School of Accounting, Economics and Finance

CEO Power and Audit Quality: Does Monitoring Intensity Matter?

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Declaration

To the best of my knowledge and belief this thesis contains no materials previously published by any other person except where due acknowledgement has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

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Abstract

While prior research has expressed concerns over the detrimental impact of chief executive officer (CEO) power on various corporate outcomes, the question of whether such an impact can be extended to audit quality remains open. Drawing on agency theory, this study examines whether CEOs use their power to influence audit quality, proxied by audit fees and the likelihood of receiving a going-concern opinion. In addition, this study examines the moderating role of internal and external monitoring on the association between CEO power and audit quality to assess whether monitoring intensity can counterbalance CEO power. The empirical analysis is conducted with a sample of companies listed on the Australian Stock Exchange from 2004 to 2015. The results from the study reveal that powerful CEOs are associated with lower levels of audit quality. This study also finds that only internal monitoring mitigates the inverse relationship between CEO power and audit fees. The results further reveal that external monitoring does not play a role in mitigating the inverse relationship. The main results of the study are largely supported by a variety of robustness and sensitivity tests, including endogeneity tests. The findings of the study, therefore, have several implications for regulators, auditors, investors, and academic researchers.

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Table of Contents

List of Figures

List of Tables

List of Abbreviations

APESB	Australian Professional and Ethical Standards Board
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
ASX CGC	Australian Securities Exchange Corporate Governance Council
CEO	Chief executive officer
CFO	Chief financial officer
CLERP 9	Corporate Law Economic Reform Program
GCO	Going-concern opinion
GICS	Global Industry Classification Standard
H	Hypothesis
MTB ratio	Market-to-book ratio
OLS	Ordinary least squares
PCA	Principal component analysis
PCAOB	Public Company Accounting Oversight Board
PSM	Propensity score matching
ROA	Return on assets
SIRCA	Securities Industry Research Centre of Asia-Pacific
SOX	Sarbanes–Oxley Act 2002

Chapter 1:
Introduction

1.1 Background and Motivation

Corporate structures in the capital market have experienced unprecedented and fundamental change, particularly in the last two decades in response to global events such as large corporate collapses, financial crises, technological advances, increasing regulations, growing global competition, and greater consumer expectations. The role of top management is to manage companies through these complex changes. In the corporate hierarchy, chief executive officers (CEOs) assume the highest position and often wield the most power. Decision-making power in companies is concentrated in the hands of the CEO. Child (1972) remarks that power plays a critical role in strategic changes and decision-making. CEO power is attributed to the legitimate authority, knowledge, and influence over a firm and its management (Daily & Johnson, 1997). Powerful CEOs tend to influence key corporate decisions despite possible opposition from other executives (Adams, Almeida, & Ferreira, 2005). When CEOs have complete autonomy to make decisions, the information asymmetry between the CEO and shareholders is likely to grow, increasing the likelihood of weak governance (Brown & Sarma, 2007). Additionally, CEOs can exploit this dominance to make decisions that increase their own wealth (Morse, Nanda, & Seru, 2011), creating moral hazard problems (Adams & Ferreira, 2007). Therefore, the power held by the CEO can be used to advance self-interest rather than shareholders' interest. This is evidenced in many well-known corporate financial scandals such as WorldCom, Adelphia Communications Corporation, HIH Insurance, and Parmalat, which were triggered by CEOs' misconduct. Such misconduct by powerful CEOs demonstrates how power can be detrimental to long-term corporate success and shareholders' wealth.

The external audit function is considered a vital service to protect shareholders' interests. The importance of auditing arises in its incremental value in assuring the reliability of the financial information in annual reports. Financial statements are prepared by management, so the reliability of these statements depends on the integrity of the CEO and their management team, who might be incentivised to alter the

financial information for their self-benefit. Therefore, an independent third party (i.e., the external auditor) is needed to assess whether the financial statements truly reflect the company's financial condition. Specifically, the audit function serves a critical purpose in enhancing investors' confidence in the credibility of the financial statements, which reduces the information asymmetry between management and shareholders (Barroso, Ben Ali, & Lesage, 2018; Desender, Aguilera, Crespi, & GarcÍa-cestona, 2013). The growing complexity of business structures and the rapid changes in the economy have caused the audit function to change significantly. These changes have led to a proliferation of studies examining audit quality. As DeFond and Zhang (2014) noted in their paper, changes of unprecedented magnitude have profoundly transformed the audit market, causing the profession to be under government regulation for the first time in history. Following the corporate financial scandals, regulators, practitioners, and researchers have paid a great deal of attention not only to the external audit function but also to the quality of the audit function.

