## The Impact of Internal Governance on Conservatism: Evidence from Australia

## ABSTRACT

Financial reporting decisions can be influenced by the distribution of executive decisionmaking power. We examine whether internal governance, the process through which the power to make decisions is distributed between CEOs and their subordinates, can influence the level of conservatism in such decisions. We show that firms with better internal governance are more conservative. We also find that the effect is more pronounced for firms with less powerful and older CEOs, those with subordinate executives who contribute more, and those that are more mature. We conduct various tests that confirm the robustness of our results. Unlike other studies that focus only on CEOs, we examine how the top management team as a group and the power distribution between CEOs and key subordinates shape financial reporting quality. Our study can inform various stakeholders, including firms aiming to appoint executives and strengthen their internal governance.

## **I. INTRODUCTION**

The study examines the effect of internal governance on the level of conservatism in financial reporting decisions. Internal governance refers to the process through which key subordinate executives monitor and counterbalance the interests of the chief executive officer (CEO) and thus influence such decisions (Acharya, Myers, and Rajan 2011; Cheng, Jimmy, and Shevlin 2016). Financial reporting decisions are typically made by the top management team as a whole rather than solely by the CEO (Hambrick and Mason 1984). We define key subordinate executives as the ten executives who receive the highest compensation, other than the CEO, as they are most likely to have the ability and incentives to influence the CEO when decisions are made (Cheng et al. 2016).

Subordinate executives have strong incentives to focus on long-term firm value rather than short-term performance (Acharya et al. 2011) and thus counterbalance the self-serving behaviour of the CEO through bottom-up governance mechanisms (Acharya et al. 2011; Cheng et al. 2016; Landier, Sauvagnat, Sraer, and Thesmar 2013). The trade-off between current and future firm value can affect the conservative understatement of net assets and earnings, in which long-term value is prioritised (Watts 2003). We expect subordinate executives to impact financial reporting decisions as they are closely involved in business operations (Graham, Harvey, and Puri 2015).

Our research motivation is two-fold. First, although the effects of CEOs and CFOs on financial reporting quality attributes such as conservatism have been extensively investigated, the influence of other top management team members (Finkelstein 1992) has been neglected. These subordinate executives have different incentives and can influence corporate decisions through various means (Cheng et al. 2016). Subordinate executives are more long-term oriented, i.e., have longer decision and employment horizons, as compared to the CEO who are more

short-term oriented, i.e., have shorter decision and employment horizons (Jain, Jiang, and Mekhaimer 2016). Differential horizons refer to the different time-orientation preferences of a CEO and other subordinate executives. We hypothesise that incentives arising from differential horizons among the top management team can affect how conservative their financial decisions are (Dechow and Sloan 1991). Second, although previous literature focuses on various corporate governance mechanisms (e.g., board composition and ownership structure), few studies investigate how checks and balances within the management team affect corporate outcomes. Internal power-balancing mechanisms should be considered, as control is imposed not only externally onto the management team or top-down from the CEO but also bottom-up by subordinate executives and managers (Acharya et al. 2011; Fama 1980).

Conservatism is an attribute of financial reporting and refers to the downward bias of net asset values and earnings (Givoly, Hayn, and Natarajan 2007). CEOs tend to oppose conservatism as it negatively impacts their compensation in the short-term (Bergstresser and Philippon 2006; Shleifer and Vishny 1989). They are often more likely to emphasise short-term performance and firm (Antia, Pantzalis, and Park 2010). In contrast, key subordinate executives are often more conservative, as they are more concerned about long-term firm value due to their potential ambitions to become the future CEO (Acharya et al. 2011). They also have more to lose relative to their total wealth than CEOs if firms underperform, as they typically have more years in their career remaining (Cheng et al. 2016). Further, as the prospective wages of these executives depend on the firms' continued good performance, which is influenced by the CEO's decisions and actions, they are motivated to monitor the CEO and to be more long-term oriented (Fama 1980).

Subordinate executives have the ability to monitor the CEO (Cheng et al. 2016), as they are closely involved in ensuring the firm's performance and cash flow and, thus, the CEO's

welfare. If the CEO does not consider their long-term approach, the subordinate executives' lack of motivation can threaten the welfare of the CEO (Acharya et al. 2011). This opposition and dependence between the CEO and subordinates facilitate the distribution of decision-making power among the top management team and, therefore, reflects internal governance.

The above discussions imply that the effectiveness of internal governance depends on the incentives and ability of key subordinate executives to exert control over the CEO. Subordinates' incentives are derived from their decision horizons, while their influence is reflected in their compensation under competitive labour market conditions. Therefore, we follow Cheng et al. (2016) to use subordinate executives' decision horizons and pay to capture these incentives and their ability to proxy for the effectiveness of internal governance. We propose that the greater the decision horizons and pay of the subordinate executives, the greater their incentives and ability to monitor the CEO. This can then lead to more effective internal governance and a more conservative approach.

From an alternative perspective, executives may possess the same compensation incentives as their CEO bosses to focus on short-term performance (Cheng et al. 2016) and may not monitor the CEO to avoid being demoted or fired. External candidates may also compete for the CEO position; thus, executives may aim to increase short-term earnings by being less conservative, as this can influence successor selection (Acharya et al. 2011). Therefore, the potential positive effects of internal governance on conservatism remains an empirical question.

We test our hypotheses using 2,657 firm-year observations from ASX over the 2004-2020 period. We find that the level of conservatism increases with the age difference between the CEO and key subordinate executives, which is consistent with our prediction. The results hold after controlling for other CEO attributes and firm characteristics that may affect the level of conservatism. To rule out endogeneity issues due to measurement errors, we use alternative measures of conservatism and internal governance. We conduct additional analyses using lagged values of internal governance and undertake a two-stage least squares approach to further address endogeneity concerns. We also include year and firm fixed effects to control for unobservable factors that may affect our findings. Results remain consistent with our prediction.

We conduct a series of cross-sectional analyses to corroborate our main results. First, we find that the effect of internal governance is stronger when the CEO is less powerful and more effectively monitored. Second, we find that the impact of key subordinate executives on the CEO is more evident when the CEO nears retirement age. Third, we find that the impact of subordinate executives on the CEO depends on their contribution to firm performance, whereby greater firm complexity reflects a greater contribution. Fourth, we find that the effect of internal governance on conservatism is stronger for more mature firms than younger firms, as the pressures for younger firms to meet financial targets and covenants are greater.

Our study makes three main contributions to the literature. First, we enrich the conservatism framework of Watts (2003) by identifying a new aspect of executive contracts, i.e., the distribution of power and variation of incentives between a CEO and key subordinate executives. Further, prior internal governance literature based in Australia focus on the effects of board characteristics (Lim 2011; Tian and Twite 2011), voluntary committee formation (Ahmed and Henry 2012; Miglani, Ahmed, and Henry 2015), audit committee characteristics (Davidson, Goodwin-Stewart, and Kent 2005), and CEO duality (Habib and Azim 2008). More recently, the focus has been on CFO characteristics (Muttakin, Khan, and Tanewski 2019). However, decision-making influence is shared by all top executives rather than the CEO or CFO alone (Acharya et al. 2011). Therefore, we identify subordinate executives' bottom-up monitoring as an internal governance mechanism and highlight that subordinate executives'

incentives and ability to influence within a firm play an important role on financial reporting quality.

Second, instead of viewing top executives as a unified team, we provide a more comprehensive picture of how firms operate. We find that key subordinate executives serve an important monitoring role in the management team and can effectively counterbalance the self-serving behaviour of the CEO. Our study builds upon the only handful of studies dedicated to executive power distribution and the bottom-up monitoring of subordinate executives (e.g., Cheng et al. 2016; Jain et al. 2016; Mekhaimer, Abakah, Ibrahim, and Hussainey 2022; Xie, Chen, and Liu 2021). Specifically, we examine the role of subordinate executives in conservative accounting. Unlike prior studies, our focus extends beyond the top four subordinate executives because it is likely that more than several top executives make important contributions to sizable, listed firms. Further, we extend the literature examining top management team attributes (Li, Tseng, and Chen 2016; Zhang 2019). We uncover the 'black box' between top management team attributes and financial reporting quality by focusing on team power distribution (Plöckinger, Aschauer, Hiebl, and Rohatschek 2016). We also complement the CEO opportunism literature (e.g., Devos, Elliott, and Warr 2015; Shen 2003) by identifying an important mechanism to mitigate the principal-agency problem.

Third, most research into subordinates-driven internal governance is based in the US (Cheng et al. 2016; Jain et al. 2016; Mekhaimer et al. 2022) or China (Xie et al. 2021). Different regulatory environments and institutional settings significantly influence financial reporting outcomes (Bushman and Piotroski 2006; Geiger and Smith 2010; Haga, Huhtamäki, and Sundvik 2019). China's distinct corporate governance and reporting regime under its unique political and historical background contribute to the opacity of its information environment (Habib and Jiang 2015; Piotroski and Wong 2012). Barth, Landsman, Lang, and Williams (2012) highlight that

financial reporting quality is greater for firms in common law countries (e.g., the US and Australia) than for code law countries (e.g., China). In support of this view, Swenson (2020) finds evidence that firms domiciled in countries with prevailing Western religions are more earnings conservative than countries with Eastern religions.

Further, the US Generally Accepted Accounting Principles (GAAP) accounting system is a strict rules-based approach that requires continuous disclosure and restricts firms' discretion when compiling financial statements. In comparison, Australia's accounting framework based on the International Financial Reporting Standards (IFRS) provides broader and more flexible principles-based reporting guidelines (Barth et al. 2012). As a result, managers can exercise greater discretion for the timely recognition of losses (Watts and Zimmerman 1990). Based on Australian evidence, Chua, Cheong, and Gould (2012) find that conservatism has improved after a mandatory replacement of the GAAP framework by the IFRS guidelines. Therefore, the potential influence of internal governance on financial reporting may be greater in Australia and the Australian setting poses an interesting research context. By providing Australian evidence on the impact of executive power distribution, we exploit a different institutional setting to alleviate some limitations of within-regime internal governance research, and facilitate a better understanding of the universal phenomena (Ball 2016). We contribute to the limited stream of studies examining accounting conservatism in Australia (Ahmed and Henry 2012; Crockett and Ali 2015; Haider, Singh, and Sultana 2021; Lim 2011; Muttakin et al. 2019; Sultana 2015).

The remainder of the paper is organised as follows. Section 2 presents the theoretical framework and develops the hypotheses. Section 3 describes the sample and data collection and presents the research design. Section 4 reports the main analysis of the impact of internal governance on the extent of conservatism, along with cross-sectional analyses. Section 5 reports additional analyses, and Section 6 concludes.

## II. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

#### 2.1 Main Hypotheses

Conservatism is an attribute of financial reporting and refers to the downward bias of net asset values and earnings (Givoly et al. 2007). Conservatism can be classified as unconditional or conditional. Unconditional conservatism, also referred to as news-independent or ex-ante conservatism arises from accounting processes determined at the inception of assets and liabilities (Beaver and Ryan 2005; Zhong and Li 2017). Conditional conservatism, also referred to as news-dependent or ex-post conservatism stems from the seminal model of Basu (1997). It is defined as the tendency to require a higher degree of verification for recognising good news than bad news, resulting in faster recognition of economic losses than gains (Basu 1997; LaFond and Watts 2008; Watts 2003). Conditional conservatism carries new information and is responsive to the emerging economic environment (Ball, Kothari, and Nikolaev 2013).

As equity and debtholders contract with firms using accounting information, a firm and its managers have incentives to inflate equity book value and earnings, which induces potential losses for investors (Watts 2003). Prior literature documents that monitoring imposed on managers forces them to provide loss information that they are otherwise reluctant to disclose in a timely fashion due to its downward effect on earnings (Ball and Shivakumar 2005; Basu 1997; Qiang 2007). We expect that subordinate executives' influence on financial reporting decisions is better reflected through their attitudes towards emerging economic news (i.e., conditional conservatism), as opposed to predetermined accounting methods of the firm (i.e., unconditional conservatism through accounting standards (Lara, Osma, and Penalva 2009b). Under the principles-based accounting standards regime, while subordinate executives are still able to utilize the remaining flexibility within accounting standards to influence reporting decisions through unconditional conservatism, we expect that this influence is less significant. Qiang (2007)

finds evidence that contracting induces only conditional conservatism.<sup>1</sup> Therefore, we focus on conditional conservatism in our study.

Managers who exercise conservatism to recognize losses timelier than gains can obtain early warning signals about the profitability of projects (García Lara, García Osma, and Penalva 2016; Roychowdhury 2010). Thus, conditional conservatism can improve a firm's risk management by accounting for risk in a timely manner (Bjornsen, Do, and Omer 2019; García Lara et al. 2016). Kim and Zhang (2016) assert that conditional conservatism prevents bad news from being hidden and accumulated, thereby reducing the future stock price crash risk for a firm (Cui, Kent, Kim, and Li 2021). In the future event of sudden bad news, firms that exercise conservative accounting and reporting practices face a lower level of uncertainty (Kim and Pevzner 2010). Kim and Pevzner (2010) find evidence that higher current conditional conservatism lowers the probability of future bad news and that markets react more positively to good earnings news of more conditional conservative firms. They also find that markets react less negatively to bad earnings news of more conditionally conservative firms. Huijgen and Lubberink (2005) highlight that firms use conditional conservatism in response to a stricter reporting enforcement regime to reduce long-term litigation risks. Watts (2003) explains how conditional conservatism reduces litigation and regulatory risks and thus implies a positive impact on long-term value. Taken together, while the timely recognition of economic losses (i.e., conditional conservatism) may negatively affect earnings and, thus, firm value in the short-term,

<sup>&</sup>lt;sup>1</sup>Qiang (2007) provides further evidence that conditional conservatism and unconditional conservatism are negatively interrelated. We utilize two measures of unconditional conservatism and find a statistically insignificant impact of internal governance on unconditional conservatism. Specifically, we use the book-to-market ratio following Ahmed and Henry (2012), and the accrual-based measure following Givoly and Hayn (2000), Ahmed, Billings, Morton, and Stanford-Harris (2002), and Ahmed and Duellman (2013).

it delivers long-term value benefits through better risk management and lower investor uncertainty.<sup>2</sup>

Unlike other studies that examine the internal governance mechanisms of audit committees and the board of directors (Cassell, Myers, Schmardebeck, and Zhou 2018; Filatotchev and Bishop 2002; Jensen 1993; Lynall, Golden, and Hillman 2003; Sultana 2015; Yunos, Ahmad, and Sulaiman 2014), we specifically focus on internal governance in terms of how key subordinate executives monitor and counterbalance the interests of the CEO and affect corporate decisions. Few studies examine internal governance as the power distribution between the CEO and subordinate executives. Cheng et al. (2016) find that internal governance reduces real earnings management. Landier et al. (2013) find that firm performance is enhanced when subordinate executives' tenure is greater than that of the CEO. Li (2014) documents that the extent of mutual monitoring between executives is positively associated with future firm value. Jain et al. (2016) show that internal governance is associated with lower information asymmetry and higher liquidity.

