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Peer performance and the asymmetric timeliness of earnings recognition

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ABSTRACT

This paper investigates the impact of peer performance on the asymmetric timeliness of earnings recognition. We find a positive relationship between peers' weak performance and timely bad news disclosure. Our results are robust to a variety of tests, including instrument variable approach, difference-in-differences analysis, alternative measures and subsample analysis. Consistent with the notion that weak peer performance increases investors' demand for information, the relationship is more profound for firms suffering from high information externality, with weak governance and high information asymmetry. Furthermore, we find that the relationship is difficult to reconcile with the explanation of managers' herding behaviour. In addition, we show that conservative accounting information disclosure due to weak peer performance alleviates managerial bad news hoarding and information asymmetry for underperforming firms, but distorts investment decisions for outperforming firms. We highlight the spillover effect of peer performance on conservative accounting information and the related heterogeneous outcomes.

1. Introduction

It is well documented in the information spillover literature that firms reflect peer firms' information on their own decision-making, and peer firms' performance is important information that plays a significant role in shaping corporate governance.[1] For instance, some firms may link peer performance with managerial compensation and turnover decision to evaluate managers' efforts. Similarly, due to the presence of information asymmetry, investors could use peer firms' information to update beliefs about focal firms' performance. However, much less is known about the influence of peer performance on focal firms' financial reporting strategy. Accounting conservatism is one of the most influential properties of financial reporting (Sterling, 1970), and it requires managers to disclose bad news in a more timely manner than good news (Basu, 1997); therefore, in this study, we extend the literature on information spillover by investigating how peer firms' performance affects accounting conservatism.[2]

From the monitoring perspective, investors could demand more timely bad news disclosure to reduce information asymmetry and oversee managers' behaviours (e.g., Watts, 2003a; Zhang, 2008). Based on mosaic theory, investors' demands should take peer firms' information into account if peer information plays a role in supplementing the focal firm's information set (Cheynel & Levine, 2020; Pozen, 2005). Thus, peer underperformance could change investors' expectations of focal firms (e.g., Kothari, Shu, & Wysocki, 2009; Ng, Tuna, & Verdi, 2013; Skinner, 1994) and raise their concern about managerial bad news hoarding (e.g., Callen & Fang, 2013; Shroff, Verdi, & Yost, 2017). Accordingly, investors have strong monitoring incentives and demand more timely bad news disclosure to ease their concerns about corporate performance.

From the herding perspective, according to covariation theory, managers with career and reputation concerns have an incentive to

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[1] Numerous studies provide evidence that peers' information has a great impact on capital structure (Bernard et al., 2021; Francis et al., 2016; MacKay & Phillips, 2005), innovation (Bessen & Maskin, 2009; Im & Shon, 2019; Zeng, 2001), cash holdings (Chen et al., 2019; Machokoto et al., 2021), investment (Im, Liu, & Park, 2021) and dividend payout (Adhikari & Agrawal, 2018).

[2] In this study, we follow prior studies (Ahmed & Duellman, 2013; Ball & Shivakumar, 2005; Basu, 1997) and use accounting conservatism, timely bad news disclosure, timely recognition of losses and asymmetric timeliness of earnings interchangeably.

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decrease their responsibility for poor performance by herding on other firms' bad new disclosures (Baginski, Hassell, & Hillison, 2000; Scharfstein & Stein, 1990). Such a herding incentive is stronger for managers with insufficient skill and confidence (Jiang & Verardo, 2018; Scharfstein & Stein, 1990). Thus, managers aware of poor peer performance might voluntarily announce bad news, especially for incompetent and less overconfident managers. Based on the monitoring and herding perspectives, we hypothesize that weak peer performance is positively associated with the timely recognition of losses.

Another strand of literature investigates the outcome of adopting accounting conservatism. The timely recognition of losses limits the ability of managers to exaggerate accounting figures and hoard bad news, which reduces information asymmetry and stock price crash risk (e.g., Kim & Zhang, 2016; Watts, 2003a). However, accounting conservatism may limit managers' incentive to pursue high-risk but positive net present value (NPV) investments, affecting firms' long-term performance (e.g., Kravet, 2014; Roychowdhury, 2010). Given the conflicting predictions in the literature, we further investigate the outcome of accounting conservatism induced by weak peer performance.

Using the data for US-listed firms from 1987 to 2019, we find that weak peer performance has a significant and positive impact on timely bad news disclosure, and such an impact increases with the deteriorating peer performance since investors are more sensitive to bad news than good news. Our findings are robust to a variety of tests, including the instrument variable approach, difference-in-differences analysis, alternative measures and subsample analysis.

We then conduct several cross-sectional tests to consolidate the potential channels. Consistent with the notion that weak peer performance increases timely bad news disclosure through investors' monitoring incentive, the relationship between peer performance and accounting conservatism is more profound for firms facing high information externality and with low governance quality and high information asymmetry. We also find that the effect is greater for firms that adopt relative performance evaluation (RPE) and experience the implementation of the Inevitable Disclosure Doctrine, implying that weak peer performance induces investors to demand the timelier recognition of bad news if managers have a compensation incentive to hide bad news.

Furthermore, we find that the impact of peer performance is not statistically distinguishable between managers with high and low ability and between overconfident and non-overconfident managers, which does not support the covariation theory that managers tend to herd others by deliberately recognizing bad news earlier. Finally, we further explore the consequence of accounting conservatism induced by weak peer performance. We document that such a decision imposes the constraint of bad news hoarding on underperforming firms and the constraint of investment on outperforming firms.

This study has several contributions. Firstly, we contribute to the literature on information spillover (e.g., Adhikari & Agrawal, 2018; Albuquerque, 2009; Francis, Hasan, & Kostova, 2016). In contrast to most studies that concentrate on the information spillover effect on strategy decisions (e.g., Bessen & Maskin, 2009; Fuertes & Robles, 2021; Im & Shon, 2019), we shed light on peer firms' information from the perspective of financial reporting strategy. Our study is related to that of Du and Shen (2018), who investigate the relationship between peer performance and earnings management. However, our study offers new insights into the literature as earnings management and accounting conservatism are two different earnings attributes (Francis, LaFond, Olsson, & Schipper, 2004) and earnings management is not a reasonable explanation for accounting conservatism (Watts, 2003b).

Secondly, our study contributes to the literature on the determinants of accounting conservatism (e.g., Ahmed & Duellman, 2013; Basu, 1997; LaFond & Watts, 2008) by documenting the non-trivial role of peer performance in the demand for the timely recognition of losses. We also find that the impact is driven by the monitoring incentive of investors rather than managerial herding behaviour. In addition, by discovering the nonlinear relationship between peer performance and accounting conservatism, we provide supporting evidence for the asymmetric reactions of investors to good and bad news (e.g., Kothari et al., 2009; Ng et al., 2013; Skinner, 1994).

Thirdly, this study contributes to the debate on the benefit and cost of conservative financial reporting (e.g., Francis & Martin, 2010; Kim & Zhang, 2016; Kravet, 2014). The Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) opposed conservative accounting and removed the requirement for accounting conservatism from the joint conceptual framework in 2010 (FASB, 2010; IASB, 2010). We provide new evidence for the heterogeneous outcome of conservative financial reporting induced by weak peer performance. We contribute to the debate by highlighting the benefit of reduced information asymmetry for underperforming firms and the drawback of constrained investment for outperforming firms.

Fourthly, our finding that investors demand more accounting conservatism when peer firms have weak performance is consistent with the notion that peer information may serve as a supplement to own-firm disclosures (Cheynel & Levine, 2020), which is consistent with the prediction of mosaic theory (Pozen, 2005). However, we do not find a significantly positive relationship between peer weak performance and focal firms' timely bad news disclosure due to managers' herding behaviour, which is inconsistent with the prediction of covariation theory (Kelley, 1967; Koonce & Mercer, 2005).

Finally, our study has significant implications. During the period of shocks for the entire market (e.g., financial crisis, coronavirus pandemic), if investors demand more accounting conservatism due to weak peer performance, investors can benefit from the reduced information asymmetry of low-quality firms, but such demand also impedes high-quality firms that have experienced financial losses from recovering and harm their long-term performance. Our study appeals to policymakers to consider the side effects of accounting conservatism on investment performance when making a policy decision.

The remainder of this study is organized as follows. Section 2 presents the literature review and hypothesis development. Section 3 outlines the data and methodology. Section 4 presents the empirical results, and Section 5 concludes.

2. Literature review and hypothesis development

Based on mosaic theory, if peer firms' information plays a role in complementing a firm's information set, the decisions of managers, investors, and analysts should reflect not only the firms' own information but also that of peer companies' (Cheynel & Levine, 2020; Pozen, 2005). In line with this argument, previous studies document that managers are more likely to make decisions based on the decisions of their peers. For example, managers take peer financing decisions as an essential reference for their own financing decisions (Bernard, Kaya, & Wertz, 2021; Leary & Roberts, 2014; MacKay & Phillips, 2005). Firms have an incentive to imitate peer innovation (Bessen & Maskin, 2009; Im & Shon, 2019; Zeng, 2001). Peer cash holdings are a key determinant of cash policy in the focal firm (Chen, Chan, & Chang, 2019; Machokoto, Chipeta, & Ibeji, 2021). Besides, firms tend to manipulate earnings when peer firms announce a restatement (Kedia, Koh, & Rajgopal, 2015).

Another strand of studies documents that investors use peer firms' information to form their beliefs on focal firms. For instance, Foster (1981) and Han, Wild, and Ramesh (1989) suggest that peer firms' earnings announcements and forecasts affect the focal firm's stock price. Peer earnings quality also alters investors' belief in focal firms. The Wall Street Journal (Barta, 2004) reports that the earnings restatement of Freddie Mac raises serious concerns about the financial reporting quality of its peer firm, Fannie Mae. In the same vein, Gleason, Jenkins, and Johnson (2008) suggest that peer firms' accounting restatement leads the stock price of focal firms to decline. Xu, Najand, and Ziegenfuss (2006) find that when the restatement impacts the restating firm's stock price, peers with identical cash flow characteristics experience an abnormal return.

Peer comparison is also one of the most extensively used techniques for professional analysts to conduct equity analysis (Baker & Ruback, 1999; Damodaran, 2009; Nguyen, Cheong, & Zurbruegg, 2021), which creates value in analysts' recommendations (Boni & Womack, 2006). Analysts' selection criteria for peer firms impact their capacity to identify focal firms' performance (Ecker, Francis, Olsson, & Schipper, 2013). In addition to shareholders and analysts, debtholders adjust their risk estimations about the focal firm based on peer information. For example, when peer firms have corporate scandals, debtholders demand a higher risk premium from focal firms (Bonini & Boraschi, 2012; Yuan & Zhang, 2015).

Due to information asymmetry, investors have more timely responses to bad news than good news (e.g., Kothari et al., 2009; Skinner, 1994). Investors are aware that management has a motive to cater for the market; therefore, they first respond cautiously to good news and then wait for more confirmation signs. By contrast, investors assign high credibility to bad news disclosure. When peers have weak performance, investors have great concerns about the focal firms' performance. In order to ease their concerns, investors might demand timelier bad news disclosure and conservative earnings reporting to curb managers' ability to conceal negative news. Consistent with this, LaFond and Watts (2008) find that firms are more likely to disclose bad news promptly as information asymmetries increase. Besides, conservative reporting increases the reliability of debt contract-related accounting information, thereby improving the efficiency of debt contracts (e.g., Zhang, 2008). Therefore, we conjecture that investors demand more accounting conservatism in the face of weak peer performance.

***H1**: Investors demand more accounting conservatism when peer firms have weak performance.*

Prior studies document that information externality is much stronger for firms that are cross-held by institutional investors (i.e., common institutional investors) since bad performance by one portfolio firm affects the firm's value and other co-owned peer firms' decisions (Ramalingegowda, Utke, & Yu, 2021). For example, peer firm accounting overstatements give a false signal to the focal firm about potential investment possibilities, influencing the focal firm's investment choices (Beatty, Liao, & Yu, 2013; Li, 2016). Ramalingegowda et al. (2021) further suggest that such a spillover effect among portfolios is exaggerated by the number of cross-held peers. In the same vein, information externality is considerable among firms that share the same analysts (i.e., common analysts) since common analysts tend to consider peer performance in their forecasting (e.g., Ali & Hirshleifer, 2020; Kaustia & Rantala, 2021; Kini, Mian, Rebello, & Venkateswaran, 2009).