The enactment of regulations, such as the *Sarbanes–Oxley Act 2002* (SOX; US House of Representatives, 2002) in the United States (US) and the *Corporate Law Economic Reform Program (Audit Reform & Corporate Disclosure) Act 2004* (CLERP 9; Commonwealth of Australia, 2004) in Australia, aimed to enhance auditor independence and ensure a high-quality audit is conducted. One of the ways auditors usually ensure a high-quality audit is to consider management attitude when making audit risk assessments (Duellman, Hurwitz, & Sun, 2015), which ultimately impacts audit procedures and, consequently, audit efforts and fees. CEOs set the "tone at the top" in firms. Such a tone set by the CEO, depending on their integrity, can determine the risk associated with firms.

When CEOs wield excessive power and control the decision-making process, they may be incentivised to take actions that benefit their own wealth (Booth & Schulz, 2004).[1] CEO power can be detrimental to various corporate outcomes. Previous research has revealed that CEO power is associated with a greater likelihood of fraud (Khanna, Kim, & Lu, 2015), higher probability of restatements (Al Mamun, Balachandran, & Duong, 2020), lower firm performance (Veprauskaitė & Adams, 2013), and lower credit ratings (Y. Liu & Jiraporn, 2010).

[1] On the other hand, having powerful CEOs in firms could reduce the decision-making process time, resulting in fast response to different market conditions (Cuñat & Guadalupe, 2005; Li, Lu, & Phillips, 2019).

The detrimental impact of CEO power on various corporate outcomes raises a concern about whether this detrimental impact can be extended to the audit quality. This thesis builds on the CEO power literature and sheds light on the question of how CEO power affects the audit quality of Australian publicly listed companies. Although the audit committee is responsible for appointing, compensating, and overseeing the auditor, recent research evidence reports that management still has a significant role in the audit process (Almer, Philbrick, & Rupley, 2014; Beck & Mauldin, 2014; Cohen, Gaynor, Krishnamoorthy, & Wright, 2011; Dhaliwal, Lamoreaux, Lennox, & Mauler, 2015; Fiolleau, Hoang, Jamal, & Sunder, 2013).[2] The effect of CEO power on various corporate outcomes has attracted a great deal of attention from market participants and researchers, yet what is not clear is the impact of powerful CEOs on audit quality. This study fills this gap and answers the question of whether powerful CEOs may be interested in lower levels of audit quality to camouflage their opportunistic behaviour and misconduct. Therefore, this study undertakes a comprehensive empirical analysis to examine the association between CEO power and audit quality.

Additionally, this study explores the moderating effect of monitoring intensity mechanisms on the relationship between CEO power and audit quality. Mallin, Michelon, and Raggi (2012) report that the monitoring function has been analysed following agency theory (Jensen & Meckling, 1976), based on which internal and external monitoring mechanisms are set to monitor management's decisions and practices on behalf of shareholders. The conflict of interest that arises due to the separation of ownership and management reveals the importance of monitoring management's behaviour from external and internal monitoring mechanisms (Aguilera, Desender, Bednar, & Lee, 2015; Ali & Zhang, 2015). When monitoring intensity is relatively effective, the CEO and their management may find themselves forced to align their interests with those of the shareholders (Duellman, Ahmed, & Abdel-Meguid, 2013). Therefore, this study explores how the relation between CEO power and audit quality changes with respect to the presence of strong internal and external monitoring mechanisms.

