the effect of the *Silicon Graphics* decision and the *Tellabs* decision on conditional conservatism for the same treated firms affected by both court decisions. Panel C reports DiD estimates from regressions examining the effect of the *Silicon Graphics* decision and the *Tellabs* decision on conditional conservatism for non-Nevada and non-Delaware firms. Panel D of this table reports DiD estimates from regressions examining the effect of the *Silicon Graphics* decision on conditional conservatism for the period 1996–2002, excluding 1999 (the year of the *Silicon Graphics* decision), and the effect of the *Tellabs* decision on conditional conservatism for the period 2004–2010, excluding 2007 (the year of the *Tellabs* decision). All regressions contain the same set of control variables as in Table 2. All continuous variables are winsorized at the top and bottom 1%. Robust standard errors are clustered at the state level where firms are headquartered. *p*-values are reported in parentheses. Variable definitions are provided in Appendix A. ***, **, and * indicate significance at the 1%, 5%, and 10% levels for a two-tailed test, respectively.