We consider subordinate executives because they constitute the group of members in the management team that jointly make corporate decisions with the CEO (Hambrick and Mason 1984). Previous studies examine how conditional conservatism is affected by CEO attributes (Ahmed and Duellman 2013; Wang, Xie, and Xin 2018) and, more recently, CFO attributes (Dichev, Graham, Harvey, and Rajgopal 2013; Francis, Hasan, Park, and Wu 2015; Ge, Matsumoto, and Zhang 2011; Muttakin et al. 2019). Few studies explore how executives other than the CEO and CFO affect financial reporting decisions, although these executives can significantly influence firm decisions through bottom-up governance (Fama and Jensen 1983).

<sup>&</sup>lt;sup>2</sup> While some researchers question the merits of conservatism towards long-term firm value due to the understatement of potential gains (Brown, He, and Teitel 2006; Lara, Osma, and Penalva 2007), LaFond and Watts (2008) assert that the effects of delayed recognition of difficult-to-verify gains can be offset by communication channels other than financial statements.

Therefore, we extend the definition of internal governance to include key subordinate executives because their thoughts, values, and perceptions also play an important role in corporate decisions (Carpenter, Geletkanycz, and Sanders 2004; Hambrick and Mason 1984).

The employment horizons of CEOs are typically shorter than those of subordinate executives, as they have fewer remaining years and incentives for promotion (Acharya et al. 2011). Therefore, CEOs tend to emphasise short-term performance over long-term firm value (Antia et al. 2010; Stein 1989). They may oppose conservatism because downward-biased reporting can result in lower earnings and net assets, thereby negatively affecting their compensation or placing their jobs at risk (Bergstresser and Philippon 2006; Defond and Park 1997; Matsunaga and Park 2001; Murphy 1985; Shleifer and Vishny 1989).

However, subordinate executives may have various incentives to prioritise long-term firm value and exercise conditional conservatism, thereby countering the CEO's position (Acharya et al. 2011). They may seek to achieve the CEO position in the future, particularly if they are younger and can potentially advance their careers in the firm (Acharya et al. 2011).<sup>3</sup> Thus, as potential candidates, they are likely to care about long-term performance and less likely to meet short-term performance targets at the expense of long-term value. They also have more to lose, relative to their total wealth, from corporate underperformance than the CEO because they typically have more years remaining in their careers (Cheng et al. 2016).<sup>4</sup> Thus, failing to find a comparable job and losing potential income in the future is more of a risk for younger executives, and the younger the executive, the greater the potential risk (Cheng et al. 2016). In addition, their potential wages in other firms also can depend on continuous firm performance,

<sup>&</sup>lt;sup>3</sup> Cremers and Grinstein (2014) report that in 68.6 percent of the CEO turnover cases, one of the subordinate executives becomes the next CEO; in other words, 68.6 percent of CEOs are promoted from within the firm.

<sup>&</sup>lt;sup>4</sup> Luttmer (2005) documents the importance of diminishing marginal utility. They provide suggestive evidence of individuals having utility functions that depend on a relative scale.

which is influenced by the CEO's actions. This motivates key subordinate executives to monitor the CEO and to be more long-term oriented (Fama 1980).

Subordinate executives are able to influence the CEOs to be more long-term orientated, as the CEOs rely on them to ensure good firm performance, cash flow, and thus CEO welfare (Cheng et al. 2016). Otherwise, executives may contribute less, harming the firm's and the CEO's welfare (Acharya et al. 2011). This opposition and dependence within the CEO– subordinate executive relationship facilitate the distribution of decision-making power among the top management team and therefore reflects internal governance.

The above discussions indicate that subordinate executives have longer horizons than CEOs do. The longer the horizon, the greater the incentives for these executives to monitor the CEO to ensure long-term firm value is prioritised. Apart from incentives, subordinate executives also have the ability to influence the CEOs to consider their long-term preferences. The greater the subordinate executives' incentives and ability to monitor the CEO, the more effective the internal governance. Thus, our first hypothesis is formulated as follows:

## **Hypothesis 1:** *The effectiveness of internal governance is positively associated with the level of conservatism.*

Hypothesis 1 assumes that CEOs have incentives to improve short-term performance at the expense of long-term value due to termination and compensation risks (Cheng and Warfield 2005; Defond and Park 1997; Healy 1985). Subordinate executives may face a similar risk. If the subordinate executives wish to become the next CEO, they may have to compete with external candidates for the position, as not all CEOs are internally sourced (Zajac 1990). Cremers and Grinstein (2014) report that 68.6 percent of CEOs are promoted from within the firm. As the serving CEO likely plays a role in selecting the successor, subordinate executives may side with the serving CEO to achieve his or her favour and thus conform to his or her short-term

preferences (Carcello, Hermanson, and Ye 2011; Cheng et al. 2016; Lara et al. 2007). This proposition may not support Hypothesis 1.

In addition, CEOs have the power to demote or dismiss subordinate executives, even if they have an influence (Coles, Daniel, and Naveen 2014; Lee, Jiraporn, Kim, and Park 2021). The executives may therefore cooperate with the CEO over corporate decisions to ensure job security (Feng et al. 2011). If subordinate executives have no influence on the CEO, Hypothesis 1 may not hold. Although we have this concern, we posit that collectively the subordinate executives retain the ability to influence the CEO. This is because we consider the influence of all key subordinate executives as a group rather than one or two subordinate executives who are candidates for the next CEO position. Further, if CEOs dismiss subordinates due to their noncooperation, the subordinates may become whistle-blowers and reveal inappropriate CEO behaviour to other stakeholders or sue the firm for inappropriate dismissal (Cheng et al. 2016). This deters CEOs from firing subordinates who choose not to cooperate with myopic CEO behaviour. Therefore, we conduct empirical tests to examine our directional hypothesis.

## 2.2 Cross-sectional Analyses

#### 2.2.1 Variations in CEO Power

The influence of subordinate executives on the CEO is likely to be affected by the power held by the CEO. Those with significant authority can consistently influence key decisions despite potential opposition from other executives (Adams, Almeida, and Ferreira 2005). The decision-making authority of a firm may rest exclusively with the CEO, who can then push their personal agenda even if the decision is viewed as sub-optimal by other executives (Cheng et al. 2016; Combs, Ketchen Jr, Perryman, and Donahue 2007). Lisic, Neal, Zhang, and Zhang (2016) find that CEO power reduces the monitoring effectiveness of audit committees, while Feng, Ge, Luo, and Shevlin (2011) find that CFOs are likely to agree to the manipulation of financial statements if the CEO is powerful. Thus, we expect a CEO with substantial power and authority within a firm to be less influenced by subordinate executives and that internal governance will more effectively lead to conservative decisions if CEOs are less powerful. Thus, our second hypothesis is formulated as follows:

**Hypothesis 2:** The effectiveness of internal governance in increasing the level of conservatism is more pronounced for firms with less powerful CEOs than for those with powerful CEOs.

## 2.2.2 Variations in CEO Horizon

The decision horizon of a CEO is measured as the number of years until the CEO reaches the assumed retirement age of 65.<sup>5</sup> Studies document that older CEOs and shorter CEO decision horizons indicate myopic behaviour, in which short-term performance is prioritised at the expense of long-term value creation (Antia et al. 2010; McClelland, Barker, and Oh 2012). Dechow and Sloan (1991) find that managers reduce research and development expenditure aimed at generating future value as they approach retirement, and Graham, Harvey, and Rajgopal (2005) find that 78 percent of US CEOs are willing to beat market expectations at the expense of long-term firm value. Conservatism indicates the priority of long-term firm value over shortterm performance, so we expect a CEO to be more influenced by subordinate executives and to agree to conservative decision-making if the CEO's decision horizon is shorter. Subordinates may anticipate that the CEO will be more aggressive in pursuing short-term personal interests when nearing retirement and thus monitor the CEO more closely in response. Huang, Ena, and Lee (2012) support this view, as they find a positive association between CEO age and financial reporting quality. Thus, our third hypothesis is formulated as follows:

**Hypothesis 3:** The effectiveness of internal governance in increasing the level of conservatism is more pronounced when the CEO horizon is shorter.

<sup>&</sup>lt;sup>5</sup> Assuming a different retirement age, such as 60, does not change regression results except for the intercept because the retirement age is assumed to be a cross-sectional constant and is thus just a scalar (Cheng et al. 2016).

## 2.2.3 Variations in Subordinate Executives' Contributions to the Firm

Subordinate executives can influence the CEO in corporate decision-making, as they contribute to firm performance and, thus, CEO welfare (Cheng et al. 2016). Complex firms are more difficult to manage by a CEO alone, requiring a collective executive team effort (Aghion and Tirole 1997; Graham et al. 2015). Further, more complex firms require designated departments to satisfy stakeholder needs (Bosse, Phillips, and Harrison 2009). As the CEO oversees operations at a firm level, the importance and need to delegate decision-making authority to subordinate executives increases with firm complexity. As such, the requirement for CEOs to consider the long-term preferences of the subordinate executives increases for more complex firms (Acharya et al. 2011; Finkelstein 1992). We, therefore, expect internal governance to be more effective in relatively more complex firms. Thus, our fourth hypothesis is formulated as follows:

**Hypothesis 4:** The effectiveness of internal governance in increasing the level of conservatism is more pronounced in more rather than less complex firms.

## 2.2.4 Variations in Firm Age

The incentives for top management teams to exercise conservatism may vary across firms' business life cycles. As a firm age, its corporate charter and management team composition influences its capital structure choices (Kieschnick and Moussawi 2018; Pfaffermayr, Stöckl, and Winner 2013). These studies suggest that younger firms use debt more freely, as those in their start-up phases typically require external funds to finance their investment due to uncertainty and a lack of operational history (Beck and Kunt 2006; Berger and Udell 1998). Before debt contracting, the conservative downward bias of earnings and assets reduces younger firms' ability to borrow (Watts 2003); afterwards, such downward bias risks triggering debt covenants and the subsequent violation of debt contracts (Zhang 2008). Younger firms may also face greater pressure from shareholders to achieve forecasted earnings or outperform competitors

(Coad, Segarra, and Teruel 2016). However, profitable mature firms are more likely to have sufficient internal retained earnings to fund investments. Mature firms rely less on debt, and their cost of external debt financing decreases as banks typically reduce interest rates for 'surviving firms' (Fazzari, Hubbard, Petersen, Blinder, and Poterba 1988; Petersen and Rajan 1994). Thus, subordinate executives of more mature firms will have more incentives (or fewer disincentives) to influence the CEO to exercise conservatism. Our fifth hypothesis is therefore formulated as follows:

**Hypothesis 5:** The effectiveness of internal governance in increasing the level of conservatism is more pronounced for mature firms than for less mature firms.

## III. RESEARCH DESIGN

## 3.1 Sample

We obtain our initial sample of Australian Stock Exchange (ASX) listed firms from 2004 to 2020 from the Connect4 boardroom.<sup>6</sup> We exclude firms that have been delisted during this period to avoid confounding influences (Sultana 2015).<sup>7</sup> We require the CEO to be in office for at least six months in the financial year to ensure that we have an appropriate measure of the CEO's influence within the firm. We also require all key subordinate executives to be in office for at least 31 days of the financial year. We then obtain data for the other variables required for our analyses from DatAnalysis (MorningStar) and Capital IQ and combine them with the sample of executive-level data. We drop observations with missing values, and our final valid sample

<sup>&</sup>lt;sup>6</sup> ASX listed firms are chosen because information on such firms is publicly available, and we posit that subordinate executives' influence over the CEO is greater for listed firms of considerable size. That is, the importance and existence of internal governance are greater for listed firms because they face corporate governance pressures from various stakeholders, including the public. We, therefore, expect the distribution of decision-making power, i.e., internal governance, to be more prominent within listed firms than for non-listed firms.

<sup>&</sup>lt;sup>7</sup> The earliest executive data we were able to obtain from Connect4 was from 2004. We collect data up to 2020 because it is the most recent financial year end at the time of our research.

consists of 2,996 firm years. Table 1 Panel A reports the sample selection process, including details for our hypotheses.

Table 1, Panel B, reports the job titles of the key subordinate executives in our sample firms. In our study, key subordinate executives refer to the top ten executives included in the Connect4 database other than the CEO. Key executives reported are executive directors, company secretaries, divisional heads, CFOs, and Chief Operating Officers (COOs). Some subordinates hold two key positions. These titles suggest that the key subordinate executives in our sample hold significant responsibilities within the firm, thereby reflecting their influence over the CEO in financial reporting decisions, including the extent of conservatism to exercise.

## **3.2 Measure of Internal Governance**

In this study, we propose that internal governance becomes more effective due to the incentives and ability of key subordinate executives to monitor the CEO. We measure incentives based on the decision horizons of the executives. Age is commonly used as a proxy for these horizons (Brickley, Linck, and Coles 1999; Dechow and Sloan 1991; Gibbons and Murphy 1992; Matějka, Merchant, and van der Stede 2009). We use the difference between the assumed retirement age of 65 and the average age of the top ten subordinate executives as a proxy for subordinate executives' decision horizons (Cheng et al. 2016).

$$Exec\_Horizon = 65 - the \ average \ age \ of \ key \ subordinate \ executives$$
(1)

Under competitive labour market conditions, executives' compensation reflects their contribution to and structural position in the firm, which suggests their influence over the firm's decisions (Finkelstein 1992). Therefore, we use the ratio of key subordinate executives' average annual compensation to the CEO's annual compensation as a proxy for subordinate executives' ability to influence the CEO (Cheng et al. 2016).