Following several studies in the literature (Chao, Hu, Munir, & Li, 2017; Duellman et al., 2013; Florackis & Ozkan, 2009; Florackis & Sainani, 2018;

[2] Evidence from several studies suggests that managers have significant influence over auditor selection (Cohen et al., 2011; Dhaliwal et al., 2015), and auditors perceive that CEOs have the power to change auditors with little friction with the audit committee (Gendron & Bédard, 2006).

Veprauskaitė & Adams, 2013), this study employs principal component analysis to construct indices for the study's independent variables (e.g., CEO power, internal monitoring, external monitoring). Using an index, instead of using each variable individually, increases the power of the regression tests by avoiding problems arising from multicollinearity and minimises measurement errors (Custódio, Ferreira, & Matos, 2013). It also reduces the dimensionality of a data set consisting of several interrelated variables (Veprauskaitė & Adams, 2013). CEO power is proxied by CEO tenure, CEO–Chair duality, CEO ownership, and CEO compensation. Internal monitoring is proxied by board and audit committee characteristics, while external monitoring is proxied by the number of analysts following a firm and institutional ownership. Audit quality is measured using audit fees and the likelihood of a company receiving a going-concern opinion. Audit fees represent the contracting feature between the auditor and the client and are considered an input to the audit process that determines the amount of work and effort during the audit. The going-concern opinion represents the output of the audit process and determines the quality of work conducted during the audit process by issuing a going-concern opinion when one is warranted.

Several motivations underpin this research. First, the CEOs' role in several high-profile corporate financial scandals, which resulted in heightened and continuous scrutiny from regulators and market participants, necessitates examining CEO power from a holistic view. Specifically, this study takes into consideration several attributes from which a CEO can gain power. Previous research has demonstrated the influential role of the CEO and management in the audit process (Almer et al., 2014; Beck & Mauldin, 2014; Cohen et al., 2011; Dhaliwal et al., 2015; Fiolleau et al., 2013). Therefore, the impact of CEO power on audit quality should not be ignored. Moreover, CEO power can affect accruals quality, risk-taking, and firm governance, which in turn affect audit risk and efforts and, consequently, audit quality.

Second, several studies have examined some internal monitoring mechanisms and audit quality (Carcello, Hermanson, Neal, & Riley, 2002; Carcello & Neal, 2003; Chan, Liu, & Sun, 2013; X. Liu, Lobo, & Yu, 2020), yet the effects of CEO power and external monitoring forces have not been thoroughly investigated. In particular, there is much less information about the effect of CEO power along with both forms of monitoring on audit quality. Additionally, following calls to examine internal and external governance mechanisms holistically (Aguilera et al., 2015; Filatotchev &

Boyd, 2009; Misangyi & Acharya, 2014; Walls, Berrone, & Phan, 2012), this study examines the association between CEO power and audit quality and how this relationship varies in the presence of internal and external monitoring, which could provide better insight into governance, practice, and audit research.

Third, most literature on the CEO role in relation to corporate outcomes is based on US data, with limited studies in the context of the Australian market. Australia provides a unique setting for the study. CEOs are required to sign off the financial statements to affirm that these reports fairly present the financial condition of the company. [3] Countries around the world have different legal systems, and their legal enforcement systems vary as well. These differences will affect the auditor's risk assessment across different jurisdictions (Donelson, McInnis, & Mergenthaler, 2012). In other words, the effect of CEO power might be different in Australia from that in other countries. Moreover, unlike auditing standards in the US, which are primarily rules-based, the Australian Auditing Standards are principles-based (Qu, Yao, & Percy, 2018). It has been argued that violations of objective rules-based auditing standards will increase the likelihood of a successful lawsuit against the auditor, which in turn increases the threat of auditor litigation risk (Donelson et al., 2012). Thus, auditors in Australia face lower litigation risks than their counterparts in the US, making Australia an interesting setting (Qu, Yao, et al., 2018) in which to examine the relationship between CEO power and audit quality.

Finally, there has been heightened interest in Australia's critical corporate governance mechanisms (Qu, Yao, et al., 2018). This view is supported by Kiel and Nicholson (2003), who comment that "Australia represents an interesting case study as in many respects it more closely resembles world's best practice concerning board composition than other comparable countries" (p. 191). Hence, Australia provides an interesting setting to investigate the relationship between CEO power and audit quality with respect to the moderating role of monitoring intensity mechanisms.