Investors increase their concern about firm performance when firms have low information quality. For instance, Gleason et al. (2008) suggest that if peers restate their earnings, such information could have a spillover effect on the focal firms because investors raise the concern of earnings manipulation for firms with low information quality. Similarly, Shroff et al. (2017) demonstrate that creditors rely more on peer information to evaluate the information of firms with less publicly available information. Furthermore, such investors' concerns should be stronger when firms have poor governance quality. Under weak governance, managers have a higher ability to hoard bad news because high-quality governance enhances information disclosure (Bedard, Chtourou, & Courteau, 2004; Larcker, Richardson, Tuna, & r., 2007).

Thus, if investors demand timelier loss recognition under weak peer performance due to the increased concern about managers' bad news boarding, we expect such an effect to be more profound for firms with high information externality, high information asymmetry and low governance quality.

***H2**: The positive relationship between weak peer performance and accounting conservatism is more profound for firms with high information externality, high information asymmetry and low governance quality.*

The RPE is a performance-based incentive compensation contract in which performance is measured relative to peers. However, there is some debate on the use of RPE. Specifically, on the one hand, RPE is preferred over individual incentive contracts when the performance outcomes of firms are exposed to common external shocks, as peer performance can be used to filter common external shocks to isolate managers' specific performance (Im & Shon, 2019). On the other hand, RPE increases competitiveness between managers in focal firms and managers in peer firms (e.g., Aggarwal & Samwick, 1999; Feichter, Moers, & Timmermans, 2020; Vrettos, 2013), which incentivizes managers to hoard bad news to pursue private compensation benefits. For example, to achieve RPE targets, Gong, Li, and Yin (2019) find that managers have an incentive to outperform their peers through hoarding bad news (i.e., manipulating earnings). Similarly, Infuehr (2021) theoretically shows that RPE increases earnings management. Given that managers tend to hoard bad news after RPE implementation, we conjecture that investors might demand a more timely disclosure of bad news in this situation.

***H3**: The positive relationship between weak peer performance and accounting conservatism is more profound for firms with RPE contracts.*

Covariation theory suggests that assessors ascribe the agent's behaviours to external factors when other agents demonstrate identical behaviours (Kelley, 1967; Koonce & Mercer, 2005). According to covariation theory, managers have incentives to reduce their responsibility for poor performance by herding with other firms' bad new disclosures. In line with this explanation, Tse and Tucker (2010) find that managers are more likely to schedule their earnings warnings following the warnings of peer firms. Consistent with this viewpoint, Myers, Scholz, and Sharp (2013) suggest that managers tend to utilize Form 8-K to reveal their restatements when peer firms publish their restatements in Form 8-K filings. Besides, managers have less incentive to meet analysts' estimates when peers fall short of financial analysts' earnings forecasts (Bratten, Payne, & Thomas, 2016). Thus, we predict that managers tend to disclose bad news when their peer firms perform poorly.

Prior studies document that managers with high ability and confidence are less likely to herd (Hudson, Yan, & Zhang, 2020; Jiang & Verardo, 2018; Menkhoff, Schmidt, & Brozynski, 2006; Scharfstein & Stein, 1990). In the presence of high noise in performance, investors

update their views about managerial talents based on whether managers' choice reflects those of other managers (Scharfstein & Stein, 1990). Thus, low-skilled managers have more incentive to "follow the crowd" to appear as talented as others (Jiang & Verardo, 2018). However, confident managers are more likely to exhibit anti-herding behaviour to demonstrate their ability (Avery & Chevalier, 1999). Therefore, we conjecture that managers have more incentive to disclose bad news in a timely manner following weak peer performance, particularly if they lack ability and confidence.

***H4**: The positive relationship between weak peer performance and accounting conservatism is more profound for managers with low skill and confidence.*

The influence of conservative accounting information is a point of contention in the current literature. Supporters of accounting conservatism suggest that timely bad news disclosure curbs managers' incentives and abilities to exaggerate performance and conceal losses, thus reducing information asymmetry (e.g., LaFond & Watts, 2008; Watts, 2003a) and the likelihood of the firms' future stock price risk (Kim & Zhang, 2016). Given that underperforming firms are more likely to manipulate earnings and hoard bad news than outperforming firms, we expect that investors' demand for more accounting conservatism due to weak peer performance will reduce underperforming firms' information asymmetry and stock price crash risk.

On the contrary, some studies propose the cost of the conservative reporting strategy. For instance, Roychowdhury (2010) argues that accounting conservatism encourages risk-averse managers to take low-risk projects and reject high-risk ones, even if these projects have a positive NPV. In the same vein, Kravet (2014) discovers that the timely recognition of losses curbs managers' incentive to make risky but valuable acquisitions that will generate positive returns. As timely loss recognition could incentivize managers to abandon risky but positive NPV projects, we predict that demand for accounting conservatism might constrain investment for outperforming firms.

***H5a**: When peer firms perform poorly, investors' demand for accounting conservatism will reduce information asymmetry and stock price crash risk for underperforming firms.*

***H5b**: When peer firms perform poorly, investors' demand for accounting conservatism will constrain investment opportunities for outperforming firms.*

3. Data and methodology

We obtain accounting data from the annual Compustat, stock-market-related data from the Center for Research in Security Prices (CRSP), institutional holding data from the Thomson Reuters 13f database, and analyst coverage data from the Institutional Brokers' Estimate System (IBES). Our sample spans 1987 to 2019. We choose 1987 as the starting point because it is the first year that Text-based Network Industry Classifications (TNIC) are available. We exclude non-US firms (organization country code of incorporation (FIC) not equal to the USA) financial firms and utilities (standard industrial classification (SIC) in the range of 6000–6999 or 4900–4999) because these firms are subject to different regulations. After the data cleaning steps, there are 106,322 observations with the non-missing value of accounting conservatism.

3.1. Measure of peer performance

We follow prior studies (e.g., Du & Shen, 2018; Leary & Roberts, 2014; Seo, 2021) and employ the idiosyncratic stock returns of a focal firm's peers as the proxy of peer performance. Idiosyncratic stock returns are arguably a more exogenous proxy for firm performance than the raw return because it contains little common variation within a peer group and is uncorrelated with the future performance of the focal firm and its peers. Specifically, we estimate the following equation to calculate a firm's idiosyncratic stock returns:

$$Ret_{i,m} - R_{f,m} = \alpha + \beta_{market}\left(R_{market,m} - R_{f,m}\right) + \beta_{industry}\left(R_{industry,m} - R_{f,m}\right) + \varepsilon_{i,m}, \quad (1)$$

where i and m denote firm and month. $Ret_{i,\,m}$ and $R_{f,\,m}$ are the monthly raw stock returns for firm i and the monthly risk-free rate, respectively. $R_{market,\,m}$ is the monthly market return, and $R_{industry,\,m}$ is the equal-weighted three-digit SIC industry monthly return excluding focal firm i's return. For each firm with at least 12 months of non-missing stock returns, we employ the rolling window technique with 60 months to calculate the expected monthly return. Using the coefficients estimated from Eq. 1, we calculate firm i's idiosyncratic stock returns as follows:

$$\begin{aligned} IdiosyncraticStockReturn_{i,m} &= MonthlyReturn_{i,m} - ExpectedReturn_{i,m} \\ &= Ret_{i,m} - R_{f,m} - \widehat{\alpha} - \widehat{\beta}_{market}\left(R_{market,m} - R_{f,m}\right) \\ &\quad - \widehat{\beta}_{industry}\left(R_{industry,m} - R_{f,m}\right) \end{aligned} \quad (2)$$

Panel A of Table 1 reports the statistics for the estimation of Eqs. 1 and 2. The mean, median, and standard deviation are comparable with the statistics reported by Leary and Roberts (2014).[3] For instance, the average of $\widehat{\beta}_{market}$, $\widehat{\beta}_{industry}$, Adjusted R^2 and idiosyncratic stock returns are 0.335, 0.693, 0.258 and − 0.001, which is similar to the values in their Table II (0.399, 0.616, 0.258 and − 0.002).

To construct the poxy of peer performance, we cumulate monthly idiosyncratic stock returns for each fiscal year, and calculate the peer performance for firm i as the mean of the annual idiosyncratic stock returns of all firm i's peers (excluding firm i). We identify a firm i's peers based on the TNIC. The TNIC classification was developed by Hoberg and Phillips (2016) using the number of common words in a firm's product description. Compared with the SIC industry classification, the unique set of peers for each firm identified by the TNIC is time-varying, which is more accurate if firms modify product lines, hence reducing selection bias (Foucault & Fresard, 2014; Rind, Akbar, Boubaker, Lajili-Jarjir, & Mollah, 2022). However, in our robustness test, we find qualitatively similar results for the proxy of peer performance constructed by the SIC classification.

For a more straightforward interpretation, we multiply the mean idiosyncratic stock returns of a firm's peers by a negative one to construct a proxy of weak peer performance. A higher value of *Weak-Performance* implies a poorer peer performance.

3.2. Measure of conditional conservatism

Following Khan and Watts (2009), we construct the firm-specific estimation of the timeliness of bad news, *Cscore*, as the measure of conditional conservatism. C-score is constructed based on Basu's (1997) model, which reflects the future degree of asymmetric timeliness up to three years ahead. We denote the C-score based on Khan and Watts' (2009) model as *Cscore*. In our robustness tests, we also follow Banker, Basu, Byzalov, and Chen (2016) and Lee, Li, and Sami (2015) and use alternative proxies of conditional conservatism. Appendix A provides the details of the construction of the three proxies.

3.3. Research design

We employ the following regression to examine the relationship between peer performance and conditional conservatism:

[3] To enable a comparison with Leary and Roberts (2014), we report the statistics for the sample starting from 1965.

$$Cscore_{i,t} = \beta_0 + \beta_1 WeakPerformance_{i,t} + \beta_2 FirmSize_{i,t} + \beta_3 M/B_{i,t} + \beta_4 Leverage_{i,t} + \beta_5 SalesVolatility_{i,t} + \beta_6 SalesGrowth_{i,t} + \beta_7 RDAD_{i,t} + \beta_8 CashFlow_{i,t} + \beta_9 LitigationRisk_{i,t} + \beta_{10} FirmAge_{i,t} + \beta_{11} RelativePerformance_{i,t} + \nu_i + \nu_t + \varepsilon_{i,t}, \quad (3)$$

where i and t denote firm and year. The variable of interest, $WeakPerformance_{i,t}$, is the proxy of stock performance for the focal firm i's peer firms. We control firm characteristics that are known to be the determinants of conservative reporting. We include firm size ($FirmSize_{i,t}$) and age ($FirmAge_{i,t}$) because asymmetric information is lower in larger and older firms, which in turn decreases the asymmetric timeliness of earnings (Khan & Watts, 2009; LaFond & Watts, 2008).

Following Ahmed and Duellman (2007) and Roychowdhury and Watts (2007), we include the market-to-book ratio ($M/B_{i,t}$) and sales growth ($SalesGrowth_{i,t}$) to capture the growth options. We follow Lara, Osma, and Penalva (2009) and control sales volatility ($SalesVolatility_{i,t}$). High sales volatility indicates a high cash flow risk and a high demand for conservative reporting. We control for leverage ($Leverage_{i,t}$), as firms with high leverage have a severe conflict between debtholders and shareholders, which leads to high demand for accounting conservatism (Ahmed, Billings, Morton, & Stanford-Harris, 2002; Ball & Shivakumar, 2005).

We control for research and development and advertising expenditures ($RDAD_{i,t}$) because they reflect GAAP-mandated conservatism (Ahmed & Duellman, 2007). The relationship between operating cash flow ($CashFlow_{i,t}$) and accounting conservatism is mixed (Ahmed et al., 2002). High cash flows allow firms to afford the application of conservatism better, as the low profits incurred by conservative reporting are high for firms with low profitability. However, high cash flows convey a signal of high profitability, which reduces the demand for accounting conservatism.

Watts (2003a) argues that the threat of shareholder litigation risk induces a high demand for conservatism for firms with overstated earnings. Accordingly, we include a dummy variable that indicates high litigation risk ($LitigationRisk_{i,t}$). We also control for the focal firms' performance relative to their peers' performance ($RelativePerformance_{i,t}$). As we focus on the spillover effect of peer performance, this variable rules out the concern that the effect of peer performance on

Table 1
Summary statistics.