Our final measure of a firm's overall internal governance is derived from both key subordinate executives' incentives and ability to monitor. We sum the standardized values of *Exec\_Horizon* and *Exec\_PayRatio* to form our proxy for internal governance (*Int\_Gov*).

## 3.3 Measure of Conditional Conservatism

Following prior studies (Ahmed and Duellman 2013; Crockett and Ali 2015; LaFond and Watts 2008; Nikolaev 2010), we use Basu (1997)'s asymmetric timeliness of earnings model as the measure of conditional conservatism (Wang, Hogartaigh, and Zijl 2009). This model regresses annual earnings on annual returns to measure how quickly a firm's earnings reflect both good and bad news. Positive and negative stock returns are proxies for good and bad news, respectively. The model is based on the premise that stock returns reflect news from sources other than the financial statements issued by firms. If earnings reflect bad news (negative returns) more quickly than good news (positive returns), then a strong association between earnings and bad news is observed. A stronger association between negative returns and earnings implies the timely recognition of bad news and thus reflects a higher degree of conservatism. The following equation details the model:

$$EPS_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 R_{it} + \beta_3 R_{it} * DR_{it} + \varepsilon_{it}$$
(3)

*EPS* is the operating profit after tax before abnormal, deflated by the number of outstanding shares at the beginning of financial year *t*. *DR* is a dummy variable equal to one if *R* is less than zero and zero otherwise. *R* is the value of stock return, calculated as the difference between the stock price three months after the end of the financial year *t*, and the stock price three months after the end of the financial year *t*, and the stock price three months after the end of financial year *t* – 1. In equation (3), *R* refers to the stock return, and *DR* denotes the dummy variable for negative stock returns (bad news).  $\beta_3$  is the primary variable

of interest and captures conservatism, whereby a positive and greater value represents a greater extent of conditional conservatism.

## **3.4 Measure of Conditioning Variables**

We discuss the proxy for the conditioning variables associated with our cross-sectional analyses. For Hypothesis 2, we use the currently serving CEO's tenure as a proxy for his or her power within the firm (Lewellyn and Muller-Kahle 2012). We expect long-tenured CEOs to be more experienced, influential, and, thus, more powerful (Muttakin et al. 2019; Veprauskaité and Adams 2013). Further, previous studies document that the level of external monitoring for managing agents by institutional investors is greater than by other shareholders (Bushee 1998; Chen, Harford, and Li 2007; Gillan and Starks 2003; Parrino 1997). Consistent with other studies (e.g., Baldenius, Melumad, and Meng 2014; Kim and Lu 2011), we expect that CEOs are less powerful when there are effective external corporate governance mechanisms in place. Therefore, we use CEO tenure (*CEO\_Tenure*) and the level of institutional ownership (*Inst\_Own*) as proxies for CEO power. For Hypothesis 3, we measure the CEO horizon using the assumed retirement age of 65 less the CEO's age (*CEO\_Horizon*), following Acharya et al. (2011) and Cheng et al. (2016). The closer a CEO is to retirement, the shorter the decision horizon, as the CEO focuses on near-term outcomes.

For Hypothesis 4, we follow Markarian and Parbonetti (2007) and assess internal complexity using the ratio of invested capital to assets (*Complexy\_Inv*), which measures the amount of tangible and intangible capital invested as a percentage of non-current assets. A higher ratio indicates greater investment by shareholders and creditors towards the less quantifiable and more sophisticated internal processes of the firm (Almazan, Hartzell, and Starks 2005; Wang and Tunzelmann 2000). We further measure complexity using the number of geographic (*Geo\_Seg*) and business segments (*Bus\_Seg*) the firm operates in (Frijns, Dodd, and Cimerova 2016; Markarian and Parbonetti 2007). The greater the number of segments, the greater the

complexity. For Hypothesis 5, our measure of firm age is the natural log of the number of years since the firm's listing (*Firm\_Age*).

#### **3.5 Empirical Model**

Below we describe the research design for the main test of Hypothesis 1. To test Hypothesis 1, we use an adaptation of the Basu asymmetric timeliness of earnings model in which we interact our internal governance proxy with the interaction term  $\beta_3$  and include all control variables. As a result, we estimate regression Equation (4). The design for other tests is described in the corresponding empirical analysis sections. All continuous variables are winsorized at the 1% and 99% levels to mitigate the influence of outliers. *Appendix A* includes a detailed definition of all variables.

$$EPS_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 R_{it} + \beta_3 R_{it} * DR_{it} + \beta_4 Int \_Gov_{it} + \beta_5 Int \_Gov_{it} * R_{it} * DR_{it} + \beta_6 Firm \_Size_{it} + \beta_7 Firm \_Age_{it} + \beta_8 MTB_{it} + \beta_9 ROA_{it} + \beta_{10} Leverage_{it}$$

$$+\beta_{11}BInd_{it} + \beta_{12}BSize_{it} + \beta_{13}CEO\_Age_{it} + YearFE + FirmFE + \varepsilon_{it}$$

$$(4)$$

Int\_Gov is the measure of a firm's internal governance strength, as discussed above. The interaction term R\*DR measures the extent of conservatism. The variable of interest is the interaction term of R\*DR with the internal governance measure, i.e.,  $\beta_5$ . Hypothesis 1 predicts a positive coefficient  $\beta_5$ .

## 3.5.1 Firm-level Control Variables

Following other studies (Cheng et al. 2016; Larcker, Richardson, and Tuna 2007), we include contemporaneous firm-level control variables to capture the impact of firm characteristics on the level of conservatism and to account for omitted correlated variables that may arise from potential endogeneity in terms of internal governance. First, we control for firm age (*Firm\_Age*), as younger firms that have a higher reliance on debt financing during their high-growth phases are likely to have less incentive to be conservative (Armstrong, Larcker,

Ormazabal, and Taylor 2013; Lakonishok, Shleifer, and Vishny 1994; Skinner and Sloan 2002). We include firm size (*Firm\_Size*), as large firms are more likely to be more conservative to avoid litigation and regulatory costs (Haider et al. 2021; Watts and Zimmerman 1978). We include the market-to-book ratio (*MTB*) to capture firm growth and investment opportunities, which may also affect the level of conservatism (Ahmed and Duellman 2013; Lara et al. 2007). We also include financial performance (*ROA*), as firms with higher profits incur smaller losses when reporting conservatively than do less profitable firms (Ahmed et al. 2002). We further include leverage (*Leverage*), as firms with higher leverage and more bondholder conflicts have a higher contractual demand for conservatism (Ahmed et al. 2002; Hirshleifer and Thakor 1992; Zhang 2008). The literature indicates that the level of corporate governance is positively associated with conservatism (Ahmed and Henry 2012; Lara, Osma, and Penalva 2009a; Lim 2011; Sultana 2015). Thus, we include the corporate governance variables of board independence (*BInd*) and board size (*BSize*).

## 3.5.2 Controlling for CEO Age

The horizons of the CEO, in addition to the horizons of subordinate executives, may also affect the level of internal governance and conservatism (Jain et al. 2016). CEO age may indicate CEO entrenchment in a firm. Further, a CEO nearing retirement or with shorter horizons may have greater incentives to maximise personal interests and disregard the long-term preferences of subordinate executives. In this case, the effectiveness of internal governance may be weaker. However, subordinate executives may strengthen their monitoring in response to heightened CEO myopia. We address these concerns by controlling for the CEO's age in our regression model.

## 3.5.3 Fixed Effects and Robust Statistics

We include year and firm fixed effects to control for unobservable factors that drive our results. These control for year and firm characteristics that are not captured by other variables in

the model. As we use a pooled sample, we report the Huber-White robust t-statistics to control for heteroscedasticity and autocorrelation (Cheng et al. 2016).

## **3.6 Descriptive Statistics**

Table 2 presents the descriptive statistics of the variables used in the regressions. The mean (median) decision horizon of key subordinate executives (*Exec\_Horizon*) is 14.06 (14.37) years. Comparatively, the CEO's mean (median) decision horizon (*CEO\_Horizon*) is shorter by 19.6 percent (19.7 percent) at 11.76 (12.00). This difference conceptualizes that key subordinate executives have longer decision horizons than the CEO. The mean (median) annual compensation of key subordinate executives relative to CEO annual compensation (*Exec\_PayRatio*) is 0.60 (0.48). The summary measure of internal governance, *Int\_Gov*, has a mean of 0 by construction. The decision horizon and pay ratio of key subordinate executives in our Australian sample are similar to Cheng et al. (2016)'s sample of US firms.

The mean logged value for total assets (*Firm\_Size*) is 19.07. *MTB* has a mean of 2.71, and *Leverage* 1.91. A firm's board of directors (*BSize*) includes six members on average, with 45% of the board positions (*BInd*) occupied by independent members.<sup>8</sup> The mean logged firm age (*Firm\_Age*) is 2.61, with the oldest firm reporting a listing history of 135 years.

Table 3 reports the Pearson correlations of the variables in our main analysis. *Int\_Gov* is significantly and negatively correlated with the level of board independence (*BInd*). Subordinate executives may not exert as much influence over the CEO in firms with a stronger governance

<sup>&</sup>lt;sup>8</sup> Board independence levels in our study sample are higher compared to past Australian studies. Using firm-year observations from 2004 to 2013, Haider et al. (2021) report an average board independence of 36.70%. Ahmed and Henry (2012) reports an average board independence level of 56.40% (higher than our sample) using observations from 1993 to 2009 because their study focuses on the largest 300 Australian companies. As such, because the importance of corporate governance increases with firm size, we focus on listed firms in our study.

structure, as they have fewer agency problems and less information asymmetry due to other governance mechanisms.<sup>9</sup> None of the correlations are sufficiently high to risk multicollinearity.

#### **IV. RESULTS**

## 4.1 Main Analyses – Tests of Hypothesis 1

Hypothesis 1 predicts that the effectiveness of internal governance is positively associated with the level of conservatism. Table 4 presents the regression results. As predicted in Hypothesis 1, we find that the effectiveness of internal governance is positively associated with the extent of conservatism.  $\beta_5$  remains significantly positive (Panel 4, *t-statistic* = 1.847, *p* < 0.10) after controlling for fixed effects. Following Wang et al. (2018), we evaluate the economic significance of our results by ranking our internal governance measure into quintiles and separating our observations into five subsamples based on the ranked value of internal governance. We then run separate regressions for each subsample. We find that the conservatism coefficient decreases from 6.07 in the top quintile (*Rank* = 5) to 1.13 in the bottom quintile (*Rank* = 1), an 81 percent reduction in the degree of asymmetric timely loss recognition. Therefore, the relationship between internal governance and conservatism appears to be economically sizable. The results for the control variables do not provide evidence related to internal governance because our regression model uses interaction effects to test our hypotheses. Overall, the results are consistent with Hypothesis 1.

<sup>&</sup>lt;sup>9</sup> Chi, Liu, and Wang (2009) provide empirical evidence for the substitutive perspective of conservative accounting, whereby conservatism is more greatly exercised by firms with a less solid governance structure. Their study finds a significant negative relationship between the extent of conservatism and other governance mechanisms. Specifically, Ahmed and Henry (2012) find a negative relationship between voluntary audit committee formation, a form of internal governance mechanism, and the extent of conditional conservatism.

## 4.2 Cross-sectional Analyses 4.2.1 Research Design

To test Hypotheses 2 to 5, we separate our study sample into subsamples based on whether the firm-year observation is below or above the sample median for each respective conditioning variable. Then, we run separate regressions and obtain the results.

## 4.2.2 The Conditioning Effect of CEO Power – Test of Hypothesis 2

We predict that the effectiveness of internal governance decreases with the level of CEO tenure and increases with the level of institutional ownership. Table 5 presents the regression results. After controlling for fixed effects, we find that internal governance increases the level of conservatism more effectively in firms with lower CEO tenure (Panel 1, *t-statistic* = 1.890, p < 0.10) and higher institutional ownership (Panel 2, *t-statistic* = 1.903, p < 0.10). The effectiveness of internal governance in increasing the level of conservatism is no longer significant for firms with higher CEO tenure and lower institutional ownership. These results are consistent with Hypothesis 2, indicating that internal governance is more effective when CEOs are less powerful and that higher institutional ownership can enhance the abilities of key subordinate executives to influence the CEO.

## 4.2.3 The Conditioning Effect of CEO Horizon – Test of Hypothesis 3

Hypothesis 3 predicts that internal governance will be more effective when CEO horizon is shorter. We expect key subordinate executives to monitor the CEO more closely to prevent myopic behaviour when he or she is closer to retirement. We remove the control variable of CEO age (*CEO\_Age*) in our empirical model to better analyse the effects of CEO horizons. Table 6 presents the regression results. We find that the effectiveness of internal governance in increasing the extent of conservatism is higher in firms with shorter CEO horizons (Panel 1, *t-statistic* = 3.058, p < 0.01) than for firms with longer CEO horizons (Panel 2, *t-statistic* = 1.686, p < 0.10) after controlling for fixed effects. These results are consistent with Hypothesis 3. Our results support the findings of Huang et al. (2012).

## 4.2.4 The Conditioning Effect of Subordinate Executive Contributions – Test of Hypothesis 4

We examine whether internal governance can more effectively increase the level of conservatism for more internally complex firms, in which key subordinate executives are expected to contribute more to the firm, and thus the CEO relies more heavily on this contribution. Table 7 reports the regression results. We find that the association between internal governance and the extent of conservatism is significantly positive for more complex firms (Panel 1, *t*-*statistic* = 2.628, p < 0.01; Panel 2, *t*-*statistic* = 4.428, p < 0.01; Panel 3, *t*-*statistic* = 2.677, p < 0.01), while results are no longer significant for less complex firms. Our results are consistent with Hypothesis 4.

## 4.2.5 The Conditioning Effect of Firm Age – Test of Hypothesis 5

Hypothesis 5 predicts that internal governance is more effective for older and more mature firms. Younger firms rely heavily on debt financing; thus, they face greater pressure to meet debt covenant ratios and have less incentive to increase the level of conservatism by monitoring the CEO (Beck and Kunt 2006; Berger and Udell 1998). In contrast, the incentives for subordinate executives to exercise conservatism are greater in more mature firms. We remove the control variable of firm age (*Firm\_Age*) in the regression model. Table 8 presents the regression results. We find that the association between internal governance and the extent of conservatism is significantly positive for older firms (Panel 2, *t-statistic* = 1.718, *p* < 0.10), while results are no longer significant for younger firms after controlling for fixed effects. These results are consistent with Hypothesis 5.