1.2 Objectives

This study has three primary objectives:

[3] In Australia, the *Corporations Act 2001* requires CEOs and CFOs of listed companies to sign off on their company's annual accounts and to declare that the company's financial reports present "a true and fair view in accordance with relevant accounting standards".

- To investigate the impact of CEO power on audit quality.
- To examine the moderating role of internal monitoring on the relationship between CEO power and audit quality.
- To examine the moderating role of external monitoring on the relationship between CEO power and audit quality.

1.3 Significance of the Study

This thesis provides several theoretical contributions to the extant literature. First, it complements previous research on CEO power effects. From the agency perspective, CEOs pursue a self-interest agenda at the expense of shareholders' wealth. In this matter, this study contributes to agency theory literature by examining the relationship between CEO power and audit quality, taking into account the role of governance mechanisms in this association. This study is the first (to the best knowledge of the author) to comprehensively examine the relationship between CEO power and audit quality. This examination provides a deeper understanding of the extended influence of CEO power on audit quality, which can ultimately affect auditor independence.

Second, this research study takes into consideration not only internal monitoring mechanisms but also external monitoring forces and how they can restrain CEO power with respect to the effect on audit quality. Therefore, the results from this study will illustrate if the presence of strong monitoring mechanisms (i.e., internal and external) can create referent power vis-a-vis the CEO.

Third, this study examines audit quality comprehensively by focusing on an input-based measure (i.e., audit fees) and an output-based measure (i.e., going-concern opinion). Therefore, the findings of this study contribute to this growing area of research by illustrating whether the effect of CEO power can be on audit fees only or can be extended to influencing the audit opinion. Similarly, this study contributes to the literature of corporate governance by providing some insights on the ability of monitoring mechanisms to protect the quality of the audit process, starting from the engagement stage (i.e., audit fees negotiation) to the end of the audit process (i.e., audit opinion issuance), from the interference of powerful CEOs.

From a practical perspective, this research has the potential to benefit various stakeholders. Findings from this study could benefit regulators in conceptualising the

effect of CEO power on audit quality and then evaluating the present status of managerial power in Australian companies. Consequently, further regulations may be needed to limit CEO power and strengthen monitoring mechanisms in corporations. Additionally, investors typically rely on firms' audited annual reports before making investment decisions. Therefore, the study results could provide investors with a new perspective on how they can evaluate potential investments by assessing the effect of CEO power and the strength of monitoring mechanisms to restrain CEO power when it comes to audit quality. Furthermore, the results of this study could be of interest to directors on boards and audit committee members. Specifically, directors and audit committee members could use the results of the study to identify whether the effect of CEO power can be extended to compromising the quality of an audit and whether internal and external monitoring mechanisms are effective in limiting CEO power. Finally, results from this study could benefit some Australian regulatory bodies responsible for monitoring the audit function in the market, particularly, how the audit could be impacted by CEO power and determine if further reforms are required to maintain a high-quality audit in the market.

1.4 Thesis Structure

The remaining chapters of the thesis are structured as follows.

Chapter 2 presents an in-depth discussion of several corporate governance theories, along with a justification for the theory selected for this study. Additionally, the chapter continues to review the related literature surrounding audit quality, CEO power, and monitoring intensity. It also provides a comprehensive background on Australia's audit environment and corporate governance structure settings. It further discusses the hypotheses development of the present study.

Chapter 3 details the research design adopted by this study to achieve the main objectives. It starts with an overview of the sample selection process and the time frame selected for the study. The chapter then moves on to describe the measurements of audit quality, CEO power, and monitoring intensity. Next, it details the measurements of all control variables included in the statistical models, with justification of their inclusion based on the prior empirical literature. Lastly, the chapter outlines the statistical tests and models used in the study to test the hypotheses.

Chapter 4 details the construction of the indices used in the study. Then, the chapter reports the descriptive statistics and Pearson correlation matrix of all variables.