Panel A. Summary statistics for the stock return regression results

	(1) Mean	(2) Median	(3) S.D.
α	−0.001	0.000	0.020
β_{market}	0.335	0.323	0.971
$\beta_{industry}$	0.693	0.614	0.779
Adjusted R^2	0.258	0.226	0.215
MonthlyReturn	0.006	−0.001	0.138
ExpectedMonthlyReturn	0.006	0.007	0.068
IdiosyncraticMonthlyReturn	−0.001	−0.005	0.113

Panel B. Summary statistics for the variables in the baseline regression

	(1) Mean	(2) S.D.	(3) P25	(4) P50	(5) P75	(6) Observations
Cscore	0.154	0.172	0.050	0.152	0.255	81,558
WeakPerformance	0.025	0.159	−0.048	0.027	0.105	81,558
FirmSize	5.537	2.144	3.951	5.469	7.047	81,558
M/B	3.387	4.605	1.217	2.054	3.604	81,558
Leverage	0.222	0.194	0.040	0.195	0.351	81,558
SalesVolatility	0.185	0.180	0.071	0.131	0.233	81,558
SalesGrowth	0.201	0.615	−0.020	0.085	0.242	81,558
RDAD	0.296	1.449	0.000	0.018	0.092	81,558
CashFlow	0.024	0.208	0.017	0.075	0.120	81,558
LitigationRisk	0.123	0.329	0.000	0.000	0.000	81,558
FirmAge	2.634	0.772	2.079	2.639	3.258	81,558
RelativePerformance	−0.007	0.440	−0.251	0.002	0.249	81,558

Panel A of this table reports the summary statistics for the variables used to construct peer performance (details are discussed in Section 4.1). Panel B of this table reports the summary statistics of each variable used in the regression analysis. Columns 1–6 show the mean, standard deviation, 25th percentile, median, 75th percentile, and the number of observations for each variable. *Cscore* refers to the accounting conservatism proxy calculated using Basu's (1997) model. *WeakPerformance* is the idiosyncratic stock performance for the focal firm *i*'s peer firms. *FirmSize* is the natural logarithm of total assets. *M/B* is equity market value divided by equity book value, which captures a firm's investment opportunities. *Leverage* is total debt divided by total assets. *SaleGrowth* is the percentage change of sales. *SalesVolatility* is the standard deviation of sales using a 5-year rolling window (a minimum of 3 years required), then deflated by total assets. *SalesGrowth* is the percentage of annual growth in total sales. *RDAD* is total research and development expense plus advertising expense deflated by total sales. *CashFlow* is cash flow divided by total assets. *LitigationRisk* is an indicator variable that equals one if a firm's litigation risk is in the top decile of the sample and zero otherwise (Gao, Li and Ma, 2021). *FirmAge* is the natural log of the year in which the firm appears in the Compustat database. *RelativePerformance* is the difference between a firm's annual idiosyncratic stock returns and *WeakPerformance*. The details of the variable construction are given in Appendix A.

Table 2
Peer performance and accounting conservatism.

	(1)	(2)	(3)	(4)	(5)	(6)
WeakPerformance	0.018***	0.024***	0.017***	0.024***	0.011	0.018
	(0.002)	(0.002)	(0.002)	(0.002)	(0.015)	(0.013)
WeakPerformance^2			0.026***	0.016**	0.008	0.002
			(0.008)	(0.007)	(0.033)	(0.030)
NegativePerformance					0.003*	0.004***
					(0.001)	(0.001)
NegativePerformance×*WeakPerformance*					−0.030	−0.035**
					(0.020)	(0.018)
NegativePerformance×*WeakPerformance*^{2}					0.098**	0.102***
					(0.042)	(0.039)
FirmSize	−0.066***	−0.069***	−0.065***	−0.069***	−0.065***	−0.069***
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
M/B	−0.012***	−0.009***	−0.012***	−0.009***	−0.012***	−0.009***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	0.293***	0.243***	0.293***	0.243***	0.293***	0.243***
	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)
SalesVolatility	0.013***	−0.017***	0.013***	−0.017***	0.013***	−0.017***
	(0.003)	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)
SalesGrowth	−0.009***	−0.005***	−0.009***	−0.005***	−0.009***	−0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
R&D	−0.004***	−0.003***	−0.004***	−0.003***	−0.004***	−0.003***
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
CashFlow	−0.061***	−0.059***	−0.062***	−0.059***	−0.062***	−0.059***
	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)
LitigationRisk	0.000	0.001	0.000	0.001	0.000	0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
FirmAge	0.006***	0.037***	0.006***	0.037***	0.006***	0.037***
	(0.001)	(0.003)	(0.001)	(0.003)	(0.001)	(0.003)
RelativePerformance	0.014***	0.019***	0.014***	0.019***	0.014***	0.019***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	No	Yes	No	Yes	No
Firm F.E.	No	Yes	No	Yes	No	Yes
Adjusted R^2	0.681	0.758	0.681	0.758	0.681	0.758
Observations	81,558	81,558	81,558	81,558	81,558	81,558

This table presents the OLS estimates of the effect of peer performance on accounting conservatism. We include industry fixed effects in Columns 1, 3 and 5 and firm fixed effects in Columns 2, 4 and 6. The dependent variable for each regression is *Cscore*. *WeakPerformance*^{2} is the quadratic term of *WeakPerformance*. *NegativePerformance* is a dummy variable that equals one for negative peer performance (*WeakPerformance* < 0) and zero otherwise. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

conservatism is caused by the performance of focal firms that fall behind their peers.

In our baseline regression, we include firm (v_i) and year (v_t) fixed effects to control any time-invariant omitted variable bias and potential variation in the macroeconomic environment over time. Panel B of Table 1 shows the summary statistics for the variables used in the baseline regression. There are 81,558 firm-year observations with the non-missing value of variables in the baseline regression. The details of the variable construction are presented in Appendix A.

4. Empirical results

4.1. Peer performance and accounting conservatism

Column 1 of Table 2 reports the results for the baseline regression with the industry fixed effects. The coefficient of *WeakPerformance* is 0.018, which is positive and significant at the 1% level. Specifically, one standard deviation increase in *WeakPerformance* is associated with a 2% increase in *Cscore*. In Column 2, we include firm fixed effects, and the results are qualitatively similar. Therefore, the baseline results support *Hypothesis 1* that firms with low peer performance are more likely to accelerate bad news into earnings.

The results for the control variables are generally consistent with previous studies (e.g., Ahmed & Duellman, 2013; Khan & Watts, 2009; LaFond & Watts, 2008). For instance, larger firms have low information asymmetry, leading to a lower probability of adopting conservative reporting. Firms with more growth opportunities have lower asymmetric timeliness of earnings. High leverage and sales volatility indicate a high cash flow risk and a conflict of interests between creditors and shareholders, which increase the asymmetric timeliness of earnings.

Since investors are more sensitive to bad news than good news, we expect the relationship between peer performance and conservative reporting to be nonlinear. In Columns 3 and 4, we follow Gyimah, Machokoto, and Sikochi (2020) to include a quadratic term for *WeakPerformance*. The coefficient of the quadratic term is significantly positive, implying that the impact of peer performance on the acceleration of bad news into earnings is growing as peer performance worsens. In Columns 5 and 6, we include an interaction of a quadratic term with a dummy variable that equals one for negative peer performance (*NegativePerformance*). The significant and positive coefficients of interaction suggest that the nonlinear effect is more profound if peers' average firm-specific stock returns are negative. Overall, Table 2 is consistent with the notion that weak peer performance induces investors to demand bad news in a timelier manner. Such demand rises with the deterioration of peer performance since investors are more sensitive to bad news than good news.

4.2. Peer performance, accounting conservatism and investors' concern

In Table 3, we conduct several tests for the potential mechanism. We argue that investors consider peer performance to evaluate focal firms' performance; weak peer performance leads to high demand for timelier loss recognition due to investors' perception that managers could hoard

Table 3
Peer performance, accounting conservatism and information demand.

	(1)	(2)	(3)	(4)	(5)	(6)
WeakPerformance	0.012***	0.010***	0.008**	−0.035	−0.000	0.016***
	(0.004)	(0.003)	(0.004)	(0.022)	(0.003)	(0.003)
HighCIOpeers	0.000					
	(0.001)					
HighCIOpeers × *WeakPerformance*	0.009**					
	(0.005)					
HighCApeers		0.006***				
		(0.001)				
HighCApeers × *WeakPerformance*		0.014***				
		(0.004)				
LowTOIndex			0.043**			
			(0.018)			
LowTOIndex × *WeakPerformance*			0.057**			
			(0.024)			
HighGIndex				−0.001		
				(0.001)		
HighGIndex × *WeakPerformance*				0.005**		
				(0.002)		
HighPIN					0.015***	
					(0.001)	
HighPIN × *WeakPerformance*					0.023***	
					(0.004)	
HighDispersion						0.016***
						(0.001)
HighDispersion × *WeakPerformance*						0.013***
						(0.004)
Adjusted R^2	0.740	0.740	0.747	0.758	0.777	0.773
Observations	81,512	81,512	69,664	4474	50,953	52,720

This table presents the OLS estimates of the moderate effect of information demand on the relationship between peer performance and accounting conservatism. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. In Columns 1 and 2, information externality is proxied by *HighCIOpeer* and *HighCApeers*. *HighCIOpeers* and *HighCApeers* are defined based on whether a firm has the above-median number of cross-held peer firms and of common analysts in a given year, respectively. In Columns 3 and 4, corporate governance is measured by *LowTOIndex* and *HighGIndex*. *LowTOIndex* and *HighGIndex* are defined based on whether a firm has the below-median takeover index and above-median G-index in a given year, respectively. In Columns 5 and 6, information asymmetry is measured by *HighPIN* and *HighDispersion*. *HighPIN* and *HighDispersion* are defined based on whether a firm has the above-median probability of informed trading and analyst forecast dispersion in a given year, respectively. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

bad news. If investors incorporate peer performance into monitoring decisions, we should observe that the effect of peer performance on the asymmetric timeliness of earnings is more profound for firms with high exposure to information externalities.

We construct two variables to measure the degree of information externality. The first proxy is the number of peer firms cross-held by institutional investors. Park, Sani, Shroff, and White (2019) find that cross-owned relationships facilitate information spillovers across co-owned firms, and Ramalingegowda et al. (2021) find that the greater the number of peers cross-held by institutional investors, the greater the benefit of economies of scale and investors' information acquisition and processing costs. The second proxy is the number of analysts who provide forecasting information for both peers and focal firms. Previous studies find that information spillover is more substantial among firms that share common analysts (Huang, Jain, Kini, & Xi, 2020; Israelsen, 2016).

As higher information spillover is associated with a higher number of cross-held peers and common analysts, we expect the effect of peer performance on conservative reporting to be more profound for firms with a high number of cross-held peer firms by institutional investors or a high number of common analysts. In Columns 1 and 2 of Table 3, we construct *HighCIOpeers*, which equals one if a firm's number of peer firms that are cross-held by institutional investors is above the median value in a given year and zero otherwise, and *HighCApeers*, which equals one if a firm's number of common analysts is above the median value in a given year and zero otherwise. Then we include an interaction of each dummy variable with *WeakPerformance* and rerun the regression model separately. Consistent with the information spillover channel, the results show that the coefficients for the interaction terms are positive and significant, implying that peer performance affects the asymmetric timeliness of earnings through the information spillover effect. For robustness, in Appendix B, we also employ the board cross-membership (i.e., outside directors take a position on peers' boards) and common auditor (i.e., focal firms share the same auditor with peers) as alternative proxies of information externality since previous studies (e.g., Cai, Kim, Park, & White, 2016; Geng, Hau, Michaely, & Nguyen, 2021) document that the information spillover effect is stronger in the presence of board cross-membership or a common auditor. Our findings are qualitatively unchanged.

We next explore the moderating role of corporate governance. We expect to observe that peer performance's effect on accounting conservatism is more remarkable for firms with weak governance because low quality of governance attenuates managers' ability to hoard bad news. To test this prediction, we follow prior studies (Cain, McKeon, & Solomon, 2017; Gompers, Ishii, & Metrick, 2003) and use the takeover index and G-index as proxies for corporate governance. Poor governance is associated with a high G-index and a low takeover index.

In Columns 3 and 4 of Table 3, we construct *LowTOindex*, which equals one if a firm's takeover index is below the median value in a given year and zero otherwise, and *HighGindex*, which equals one if a firm's G-index is above the median value in a given year and zero otherwise. Then we include an interaction of each dummy variable with *WeakPerformance* and rerun the regression model separately. The significant and positive coefficients of the interaction terms support the prediction that weak peer performance increases investors' concern about bad news hoarding, leading to high demand for accounting conservatism. In addition, for robustness checks, we also explore whether the enactment of the Sarbanes-Oxley Act (SOX) can alleviate the demand for

Table 4
Peer performance, accounting conservatism and managerial compensation incentive.