## V. ADDITIONAL ANALYSIS AND ROBUSTNESS TESTS

## 5.1 An Alternative Measure of Conditional Conservatism

Bias is a major concern in the asymmetric timeliness of earnings measure proposed by Basu (1997) (Dietrich, Muller, and Riedl 2007; Givoly et al. 2007; Patatoukas and Thomas 2011). To address these potential concerns, we use the earnings persistence model, an alternative measure of conditional conservatism suggested by Basu (1997), to validate inferences drawn in our main analyses. In the conservative approach, the bad news is recognised contemporaneously in current earnings and thus does not need to be recognised in future earnings (Basu 1997). Conservatism therefore implies that current earnings anticipate future losses (bad news) and account for these losses in the current period. This accounting appears as a one-time dip, and such negative earnings changes are likely to reverse in the next period (Basu 1997). In contrast, positive shocks (good news) are gradually recognised only when they are verifiable under conservatism, so good news events are likely to appear as persistent positive shocks to the earnings stream. Positive earnings changes are therefore less likely to reverse than negative earnings changes (Basu 1997). The delay in recognising good news leads to positive changes in earnings that persist longer than negative changes in earnings. The following equation presents the earnings persistence model:

$$CX_{it} = \beta_0 + \beta_1 P X_{it} + \beta_2 D P X_{it} + \beta_3 P X_{it} * D P X_{it} + \varepsilon_{it}$$
(5)

*CX* is the change in operating profit after tax of firm *i* for period *t* from operating profit after tax of period t - 1, deflated by market capitalization at the end of period t - 1. *PX* is the change in operating profit after tax of firm *i* for period t - 1 from operating profit after tax of period t - 2, deflated by market capitalization at the end of period t - 2. *DPX* is a dummy variable that equals one if PX is less than zero, and zero otherwise. *PX\*DPX* is a two-way interaction between *PX* and *DPX*. With a conservative approach, a negative earning change from the prior period (*PX*) will likely reverse to become a positive earning change in the current period (*CX*), i.e., *PX\*DPX* will be negatively and significantly correlated with *CX*. A negative and significant coefficient on  $\beta_3$  thus reflects higher levels of conservatism. We estimate equation (6) to empirically test how the effectiveness of internal governance affects conservatism. We expect a negative and significant coefficient of  $\beta_3$ , suggesting that the effectiveness of internal

governance increases the level of conservatism. *Appendix A* provides a detailed definition of all variables.

$$CX_{it} = \beta_0 + \beta_1 P X_{it} + \beta_2 D P X_{it} + \beta_3 P X_{it} * D P X_{it} + \beta_4 Int \_Gov_{it} + \beta_5 Int \_Gov_{it} * P X_{it} * D P X_{it} + \beta_6 Firm \_Size_{it} + \beta_7 Firm \_Age_{it} + \beta_8 M T B_{it} + \beta_9 R O A_{it} + \beta_{10} Leverage_{it} + \beta_{11} B Ind_{it} + \beta_{12} B Size_{it} + \beta_{13} CEO \_Age_{it} + YearFE + FirmFE + \varepsilon_{it}$$

$$(6)$$

Table 9 reports the empirical results to support our main hypothesis. We find that, as predicted in Hypothesis 1, the more effective the internal governance, the greater the extent of conservatism (Panel 4, *t-statistic* = -4.552, p < 0.01).

## 5.2 An Alternative Measure of Internal Governance

Cheng et al. (2016) measure subordinate executives' incentives to influence the CEO based on their decision horizons, defined as the difference between retirement age and the executives' ages. However, this measure may only factor in one incentive for monitoring or exerting control over the CEO. Subordinate executives also have the potential incentive of a promotion-based tournament for the future CEO position. Kale, Reis, and Venkateswaran (2009) document that subordinates have a greater influence on corporate decisions when a CEO nears retirement due to the increased incentive to be the next CEO, while Gopalan, Milbourn, Song, and Thakor (2014) find that older CEOs emphasise short-term performance and are likely to reduce firms' reporting quality. These findings suggest that the effects of the difference in a CEO's and subordinate executives' horizons on a firm's financial reporting quality should be empirically examined. Following Jain et al. (2016), we use the difference between the age of the CEO and the average age of key subordinate executives to capture the effectiveness of internal governance and the more conservative the firm's approach to financial reporting. Table 10 reports the empirical results that support our main hypothesis. We find that,

as predicted in Hypothesis 1, the more effective the internal governance, the greater the extent of conservatism.  $\beta_5$  remains significantly positive (Panel 4, *t-statistic* = 1.715, *p* < 0.10) after controlling for fixed effects.

## 5.3 Two-Stage Least Squares Approach

We undertake a two-stage least squares (2SLS) instrumental variable approach to further address endogeneity concerns. We utilize two instruments: (1) the industry-adjusted age difference (*IndAdjDiff\_Horizon*) and (2) the industry-year median value of internal governance (*IndYear\_IG*). Following Mekhaimer et al. (2022), we use the industry-adjusted age difference (*IndAdjDiff\_Horizon*) between the CEO and key subordinate executives as the first instrument. This measure, detailed in Model (7), compares the decision horizons of the subordinate executives relative to the other executives of the industry with the decision horizons of the CEO. A positive value indicates that subordinates' industry-adjusted decision horizons exceed the industry-adjusted decision horizon of the CEO.

$$\begin{bmatrix} (Industry \ average \ subordinates' \ age - firm \ average \ subordinates' \ age) \\ -(Industry \ average \ CEO \ age - firm \ CEO \ age) \end{bmatrix}$$
(7)

For the second instrument, we follow Cheng et al. (2016) and use the industry-year median value of internal governance (*IndYear\_IG*), as industry-specific measures are more likely to be exogenous because they are not under the firm's control in any given year (Kale et al. 2009). Table 11 reports the 2SLS regression results. Panel (1) presents the first-stage regression, where we regress our baseline internal governance measure *Int\_Gov* on the instrumental variables. As predicted, we find that the instrument variables *IndAdjDiff\_Horizon* and *IndYear\_IG* are significantly positively associated with *Int\_Gov* (*t-statistic* = 29.99, p < 0.01; *t-statistic* = 3.60, p < 0.01, respectively). The weak identification test suggests that these instruments are relevant and powerful: the F-statistic for the joint explanatory power is significant at 237.90, which is higher than the critical value of 13.96 suggested by Stock, Wright, and Yogo (2002). The result

from the over-identification test is insignificant (*Sargan statistic* = 0.11), suggesting that the instruments are valid. Panel (2) presents the regression results for the relation between internal governance and conservatism. We find that predicted internal governance from the first-stage regression is significantly and positively associated with the conservatism interaction coefficient (*t-statistic* = 4.78, p < 0.01). Results confirm our previous findings.

## **5.4 Self-Selection Bias**

We recognise that our analyses may be subject to self-selection bias. For example, firms that are conscientiously conservative in their financial reporting may select strong and powerful subordinate executives or a CEO who subordinates can more easily influence. To rule out this explanation, we follow Cheng et al. (2016) and use the one-year lagged value of internal governance (*Lagged\_Int\_Gov*) to re-estimate our model. Our untabulated results still support our hypotheses.<sup>10</sup>

## VI. CONCLUSION AND IMPLICATIONS

This study examines whether key subordinate executives influence CEOs to ensure a conservative approach. These executives typically have longer horizons and care more about future firm performance and value than CEOs. We examine the different horizons of these subordinates and of the CEOs to assess the subordinates' incentives to monitor CEOs and find that the level of conservatism increases with the influence of the subordinates. Moreover, we find that subordinates exert greater influence when the CEO is less powerful, when the CEO nears retirement when subordinates' contributions are greater, and when the firm is more mature. We extend Basu (1997)'s concept of conservatism by providing novel evidence on how executive power distribution contributes to conservative financial reporting.

<sup>&</sup>lt;sup>10</sup> Results can be provided upon request.

The results of this study have several practical implications. First, our results have practical implications for investors. We highlight that it is important to consider top management team dynamics and attributes in investment decision-making. Particularly, subordinate executives' decision horizons are relevant in considering long-term investment outcomes. Second, our results are also important to debtholders in contracting. Subordinates' influence and decision horizons can affect a lender's decision when implementing debt contracts or covenants.

Third, our study is of importance to regulators. As the stability of the Australian capital market relies on relevant and timely disclosures of accounting information, we highlight it is important to motivate top management team members, particularly subordinate executives, to embed long-term-oriented decision-making through regulations and policies. Fourth, it is important for shareholders and the board of directors to employ subordinate executives with long-term decision horizons to achieve a firm's objectives in the long run. It is also vital that incentives are in place to motivate their commitment to long-term value.

Fifth, by revealing the influence of subordinate executives in financial reporting decisions, our study will also be of interest to users of financial news. The tendency of a firm to disclose news in a timely and reliable manner significantly influences information quality. Thus, the users of information must consider the influence of top management team dynamics and attributes. By shedding light on internal power distribution as an important governance mechanism, our study has implications for the "Governance" pillar of Environmental, Social and Governance (ESG). To strengthen the corporate governance of firms and promote sustainable economic stability, we must look beyond top-down governance and consider the influence of subordinate executives.

Our findings also have insightful implications for the institutional settings of other countries and financial markets. Future research can investigate the influence of internal governance on other aspects of corporate decision-making, including the aspects of non-financial performance such as corporate social responsibility.

## References

- Acharya, V. V., S. C. Myers, and R. G. Rajan. 2011. "The internal governance of firms." *The Journal of Finance* 66 (3): 689-720. <u>https://dx.doi.org/10.1111/j.1540-6261.2011.01649.x</u>.
- Adams, R. B., H. Almeida, and D. Ferreira. 2005. "Powerful CEOs and their impact on corporate performance." *The Review of Financial Studies* 18 (4): 1403-1432. <u>https://doi.org/10.1093/rfs/hhi030</u>.
- Aghion, P., and J. Tirole. 1997. "Formal and real authority in organizations." *Journal of Political Economy* 105 (1): 1. <u>https://doi.org/10.1086/262063</u>.
- Ahmed, A. S., B. K. Billings, R. M. Morton, and M. Stanford-Harris. 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. https://doi.org/10.2308/accr.2002.77.4.867.
- Ahmed, A. S., and S. Duellman. 2013. "Managerial overconfidence and accounting conservatism." *Journal of Accounting Research* 51 (1): 1-30. <u>https://dx.doi.org/10.1111/j.1475-679x.2012.00467.x</u>.
- Ahmed, K., and D. Henry. 2012. "Accounting conservatism and voluntary corporate governance mechanisms by Australian firms." *Accounting & Finance* 52 (3): 631-662. <u>https://dx.doi.org/10.1111/j.1467-629x.2011.00410.x</u>.
- Almazan, A., J. C. Hartzell, and L. T. Starks. 2005. "Active institutional shareholders and costs of monitoring: Evidence from executive compensation." *Financial Management* 34 (4): 5-34. <u>https://dx.doi.org/10.1111/j.1755-053x.2005.tb00116.x</u>.
- Antia, M., C. Pantzalis, and J. C. Park. 2010. "CEO decision horizon and firm performance: An empirical investigation." *Journal of Corporate Finance* 16 (3): 288-301. https://dx.doi.org/10.1016/j.jcorpfin.2010.01.005.
- Armstrong, C. S., D. F. Larcker, G. Ormazabal, and D. J. Taylor. 2013. "The relation between equity incentives and misreporting: The role of risk-taking incentives." *Journal of Financial Economics* 109 (2): 327-350. <u>https://dx.doi.org/10.1016/j.jfineco.2013.02.019</u>.
- Baldenius, T., N. Melumad, and X. Meng. 2014. "Board composition and CEO power." *Journal of Financial Economics* 112 (1): 53-68. <u>https://doi.org/10.1016/j.jfineco.2013.10.004</u>.
- Ball, R. 2016. "Why we do international accounting research." *Journal of International Accounting Research* 15 (2): 1-6. <u>https://doi.org/10.2308/jiar-51403</u>.
- Ball, R., S. P. Kothari, and V. V. Nikolaev. 2013. "Econometrics of the Basu asymmetric timeliness coefficient and accounting conservatism." *Journal of Accounting Research* 51 (5): 1071-1097. <u>https://dx.doi.org/10.1111/1475-679x.12026</u>.
- Ball, R., and L. Shivakumar. 2005. "Earnings quality in UK private firms: Comparative loss recognition timeliness." *Journal of Accounting and Economics* 39 (1): 83-128. <u>https://doi.org/10.1016/j.jacceco.2004.04.001</u>.
- Barth, M. E., W. R. Landsman, M. Lang, and C. Williams. 2012. "Are IFRS-based and US GAAPbased accounting amounts comparable?" *Journal of Accounting and Economics* 54 (1): 68-93. <u>https://dx.doi.org/10.1016/j.jacceco.2012.03.001</u>.
- Basu, S. 1997. "The conservatism principle and the asymmetric timeliness of earnings." *Journal of Accounting and Economics* 24 (1): 3-37. <u>https://doi.org/10.1016/S0165-4101(97)00014-1</u>.
- Beaver, W. H., and S. G. Ryan. 2005. "Conditional and unconditional conservatism: Concepts and modeling." *Review of Accounting Studies* 10 (2): 269-309.
- Beck, T., and A. D. Kunt. 2006. "Small and medium-size enterprises: Access to finance as a growth constraint." *Journal of Banking & Finance* 30 (11): 2931-2943. <u>https://dx.doi.org/10.1016/j.jbankfin.2006.05.009</u>.
- Berger, A. N., and G. F. Udell. 1998. "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle." *Journal of Banking & Finance* 22 (6-8): 613-673. <u>https://dx.doi.org/10.1016/s0378-4266(98)00038-7</u>.
- Bergstresser, D., and T. Philippon. 2006. "CEO incentives and earnings management." *Journal of Financial Economics* 80 (3): 511-529. <u>https://doi.org/10.1016/j.jfineco.2004.10.011</u>.