Chapter 5 presents the empirical results of the study. Multivariate analyses are conducted to test the specified hypotheses. The results of the main analyses are presented and discussed in this chapter. After that, Chapter 6 presents a number of robustness and sensitivity analyses to check whether the main results presented in Chapter 5 are robust to alternative variable definitions and different sample partitioning approaches. This chapter also addresses the endogeneity concerns by conducting additional econometrics tests.

Chapter 7 concludes the thesis. It provides a summary of the major findings of the study, including the acceptance and rejection of the hypotheses. Then, the chapter suggests the theoretical and practical implications. It also addresses the limitations of the study and provides directions for future research. Finally, a summary of the overall thesis is presented. Figure 1.1 presents the roadmap of the thesis.

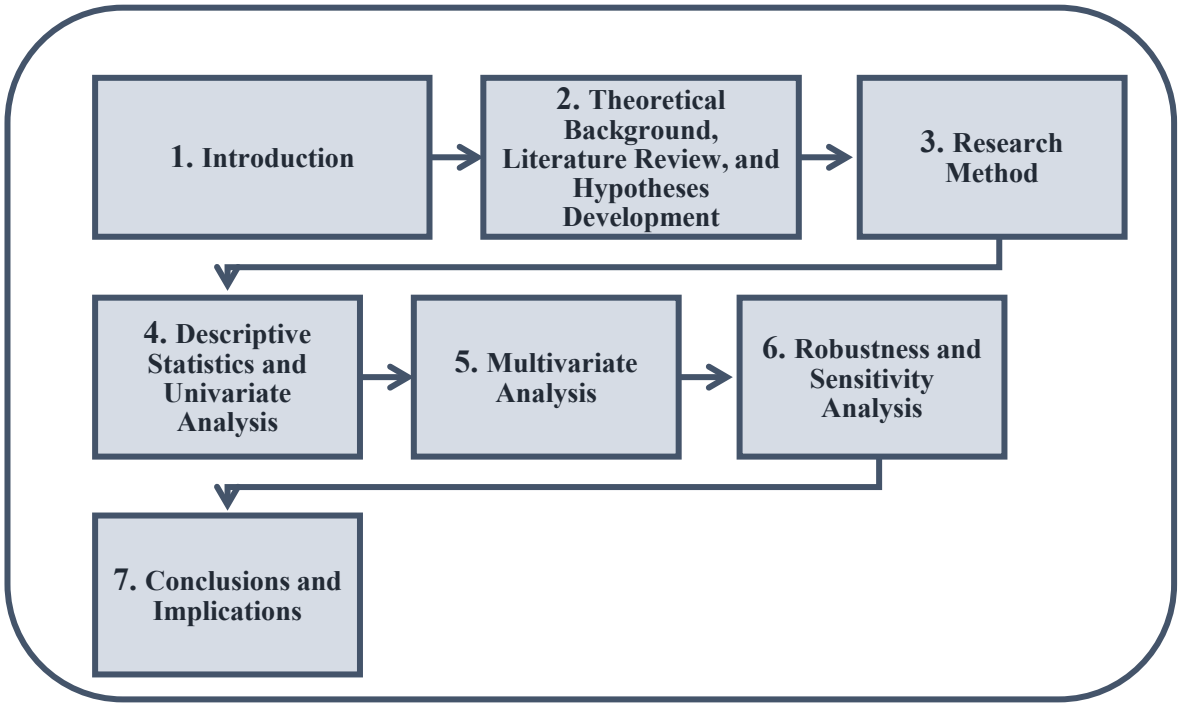

Figure 1.1 Thesis roadmap.

Chapter 2:
Theoretical Background, Literature Review, and Hypotheses Development

2.1 Chapter Overview

Chapter 1 provided the background and motivations of this study. The key objectives and the significance of the study were also outlined. This chapter reviews the theoretical framework of this research study by first discussing several corporate governance theories in Section 2.2: agency theory, institutional theory, resource dependency theory, stakeholder theory, and stewardship theory. In Section 2.3, a theory is selected as the theoretical basis for the study with a justification for its selection. Next, Section 2.4 provides a comprehensive literature review on audit quality. Prior related literature on audit fees and the going-concern opinion is thoroughly discussed in Section 2.5. Next, Sections 2.6 and 2.7 comprehensively review the literature related to CEO power and monitoring intensity with detailed discussion of their characteristics. The testable hypotheses of this study are developed in these sections. Moreover, an overview of the audit market and corporate governance structure in Australia is provided. Section 2.8 provides a conceptual schema outlining the key relationships examined in this study. Finally, Section 2.9 summarises the chapter.