	(1)	(2)
WeakPerformance	0.016	0.011***
	(0.014)	(0.003)
RPE	−0.011*	
	(0.006)	
RPE×*WeakPerformance*	0.035*	
	(0.020)	
IDD		0.003*
		(0.002)
IDD×*WeakPerformance*		0.008**
		(0.004)
Adjusted R^2	0.754	0.780
Observations	4116	66,665

This table presents the OLS estimates of the moderate effect of managerial compensation incentives on the relationship between peer performance and accounting conservatism. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. Managerial compensation incentive is measured by *RPE* and *IDD*. *RPE* is a dummy variable that equals one if a firm adopts RPE in a given year and zero otherwise. *IDD* is a dummy variable that equals one if a firm operates in a state that has experienced the enforcement of Inevitable Disclosure Doctrine and zero otherwise. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

Table 5
Alternative explanation-herding perspective.

	(1)	(2)
WeakPerformance	0.019***	0.018***
	(0.003)	(0.006)
HighAbility	−0.010***	
	(0.001)	
HighAbility×*WeakPerformance*	−0.003	
	(0.004)	
OverconfidentCEO		−0.020***
		(0.002)
OverconfidentCEO×*WeakPerformance*		−0.009
		(0.007)
Adjusted R^2	0.774	0.775
Observations	69,563	23,071

Notes: This table presents the OLS estimates of the effect of managerial herding incentive on the relationship between peer performance and accounting conservatism. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. We use two proxies to measure managerial herding incentives, *HighAbility* and *OverconfidentCEO*. *HighAbility* is a dummy variable that equals one if the managerial ability is greater than the median value of a given year and zero otherwise. *OverconfidentCEO* is a dummy variable that equals one if a CEO holds vested options with average moneyness of at least 67% and zero otherwise. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

accounting conservatism induced by weak peer performance, as previous studies document an improved overall governance environment in the post-SOX period (e.g., Cohen, Hayes, Krishnamoorthy, Monroe, & Wright, 2013; Dyck, Morse, & Zingales, 2010). In Column 1 of Appendix C, we find that the enactment of SOX significantly reduces the impact of weak peer performance on accounting conservatism,[4] which provides further supporting evidence for investors' concerns.

In Columns 5 and 6 of Table 3, we test the moderating role of information asymmetry in the relationship between peer performance and accounting conservatism. Information asymmetry exaggerates managers' ability to hoard bad news (Healy & Palepu, 2001; Kothari et al., 2009), and investors' concerns are more sensitive to peers' information if the focal firms' information is opaque (Park et al., 2019; Shroff et al., 2017). We, therefore, follow the previous study and use the probability of informed trading and analysts' forecast dispersion as the proxies of information asymmetry[5] (e.g., Gyimah et al., 2020; Jacoby & Zheng, 2010; Li & Zhao, 2008). We employ the same procedure to construct dummy variables of *HighPIN* and *HighDispersion* based on the median value, and rerun the regression with the interaction of each dummy variable with *WeakPerformance*. The results show that peer performance has a more profound effect on the asymmetric timeliness of earnings for firms with high information asymmetry, supporting our hypothesis that weak peer performance affects accounting conservatism by amplifying investors' concern about bad news hoarding.

4.3. Peer performance, accounting conservatism and managerial compensation incentive

The previous section presented evidence of investors' concern as the potential explanation for the relationship between peer performance and accounting conservatism. Next, we investigate whether such a concern is stronger if managerial compensation is tied to peer performance. In order to align the interests of managers and shareholders, a proportion of firms adopt RPE, tying the compensation of their managers to their performance relative to a peer group. However, such RPE compensation may lead to a high incentive for managers to manipulate earnings in pursuit of high compensation (Du & Shen, 2018; Infuehr, 2021). In the same vein, as market valuation will react more negatively to the disclosure of bad news if most of their peers are underperforming, managers with RPE contracts have a strong incentive to hide bad news to avoid significant compensation losses. Therefore, we expect that the impact of peer performance is more profound for firms with RPE compensation contracts.

We follow prior studies (Du & Shen, 2018; Gong, Li, & Shin, 2011) and manually collect RPE information from Compensation Discussion and Analysis reports, creating a dummy variable of *RPE* that equals one if a firm adopts RPE for the compensation contract and zero otherwise. The second dummy variable, *IDD*, is based on the argument of Na (2020) that the implementation of the Inevitable Disclosure Doctrine (IDD) by US state courts reduces CEOs' outside opportunities, thereby increasing the likelihood of RPE adoption. We, therefore, follow Klasa, Ortiz-Molina, Serfling, and Srinivasan (2018) and identify the time of IDD implementation for each state from 1987 to 2011 and create a dummy variable that equals one if a firm operates in a state that has experienced the enforcement of IDD and zero otherwise. We then include an interaction term for each dummy variable with *WeakPerformance* in the baseline equation.

Table 4 reports the results. The significant and positive coefficient of the interaction term in Column 1 suggests that weak peer performance has a greater impact on accounting conservatism for firms that adopt RPE in executive compensation contracts. Similarly, Column 2 shows that weak peer performance has a more profound effect on accounting conservatism for firms that experience the implementation of IDD. Overall, the results of Table 4 are consistent with our conjecture that weak peer performance induces investors' concern about managers hoarding bad news to maximize their own interests, leading to a higher demand for more timely reporting of bad news.

[4] We only compare the three years before and after the enactment of SOX to better isolate the impact of SOX enactment, as Kedia et al. (2015) document that the impact of SOX enactment only lasted a few years.

[5] We also employ the analyst forecast error as an alternative proxy of information asymmetry. Column 2 of Appendix C shows a qualitatively similar result.

Table 6
Instrument variable using peers' customer performance.

	(1)	(2)	(3)	(4)
Dependent variable	*WeakPerformance*	*Cscore*	*WeakPerformance*	*Cscore*
WeakPerformance_C	0.085***		0.079***	
	(0.010)		(0.011)	
WeakPerformance		0.208***		0.147**
		(0.064)		(0.064)
FirmSize	0.003***	−0.063***	0.016***	−0.065***
	(0.001)	(0.001)	(0.002)	(0.002)
M/B	−0.001***	−0.010***	−0.002***	−0.008***
	(0.000)	(0.000)	(0.000)	(0.001)
Leverage	0.004	0.267***	0.005	0.228***
	(0.005)	(0.007)	(0.012)	(0.009)
SalesVolatility	0.001	0.012**	0.000	−0.009
	(0.006)	(0.006)	(0.011)	(0.008)
SalesGrowth	−0.004**	−0.008***	−0.005**	−0.005***
	(0.001)	(0.001)	(0.002)	(0.002)
R&D	−0.001**	−0.005***	−0.002**	−0.002**
	(0.001)	(0.001)	(0.001)	(0.001)
CashFlow	−0.036***	−0.042***	−0.054***	−0.051***
	(0.005)	(0.006)	(0.010)	(0.008)
LitigationRisk	0.013***	−0.010***	0.016***	−0.005**
	(0.002)	(0.002)	(0.004)	(0.003)
FirmAge	−0.010***	0.007***	−0.028***	0.032***
	(0.002)	(0.002)	(0.006)	(0.006)
RelativePerformance	−0.074***	0.027***	−0.076***	0.027***
	(0.003)	(0.005)	(0.004)	(0.005)
Year F.E.	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	No	No
Firm F.E.	No	No	Yes	Yes
Adjusted R^2	0.101	0.665	0.100	0.286
Observations	18,630	18,630	18,630	18,630

This table reports the instrument variables analysis of the effect of peer performance on accounting conservatism using the 2SLS regression. The first row shows the dependent variables for each regression. *WeakPerformance_C* is the average idiosyncratic stock return of peers' major customers. The information on customer relationships is obtained from the Compustat Segment file. Columns 1 and 3 report the results for the first-stage regression. Columns 2 and 4 show the results for the second-stage regression. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

4.4. Alternative explanation-herding behaviour

According to covariation theory, managers are incentivised to herd by disclosing bad news if they perceive that rivals perform poorly (Kelley, 1967; Koonce & Mercer, 2005). To test this alternative explanation, we follow prior studies and employ managerial ability and managerial overconfidence as proxies for managers' herding incentive. Scharfstein and Stein (1990) and Jiang and Verardo (2018) find that managers with high abilities are less likely to herd. Menkhoff et al. (2006) and Hudson et al. (2020) also document that overconfident managers have a low incentive to herd because they are confident about their competence. Therefore, if weak peer performance increases timely bad news recognition due to herding behaviour, we should observe that the effect is less profound for firms with high managerial ability and overconfident CEOs. Accordingly, we construct the dummy variable *HighAbility* based on whether the managerial ability is greater than the median value in a given year, while the dummy variable of *OverconfidentCEO* is based on whether a CEO holds vested options with average moneyness of at least 67%. Next, we interact the two dummy variables with *WeakPerformance* separately and rerun Eq. 3.

Table 5 reports the results of the test for herding behaviour. The interaction terms are insignificant, regardless of the proxies for managers' herding incentive used, which indicates that managers' herding incentive does not drive the relationship between weak peer performance and timely bad news recognition. Overall, we fail to find evidence for the potential explanation that managers deliberately report conservatively to avoid the penalty of the markets when peers perform poorly.

4.5. Instrument variable and difference-in-differences analysis

One concern is that the proxy of peer performance contains errors related to a firm's disclosure policy due to the imperfect estimation of the market and industry components in peers' stock returns. Therefore, we follow previous studies and use a two-stage instrument variable approach (Du & Shen, 2018; Leary & Roberts, 2014) to test whether our results are consistent. Specifically, for each focal firm, we identify the major customers of its peer firms using the Compustat segment file. The major customers must satisfy three criteria: (1) the customer is in an industry different from a focal firm, (2) the major customer is not a customer of the focal firm, and (3) the customer accounts for at least 10% of the peer firm's sales. Next, we employ the idiosyncratic stock returns of the major customers as the instrument variable of focal firms' peer performance[6] (*WeakPerformance_C*). The logic is that customers' performance predicts the stock returns for supplier firms but not for firms operating in the same supplier industry that do not have active customer-supplier relationships (Cohen & Frazzini, 2008).

Column 1 of Table 6 reports the results for the first-stage regression with the industry fixed effects. *WeakPerformance_C* is significantly and positively correlated with *WeakPerformance*, which is consistent with the notion that customers' stock performance predicts the stock performance of supplier firms. Column 2 shows the results for the second-stage regression. The significant and positive coefficient of instrumented *WeakPerformance* is consistent with Table 2 that weak peer performance accelerates bad news into earnings. Columns 3 and 4

[6] We flip the sign of the idiosyncratic stock return of the major customers to align with *WeakPerformance*.

Table 7
Difference-in-differences analysis using severe drought events.

	(1)	(2)	(3)
SevereDrought	0.005***	0.005**	
	(0.002)	(0.002)	
OneYearBeforeSevereDrought		−0.001	
		(0.002)	
TwoYearBeforeSevereDrought		0.001	
		(0.002)	
Placebo			0.002
			(0.002)
Adjusted R^2	0.770	0.770	0.783
Observations	29,877	29,877	25,402

This table reports the effect of peer performance on accounting conservatism using the difference-in-differences framework. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. *SevereDrought* is the difference-in-differences estimator that equals one if at least one peer firm of the treated firm has experienced the severe drought event by the time *t* and zero otherwise. *OneYearBeforeSevereDrought* is a dummy variable that equals one if a treated firm's peer firms experience a shock one year later and zero otherwise. *TwoYearBeforeSevereDrought* is a dummy variable that equals one if a treated firm's peer firms experience a shock two years later and zero otherwise. *Placebo* is constructed by falsely identifying the time of a shock two years ahead. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

include the firm fixed effects, and the results remain qualitatively similar.

We also employ difference-in-differences (DID) analysis to test a causal effect using extreme drought events as the exogenous shock for peer performance. Huang, Kerstein, and Wang (2018) find that climate disasters significantly damage firm performance. Among all extreme climate disasters, drought incurs the greatest economic losses (Huynh, Nguyen, & Truong, 2020). Specifically, we follow Huynh et al. (2020) and identify the state-level severe drought condition as the Palmer index of less than negative three. Next, we identify the non-suffered sample as firms without experience of severe drought events within three preceding and following years. Among the non-suffered sample, we construct the treated group as firms that have at least one peer firm experiencing a severe drought event in a given year, and identify the control group as firms whose peers do not suffer severe drought events in our sample period.