- Bjornsen, M., C. Do, and T. C. Omer. 2019. "The influence of country-level religiosity on accounting conservatism." *Journal of International Accounting Research* 18 (1): 1-26. <u>https://doi.org/10.2308/jiar-52270</u>.
- Bosse, D. A., R. A. Phillips, and J. S. Harrison. 2009. "Stakeholders, reciprocity, and firm performance." *Strategic Management Journal* 30 (4): 447-456. <u>https://doi.org/10.1002/smj.743</u>.
- Brickley, J. A., J. S. Linck, and J. L. Coles. 1999. "What happens to CEOs after they retire? New evidence on career concerns, horizon problems, and CEO incentives." *Journal of Financial Economics* 52 (3): 341-377. <u>https://doi.org/10.1016/S0304-405X(99)00012-4</u>.
- Brown, W. D., H. He, and K. Teitel. 2006. "Conditional conservatism and the value relevance of accounting earnings: An international study." *European Accounting Review* 15 (4): 605-626. https://dx.doi.org/10.1080/09638180601102198.
- Bushee, B. J. 1998. "The influence of institutional investors on myopic R&D investment Behavior." *The Accounting Review* 73 (3): 305-333. <u>https://www.jstor.org/stable/248542</u>.
- Bushman, R. M., and J. D. Piotroski. 2006. "Financial reporting incentives for conservative accounting: The influence of legal and political institutions." *Journal of Accounting and Economics* 42 (1-2): 107-148. <u>https://dx.doi.org/10.1016/j.jacceco.2005.10.005</u>.
- Carcello, J. V., D. R. Hermanson, and Z. Ye. 2011. "Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions." *Auditing: A Journal of Practice & Theory* 30 (3): 1-31. <u>https://doi.org/10.2308/ajpt-10112</u>.
- Carpenter, M. A., M. A. Geletkanycz, and W. G. Sanders. 2004. "Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition." *Journal of Management* 30 (6): 749-778. <u>https://doi.org/10.1016/j.jm.2004.06.001</u>.
- Cassell, C. A., L. A. Myers, R. Schmardebeck, and J. Zhou. 2018. "The monitoring effectiveness of coopted audit committees." *Contemporary Accounting Research* 35 (4): 1732-1765. <u>https://dx.doi.org/10.1111/1911-3846.12429</u>.
- Chen, X., J. Harford, and K. Li. 2007. "Monitoring: Which institutions matter?" *Journal of Financial Economics* 86 (2): 279-305. <u>https://dx.doi.org/10.1016/j.jfineco.2006.09.005</u>.
- Cheng, Q., L. Jimmy, and T. Shevlin. 2016. "Internal governance and real earnings management." *The Accounting Review* 91 (4): 1051-1085. <u>https://doi.org/10.2308/accr-51275</u>.
- Cheng, Q., and T. D. Warfield. 2005. "Equity incentives and earnings management." *The Accounting Review* 80 (2): 441-476. <u>https://www.jstor.org/stable/4093065</u>.
- Chi, W., C. Liu, and T. Wang. 2009. "What affects accounting conservatism: A corporate governance perspective." *Journal of Contemporary Accounting & Economics* 5 (1): 47-59. https://doi.org/10.1016/j.jcae.2009.06.001.
- Chua, Y. L., C. S. Cheong, and G. Gould. 2012. "The impact of mandatory IFRS adoption on accounting quality: Evidence from Australia." *Journal of International Accounting Research* 11 (1): 119-146. <u>https://doi.org/10.2308/jiar-10212</u>.
- Coad, A., A. Segarra, and M. Teruel. 2016. "Innovation and firm growth: Does firm age play a role?" *Research Policy* 45 (2): 387-400. <u>https://doi.org/10.1016/j.respol.2015.10.015</u>.
- Coles, J. L., N. D. Daniel, and L. Naveen. 2014. "Co-opted boards." *Review of Financial Studies* 27 (6): 1751-1796. <u>https://doi.org/10.1093/rfs/hhu011</u>.
- Combs, J. G., D. J. Ketchen Jr, A. A. Perryman, and M. S. Donahue. 2007. "The moderating effect of CEO power on the board composition–firm performance relationship." *Journal of Management Studies* 44 (8): 1299-1323. <u>https://doi.org/10.1111/j.1467-6486.2007.00708.x</u>.
- Cremers, K. J. M., and Y. Grinstein. 2014. "Does the market for CEO talent explain controversial CEO pay practices?" *Review of Finance* 18 (3): 921-960. <u>https://dx.doi.org/10.1093/rof/rft024</u>.
- Crockett, M., and M. J. Ali. 2015. "Auditor independence and accounting conservatism." *International Journal of Accounting & Information Management* 23 (1): 80-104. <u>https://doi.org/10.1108/IJAIM-02-2014-0008</u>.
- Cui, L., P. Kent, S. Kim, and S. Li. 2021. "Accounting conservatism and firm performance during the COVID-19 pandemic." Accounting & Finance 61 (4): 5543-5579. <u>https://doi.org/10.1111/acfi.12767</u>.
- Davidson, R., J. Goodwin-Stewart, and P. Kent. 2005. "Internal governance structures and earnings management." *Accounting and Finance* 45 (2): 241-267. <u>https://dx.doi.org/10.1111/j.1467-629x.2004.00132.x</u>.

- Dechow, P. M., and R. G. Sloan. 1991. "Executive incentives and the horizon problem." *Journal of Accounting and Economics* 14 (1): 51-89. <u>https://dx.doi.org/10.1016/0167-7187(91)90058-s</u>.
- Defond, M. L., and C. W. Park. 1997. "Smoothing income in anticipation of future earnings." *Journal of Accounting and Economics* 23 (2): 115-139. <u>https://dx.doi.org/10.1016/s0165-4101(97)00004-</u> <u>9</u>.
- Devos, E., W. B. Elliott, and R. S. Warr. 2015. "CEO opportunism?: Option grants and stock trades around stock splits." *Journal of Accounting and Economics* 60 (1): 18-35. <u>https://doi.org/10.1016/j.jacceco.2015.02.004</u>.
- Dichev, I. D., J. R. Graham, C. R. Harvey, and S. Rajgopal. 2013. "Earnings quality: Evidence from the field." *Journal of Accounting and Economics* 56 (2-3): 1-33. https://dx.doi.org/10.1016/j.jacceco.2013.05.004.
- Dietrich, J. R., K. A. Muller, and E. J. Riedl. 2007. "Asymmetric timeliness tests of accounting conservatism." *Review of Accounting Studies* 12 (1): 95-124. <u>https://dx.doi.org/10.1007/s11142-006-9023-y</u>.
- Fama, E. F. 1980. "Agency problems and the theory of the firm." *Journal of Political Economy* 88 (2): 288-307. <u>https://doi.org/10.1086/260866</u>.
- Fama, E. F., and M. C. Jensen. 1983. "Separation of ownership and control." *The Journal of Law & Economics* 26 (2): 301-325. <u>https://doi.org/10.2139/ssrn.94034</u>.
- Fazzari, S. M., R. G. Hubbard, B. C. Petersen, A. S. Blinder, and J. M. Poterba. 1988. "Financing constraints and corporate investment." *Brookings Papers on Economic Activity* 1988 (1): 141-206. <u>https://doi.org/10.2307/2534426</u>.
- Feng, M., W. Ge, S. Luo, and T. Shevlin. 2011. "Why do CFOs become involved in material accounting manipulations?" *Journal of Accounting and Economics* 51 (1): 21-36. <u>https://doi.org/10.1016/j.jacceco.2010.09.005</u>.
- Filatotchev, I., and K. Bishop. 2002. "Board composition, share ownership, and underpricing of U.K. IPO firms." *Strategic Management Journal* 23 (10): 941-955. <u>https://doi.org/10.1002/smj.269</u>.
- Finkelstein, S. 1992. "Power in top management teams: Dimensions, measurement, and validation." *The Academy of Management Journal* 35 (3): 505-538. <u>https://doi.org/10.2307/256485</u>.
- Francis, B., I. Hasan, J. C. Park, and Q. Wu. 2015. "Gender differences in financial reporting decision making: Evidence from accounting conservatism." *Contemporary Accounting Research* 32 (3): 1285-1318. <u>https://doi.org/10.1111/1911-3846.12098</u>.
- Frijns, B., O. Dodd, and H. Cimerova. 2016. "The impact of cultural diversity in corporate boards on firm performance." *Journal of Corporate Finance* 41: 521-541. https://doi.org/10.1016/j.jcorpfin.2016.07.014.
- García Lara, J. M., B. García Osma, and F. Penalva. 2016. "Accounting conservatism and firm investment efficiency." *Journal of Accounting and Economics* 61 (1): 221-238. <u>https://doi.org/10.1016/j.jacceco.2015.07.003</u>.
- Ge, W., D. Matsumoto, and J. L. Zhang. 2011. "Do CFOs have style? An empirical investigation of the effect of individual CFOs on accounting practices." *Contemporary Accounting Research* 28 (4): 1141-1179. <u>https://dx.doi.org/10.1111/j.1911-3846.2011.01097.x</u>.
- Geiger, M., and J. v. d. L. Smith. 2010. "The effect of institutional and cultural factors on the perceptions of earnings management." *Journal of International Accounting Research* 9 (2): 21-43. <u>https://doi.org/10.2308/jiar.2010.9.2.21</u>.
- Gibbons, R., and K. J. Murphy. 1992. "Does executive compensation affect investment?" *Journal of Applied Corporate Finance* 5 (2): 99-109. <u>https://dx.doi.org/10.1111/j.1745-6622.1992.tb00493.x</u>.
- Gillan, S., and L. T. Starks. 2003. "Corporate governance, corporate ownership, and the role of institutional investors: A global perspective." *Journal of Applied Finance* 13 (2): 4-22. <u>https://doi.org/10.2139/ssrn.439500</u>.
- Givoly, D., and C. Hayn. 2000. "The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative?" *Journal of Accounting and Economics* 29 (3): 287-320. <u>https://doi.org/10.1016/S0165-4101(00)00024-0</u>.
- Givoly, D., C. K. Hayn, and A. Natarajan. 2007. "Measuring reporting conservatism." *The Accounting Review* 82 (1): 65-106. <u>https://doi.org/10.2139/ssrn.606841</u>.

- Gopalan, R., T. Milbourn, F. Song, and A. V. Thakor. 2014. "Duration of executive compensation." *The Journal of Finance* 69 (6): 2777-2817. <u>https://doi.org/10.1111/jofi.12085</u>.
- Graham, J. R., C. R. Harvey, and M. Puri. 2015. "Capital allocation and delegation of decision-making authority within firms." *Journal of Financial Economics* 115 (3): 449-470. https://doi.org/10.1016/j.jfineco.2014.10.011.
- Graham, J. R., C. R. Harvey, and S. Rajgopal. 2005. "The economic implications of corporate financial reporting." *Journal of Accounting and Economics* 40 (1-3): 3-73. https://dx.doi.org/10.1016/j.jacceco.2005.01.002.
- Habib, A., and I. Azim. 2008. "Corporate governance and the value-relevance of accounting information." *Accounting Research Journal* 21 (2): 167-194. https://dx.doi.org/10.1108/10309610810905944.
- Habib, A., and H. Jiang. 2015. "Corporate governance and financial reporting quality in China: A survey of recent evidence." *Journal of International Accounting, Auditing and Taxation* 24: 29-45. <u>https://dx.doi.org/10.1016/j.intaccaudtax.2014.12.002</u>.
- Haga, J., F. Huhtamäki, and D. Sundvik. 2019. "Long-term orientation and earnings management strategies." *Journal of International Accounting Research* 18 (3): 97-119. <u>https://doi.org/10.2308/jiar-52501</u>.
- Haider, I., H. Singh, and N. Sultana. 2021. "Managerial ability and accounting conservatism." Journal of Contemporary Accounting & Economics 17 (1): 100242. <u>https://dx.doi.org/10.1016/j.jcae.2020.100242</u>.
- Hambrick, D. C., and P. A. Mason. 1984. "Upper echelons: The organization as a reflection of its top managers." *Academy of Management Review* 9 (2): 193-206. https://doi.org/10.5465/AMR.1984.4277628.
- Healy, P. M. 1985. "The effect of bonus schemes on accounting decisions." Journal of Accounting and Economics 7 (1): 85-107. <u>https://doi.org/10.1016/0165-4101(85)90029-1</u>.
- Hirshleifer, D., and A. V. Thakor. 1992. "Managerial conservatism, project choice, and debt." *Review of Financial Studies* 5 (3): 437-470. <u>https://dx.doi.org/10.1093/rfs/5.3.437</u>.
- Huang, H.-W., R.-G. Ena, and C.-C. Lee. 2012. "CEO age and financial reporting quality." *Accounting Horizons* 26 (4): 725-740. <u>https://doi.org/10.2308/acch-50268</u>.
- Huijgen, C., and M. Lubberink. 2005. "Earnings conservatism, litigation and contracting: The case of cross-listed firms." *Journal of Business Finance & Accounting* 32 (7-8): 1275-1309. <u>https://dx.doi.org/10.1111/j.0306-686x.2005.00629.x</u>.
- Jain, P., C. Jiang, and M. Mekhaimer. 2016. "Executives' horizon, internal governance and stock market liquidity." *Journal of Corporate Finance* 40: 1-23. https://dx.doi.org/10.1016/j.jcorpfin.2016.06.005.
- Jensen, M. C. 1993. "The modern industrial revolution, exit, and the failure of internal control systems." *The Journal of Finance* 48 (3): 831-880. <u>https://doi.org/10.1111/j.1540-6261.1993.tb04022.x.</u>
- Kale, J. R., E. Reis, and A. Venkateswaran. 2009. "Rank-order tournaments and incentive alignment: The effect on firm performance." *The Journal of Finance* 64 (3): 1479-1512. https://dx.doi.org/10.1111/j.1540-6261.2009.01470.x.
- Kieschnick, R., and R. Moussawi. 2018. "Firm age, corporate governance, and capital structure choices." *Journal of Corporate Finance* 48: 597-614. https://doi.org/10.1016/j.jcorpfin.2017.12.011.
- Kim, B. H., and M. Pevzner. 2010. "Conditional accounting conservatism and future negative surprises: An empirical investigation." *Journal of Accounting and Public Policy* 29 (4): 311-329. <u>https://doi.org/10.1016/j.jaccpubpol.2010.03.003</u>.
- Kim, E. H., and Y. Lu. 2011. "CEO ownership, external governance, and risk-taking." *Journal of Financial Economics* 102 (2): 272-292. <u>https://doi.org/10.1016/j.jfineco.2011.07.002</u>.
- Kim, J. B., and L. Zhang. 2016. "Accounting conservatism and stock price crash risk: Firm-level evidence." *Contemporary Accounting Research* 33 (1): 412-441. <u>http://dx.doi.org/10.2139/ssrn.1521345</u>.
- LaFond, R., and R. L. Watts. 2008. "The information role of conservatism." *The Accounting Review* 83 (2): 447-478. <u>https://doi.org/10.2308/accr.2008.83.2.447</u>.