2.2 Theoretical Perspective – Corporate Governance

Several key theories have been used in previous literature to explain corporate governance research. These theories are agency theory, institutional theory, resource dependency theory, stakeholder theory, and stewardship theory. The following subsections will discuss each theory in addition to outlining the underlying theory of this study.

2.2.1 Agency theory

Agency theory is one of many dominant theories of economic corporations and management literature (Baiman, 1990; Bebchuk & Fried, 2003; Booth & Schulz, 2004; Bosse & Phillips, 2016; Eisenhardt, 1989; Hoi, Wu, & Zhang, 2019). Agency theory

describes the separation of ownership from management in the structure of corporate firms (Berle & Means, 1932). The theory, in broad terms, describes a relationship between two parties: principals and agents. In this relationship, principals delegate the decision-making authority to the agents in terms of contracts to perform some services on behalf of the principals. In the context of modern corporations, shareholders (principals) employ the CEO and other senior executives (agents) to conduct and manage the company (Jensen & Meckling, 1976; Ross, 1973). Therefore, many business decisions made by managers can directly affect shareholders' wealth. However, the argument underlying agency theory is that managerial actions and decisions might depart from those required to maximise shareholders' return (Berle & Means, 1932; Pratt & Zeckhauser, 1985). In essence, CEOs and senior executives are assumed to be self-interested and risk-averse (Eisenhardt, 1989), which may result in a direct conflict with the principal's interest (Eisenhardt, 1989; Jensen & Meckling, 1976).

Agency theory postulates that two issues may arise because of the separation of ownership from management: conflict of interest and information asymmetry. First, agency theory posits that when the interests of managers are not in alignment with those of shareholders (Jensen & Meckling, 1976), the "incentive" element of an agency problem exists (Baiman, 1982, 1990; Eisenhardt, 1989). Consequently, managers may take actions that disadvantage some shareholders in order to maximise their own welfare. Second, information asymmetry refers to situations where a firm's CEO and senior executives have better access to information than shareholders, who may find it difficult and expensive to access inside information, which leads to the "opportunity" element of the agency problem (Baiman, 1982, 1990; Booth & Schulz, 2004; Eisenhardt, 1989). Due to the difficulty of accessing such information, shareholders will not be able to assess and evaluate whether the work performed by management is indeed in their best interests. These concerns about imperfect alignment of interests and information asymmetry between shareholders and management can cause reservations about the reliability of the decisions made and information provided by management. When the incentive and opportunity elements of the agency problem exist, CEOs and senior executives are likely to make decisions that are in alignment with their own interests rather than the interests of shareholders (Baiman, 1982, 1990; Eisenhardt, 1989).

In order to curb any opportunistic behaviour by management, structural mechanisms should be enacted to monitor business decisions made by the CEO and their senior executives (Cruz, Gómez-Mejia, & Becerra, 2010; Eisenhardt, 1989; Fama & Jensen, 1983). Agency problems can be mitigated by effective internal and external corporate governance mechanisms (Jensen, 1993). Strengthening the effectiveness of corporate governance mechanisms helps to monitor the decisions made by the firm's CEO and senior executives so that the actions taken by management are indeed in the best interest of shareholders (Fama & Jensen, 1983; Jensen & Meckling, 1976). In essence, setting up corporate governance mechanisms is expected to minimise agency problems, especially with the absence of shareholders from routine managerial activities (Fama & Jensen, 1983; Jensen & Meckling, 1976). Prior research has found that corporate governance structures, such as the board of directors and audit committees, are an essential counterbalance to potential self-interest behaviour from management and also an effective mechanism to overcome agency problems (Dalton, Daily, Johnson, & Ellstrand, 1999; Fama & Jensen, 1983; Klein, 2002).