It is possible that the heterogeneous firm characteristics between treat and control firms may bias the DID results. Therefore, we use the propensity score matching (PSM) approach to mitigate such differences in characteristics. Specifically, we create a dummy variable that equals one for the treated group and zero for the control group. Then we employ the logit model, regress all the control variables in Eq. 3 on the dummy variable, and obtain the predicted value (propensity score). We select one control firm, with replacement, with the closest propensity score for each treated firm. After the matching procedure, we find 2338 matched control firms for 3155 treated firms. To better isolate the causal effect, we select three years surrounding each severe drought event. Finally, we conduct the regression below for the treated and matched firms:

$$\begin{aligned} Cscore_{i,t} = {} & \beta_0 + \beta_1 SevereDrought_{i,t} + \beta_2 FirmSize_{i,t} + \beta_3 M/B_{i,t} \\ & + \beta_4 Leverage_{i,t} + \beta_5 SalesVolatility_{i,t} + \beta_6 SalesGrowth_{i,t} \\ & + \beta_7 RDAD_{i,t} + \beta_8 CashFlow_{i,t} + \beta_9 LitigationRisk_{i,t} \\ & + \beta_{10} FirmAge_{i,t} + \beta_{11} RelativePerformance_{i,t} + v_i + v_t + \varepsilon_{i,t}, \end{aligned} \quad (4)$$

where $SevereDrought_{i,t}$ is the DID estimator, which equals one if at least one peer firm of the treated firm has experienced a severe drought event by the time *t* and zero otherwise. The firm fixed effects absorb the time-invariant omitted difference between the treated and matched control groups. The year fixed effects capture the difference in average outcomes between the pre-shock and post-shock periods.

Table 7 reports the results for the estimation of Eq. 4. Column 1 shows that the DID estimator, $SevereDrought_{i,t}$, is positive and significant at the 1% level. The result implies that firms whose peer firms have experienced a severe drought significantly increase the asymmetric timeliness of their earnings. A valid DID test requires that the treated and control firms share a similar time trend of the outcome before the shocks. Therefore, we include two variables to conduct the pre-trend analysis. *OneYearBeforeSevereDrought* is a dummy variable that equals one if a treated firm's peer firms experience a shock one year later and zero otherwise. *TwoYearBeforeSevereDrought* is a dummy variable that equals one if a treated firm's peer firms experience a shock two years later and zero otherwise. If pre-trend variables are significant, the parallel assumption could be violated because the observed difference in the asymmetric timeliness of earnings between the treated and control groups already exists before the shock. In Column 2, the pre-trend variables are insignificant, suggesting the DID test is less likely to violate the parallel assumption. In Column 3, we further conduct a placebo test by falsely identifying the time of severe drought two years ahead. The insignificant coefficient of *Placebo* indicates that our DID results are indeed driven by the actual shock.

In Appendix D, we obtain the top ten largest climate events in 1987–2019 from the National Oceanic and Atmospheric Administration's National Climatic Data Center, and employ the events as a robustness check. Our results remain qualitatively unchanged. Overall, our DID tests offer evidence for the causal effect of peer performance on the tendency to report conservatively.

4.6. Additional robustness

In this subsection, we conduct several robustness tests to validate our inferences. In Column 1 of Table 8, we add additional variables to control internal governance, including CEO duality (*CEODuality*), CEO equity ownership (*CEOEquityOwnership*) and the proportion of independent board members (*BoardIndependence*). In Column 2, we use the 3-digit SIC classification to identify a focal firm's peers, and calculate the proxy of peer performance (*WeakPerformance_SIC*) accordingly. In Columns 3 and 4, we employ alternative proxies of the asymmetric timeliness of earnings. Specifically, we construct *Cscore_Banker* by taking into account the variation of cost stickiness, and *Cscore_NC* by considering the reversal of the trends of increase and decrease in accounting income. Besides the alternative proxies of accounting conservatism, in Appendix E, we also employ Basu's (1997) model by including the interactions of weak peer performance with the timeliness of bad news recognition. All the results show that weak peer performance significantly facilitates timely bad news recognition.

In addition, we further split our sample based on the business cycle to test whether our findings are mainly driven by the business cycle, as stock performance tends to comove over business cycles (Brockman, Liebenberg, & Schutte, 2010). We rerun Eq. 3 for the contraction and expansion identified by the National Bureau of Economic Research (NBER). The coefficients of *WeakPerformance* are positive and significant in both Columns 5 and 6, implying no evidence that our findings are mainly driven by the business cycle.[7] In Columns 7 and 8, we split our sample based on whether a firm is outperforming or underperforming (i.

[7] In our untabulated results, we also mitigate the concern that the comovement of negative performance concentrates during financial crises by excluding financial crisis periods from the regression. The results are qualitatively unchanged and are available upon on request.

Table 8
Additional robustness.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sample	Full	Full	Full	Full	Contraction period	Expansion period	Outperforming sample	Underperforming sample
Dependent variable	*Cscore*	*Cscore*	*Cscore_Banker*	*Cscore_NC*	*Cscore*	*Cscore*	*Cscore*	*Cscore*
WeakPerformance	0.017***		0.020***	0.055***	0.022***	0.017***	0.021***	0.020***
	(0.005)		(0.002)	(0.007)	(0.004)	(0.003)	(0.003)	(0.003)
WeakPerformance_SIC		0.022***						
		(0.003)						
CEODuality	−0.005*							
	(0.003)							
CEOEquityOwnership	0.001***							
	(0.000)							
BoardIndependence	0.014*							
	(0.008)							
Adjusted R^2	0.770	0.775	0.689	0.580	0.851	0.760	0.771	0.768
Observations	15,652	91,474	81,558	80,449	15,308	66,250	40,932	40,626

This table reports the results of the robustness tests. In Column 1, we add additional variables to control internal governance, including CEO duality (*CEODuality*), CEO equity ownership (*CEOEquityOwnership*) and the proportion of independent board members (*BoardIndependence*). In Column 2, we replace peer performance of the TNIC-classification with peer performance of the 3-digit SIC classification. Columns 3 and 4 show the alternative proxies of asymmetric timeliness of earnings. Columns 5 and 6 report the results for the split samples based on the business cycle. Columns 7 and 8 are for the split samples based on whether a firm is outperforming or underperforming. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

e., whether *RelativePerformance* is larger than zero). The results show that weak peer performance increases the asymmetric timeliness of earnings for both outperforming and underperforming firms.[8] Overall, the results in Table 8 suggest that our findings are robust to a variety of robustness tests.

4.7. The constraint of bad news hoarding vs. the constraint of investment

Prior studies document that timely bad news recognition efficiently mitigates the managerial ability to hoard bad news and reduces information asymmetry (e.g., Kim & Zhang, 2016; Ruch & Taylor, 2015; Watts, 2003a). If weak peer performance raises investors' concern that managers hide losses, we expect the impact of constrained bad news hoarding and reduced information asymmetry to be more profound for underperforming firms since these firms are more likely to hide losses than outperforming firms. To test this hypothesis, we follow prior studies (Jacoby & Zheng, 2010; Kim & Zhang, 2016) and construct a crash dummy to measure the probability of hoarding bad news, and analysts' forecast dispersion to measure the information asymmetry. Specifically, *CrashDummy* is an indicator variable that equals one if a firm experiences one or more crash events in a given year and zero otherwise. *Dispersion* is the standard deviation of the earnings forecast scaled by the absolute value of the mean earnings forecast. In the final step, we estimate the following equation separately for underperforming and outperforming samples separately:

$$y_{i,t} = \beta_0 + \beta_1 WeakPerformance_{i,t-1} + \beta_2 HighCscore_{i,t-1} + \beta_3 WeakPerformance_{i,t-1} \times HighCscore_{i,t-1} + \beta_4 Control\ variables_{i,t-1} + v_i + v_t + \varepsilon_{i,t} \quad (5)$$

where the dependent variable is $CrashDummy_{i,\ t}$ or $Dispersion_{i,\ t}$. $HighCscore_{i,\ t-1}$ is a dummy variable that equals one if a firm's C-score is higher than the median value in a given year and zero otherwise. The variable of interest is the interaction term of $HighCscore_{i,\ t-1}$ and $WeakPerformance_{i,\ t-1}$. In addition to the control variables in Eq. 3, we add three additional control variables that were identified as determinants of crash risk in previous studies (Kim & Zhang, 2016), including detrended average monthly stock turnover, the standard deviation of firm-specific weekly returns over the fiscal year, and the arithmetic average of firm-specific weekly returns over the fiscal year. All the independent variables are lagged by one year to mitigate the endogenous concern.

Panel A of Table 9 reports the results of stock crash risk and information asymmetry. Columns 1 and 2 show that the interaction term is negative and significant for underperforming firms, but insignificant for outperforming firms. The results support our hypothesis that timely bad news reporting due to weak peer performance constrains bad news hoarding for underperforming firms, leading to a lower probability of a future stock crash. In the same vein, the interaction terms in Columns 3 and 4 show that accelerating bad news into earnings during weak peer performance alleviates information asymmetry only for underperforming firms.

While disclosing bad news in a timelier manner can reduce information asymmetry and constrain managers' ability to bad news hoarding, it also incurs the cost that managers may forego investment opportunities with positive net present value, especially for risky projects (Kravet, 2014; Roychowdhury, 2010). If asymmetric verifiability distorts investment decisions, we conjecture that accounting conservatism imposes severe constraints on investment for outperforming firms, because good performance allows these firms to better access external financing to fund investments. To test this hypothesis, we replace $y_{i,\ t}$ in Eq. 5 with the proxies of investment. Specifically, we employ capital expenditure scaled by total assets (*CE*) and R&D investments scaled by total assets (*R&D*) as the proxies of investment, and estimate Eq. 5 for underperforming and outperforming samples, respectively.

Panel B of Table 9 presents the regression results. A noteworthy observation in Columns 1 and 2 is that the interaction term is only negative and significant for the outperforming sample. The results show that timelier bad news recognition caused by poor peer performance reduces outperforming firms' capital expenditure. In Columns 3 and 4, we use R&D as the proxy for investment. The results remain qualitatively similar. Overall, Table 9 provides supporting evidence that weak peer performance enhances timely bad news recognition, which in turn

[8] In Appendix F, we calculate the abnormal return as the difference between annual cumulative return and value weighted market index, and split the sample based on whether a firm has positive and negative abnormal return. We find the results are consistent with the results split by *RelativePerformance*.

Table 9
The constraint of bad news hoarding vs. the constraint of investment.

	(1)	(2)	(3)	(4)
Dependent variable	*CrashDummy*	*CrashDummy*	*Dispersion*	*Dispersion*
Panel A. Information asymmetry outcome				
HighAC	−0.005	−0.002	0.078	0.067
	(0.009)	(0.009)	(0.053)	(0.053)
WeakPerformance	0.033	0.108***	0.118	0.164**
	(0.027)	(0.028)	(0.109)	(0.075)
HighAC× *WeakPerformance*	−0.031	−0.075***	−0.163	−0.319***
	(0.037)	(0.039)	(0.230)	(0.119)
Adjusted R^2	0.262	0.305	0.001	−0.064
Observations	28,775	28,501	20,591	18,008
Panel B. Investment outcome				
	(1)	(2)	(3)	(4)
Dependent variable	*CE*	*CE*	*R&D*	*R&D*
HighAC	−0.008***	−0.006***	−0.001	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)
WeakPerformance	0.023***	−0.005**	0.005***	0.003
	(0.002)	(0.002)	(0.002)	(0.002)
HighAC× *WeakPerformance*	−0.007**	0.004	−0.005**	−0.001
	(0.003)	(0.003)	(0.002)	(0.002)
Adjusted R^2	0.600	0.603	0.848	0.849
Observations	37,715	37,299	39,748	35,266

Columns 1 and 3 are for the outperforming sample, while Columns 2 and 4 are for the underperforming sample. Panel A reports the joint effect of accounting conservatism and peer performance on stock crash risk and information asymmetry. Stock crash risk is measured by *CrashDummy*, which is a dummy variable that equals one if a firm experiences one or more crash events in a given year and zero otherwise. Information asymmetry is measured by *Dispersion*, which is the standard deviation of the earnings forecast scaled by the absolute value of the mean earnings forecast. Panel B reports the joint effect of accounting conservatism and peer performance on investment. Investment is measured by capital expenditure scaled by total assets (*CE*) and R&D investments scaled by total assets (*R&D*). Columns 1 and 2 of Panel A also include three additional control variables. Specifically, *Dutrn* is the detrended average monthly stock turnover. *Sigma* is the standard deviation of firm-specific weekly returns over the fiscal year. *Ret* is the arithmetic average of firm-specific weekly returns over the fiscal year. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

imposes the constraint of bad news hoarding for underperforming firms and the constraint of investment for outperforming firms.