- Lakonishok, J., A. Shleifer, and R. W. Vishny. 1994. "Contrarian investment, extrapolation, and risk." *The Journal of Finance* 49 (5): 1541-1578. <u>https://dx.doi.org/10.1111/j.1540-6261.1994.tb04772.x</u>.
- Landier, A., J. Sauvagnat, D. Sraer, and D. Thesmar. 2013. "Bottom-up corporate governance." *Review* of *Finance* 17 (1): 161-201. <u>https://dx.doi.org/10.1093/rof/rfs020</u>.
- Lara, J. M. G., B. G. Osma, and F. Penalva. 2007. "Board of directors' characteristics and conditional accounting conservatism: Spanish evidence." *European Accounting Review* 16 (4): 727-755. <u>https://doi.org/10.1080/09638180701706922</u>.
- Lara, J. M. G., B. G. Osma, and F. Penalva. 2009a. "Accounting conservatism and corporate governance." *Review of Accounting Studies* 14 (1): 161-201. <u>https://doi.org/10.1007/s11142-007-9060-1</u>.
- Lara, J. M. G., B. G. Osma, and F. Penalva. 2009b. "The economic determinants of conditional conservatism." *Journal of Business Finance & Accounting* 36 (3-4): 336-372. <u>https://dx.doi.org/10.1111/j.1468-5957.2008.02122.x</u>.
- Larcker, D. F., S. A. Richardson, and I. R. Tuna. 2007. "Corporate governance, accounting outcomes, and organizational performance." *The Accounting Review* 82 (4): 963-1008. <u>https://dx.doi.org/10.2308/accr.2007.82.4.963</u>.
- Lee, S. M., P. Jiraporn, Y. S. Kim, and K. J. Park. 2021. "Do co-opted directors influence corporate risk-taking and credit ratings?" *The Quarterly Review of Economics and Finance* 79: 330-344. <u>https://dx.doi.org/10.1016/j.qref.2020.07.003</u>.
- Lewellyn, K. B., and M. I. Muller-Kahle. 2012. "CEO power and risk taking: Evidence from the subprime lending industry." *Corporate Governance: An International Review* 20 (3): 289-307. <u>https://doi.org/10.1111/j.1467-8683.2011.00903.x</u>.
- Li, C., Y. Tseng, and T.-K. Chen. 2016. "Top management team expertise and corporate real earnings management activities." *Advances in Accounting* 34: 117-132. https://dx.doi.org/10.1016/j.adiac.2016.07.007.
- Li, Z. 2014. "Mutual monitoring and corporate governance." *Journal of Banking & Finance* 45: 255-269. <u>https://doi.org/10.1016/j.jbankfin.2013.12.008</u>.
- Lim, R. 2011. "Are corporate governance attributes associated with accounting conservatism?" *Accounting & Finance* 51 (4): 1007-1030. <u>https://dx.doi.org/10.1111/j.1467-629x.2010.00390.x</u>.
- Lisic, L. L., T. L. Neal, I. X. Zhang, and Y. Zhang. 2016. "CEO power, internal control quality, and audit committee effectiveness in substance versus in form." *Contemporary Accounting Research* 33 (3): 1199-1237. <u>https://dx.doi.org/10.1111/1911-3846.12177</u>.
- Luttmer, E. F. P. 2005. "Neighbors as negatives: Relative earnings and well-being." *The Quarterly Journal of Economics* 120 (3): 963-1002. <u>https://dx.doi.org/10.1093/qje/120.3.963</u>.
- Lynall, M. D., B. R. Golden, and A. J. Hillman. 2003. "Board composition from adolescence to maturity: A multitheoretic view." *The Academy of Management Review* 28 (3): 416. https://dx.doi.org/10.2307/30040730.
- Markarian, G., and A. Parbonetti. 2007. "Firm complexity and board of director composition." *Corporate Governance: An International Review* 15 (6): 1224-1243. <u>https://dx.doi.org/10.1111/j.1467-8683.2007.00643.x</u>.
- Matějka, M., K. A. Merchant, and W. A. van der Stede. 2009. "Employment horizon and the choice of performance measures: Empirical evidence from annual bonus plans of loss-making entities." *Management Science* 55 (6): 890-905. <u>https://doi.org/10.1287/mnsc.1090.0999</u>.
- Matsunaga, S. R., and C. W. Park. 2001. "The effect of missing a quarterly earnings benchmark on the CEO's annual bonus." *The Accounting Review* 76 (3): 313. https://doi.org/10.2308/accr.2001.76.3.313.
- McClelland, P. L., V. L. Barker, and W.-Y. Oh. 2012. "CEO career horizon and tenure: Future performance implications under different contingencies." *Journal of Business Research* 65 (9): 1387-1393. <u>https://doi.org/10.1016/j.jbusres.2011.09.003</u>.
- Mekhaimer, M., A. A. Abakah, A. Ibrahim, and K. Hussainey. 2022. "Subordinate executives' horizon and firm policies." *Journal of Corporate Finance* 74: 102220. <u>https://doi.org/10.1016/j.jcorpfin.2022.102220</u>.

- Miglani, S., K. Ahmed, and D. Henry. 2015. "Voluntary corporate governance structure and financial distress: Evidence from Australia." *Journal of Contemporary Accounting & Economics* 11 (1): 18-30. <u>https://doi.org/10.1016/j.jcae.2014.12.005</u>.
- Murphy, K. J. 1985. "Corporate performance and managerial remuneration." *Journal of Accounting and Economics* 7 (1-3): 11-42. <u>https://dx.doi.org/10.1016/0165-4101(85)90026-6</u>.
- Muttakin, M. B., A. Khan, and G. Tanewski. 2019. "CFO tenure, CFO board membership and accounting conservatism." *Journal of Contemporary Accounting & Economics* 15 (3): 100165. https://dx.doi.org/10.1016/j.jcae.2019.100165.
- Nikolaev, V. V. 2010. "Debt covenants and accounting conservatism." *Journal of Accounting Research* 48 (1): 137-176. https://doi.org/10.1111/j.1475-679X.2009.00359.x.
- Parrino, R. 1997. "CEO turnover and outside succession: A cross-sectional analysis." *Journal of Financial Economics* 46 (2): 165-197. <u>https://doi.org/10.1016/S0304-405X(97)00028-7</u>.
- Patatoukas, P. N., and J. K. Thomas. 2011. "More evidence of bias in the differential timeliness measure of conditional conservatism." *The Accounting Review* 86 (5): 1765-1793. https://doi.org/10.2308/accr-10101.
- Petersen, M. A., and R. G. Rajan. 1994. "The benefits of lending relationships: Evidence from small business data." *The Journal of Finance* 49 (1): 3-37. <u>https://doi.org/10.2307/2329133</u>.
- Pfaffermayr, M., M. Stöckl, and H. Winner. 2013. "Capital structure, corporate taxation and firm age." *Fiscal Studies* 34 (1): 109-135. https://doi.org/10.1111/j.1475-5890.2013.00179.x.
- Piotroski, J. D., and T. J. Wong. 2012. "Capitalizing China." In 4. Institutions and Information Environment of Chinese Listed Firms:, edited by P. H. Fan Joseph and Morck Randall, 201-246. University of Chicago Press.
- Plöckinger, M., E. Aschauer, M. R. W. Hiebl, and R. Rohatschek. 2016. "The influence of individual executives on corporate financial reporting: A review and outlook from the perspective of upper echelons theory." *Journal of Accounting Literature* 37: 55-75. https://doi.org/10.1016/j.acclit.2016.09.002.
- Qiang, X. 2007. "The effects of contracting, litigation, regulation, and tax costs on conditional and unconditional conservatism: Cross-sectional evidence at the firm level." *The Accounting Review* 82 (3): 759-796. <u>https://doi.org/10.2139/ssrn.927090</u>.
- Roychowdhury, S. 2010. "Discussion of: "Acquisition profitability and timely loss recognition" by J. Francis and X. Martin." *Journal of Accounting and Economics* 49 (1): 179-183. <u>https://doi.org/10.1016/j.jacceco.2009.11.003</u>.
- Shen, W. 2003. "The dynamics of the CEO-board relationship: An evolutionary perspective." *Academy* of Management Review 28 (3): 466-476. <u>https://doi.org/10.5465/AMR.2003.10196776</u>.
- Shleifer, A., and R. W. Vishny. 1989. "Management entrenchment." *Journal of Financial Economics* 25 (1): 123-139. <u>https://doi.org/10.1016/0304-405x(89)90099-8</u>.
- Skinner, D. J., and R. G. Sloan. 2002. "Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio." *Review of Accounting Studies* 7 (2): 289-312. <u>https://doi.org/10.1023/A:1020294523516</u>.
- Stein, J. C. 1989. "Efficient capital markets, inefficient firms: A model of myopic corporate behavior." *The Quarterly Journal of Economics* 104 (4): 655-669. <u>https://doi.org/10.2307/2937861</u>.
- Stock, J. H., J. H. Wright, and M. Yogo. 2002. "A survey of weak instruments and weak identification in generalized method of moments." *Journal of Business & Economic Statistics* 20 (4): 518-529. <u>https://doi.org/10.1198/073500102288618658</u>.
- Sultana, N. 2015. "Audit committee characteristics and accounting conservatism." *International Journal* of Auditing 19 (2): 88-102. <u>https://doi.org/10.1111/ijau.12034</u>.
- Swenson, L. 2020. "The impact of world religions on conservatism." *Journal of International Accounting Research* 19 (2): 197-218. https://doi.org/10.2308/JIAR-2020-048.
- Tian, G. Y., and G. Twite. 2011. "Corporate governance, external market discipline and firm productivity." *Journal of Corporate Finance* 17 (3): 403-417. <u>https://doi.org/10.1016/j.jcorpfin.2010.12.004</u>.
- Veprauskaitė, E., and M. Adams. 2013. "Do powerful chief executives influence the financial performance of UK firms?" *The British Accounting Review* 45 (3): 229-241. https://doi.org/10.1016/j.bar.2013.06.004.

- Wang, C., F. Xie, and X. Xin. 2018. "CEO inside debt and accounting conservatism." *Contemporary Accounting Research* 35 (4): 2131-2159. <u>https://dx.doi.org/10.1111/1911-3846.12372</u>.
- Wang, Q., and N. V. Tunzelmann. 2000. "Complexity and the functions of the firm: breadth and depth." *Research Policy* 29 (7): 805-818. <u>https://doi.org/10.1016/S0048-7333(00)00106-2</u>.
- Wang, R. Z., C. Ó. Hogartaigh, and T. V. Zijl. 2009. "Measures of accounting conservatism: A construct validity perspective." *Journal of Accounting Literature*. https://ssrn.com/abstract=1274044.
- Watts, R. L. 2003. "Conservatism in accounting Part I: Explanations and implications." *Accounting Horizons* 17 (3): 207-221. <u>https://doi.org/10.2308/acch.2003.17.3.207</u>.
- Watts, R. L., and J. L. Zimmerman. 1978. "Towards a positive theory of the determination of accounting standards." *The Accounting Review* 53 (1): 112-134. https://www.jstor.org/stable/245729.
- Watts, R. L., and J. L. Zimmerman. 1990. "Positive accounting theory: A ten year perspective." *The Accounting Review* 65 (1): 131-156. <u>http://www.jstor.org/stable/247880</u>.
- Xie, S., Y. Chen, and Y. Liu. 2021. "Internal governance and innovation." *Accounting & Finance* 61 (S1): 2507-2538. <u>https://dx.doi.org/10.1111/acfi.12673</u>.
- Yunos, R. M., S. A. Ahmad, and N. Sulaiman. 2014. "The influence of internal governance mechanisms on accounting conservatism." *Procedia - Social and Behavioral Sciences* 164: 501-507. https://doi.org/10.1016/j.sbspro.2014.11.138.
- Zajac, E. J. 1990. "CEO selection, succession, compensation and firm performance: A theoretical integration and empirical analysis." *Strategic Management Journal* 11 (3): 217-230. https://dx.doi.org/10.1002/smj.4250110304.
- Zhang, D. 2019. "Top management team characteristics and financial reporting quality." *The Accounting Review* 94 (5): 349-375. <u>https://doi.org/10.2308/accr-52360</u>.
- Zhang, J. 2008. "The contracting benefits of accounting conservatism to lenders and borrowers." *Journal of Accounting and Economics* 45 (1): 27-54. https://doi.org/10.1016/j.jacceco.2007.06.002.
- Zhong, Y., and W. Li. 2017. "Accounting conservatism: A literature review." *Australian Accounting Review* 27 (2): 195-213. <u>https://dx.doi.org/10.1111/auar.12107</u>.

## Appendix A Definition of Variables

EPS <sub>it</sub>	Net operating profit after tax before abnormal deflated by the number of outstanding shares at the beginning of financial year $t$ .
R <sub>it</sub>	The value of stock return is calculated as the difference of stock price three months after the end of the financial year $t$ from the stock price three months after the end of the financial year $t-1$ .
DR <sub>it</sub>	Indicator variable where a firm $i$ is scored one if $R_{it}$ is negative, and zero otherwise.
Exec_Horizon <sub>it</sub>	Subordinate executives' decision horizon is defined as the retirement age of 65 minus the average age of key subordinate executives.
Exec_PayRatio <sub>it</sub>	Subordinate executives' pay ratio is calculated as the average total compensation of subordinate executives scaled by the CEO's total compensation.
Int_Gov <sub>it</sub>	A firm's overall internal governance is measured as the sum of the standardized value of $Exec\_Horizon_{it}$ and $Exec\_PayRatio_{it}$ .
CEO_Tenure <sub>it</sub>	The measure of CEO power for a firm $i$ is defined as the number of years since the appointment of the current serving CEO by the end of the financial year $t$ .
Inst_Own <sub>it</sub>	The measure of CEO power for a firm $i$ is defined as the percentage of firm ownership held by institutional investors during the financial year $t$ .
CEO_Horizon <sub>it</sub>	CEO's decision horizon for a firm $i$ is defined as a retirement age of 65 minus the age of the CEO in the financial year $t$ .
Complexy_Inv <sub>it</sub>	The measure of firm complexity for a firm $i$ is defined as the ratio of total invested capital to total non-current assets at the end of the financial year $t$ .
Geo_Seg <sub>it</sub>	The measure of firm complexity for a firm $i$ is defined as the number of geographical segments the firm operates in during the financial year $t$ .
$Bus\_Seg_{it}$	The measure of firm complexity for a firm $i$ is defined as the number of business segments the firm operates in during the financial year $t$ .
Firm_Age <sub>it</sub>	The natural log of firm age is defined as the number of years since a firm $i$ listed on the Australian Stock Exchange (ASX) at the end of the financial year $t$ .
Firm_Size <sub>it</sub>	The size of the firm is defined as the logged value of the total assets of a firm $i$ in the financial year $t$ .
MTB <sub>it</sub>	The market-to-book ratio of a firm $i$ for the financial year $t$ measured as a ratio of the market value of equity and the book value of equity.
<i>ROA</i> <sub>it</sub>	Return on assets is defined as net income divided by total assets for a firm $i$ in the financial year $t$ .