2.2.2 Institutional theory

Institutional theory, initially developed by Meyer and Rowan (1977), does not focus on the importance of individual self-interest attitudes; rather, it acknowledges the institutional factors that lie beyond the organisational boundary (Hoffman, 1999; Zucker, 1987). Institutional theory argues that organisations operate within a nexus of social norms, values, and assumptions that constitute what is considered acceptable economic behaviour and practices (Oliver, 1997). Carpenter and Feroz (2001) observe that institutional theory assumes organisations are inclined to implement practices that are considered legitimate by other similar organisations in the same field, despite the actual usefulness of these practices. This assumption leads to homogeneity in the structures and practices among organisations. In particular, organisations tend to maintain some practices that were implemented when the organisation was founded just because these practices are assumed to be true, even though they may not have been implemented as a result of a rational design or decision (Scott, 1987). Kalbers and Fogarty (1998) indicate that organisational structures play an essential role as an emblematic display of conformity and social accountability. The premise of institutional theory is that organisations tend to become responsive to pressures from

institutional environments and, therefore, implement socially accepted practices and/or procedures as being the appropriate organisational choice (Carpenter & Feroz, 2001). When organisations seek legitimacy and have a tendency to adopt the same practices in response to institutional pressures, they initiate what DiMaggio and Powell (1983) describe as "the process of isomorphism".

DiMaggio and Powell (1983) identify two forms of isomorphism: competitive and institutional. Competitive isomorphism assumes a structure of robustness measures and competitive markets. Competitive isomorphism also describes how organisations create bureaucracies and react to new innovations (DiMaggio & Powell, 1983). Institutional isomorphism is defined as the tendency of organisations to adopt the same practices and/or structures over time as a result of the common institutional pressures which might exist at the individual, organisational or field level (Carpenter & Feroz, 2001; DiMaggio & Powell, 1983). DiMaggio and Powell (1983) contend that institutional isomorphism does not necessarily improve organisations, it simply makes them look more alike.

Institutional theory can be a useful paradigm for understanding how institutional pressures and environmental influences can affect managers' accounting choices. Corporate governance research has recently paid attention to the role of the institutional context, particularly national-level institutions (Kumar & Zattoni, 2019). Prior studies have demonstrated how country-level institutions can help understand governance issues through direct effects (e.g., constraining opportunistic behaviour) or through indirect effects (e.g., strengthening governance mechanisms; Aslan & Kumar, 2012; Kumar & Zattoni, 2013).

2.2.3 Resource dependency theory

Resource dependency theory is based on the principle that a variety of elements of corporate governance can be critical resources for the organisation (Psaros, 2009). Previous research has adopted resource dependency theory to explain why firms are involved in mergers and acquisitions (Haunschild, 1993; Yin & Shanley, 2008) and to examine the need for corporate governance mechanisms in maximising firm performance (Dalton et al., 1999). Resource dependency theory states that the firm's success level depends on its ability to control external resources. It also suggests that corporate governance mechanisms provide a crucial link between the firm and other

essential resources the firm needs to maximise its performance (Pfeffer, 1973; Pfeffer & Salancik, 1978).

According to dependency theory, directors on the board serve to connect their firm with external resources to minimise environmental uncertainty and external dependency (Hillman, Cannella, & Paetzold, 2000; Pfeffer, 1972). Resource dependency further posits that directors on the board can add value and provide a number of beneficial resources to the firm. Previous studies have remarked that the beneficial value of directors is manifested in their specialist information, advice, ability to access key constituents, and reputation by virtue of personal reputation and legitimacy (Hillman et al., 2000; Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978). Therefore, resource dependency implies that the beneficial value of the board and its subcommittees is dependent on their skills and contacts (Hillman et al., 2000; Hillman & Dalziel, 2003; Psaros, 2009).