5. Conclusion

Using data from US-listed firms from 1987 to 2019, we find that weak peer performance increases timely bad news disclosure. Such an impact is more profound for firms facing high information externality, and with low governance quality and high information asymmetry. We also find that the effect is greater for firms that adopt RPE and experience the implementation of the Inevitable Disclosure Doctrine. The evidence suggests that weak peer performance affects accounting conservatism by amplifying investors' concern about bad news hoarding. However, we find no evidence for the explanation of herding behaviour. Our findings are robust to a vast of tests, including instrument variable approach, DID analysis, alternative measures and subsample analysis. We further explore the consequence of accounting conservatism induced by weak peer performance and find that such a decision imposes the constraint of bad news hoarding for underperforming firms and the constraint of investment for outperforming firms.

This study highlights the spillover impact of peer performance on financial reporting strategy and contributes to the peer effect and accounting conservatism literature. Furthermore, this study demonstrates the significant impact of investors' demands for conservative accounting reporting on firms' investment decisions. For policymakers, our findings provide new evidence for the side effects of accounting conservatism under weak peer performance.

Declarations.

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Declaration of Competing Interest

None.

Data availability

Data will be made available on request.

Appendix A. Variable definition

***Cscore*:** C-score, developed by Khan and Watts (2009), is based on Basu's (1997) model. Specifically, Basu's (1997) cross-sectional model is as follows:

Equation Section (Next)

$$NI_{i,t} = \beta_0 + \beta_1 D_{i,t} + \beta_2 R_{i,t} + \beta_3 D_{i,t} \times R_{i,t} + e_{i,t}, \quad \text{(A1)}$$

where, i and t denote firm and year, respectively; $NI_{i,t}$ is net income before extraordinary items scaled by the lagged market value of equity; $R_{i,t}$ is the annual stock returns compounded from monthly returns beginning the fourth month after the fiscal year end; $D_{i,t}$ is a dummy variable that equals one if $R_{i,t}$ is negative, and zero otherwise; Khan and Watts (2009) define the Gscore (the timeliness of earnings to good news) and Cscore (the incremental timeliness of earnings to bad news) as follows:

$$Gscore_{i,t} = \beta_2 = \mu_1 + \mu_2 MV_{i,t} + \mu_3 M/B_{i,t} + \mu_4 Leverage_{i,t} \tag{A2}$$

$$Cscore_{i,t} = \beta_3 = \lambda_1 + \lambda_2 MV_{i,t} + \lambda_3 M/B_{i,t} + \lambda_4 Leverage_{i,t} \tag{A3}$$

where, $MV_{i,t}$ refers to the log of market value of equity at the end of the fiscal year. $M/B_{i,t}$ is equity market value divided by equity book value at the end of the fiscal year. $Leverage_{i,t}$ is total debt divided by total assets at the end of the fiscal year.

Substituting β_2 and β_3 from Eqs. A2 and A3 into Eq. A1 yields Eq. A4:

$$\begin{aligned} NI_{i,t} = {} & \beta_0 + R_{i,t} \times \left(\mu_1 + \mu_2 MV_{i,t} + \mu_3 M/B_{i,t} + \mu_4 Leverage_{i,t}\right) + D_{i,t} \times R_{i,t} \times \left(\lambda_1 + \lambda_2 MV_{i,t} + \lambda_3 M/B_{i,t} + \lambda_4 Leverage_{i,t}\right) + D_{i,t} \times \left(\delta_1 + \delta_2 MV_{i,t} + \delta_3 M/B_{i,t}\right. \\ & \left. + \delta_4 Leverage_{i,t}\right) + \beta_4 MV_{i,t} + \beta_5 M/B_{i,t} + \beta_6 Leverage_{i,t} + \varepsilon_{i,t}, \end{aligned} \tag{A4}$$

we employ the annual cross-sectional estimation for Eq. A4, and apply estimates to Eq. A3 to obtain *Cscore*.

Cscore_Banker: This is based on Banker et al.'s (2016) argument that the variation in cost stickiness has a compounding effect on C-score.

$$NI_{i,t} = \beta_1 + \beta_2 D_{i,t} + \beta_3 RET_{i,t} + \beta_4 D_{i,t} \times RET_{i,t} + \beta_5 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} + \beta_6 DS_{i,t} + \beta_7 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times DS_{i,t} + \varepsilon_{i,t}, \tag{A5}$$

$$Gscore2_{i,t} = \beta_3 = \mu_1 + \mu_2 MV_{i,t\text{-}1} + \mu_3 BM_{i,t\text{-}1} + \mu_4 Leverage_{i,t\text{-}1} + \varepsilon_{i,t}, \tag{A6}$$

$$Cscore2_{i,t} = \beta_4 = \lambda_1 + \lambda_2 MV_{i,t\text{-}1} + \lambda_3 BM_{i,t\text{-}1} + \lambda_4 Leverage_{i,t\text{-}1} + \varepsilon_{i,t}, \tag{A7}$$

where, $MV_{i,t\text{-}1}$ refers to the log of the market value of equity in the fiscal year t-1. $BM_{i,t\text{-}1}$ refers to the book value of equity divided by the market value of equity in the fiscal year t-1. $Leverage_{i,t\text{-}1}$ refers to total debt divided by total assets in the fiscal year t-1. $\Delta S_{i,t}/MKT_{i,t\text{-}1}$ is the changes in sales divided by market value of equity in the fiscal year t-1. $DS_{i,t}$ equals one if $\Delta S_{i,t}$ is negative and zero otherwise. Next, replacing β_3 and β_4 from Eqs. A6 and A7 into regression Eq. A5 yields Eq. A8:

$$\begin{aligned} NI_{i,t} = {} & \beta_1 + \beta_2 D_{i,t} + RET_{i,t} \times \left(\mu_1 + \mu_2 MV_{i,t-1} + \mu_3 BM_{i,t-1} + \mu_4 Leverage_{i,t-1}\right) + D_{i,t} \times RET_{i,t} \times \left(\lambda_1 + \lambda_2 MV_{i,t-1} + \lambda_3 BM_{i,t-1} + \lambda_4 Leverage_{i,t-1}\right) \\ & + \beta_5 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} + \beta_6 DS_{i,t} + \beta_7 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times DS_{i,t} + \delta_1 MV_{i,t-1} + \delta_2 BM_{i,t-1} + \delta_3 Leverage_{i,t-1} + \delta_4 D_{i,t} \times MV_{i,t-1} + \delta_5 D_{i,t} \times BM_{i,t-1} + \delta_6 D_{i,t} \times Leverage_{i,t-1} \\ & + \delta_7 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times MV_{i,t-1} + \delta_8 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times BM_{i,t-1} + \delta_9 \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times Leverage_{i,t-1} + \delta_{10} DS_{i,t} \times MV_{i,t-1} + \delta_{11} DS_{i,t} \times BM_{i,t-1} + \delta_{12} DS_{i,t} \times Leverage_{i,t-1} \\ & + \delta_{13} \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times DS_{i,t} \times MV_{i,t-1} + \delta_{14} \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times DS_{i,t} \times BM_{i,t-1} + \delta_{15} \frac{\Delta S_{i,t}}{MKT_{i,t-1}} \times DS_{i,t} \times Leverage_{i,t-1} + \varepsilon_{i,t}. \end{aligned} \tag{A8}$$

The firm-specific conditional accounting conservatism ($Cscore\_Banker_{i,t}$) is the estimated Cscore2, which is calculated by applying the estimates from Eq. A8 to Eq. A7.

Cscore_NC: This proxy takes into account the reversal of the trends of increase and decrease in accounting income (Ball & Shivakumar, 2005; Basu, 1997). We follow Lee et al. (2015) and estimate the following equation:

$$\begin{aligned} \Delta NI_{i,t} = {} & \beta_0 + \Delta NI_{i,t-1} \times \left(\mu_1 + \mu_2 MV_{i,t} + \mu_3 M/B_{i,t} + \mu_4 Leverage_{i,t}\right) + DN_{i,t} \times \Delta NI_{i,t-1} \times \left(\lambda_1 + \lambda_2 MV_{i,t} + \lambda_3 M/B_{i,t} + \lambda_4 Leverage_{i,t}\right) + DN_{i,t} \times \left(\delta_1 + \delta_2 MV_{i,t}\right. \\ & \left. + \delta_3 M/B_{i,t} + \delta_4 Leverage_{i,t}\right) + \beta_4 MV_{i,t} + \beta_5 M/B_{i,t} + \beta_6 Leverage_{i,t} + \varepsilon_{i,t}, \end{aligned} \tag{A9}$$

where, $\Delta NI_{i,t}$ is the change in net income before extraordinary items scaled by the lagged market value of equity. $DN_{i,t}$ is a dummy variable equal to one if the ΔNI in the prior year is negative and zero otherwise. *Cscore_NC* is obtained by applying the new estimates from Eq. A9 to Eq. A3.

WeakPerformance: The mean of annual idiosyncratic stock return of a firm's peers (excluding the focal firm) multiplied by a negative one. Peers are identified by the Text-based Network Industry Classifications (TNIC). The data of TNIC is obtained from the Hoberg-Phillips Data Library.

FirmSize: The natural logarithm of total assets.

M/B: Equity market value divided by equity book value.

Leverage: Total debt divided by total assets.

SalesVolatility: The standard deviation of sale using a 5-year rolling window (a minimum of 3 years required) deflated by total assets.

SalesGrowth: The percentage of annual growth in total sales.

RDAD: Total research and development expense plus advertising expense deflated by total sales. Missing research and development expenses are replaced by zero.

CashFlow: Cash flow divided by total assets.

LitigationRisk: A dummy variable that equals one if a firm's litigation risk is in the top decile of the sample and zero otherwise (Gao, Li, & Ma, 2021).

FirmAge: Natural log of the year in which the firm appears in the Compustat database (Compustat).

RelativePerformance: The difference between a firm's annual idiosyncratic stock return and *WeakPerformance*.

HighCIOpeers: A dummy variable that equals one if a firm's number of peer firms that are cross-held by institutional investors is above the median

value in a given year and zero otherwise. The information for institutional ownership is obtained from the Thomson Reuters 13F database.

HighCApeers: A dummy variable that equals one if a firm's number of common analysts is above the median value in a given year and zero otherwise. The information for analyst forecast is obtained from the IBES database.

CrossBoard: A dummy variable that equals one if a firm's outside director also takes a board position in their peer firms and zero otherwise. Data is obtained from the BoardEx database.

CrossAudit: A dummy variable that equals one if a firm shares the same auditor with at least one peer firm and zero otherwise. Data is obtained from the Audit Analytics database.

LowTOindex: A dummy variable that equals one if a firm's takeover index is below the median value in a given year and zero otherwise. The takeover index is available on Stephen McKeon's personal website.

HighGindex: A dummy variable that equals one if a firm's G-index is above the median value in a given year and zero otherwise. G-index is available on Andrew Metrick's personal website.

SOX**:** A dummy variable that equals one for three years after the enactment of the Sarbanes-Oxley Act (SOX), and zero for three years before the enactment.

HighPIN: A dummy variable that equals one if a firm's probability of informed trading is above the median value in a given year and zero otherwise. Data on the probability of informed trading comes from Brown, Hillegeist, and Lo's (2004) continuously updated database of PIN estimates.

HighDispersion: A dummy variable that equals one if a firm's analyst forecast dispersion is above the median value in a given year and zero otherwise. Analyst forecast dispersion (*Dispersion*) is the standard deviation of the earnings forecast scaled by the absolute value of the mean earnings forecast. The information for analyst forecast is obtained from the IBES database.

HighError: A dummy variable that equals one if a firm's analyst forecast error is above the median value in a given year and zero otherwise. Analyst forecast error is the absolute value of the difference between actual earnings per share and the median forecasted value deflated by the absolute value of the mean earnings forecast.

RPE: A dummy variable that equals one if a firm adopts RPE in a given year and zero otherwise.