<i>Leverage</i> <sub>it</sub>	The financial leverage of the firm, defined as total assets divided by shareholders' equity for a firm $i$ in the financial year $t$ .
BInd <sub>it</sub>	Percentage of the board comprised of independent directors for a firm $i$ during the financial year $t$ .
$BSize_{it}$	Total number of board members of a firm $i$ during the financial year $t$ .
$CEO\_Age_{it}$	Natural log of the age of the CEO for a firm $i$ in the financial year $t$ .
$CX_{ii}$	Change in operating profit after tax of firm <i>i</i> for the financial year <i>t</i> from operating profit after tax of the financial year $t-1$ , deflated by market capitalisation of a firm <i>i</i> at the end of the financial year $t-1$ .
PX <sub>it</sub>	Change in operating profit after tax of firm <i>i</i> for the financial year $t-1$ from operating profit after tax of the financial year $t-2$ , deflated by market capitalisation of a firm <i>i</i> at the end of the financial year $t-2$ .
$DPX_{it}$	The dummy variable is equal to 1 if $PX_{it} < 0$ , and zero otherwise.
Diff_Horizon <sub>it</sub>	Alternative internal governance measure, defined as the age of the CEO minus the average age of subordinate executives in the financial year $t$ .
IndAdjDiff_Horizon <sub>ii</sub>	Industry adjusted age difference calculated as: [(Industry average subordinates' age – firm average subordinates' age) – (Industry average CEO age – firm CEO age)] in the financial year $t$ .
IndYear_IG <sub>it</sub>	The industry-year median value of internal governance.
$Lagged\_Int\_Gov_{it}$	One-year lagged value of internal governance.
$\mathcal{E}_{it}$	Error term

TABLE 1
<b>Sample Selection</b>

Panel A: Sample Selection	
	Obs.
The total number of firm-year observations from 2004-2020 with Connect4 and	
Morningstar data	12,423
Less: missing values for internal governance variable	
missing values associated with the CEO	6,510
missing values associated with subordinate executives	2,558
Less: observations where the current year tenure of the CEO is less than 6 months	(188)
Less: missing values for other independent variables used in regressions	(171)
The final study sample for regressions	2,996
The number of unique firms	497
Panel A.1: Sample Selection for Baseline Regression	
The final study sample for regressions	2,996
Less: missing values associated with conservatism measure	(339)
The final study sample for H1	2,657
The number of unique firms	466
Panel A.2: Sample Selection for H2 conditioning on CEO Power	
The final study sample for baseline regression	2,657
Less: missing values for CEO Tenure	-
Less: missing values for Institutional Ownership	(242)
The final study sample for H2	2,415
The number of unique firms	433
Panel A.3: Sample Selection for H3 conditioning on CEO Horizon	
The final study sample for baseline regression	2,657
Less: missing values for variables measuring CEO Horizon	(43)
The final study sample for H3	2,614
The number of unique firms	465
Panel A.4: Sample Selection for H4 conditioning on Subordinate Executives' Cont	·ibution
The final study sample for baseline regression	2.657
Lease missing values for Invested Conital to Non Current Assets	(2)
Less. missing values for Dusinges Segments	(2)
Less: missing values for Business Segments	(20)
Less: missing values for Geographical Segments	(350)
The final study sample for H4	2,279
The number of unique firms	406

Panel A.5: Sample Selection for H5 conditioning on Firm Age	
The final study sample for baseline regression	2,657
Less: missing values for Firm Age	-
The final study sample for H5	2,657
The number of unique firms	466

## Panel B: Titles of Key Subordinate Executives

Title	Obs.	%
Executive Director	1,599	26.03
Company Secretary	1,025	16.69
Divisional Head	728	11.85
Company Secretary/CFO	661	10.76
CFO	535	8.71
O/Seas Divisional/subsidiary head	398	6.48
Company Secretary/Legal Counsel	160	2.61
COO	144	2.34
Others	892	14.52
Total	6,142	100.00

Variables	Obs	Mean	Median	Std. Dev.	Q1	Q3
EPS	2,897	29.54	4.87	64.81	-1.37	32.37
R	2,657	0.31	0.00	3.36	-0.26	0.53
Exec_Horizon	2,996	14.06	14.37	8.21	9.00	19.25
Exec_PayRatio	2,996	0.60	0.48	0.50	0.34	0.69
Int_Gov	2,996	0.00	-0.12	1.45	-0.82	0.68
CEO_Age	2,996	3.98	3.99	0.15	3.89	4.08
BSize	2,996	6.75	6.00	2.75	5.00	8.00
BInd	2,996	0.45	0.50	0.26	0.25	0.67
Firm_Size	2,996	19.07	18.64	2.67	17.02	21.07
Firm_Age	2,996	2.61	2.64	0.88	2.03	3.23
Leverage	2,996	1.91	1.50	1.74	1.13	2.05
MTB	2,996	2.71	1.63	3.42	0.89	3.19
ROA	2,996	-0.06	0.04	0.33	-0.09	0.09
Complexy_Inv	2,991	3.65	1.26	12.46	1.01	1.82
Geo_Seg	2,562	3.03	2.00	2.67	1.00	4.00
Bus_Seg	2,919	4.01	3.00	3.44	1.00	6.00
CEO_Horizon	2,996	11.76	12.00	7.96	7.00	17.00
Inst_Own	2,576	19.38	13.91	18.52	4.02	29.96
CEO_Tenure	2,996	6.70	4.56	6.19	2.26	9.09
Diff_Horizons	2,996	2.30	2.00	10.17	-3.67	8.00

## Table 2Descriptive Statistics

#### Variable Definitions:

EPS = net operating profit after tax before abnormals deflated by the number of outstanding shares at the beginning of the financial year

R = annual share returns three months after the previous financial year end to three months after the current financial year end Exec Horizon = subordinate executives' decision horizon

Exec PayRatio = subordinate executives' ability to influence the CEO

Int Gov = firm's internal governance measured as the sum of the standardized value of Exec\_Horizon and Exec\_PayRatio

CEO\_Age = the natural log of CEO age

BSize = total number of board members

BInd = percentage of the board comprised of independent directors

Firm\_Size = size of the firm defined as the logged value of total assets

Firm\_Age = the natural log of firm age, defined as the number of years since the listing date

Leverage = financial leverage, defined as total assets divided by shareholders' equity

MTB = market-to-book ratio in the current financial year, defined as the ratio of the market value of equity to the book value of equity

ROA = return on assets in the current financial year, defined as net income divided by total assets

Complexy\_Inv = internal firm complexity, defined as the ratio of total invested capital to total non-current assets

Geo\_Seg = the number of geographical segments

Bus\_Seg = the number of business segments

CEO\_Horizon = CEO's decision horizon defined as the assumed retirement age of 65 minus the age of the CEO

Inst\_Own = CEO power defined as the percentage of firm ownership held by institutional investors

CEO\_Tenure = the number of years since the appointment of the serving CEO

Diff\_Horizons = the difference between the CEO's age and the average age of key subordinate executives

		1	2	3	4	5	6	7	8
1	Int_Gov	1.00							
2	Firm_Size	-0.02	1.00						
3	Firm_Age	-0.03	0.42***	1.00					
4	MTB	0.01	-0.07**	-0.05*	1.00				
5	ROA	0.00	0.47***	0.18***	-0.10***	1.00			
6	Leverage	-0.04	0.27***	0.07***	0.37***	0.09***	1.00		
7	BInd	- 0.09***	0.49***	0.23***	0.03	0.19***	0.16***	1.00	
8	BSize	-0.04	0.66***	0.22***	0.04*	0.16***	0.19***	0.26***	1.00
9	CEO_Age	-0.03	0.16***	0.26***	-0.11***	0.08***	0.01	0.08***	0.06**

Table 3
<b>Pearson Correlation Table</b>

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Variable Definitions:

Int\_Gov = firm's internal governance measured as the sum of the standardized value of Exec\_Horizon and Exec\_PayRatio

Firm\_Size = size of the firm defined as the logged value of total assets

Firm\_Age = the natural log of firm age defined as the number of years since the listing date

MTB = market-to-book ratio defined as the ratio of the market value of equity to the book value of equity

ROA = return on assets defined as net income divided by total assets

Leverage = financial leverage defined as total assets divided by shareholders' equity

BInd = percentage of the board comprised of independent directors

BSize = the total number of board members

CEO\_Age = the natural log of CEO age

	1	2	3	4
R	15.048***	11.940***	12.052***	3.626**
	(27.453)	(21.257)	(21.315)	(1.970)
DR	7.609**	2.219	3.329	1.482
	(2.528)	(0.769)	(1.119)	(0.645)
DR*R	24.661***	17.466***	17.517***	0.934
	(26.029)	(17.603)	(17.404)	(0.361)
Int_Gov	-1.765*	-0.195	-0.297	-0.736
	(-1.745)	(-0.201)	(-0.305)	(-0.459)
Int_Gov*DR*R	1.435***	1.445***	1.419***	2.478*
	(2.821)	(3.020)	(2.960)	(1.847)
Firm_Size		6.686***	6.824***	7.078***
		(7.321)	(7.437)	(2.914)
Firm_Age		9.354***	9.405***	0.964
- 0		(5.550)	(5.517)	(0.127)
MTB		0.768*	0.688	2.066***
		(1.848)	(1.635)	(2.798)
ROA		5.219	3.874	13.689***
		(1.140)	(0.834)	(2.996)
Leverage		1.696**	1.855**	-2.981***
		(2.066)	(2.255)	(-2.768)
BInd		-3.548	-4.774	1.881
		(-0.633)	(-0.844)	(0.352)
BSize		1.805***	1.740***	-1.376
		(2.728)	(2.618)	(-1.300)
CEO_Age		-7.392	-6.951	-11.312
		(-0.828)	(-0.774)	(-0.404)
Constant	12.787***	-124.789***	-128.530***	-64.908
	(6.055)	(-3.410)	(-3.460)	(-0.498)
Year FE			YES	YES
Firm FE				YES
Observations	2,657	2,657	2,657	2,657
Adjusted R <sup>2</sup>	0.273	0.361	0.362	0.6013

Table 4
<b>Internal Governance and Conservatism</b>

*R* is the value of stock return calculated as the difference of stock price three months after the end of period *t* from the stock price three months after the end of period t - 1. *DR* is an indicator variable that equals one if *R* is negative, and zero otherwise. *DR*\**R* is the interaction term measuring the extent of conditional conservatism (Basu 1997). *Int\_Gov* is the firm's internal governance, measured as the sum of the standardized value of subordinate executives' decision horizon and pay ratio. *Int\_Gov*\**DR*\**R* is the interaction term measuring how internal governance affects conditional conservatism. A positive coefficient indicates that more effective internal governance increases the extent of conservatism. Please refer to Appendix A for the definition of regression variables. Robust t-statistics are in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively.

 Table 5

 Internal Governance and Conservatism Conditioning on CEO Power

_	(1)		(2)	
	CEO Ten	aure	Institutional	Ownership
	Low	High	Low	High
R	3.567	3.329	-0.228	3.358
	(1.481)	(1.548)	(-0.112)	(1.555)
DR	-1.235	0.877	2.561	2.841
	(-0.305)	(0.256)	(1.210)	(0.590)
DR*R	0.630	0.938	-4.507	-0.157
	(0.145)	(0.294)	(-1.290)	(-0.048)
Int_Gov	2.303	-3.819*	-0.342	-2.847
	(0.799)	(-1.771)	(-0.434)	(-0.696)
Int_Gov*DR*R	3.322*	2.117	-1.479	3.271*
	(1.890)	(0.721)	(-1.635)	(1.903)
Firm_Size	7.397*	9.025**	7.056**	11.669*
	(1.878)	(2.009)	(2.579)	(1.672)
Firm_Age	19.456	-16.506	6.622	2.964
	(1.632)	(-1.221)	(1.097)	(0.159)
MTB	3.222**	1.209	-1.891***	-4.731*
	(2.340)	(1.645)	(-3.098)	(-1.672)
ROA	23.383**	3.923	2.553	59.115***
	(2.404)	(0.557)	(0.715)	(3.267)
Leverage	-3.815**	-2.714	1.943	-2.147
	(-2.088)	(-1.460)	(0.703)	(-1.139)
BInd	5.724	-4.185	2.433	0.516
	(0.616)	(-0.417)	(0.362)	(0.045)
BSize	-1.430	-0.994	-1.510**	-1.778
	(-1.209)	(-0.546)	(-2.401)	(-0.856)
CEO_Age	50.676	-36.259	7.384	-39.852
	(1.053)	(-0.779)	(0.586)	(-0.604)
Constant	-354.984*	29.224	-149.963**	-77.199
	(-1.701)	(0.151)	(-1.994)	(-0.238)
Year FE	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES
Observations	1,335	1,322	1,159	1,256
Adjusted R <sup>2</sup>	0.574	0.606	0.498	0.602

 $Int\_Gov$  is the firm's internal governance, measured as the sum of the standardized value of subordinate executives' decision horizon and pay ratio.  $Int\_Gov*DR*R$  is the interaction term measuring how internal governance affects conservatism. We separate our sample into two sub-groups, one sub-group of firm-year observations with the percentage of CEO tenure or institutional ownership below the sample median of 4.56 years or 13.91%, respectively, and another sub-group above the sample median. Firm-years with low CEO tenure reflect lower CEO power, while firm-years with high institutional ownership reflect lower CEO power. Please refer to Table 2 for descriptive statistics on conditioning variables. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively. Please refer to Appendix A for the definition of regression variables.