IDD: A dummy variable that equals one if a firm operates in a state that has experienced the enforcement of the Inevitable Disclosure Doctrine (IDD) and zero otherwise.

HighAbility: A dummy variable that equals one if a firm's managerial ability is greater than the median value of a given year and zero otherwise.

OverconfidentCEO: A dummy variable that equals one if a CEO holds vested options with average moneyness of at least 67% and zero otherwise.

WeakPerformance_C: The average idiosyncratic stock return of peers' major customers. We flip the sign of the idiosyncratic stock return of the major customers. The information on the customer relationship is obtained from the Compustat Segment file.

SevereDrought: A dummy variable that equals one if at least one peer firm of the treated firm has experienced the severe drought event by the time *t* and zero otherwise. The state-level Palmer index is available at https://climatedataguide.ucar.edu/climate-data/palmer-drought-severity-index-pdsi.

OneYearBeforeSevereDrought: A dummy variable that equals one if a treated firm's peer firms experience a shock one year later and zero otherwise.

TwoYearBeforeSevereDrought: A dummy variable that equals one if a treated firm's peer firms experience a shock two years later and zero otherwise.

WeatherEvents: The difference-in-differences estimator that equals one if at least one peer firm of the treated firm has experienced the top ten largest extreme weather events event by the time *t* and zero otherwise. The events of extreme weather are obtained from https://www.ncei.noaa.gov/access/monitoring/billions/events.

OneYearBeforeWeatherEvents: A dummy variable that equals one if a treated firm's peer firms experience a shock one year later and zero otherwise.

TwoYearBeforeWeatherEvents: A dummy variable that equals one if a treated firm's peer firms experience a shock two years later and zero otherwise.

WeakPerformance_SIC: The mean of annual idiosyncratic stock return of a firm's peers (excluding the focal firm). Peers are identified by the 3-digit SIC industry classification.

CEODuality: A dummy variable that equals one if a CEO serves as board chairperson and zero otherwise. The information for CEOs' employment is obtained from the Executive Compensation database.

CEOEquityOwnership: The proportion of stock ownership held by a firm's CEO.

BoardIndependence: The number of independent board directors over the total number of board members. The information for the board is obtained from the BoardEx database.

HighAC: A dummy variable that equals one if *Cscore* is greater than the median value of a given year and zero otherwise.

CrashDummy: A dummy variable that equals one if a firm experiences one or more crash events in a given year and zero otherwise.

CE: Capital expenditure scaled by total assets.

R&D: Research and development expenses scaled by total assets.

Dutrn: Detrended average monthly stock turnover.

Sigma: The standard deviation of firm-specific weekly returns over the fiscal year.

Ret: The arithmetic average of firm-specific weekly returns over the fiscal year.

Appendix B. Robustness test: Cross-board member and cross-auditor

	(1)	(2)
WeakPerformance	0.004	0.002
	(0.004)	(0.005)
CrossBoard	−0.001	
	(0.002)	
CrossBoard×*WeakPerformance*	0.016*	
	(0.009)	
CrossAudit		−0.014***
		(0.004)
CrossAudit×*WeakPerformance*		0.015**
		(0.007)
Controls	Yes	Yes
Year F.E.	Yes	Yes
Firm F.E.	Yes	Yes
Adjusted R^2	0.766	0.767
Observations	36,674	31,925

This table presents the OLS estimates of the moderate effect of information demand on the relationship between peer performance and accounting conservatism. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. Information externality is proxied by *CrossBoard* and *CrossAudit*. *CrossBoard* is a dummy variable that equals one if a firm's outside director also takes a board position in their peer firms and zero otherwise. *CrossAudit* is a dummy variable that equals one if a firm shares the same auditor with at least one peer firm and zero otherwise. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

Appendix C. Robustness test: the moderating effects of SOX and analyst forecast error

	(1)	(2)
WeakPerformance	0.022***	0.015***
	(0.004)	(0.003)
SOX×*WeakPerformance*	−0.025**	
	(0.011)	
HighError		0.016***
		(0.001)
HighError×*WeakPerformance*		0.013***
		(0.004)
Adjusted R^2	0.658	0.773
Observations	17,473	63,897

This table presents the OLS estimates of the moderate effect of information demand on the relationship between peer performance and accounting conservatism. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. In Column 1, *SOX* is a dummy variable that equals one for three years after the enactment of SOX, and zero for three years before the enactment. In Column 2, *HighError* is a dummy variable that equals one if a firm's analyst forecast error is above the median value in a given year and zero otherwise. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

Appendix D. Robustness test: Top ten largest extreme weather events during 1987–2019

	(1)	(2)	(3)
WeatherEvents	0.007***	0.006**	
	(0.002)	(0.002)	
OneYearBeforeWeatherEvents		0.004	
		(0.003)	
TwoYearBeforeWeatherEvents		−0.005	
		(0.004)	
Placebo			−0.000
			(0.003)
Controls	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes

(*continued on next page*)

(*continued*)

	(1)	(2)	(3)
Firm F.E.	Yes	Yes	Yes
Adjusted R^2	0.810	0.810	0.810
Observations	12,809	12,809	12,800

This table reports the effect of peer performance and accounting conservatism using the difference-in-differences framework. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. The dependent variable for each regression is *Cscore*. *WeatherEvents* is the difference-in-differences estimator that equals one if at least one peer firm of the treated firm has experienced the top ten largest extreme weather events event by the time *t* and zero otherwise. *OneYearBeforeWeatherEvents* is a dummy variable that equals one if a treated firm's peer firms experience a shock one year later and zero otherwise. *TwoYearBeforeWeatherEvents* is a dummy variable that equals one if a treated firm's peer firms experience a shock two years later and zero otherwise. *Placebo* is constructed by falsely identifying the time of a shock two years ahead. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

Appendix E. Robustness test: Basu's (1997) model

(1)	*D*	−0.031***
		(0.007)
(2)	*Return*	−0.004
		(0.007)
(3)	*D* × *Return*	0.010
		(0.022)
(4)	*WeakPerformance*	−0.024***
		(0.009)
(5)	*D* × *WeakPerformance*	0.001
		(0.015)
(6)	*Return*×*WeakPerformance*	−0.038**
		(0.015)
(7)	*D* × *Return*×*WeakPerformance*	0.125***
		(0.045)
(12)	*MV*	0.010***
		(0.002)
(13)	*D*× *MV*	0.005***
		(0.001)
(14)	*Return*× *MV*	−0.001
		(0.001)
(15)	*D* × *Return*× *MV*	0.028***
		(0.004)
(16)	*M/B*	0.002***
		(0.000)
(17)	*D* × *M/B*	−0.000
		(0.000)
(18)	*Return*×*M/B*	0.001
		(0.000)
(19)	*D* × *Return*×*M/B*	−0.010***
		(0.001)
(20)	*Leverage*	−0.074***
		(0.012)
(21)	*D* × *Leverage*	0.023
		(0.014)
(22)	*Return*×*Leverage*	−0.000
		(0.012)
(23)	*D* × *Return*×*Leverage*	0.251***
		(0.039)
	Adjusted R^2	0.357
	Observations	81,558

This table reports the robustness test for the effect of peer performance on accounting conservatism using Basu's (1997) model. Specifically, we include *WeakPerformance*, *D* × *WeakPerformance*, *Return*×*WeakPerformance* and *D* × *Return*×*WeakPerformance* in Eq. A3, and estimate the model using OLS with firm and year fixed effects. The dependent variable for each regression is net income before extraordinary items scaled by the lagged market value of equity. *Return* is the annual cumulative return beginning three months after the prior fiscal year end. *D* is an indicator variable set equal to one if *Return* is negative and zero otherwise. The coefficient of *D* × *Return*×*WeakPerformance* captures the impact of weak peer performance on the timeliness of loss recognition. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

Appendix F. An alternative method for defining outperformance and underperformance

	(1)	(2)
	Positive abnormal return sample	Negative abnormal return sample
WeakPerformance	0.020***	0.027***
	(0.003)	(0.003)
Adjusted R^2	0.785	0.760
Observations	34,856	46,656

This table reports the robustness results of the effect of peer performance on accounting conservatism. The dependent variable for each regression is *Cscore*. Columns 1 and 2 are for the split samples based on whether a firm has positive abnormal returns. A firm is classified as having positive (negative) abnormal returns if the annual returns are greater (lower) than the value-weighted index. All the regressions include the control variables in Eq. 3 and the firm and year fixed effects. All continuous variables are winsorized at their 1st and 99th percentiles. All standard errors in the brackets are adjusted for heteroskedasticity and clustering at the firm level. *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The details of variable construction are given in Appendix A.

References

Adhikari, B. K., & Agrawal, A. (2018). Peer influence on payout policies. *Journal of Corporate Finance, 48*, 615–637.

Aggarwal, R. K., & Samwick, A. A. (1999). Executive compensation, strategic competition, and relative performance evaluation: Theory and evidence. *The Journal of Finance, 54*(6), 1999–2043.

Ahmed, A. S., Billings, B. K., Morton, R. M., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review, 77*(4), 867–890.

Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics, 43*(2–3), 411–437.

Ahmed, A. S., & Duellman, S. (2013). Managerial overconfidence and accounting conservatism. *Journal of Accounting Research, 51*(1), 1–30.

Albuquerque, A. (2009). Peer firms in relative performance evaluation. *Journal of Accounting and Economics, 48*(1), 69–89.

Ali, U., & Hirshleifer, D. (2020). Shared analyst coverage: Unifying momentum spillover effects. *Journal of Financial Economics, 136*(3), 649–675.

Avery, C. N., & Chevalier, J. A. (1999). Herding over the career. *Economics Letters, 63*(3), 327–333.

Baginski, S. P., Hassell, J. M., & Hillison, W. A. (2000). Voluntary causal disclosures: Tendencies and capital market reaction. *Review of Quantitative Finance and Accounting, 15*(4), 371–389.

Baker, M., & Ruback, R. (1999). *Estimating industry multiples* (Working paper).

Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics, 39*(1), 83–128.

Banker, R. D., Basu, S., Byzalov, D., & Chen, J. Y. (2016). The confounding effect of cost stickiness on conservatism estimates. *Journal of Accounting and Economics, 61*(1), 203–220.

Barta, P. (2004). Restatement by freddie puts fannie mae on spot. *The Wall Street Journal, January 12*, C1.

Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics, 24*(1), 3–37.

Beatty, A., Liao, S., & Yu, J. J. (2013). The spillover effect of fraudulent financial reporting on peer firms' investments. *Journal of Accounting and Economics, 55*(2–3), 183–205.

Bedard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory, 23*(2), 13–35.

Bernard, D., Kaya, D., & Wertz, J. (2021). Entry and capital structure mimicking in concentrated markets: The role of incumbents' financial disclosures. *Journal of Accounting and Economics, 71*(2–3), Article 101379.

Bessen, J., & Maskin, E. (2009). Sequential innovation, patents, and imitation. *The Rand Journal of Economics, 40*(4), 611–635.

Boni, L., & Womack, K. L. (2006). Analysts, industries, and price momentum. *Journal of Financial and Quantitative Analysis, 41*(1), 85–109.

Bonini, S., & Boraschi, D. (2012). Corporate scandals and capital structure. In *Entrepreneurship, governance and ethics* (pp. 241–269). Springer.

Bratten, B., Payne, J. L., & Thomas, W. B. (2016). Earnings management: Do firms play "follow the leader"? *Contemporary Accounting Research, 33*(2), 616–643.

Brockman, P., Liebenberg, I., & Schutte, M. (2010). Comovement, information production, and the business cycle. *Journal of Financial Economics, 97*(1), 107–129.

Brown, S., Hillegeist, S. A., & Lo, K. (2004). Conference calls and information asymmetry. *Journal of Accounting and Economics, 37*(3), 343–366.

Cai, Y., Kim, Y., Park, J. C., & White, H. D. (2016). Common auditors in M&a transactions. *Journal of Accounting and Economics, 61*(1), 77–99.

Cain, M. D., McKeon, S. B., & Solomon, S. D. (2017). Do takeover laws matter? Evidence from five decades of hostile takeovers. *Journal of Financial Economics, 124*(3), 464–485.

Callen, J. L., & Fang, X. (2013). Institutional investor stability and crash risk: Monitoring versus short-termism? *Journal of Banking & Finance, 37*(8), 3047–3063.

Chen, Y.-W., Chan, K., & Chang, Y. (2019). Peer effects on corporate cash holdings. *International Review of Economics and Finance, 61*, 213–227.

Cheynel, E., & Levine, C. B. (2020). Public disclosures and information asymmetry: A theory of the mosaic. *The Accounting Review, 95*(1), 79–99.

Cohen, J. R., Hayes, C., Krishnamoorthy, G., Monroe, G. S., & Wright, A. M. (2013). The effectiveness of SOX regulation: An interview study of corporate directors. *Behavioral Research in Accounting, 25*(1), 61–87.

Cohen, L., & Frazzini, A. (2008). Economic links and predictable returns. *The Journal of Finance, 63*(4), 1977–2011.

Damodaran, A. (2009). *The dark side of valuation: Valuing young, distressed, and complex businesses* (2nd ed.). Upper Saddle River: Pearson Education.

Du, Q., & Shen, R. (2018). Peer performance and earnings management. *Journal of Banking & Finance, 89*, 125–137.

Dyck, A., Morse, A., & Zingales, L. (2010). Who blows the whistle on corporate fraud? *The Journal of Finance, 65*(6), 2213–2253.

Ecker, F., Francis, J., Olsson, P., & Schipper, K. (2013). Estimation sample selection for discretionary accruals models. *Journal of Accounting and Economics, 56*(2–3), 190–211.

FASB. (2010). *Statement of financial accounting concepts no. 8: Conceptual framework for financial reporting*. Norwalk, CT: Author.

Feichter, C., Moers, F., & Timmermans, O. (2020). *Relative performance evaluation and competitive aggressiveness* (Working paper).

Foster, G. (1981). Intra-industry information transfers associated with earnings releases. *Journal of Accounting and Economics, 3*(3), 201–232.

Foucault, T., & Fresard, L. (2014). Learning from peers' stock prices and corporate investment. *Journal of Financial Economics, 111*(3), 554–577.

Francis, B. B., Hasan, I., & Kostova, G. L. (2016). When do peers matter?: A cross-country perspective. *Journal of International Money and Finance, 69*, 364–389.

Francis, J., LaFond, R., Olsson, P. M., & Schipper, K. (2004). Costs of equity and earnings attributes. *The Accounting Review, 79*(4), 967–1010.

Francis, J. R., & Martin, X. (2010). Acquisition profitability and timely loss recognition. *Journal of Accounting and Economics, 49*(1–2), 161–178.

Fuertes, A.-M., & Robles, M.-D. (2021). Bank credit risk events and peers' equity value. *International Review of Financial Analysis, 75*, Article 101668.

Gao, H., Li, K., & Ma, Y. (2021). Stakeholder orientation and the cost of debt: Evidence from state-level adoption of constituency statutes. *Journal of Financial and Quantitative Analysis, 56*(6), 1908–1944.

Geng, H., Hau, H., Michaely, R., & Nguyen, B. (2021). *Does board overlap promote coordination between firms?* (Working paper).

Gleason, C. A., Jenkins, N. T., & Johnson, W. B. (2008). The contagion effects of accounting restatements. *The Accounting Review, 83*(1), 83–110.

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics, 118*(1), 107–156.

Gong, G., Li, L. Y., & Shin, J. Y. (2011). Relative performance evaluation and related peer groups in executive compensation contracts. *The Accounting Review, 86*(3), 1007–1043.

Gong, G., Li, L. Y., & Yin, H. (2019). Relative performance evaluation and the timing of earnings release. *Journal of Accounting and Economics, 67*(2–3), 358–386.

Gyimah, D., Machokoto, M., & Sikochi, A. S. (2020). Peer influence on trade credit. *Journal of Corporate Finance, 64*, Article 101685.

Han, J. C., Wild, J. J., & Ramesh, K. (1989). Managers' earnings forecasts and intra-industry information transfers. *Journal of Accounting and Economics, 11*(1), 3–33.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics, 31*(1–3), 405–440.

Hoberg, G., & Phillips, G. (2016). Text-based network industries and endogenous product differentiation. *Journal of Political Economy, 124*(5), 1423–1465.

Huang, H. H., Kerstein, J., & Wang, C. (2018). The impact of climate risk on firm performance and financing choices: An international comparison. *Journal of International Business Studies, 49*(5), 633–656.

Huang, J., Jain, B. A., Kini, O., & Xi, Y. (2020). *Common analyst networks and corporate disclosure policy choices* (Working paper).

Hudson, Y., Yan, M., & Zhang, D. (2020). Herd behaviour & investor sentiment: Evidence from UK mutual funds. *International Review of Financial Analysis, 71*, Article 101494.
Huynh, T. D., Nguyen, T. H., & Truong, C. (2020). Climate risk: The price of drought. *Journal of Corporate Finance, 65*, Article 101750.
IASB. (2010). *The conceptual framework for financial reporting*. London: IFRS Foundation.
Im, H. J., Liu, J., & Park, Y. J. (2021). Policy uncertainty and peer effects: Evidence from corporate investment in China. *International Review of Financial Analysis, 77*, Article 101834.
Im, H. J., & Shon, J. (2019). The effect of technological imitation on corporate innovation: Evidence from US patent data. *Research Policy, 48*(9), Article 103802.
Infuehr, J. (2021). Relative performance evaluation and earnings management. *Contemporary Accounting Research, 39*(1), 607–627.
Israelsen, R. D. (2016). Does common analyst coverage explain excess comovement? *Journal of Financial and Quantitative Analysis, 51*(4), 1193–1229.
Jacoby, G., & Zheng, S. X. (2010). Ownership dispersion and market liquidity. *International Review of Financial Analysis, 19*(2), 81–88.
Jiang, H., & Verardo, M. (2018). Does herding behavior reveal skill? An analysis of mutual fund performance. *The Journal of Finance, 73*(5), 2229–2269.
Kaustia, M., & Rantala, V. (2021). Common analysts: Method for defining peer firms. *Journal of Financial and Quantitative Analysis, 56*(5), 1505–1536.
Kedia, S., Koh, K., & Rajgopal, S. (2015). Evidence on contagion in earnings management. *The Accounting Review, 90*(6), 2337–2373.
Kelley, H. H. (1967). Attribution theory in social psychology. In *Nebraska symposium on motivation*. University of Nebraska Press.
Khan, M., & Watts, R. L. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. *Journal of Accounting and Economics, 48*(2–3), 132–150.
Kim, J. B., & Zhang, L. (2016). Accounting conservatism and stock price crash risk: Firm-level evidence. *Contemporary Accounting Research, 33*(1), 412–441.
Kini, O., Mian, S., Rebello, M., & Venkateswaran, A. (2009). On the structure of analyst research portfolios and forecast accuracy. *Journal of Accounting Research, 47*(4), 867–909.
Klasa, S., Ortiz-Molina, H., Serfling, M., & Srinivasan, S. (2018). Protection of trade secrets and capital structure decisions. *Journal of Financial Economics, 128*(2), 266–286.
Koonce, L., & Mercer, M. (2005). Using psychology theories in archival financial accounting research. *Journal of Accounting Literature, 24*, 175.
Kothari, S. P., Shu, S., & Wysocki, P. D. (2009). Do managers withhold bad news? *Journal of Accounting Research, 47*(1), 241–276.
Kravet, T. D. (2014). Accounting conservatism and managerial risk-taking: Corporate acquisitions. *Journal of Accounting and Economics, 57*(2–3), 218–240.
LaFond, R., & Watts, R. L. (2008). The information role of conservatism. *The Accounting Review, 83*(2), 447–478.
Lara, J. M. G., Osma, B. G., & Penalva, F. (2009). Accounting conservatism and corporate governance. *Review of Accounting Studies, 14*(1), 161–201.
Larcker, D. F., Richardson, S. A., Tuna, I., & r.. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review, 82*(4), 963–1008.
Leary, M. T., & Roberts, M. R. (2014). Do peer firms affect corporate financial policy? *The Journal of Finance, 69*(1), 139–178.
Lee, H. S., Li, X., & Sami, H. (2015). Conditional conservatism and audit fees. *Accounting Horizons, 29*(1), 83–113.
Li, K., & Zhao, X. (2008). Asymmetric information and dividend policy. *Financial Management, 37*(4), 673–694.
Li, V. (2016). Do false financial statements distort peer firms' decisions? *The Accounting Review, 91*(1), 251–278.
Machokoto, M., Chipeta, C., & Ibeji, N. (2021). The institutional determinants of peer effects on corporate cash holdings. *Journal of International Financial Markets Institutions and Money, 73*, Article 101378.
MacKay, P., & Phillips, G. M. (2005). How does industry affect firm financial structure? *The Review of Financial Studies, 18*(4), 1433–1466.
Menkhoff, L., Schmidt, U., & Brozynski, T. (2006). The impact of experience on risk taking, overconfidence, and herding of fund managers: Complementary survey evidence. *European Economic Review, 50*(7), 1753–1766.
Myers, L. A., Scholz, S., & Sharp, N. Y. (2013). *Restating under the radar? Determinants of restatement disclosure choices and the related market reactions* (Working paper).
Na, K. (2020). CEOs' outside opportunities and relative performance evaluation: Evidence from a natural experiment. *Journal of Financial Economics, 137*(3), 679–700.
Ng, J., Tuna, I., & Verdi, R. (2013). Management forecast credibility and underreaction to news. *Review of Accounting Studies, 18*(4), 956–986.
Nguyen, L. T. M., Cheong, C. S., & Zurbruegg, R. (2021). Brokerage M&as and the peer effect on analyst forecast accuracy. *International Review of Financial Analysis, 73*, Article 101650.
Park, J., Sani, J., Shroff, N., & White, H. (2019). Disclosure incentives when competing firms have common ownership. *Journal of Accounting and Economics, 67*(2–3), 387–415.
Pozen, D. E. (2005). The mosaic theory, national security, and the freedom of information act. *The Yale Law Journal, 115*, 628–678.
Ramalingegowda, S., Utke, S., & Yu, Y. (2021). Common institutional ownership and earnings management. *Contemporary Accounting Research, 38*(1), 208–241.
Rind, A. A., Akbar, S., Boubaker, S., Lajili-Jarjir, S., & Mollah, S. (2022). The role of peer effects in corporate employee welfare policies. *British Journal of Management, 33*, 1609–1631. Early Access.
Roychowdhury, S. (2010). Discussion of:"acquisition profitability and timely loss recognition" by J. Francis and X. Martin. *Journal of Accounting and Economics, 49*(1–2), 179–183.
Roychowdhury, S., & Watts, R. L. (2007). Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. *Journal of Accounting and Economics, 44*(1–2), 2–31.
Ruch, G. W., & Taylor, G. (2015). Accounting conservatism: A review of the literature. *Journal of Accounting Literature, 34*, 17–38.
Scharfstein, D. S., & Stein, J. C. (1990). Herd behavior and investment. *The American Economic Review, 80*(3), 465–479.
Seo, H. (2021). Peer effects in corporate disclosure decisions. *Journal of Accounting and Economics, 71*(1), Article 101364.
Shroff, N., Verdi, R. S., & Yost, B. P. (2017). When does the peer information environment matter? *Journal of Accounting and Economics, 64*(2–3), 183–214.
Skinner, D. J. (1994). Why firms voluntarily disclose bad news. *Journal of Accounting Research, 32*(1), 38–60.
Sterling, R. R. (1970). *Theory of the measurement of enterprise income*. KS: University Press of Kansas.
Tse, S., & Tucker, J. W. (2010). Within-industry timing of earnings warnings: Do managers herd? *Review of Accounting Studies, 15*(4), 879–914.
Vrettos, D. (2013). Are relative performance measures in CEO incentive contracts used for risk reduction and/or for strategic interaction? *The Accounting Review, 88*(6), 2179–2212.
Watts, R. L. (2003a). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons, 17*(3), 207–221.
Watts, R. L. (2003b). Conservatism in accounting part II: Evidence and research opportunities. *Accounting Horizons, 17*(4), 287–301.
Xu, T., Najand, M., & Ziegenfuss, D. (2006). Intra-industry effects of earnings restatements due to accounting irregularities. *Journal of Business Finance & Accounting, 33*(5–6), 696–714.
Yuan, Q., & Zhang, Y. (2015). Do banks price litigation risk in debt contracting? Evidence from class action lawsuits. *Journal of Business Finance & Accounting, 42*(9–10), 1310–1340.
Zeng, J. (2001). Innovative vs. imitative R&D and economic growth. *Journal of Development Economics, 64*(2), 499–528.
Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting and Economics, 45*(1), 27–54.