## Table 6 Internal Governance and Conservatism Conditioning on CEO Horizon

	(1)	(2)
	Short	Long
R	3.979	1.372
	(1.390)	(1.151)
DR	0.227	-0.373
	(0.067)	(-0.135)
DR*R	0.474	-0.573
	(0.097)	(-0.176)
Int_Gov	1.131	-1.571
	(0.508)	(-0.959)
Int_Gov*DR*R	4.484***	1.307*
	(3.058)	(1.686)
Firm_Size	7.201**	7.232*
	(2.006)	(1.775)
Firm_Age	22.174*	-22.616
	(1.701)	(-1.550)
MTB	3.229**	1.529**
	(2.474)	(2.448)
ROA	21.627***	8.973
	(2.664)	(1.361)
Leverage	-4.346**	-2.418
	(-2.250)	(-1.490)
BInd	5.556	-0.462
	(0.584)	(-0.044)
BSize	-0.881	-2.112
	(-0.759)	(-1.145)
Constant	-160.971**	-59.767
	(-2.374)	(-0.790)
Year FE	YES	YES
Firm FE	YES	YES
Observations	1,431	1,183
Adjusted R <sup>2</sup>	0.729	0.595

 $Int\_Gov*DR*R$  is the interaction term measuring how internal governance affects conservatism. *CEO\_Horizon* is the CEO's horizon defined as the difference between the assumed retirement age of 65 and the CEO's age. We separate our sample into two sub-groups, one sub-group of firm-year observations with a CEO horizon below the sample median of 12 years and another with a CEO horizon above the sample median. Please refer to Table 2 for descriptive statistics on conditioning variables. Firm-years with shorter CEO horizons reflect greater tournament incentives for key subordinate executives to monitor the CEO. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively. Please refer to Appendix A for the definition of regression variables.

				0	1 0	
	(	1)		(2)		)
	Rat	tio of	No. of G	No. of Geographic No. of Business Segn		ess Segments
	Investe	d Capital	Seg	ments		
	Low	High	Low	High	Low	High
R	4.143	2.331	4.391*	-1.412	2.603	4.260
	(1.393)	(0.782)	(1.819)	(-0.869)	(1.154)	(1.426)
DR	6.887*	-4.660	0.218	3.398	-5.525	3.071
	(1.879)	(-1.300)	(0.045)	(1.548)	(-1.646)	(0.888)
DR*R	1.656	-0.798	1.343	-4.361	-0.603	3.553
	(0.619)	(-0.155)	(0.399)	(-1.174)	(-0.262)	(0.619)
Int_Gov	-4.961*	1.645	-2.408	0.812	-3.434	0.684
	(-1.665)	(1.039)	(-0.749)	(1.050)	(-1.294)	(0.426)
Int_Gov*DR*R	-0.480	3.940***	3.028	2.686***	1.002	4.452***
	(-0.359)	(2.628)	(1.651)	(4.428)	(1.018)	(2.677)
Firm_Size	10.237*	5.737**	6.532	3.727	10.234**	4.162*
	(1.932)	(1.970)	(1.313)	(1.467)	(1.984)	(1.922)
Firm_Age	-3.304	-0.555	-13.504	9.283	3.315	-14.270
	(-0.208)	(-0.073)	(-0.862)	(1.620)	(0.218)	(-1.640)
MTB	2.604**	2.278***	3.037*	1.548***	1.756*	1.921**
	(2.049)	(2.848)	(1.860)	(3.315)	(1.849)	(2.066)
ROA	12.395	20.730***	43.348**	12.630***	37.565***	13.527***
	(1.553)	(3.656)	(2.563)	(3.037)	(3.043)	(2.972)
Leverage	-3.545**	-2.880	-4.909*	-2.533***	-3.454**	-2.281*
	(-1.974)	(-1.167)	(-1.956)	(-3.174)	(-2.210)	(-1.700)
BInd	15.049	-3.307	0.939	-1.997	5.327	0.008
	(1.620)	(-0.415)	(0.072)	(-0.432)	(0.550)	(0.001)
BSize	-1.819	-1.259	-2.416	-0.100	-1.362	-0.982
	(-1.043)	(-1.398)	(-1.016)	(-0.152)	(-0.772)	(-1.083)
CEO_Age	-47.112	13.677	-44.708	-5.194	-35.220	4.597
	(-0.761)	(0.609)	(-0.683)	(-0.342)	(-0.706)	(0.321)
Constant	17.961	-134.633	127.783	-56.908	-29.107	-63.203
	(0.061)	(-1.158)	(0.434)	(-0.803)	(-0.123)	(-0.966)
Year FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
Observations	1,346	1,309	1,024	1,255	1,306	1,323
Adjusted R <sup>2</sup>	0.481	0.707	0.620	0.536	0.590	0.654

 Table 7

 Internal Governance and Conservatism Conditioning on Firm Complexity

*Int\_Gov\*DR\*R* is the interaction term measuring how internal governance affects conservatism. *Complexy\_Inv* is the ratio of total invested capital to total non-current assets. *Geo\_Seg* and *Bus\_Seg* are the number of geographic and business segments the firm operates in. A higher ratio and a higher number of segments reflect greater complexity. We separate our sample into two sub-groups, one sub-group of firm-year observations with the measures of complexity below the sample median and another sub-group above the sample median. Please refer to Table 2 for descriptive statistics on conditioning variables. Firm-years that are more complex reflect greater key subordinate executives' contributions to the firm. Greater subordinate executives' contribution is positively associated with their influence over the CEO. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively. Please refer to Appendix A for definition of regression variables.

## Table 8

	(1)	(2)
	Low	High
R	2.889	2.603***
	(1.103)	(3.677)
DR	1.231	4.276**
	(0.323)	(2.297)
DR*R	-1.921	4.061***
	(-0.534)	(3.450)
Int_Gov	-3.447	-0.275
	(-0.958)	(-0.208)
Int_Gov*DR*R	2.632	0.937*
	(1.513)	(1.718)
Firm_Size	6.579	5.820**
	(1.166)	(2.581)
MTB	3.461*	0.323
	(1.909)	(1.253)
ROA	26.205**	5.705
	(2.332)	(1.407)
Leverage	-4.716*	0.705
	(-1.709)	-1.037*
BInd	3.580	(-1.845)
	9.990	(6.776)
BSize	-0.977	(-1.203)
	(2.085)	-0.994*
CEO_Age	(-1.032)	(-1.759)
	(64.159)	18.477
Constant	171.134	-160.599**
	(0.551)	(-2.439)
Year FE	YES	YES
Firm FE	YES	YES
Observations	1,362	1,295
Adjusted R <sup>2</sup>	0.474	0.609

Internal Governance and Conservatism	Conditioning on l	Firm Age
--------------------------------------	-------------------	----------

 $Int\_Gov*DR*R$  is the interaction term measuring how internal governance affects conservatism. *Firm\_Age* is the natural log of firm age, defined as the number of years since the listing date. Older 'surviving' firms face less shareholder/bondholder expectation to meet financial targets, whereas younger firms face greater pressures of debt covenants and firm returns. We separate our sample into two sub-groups, one sub-group of firm-year observations with firm age below the sample median of 2.64 (absolute value = 13.74) and another sub-group with firm age above the sample median. Please refer to Table 2 for descriptive statistics on conditioning variables. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively. Please refer to Appendix A for the definition of regression variables.

 Table 9

 Internal Governance and Alternative Measures of Conservatism

	1	2	3	4
РХ	-0.009	-0.008	-0.009	-0.017
	(-0.813)	(-0.799)	(-0.855)	(-0.754)
DPX	-0.087*	-0.105**	-0.103**	-0.072***
	(-1.897)	(-2.363)	(-2.379)	(-2.967)
PX*DPX	-1.515***	-1.524***	-1.527***	-1.393***
	(-8.253)	(-8.511)	(-8.638)	(-10.716)
Int_Gov	-0.035*	-0.029	-0.032	-0.005
	(-1.786)	(-1.411)	(-1.561)	(-0.190)
Int_Gov*PX*DPX	-0.585***	-0.588***	-0.593***	-0.430***
	(-3.146)	(-3.245)	(-3.312)	(-4.552)
Firm_Size		0.070***	0.069***	0.400**
		(2.782)	(2.749)	(2.525)
Firm_Age		-0.057*	-0.054*	-0.105
		(-1.829)	(-1.650)	(-0.732)
MTB		0.008	0.007	-0.001
		(1.081)	(0.995)	(-0.086)
Leverage		-0.003	-0.003	0.017
C		(-0.379)	(-0.407)	(0.534)
ROA		-0.317**	-0.326**	-1.057***
		(-2.216)	(-2.292)	(-4.485)
BInd		-0.021	-0.008	0.108
		(-0.263)	(-0.099)	(1.241)
BSize		-0.015	-0.017	0.009
		(-0.889)	(-0.968)	(0.630)
CEO_Age		0.053	0.086	0.038
C		(0.312)	(0.508)	(0.220)
Constant	-0.095***	-1.421*	-1.484*	-7.708***
	(-2.727)	(-1.758)	(-1.895)	(-2.591)
Year FE			YES	YES
Firm FE				YES
Observations	2,029	2,029	2,029	2,029
Adjusted R <sup>2</sup>	0.818	0.822	0.823	0.851

PX\*DPX measures conditional conservatism, where negative coefficient indicates the tendency for negative earnings to reverse. *Int\_Gov\*PX\*DPX* measures how internal governance affects conservatism. A negative coefficient indicate that more effective internal governance increases the extent of conservatism. The sample is smaller than that of the baseline earnings timeliness model because the earnings persistence model uses changes in earnings to reflect conservatism. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively. Please refer to Appendix A for the definition of regression variables.

# Table 10 Alternative Measure of Internal Governance and Conservatism

	1	2	3	4
R	7.103***	4.836***	4.888***	1.619***
	(6.964)	(5.619)	(5.711)	(3.765)
DR	7.953**	0.186	0.332	-0.209
	(2.562)	(0.076)	(0.145)	(-0.164)
DR*R	12.298***	7.885***	7.966***	2.558***
	(6.239)	(5.102)	(4.996)	(3.544)
Diff_Horizon	0.383***	-0.003	-0.008	0.235*
	(3.922)	(-0.040)	(-0.091)	(1.708)
Diff_Horizon*DR *R	0.251***	0.162***	0.163***	0.084*
	(3.050)	(2.687)	(2.671)	(1.715)
Firm_Size		8.826***	8.848***	6.949***
		(12.425)	(12.533)	(3.295)
Firm Age		10.827***	10.873***	-4.152
- 0		(9.053)	(9.073)	(-0.669)
MTB		1.932***	1.939***	1.641***
		(4.597)	(4.553)	(3.237)
Leverage		0.364	0.342	-1.508*
0		(0.337)	(0.315)	(-1.839)
ROA		10.012***	9.769***	16.120***
		(3.806)	(3.675)	(4.344)
BInd		-1.333	-1.308	1.483
		(-0.356)	(-0.344)	(0.363)
BSize		2.479***	2.478***	-0.679
		(4.279)	(4.311)	(-1.097)
Constant	23.715***	-196.922***	-198.117***	-104.151**
	(11.775)	(-16.376)	(-15.548)	(-2.575)
Year FE			YES	YES
Firm FE				YES
Observations	2,616	2,616	2,616	2,616
Adjusted R <sup>2</sup>	0.234	0.463	0.461	0.826

*Diff\_Horizon* is the alternative internal governance measure, defined as the difference between the age of the CEO and the average age of subordinate executives.  $Diff_Horizon*DR*R$  measures how internal governance affects conservatism. A positive coefficient indicates that more effective internal governance increases the extent of conservatism. Robust t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 level or better, respectively. Please refer to Appendix A for the definition of regression variables.

Internal Governance and Conserve	(1)	(2)
	Int Gov	(2) Conservatism
R	-0.006	3 656***
K	(-0.71)	(6.10)
DR	0.020	-1 511
DR	(0.52)	(-0.58)
DR*R	-0.002	0.900
	(-0.12)	(0.79)
IndAdiDiff Horizon	0 123***	(0.7)
muAujDm_nonzon	(29.99)	
IndAdiDiff Horizon*DR*R	-0.000	
indAdjDin_Honzon DK K	-0.000	
IndVear IC	0.33	
inu i cai _10	(3.60)	
IndYear IG*DR*R	-0.014	
	(-0.85)	
Int Gov	(-0.05)	3 186
III(_00V		(1.40)
Int Gov*DR*R		3.178***
		(4.78)
Firm Size	0.048	6 987**
I mm_Sille	(1.45)	(3.10)
Firm Age	0.076	1.249
	(0.89)	(0.22)
MTB	0.003	2.028***
	(0.39)	(3.87)
ROA	-0.216*	14.30*
	(-2.54)	(2.47)
Leverage	0.042**	-3.052**
6	(2.58)	(-2.78)
BInd	-0.104	1.583
	(-1.06)	(0.24)
BSize	0.0299*	-1.508
	(2.46)	(-1.82)
CEO Age	-6.674***	-10.91
- 0	(-21.32)	(-0.74)
		× ,
Year FE	YES	YES
Firm FE	YES	YES
Observations	2,563	2,563
Adjusted R <sup>2</sup>	-	0.674
Cragg-Donald Wald F-statistic (Weak id	237.90***	
Sargan-Hansen Test statistic (Over-ident	0.11	

Table 11
Internal Covernance and Conservatism: Instrumental Variables (251 S) Annroach

DR\*R is the interaction term measuring the extent of conservatism.  $Int_Gov$  is the original independent variable.  $IndAdjDiff_Horizon$  is the industry-adjusted age difference between the CEO and subordinate executives.  $IndYear_IG$  is the industry-year median value of internal governance.  $Int_Gov*DR*R$  is the interaction term measuring how internal governance affects conservatism. A positive coefficient indicates that more effective internal governance increases the extent of conservatism. Please refer to Appendix A for the definition of regression variables. 94 singleton observations are excluded. Robust t-statistics are in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.