Resource dependency theory, in the context of corporate governance, suggests that the board of directors contributes to a company through its members' expertise and linkage to other organisations and institutions. In particular, the board of directors can assist in accessing various resources (Pfeffer, 1972) based on human and social capitals (Certo, 2003). These resources are collectively identified as board capital (Hillman & Dalziel, 2003), which is associated with firm performance (Daily, Johnson, Ellstrand, & Dalton, 1998; Pfeffer, 1972).

2.2.4 Stakeholder theory

The term *stakeholders* is defined, according to Freeman (1984), as "any group or individual who can affect or is affected by the achievement of the organisation's objectives". This definition emphasises that firms should consider shareholders as one of many potential stakeholders (Clarkson, 1994; T. Donaldson & Preston, 1995; Freeman, 1984). Stakeholders can include creditors, customers, suppliers, employees, regulators, and even the general public (Clarkson, 1994; T. Donaldson & Preston, 1995; Freeman, 1984). According to March and Simon (1958), each of these stakeholders can be viewed as supplying the firm with critical resources; in return, they expect the organisation to satisfy their interests. The premise is that since society provides the social structure in which firms operate and prosper, ignoring society can

be a threat to the equilibrium between society and the firm (T. Donaldson & Preston, 1995; Freeman, 1984).

Freeman (1984), one of the advocates of stakeholder theory, identified the emergence of stakeholders as an essential component of a firm. His view of a firm extended beyond the owner–agent relationship to the recognition of numerous stakeholder groups. Freeman (1984) stipulates that firms can achieve their goals only if they have a comprehensive understanding of their relationships with their different stakeholder groups.

Another perspective on stakeholder theory and its impact on an organisation was offered by T. Donaldson and Preston (1995). They noted that stakeholder theory views a firm as an entity through which many various participants accomplish multiple purposes. This implies that the stakeholder theory asserts that management and other agents should act as if the interests of all an organisation's stakeholders have intrinsic value, although it might not be an equal value (Psaros, 2009).

Stakeholder theory provides a framework that helps to determine the structure of an organisation that is cognisant of many participants who are likely to pursue different goals (T. Donaldson & Preston, 1995). Academic literature on stakeholder theory has addressed how this theory can assess corporate governance issues (Blair, 1995; T. Donaldson & Preston, 1995; Freeman, 1984). In a stakeholder-theory setting, firms should take into consideration corporate governance mechanisms to understand and relate to various stakeholder interests and relationships (Psaros, 2009). Stakeholder theory redirects the focus of governance task to pursuing a long-term value for the firm instead of maximising shareholders' interests (Jensen, 2001).

2.2.5 Stewardship theory

With its roots in sociology and psychology, stewardship theory posits that human beings are characterised as having high order for self-esteem, personal growth, and achievement (Arthurs & Busenitz, 2003). It assumes that individuals are motivated by noneconomic factors. L. Donaldson and Davis (1991) suggest that, under the stewardship theory, these noneconomic factors include, but are not limited to, the need for achievement, the exercise of responsibility and authority, and gaining recognition from colleagues (D. McClelland, 1961). This theory assumes that executive managers'

behaviours are organisation centred, seeking to enhance organisational performance by satisfying the principals (Arthurs & Busenitz, 2003). The theory suggests that stewards will act in a pro-social manner, which aims at the interest of the principals and thus the firm (Davis, Schoorman, & Donaldson, 1997; Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008). Fundamentally, stewardship theory is concerned with recognising circumstances where the interests of the stewards and the principals are in alignment.

The desired outcome of a stewardship perspective is maximising firm performance (Tosi, Brownlee, Silva, & Katz, 2003). Executive managers, under stewardship theory, essentially want to be good stewards (L. Donaldson & Davis, 1991). When principals and stewards agree to prioritise the principals' interests, the theory asserts that a positive impact on firms' outcomes will be achieved because the principals and the stewards are working together to achieve the same goal (Davis et al., 1997; Eddleston & Kellermanns, 2007).

The underlying assumption of stewardship theory is that executive managers put the interests of the principals ahead of their self-serving interests in organisations (Corbetta & Salvato, 2004; Davis, Allen, & Hayes, 2010; Davis et al., 1997). Therefore, stewardship theory asserts that, in the corporate governance context, the presence of intrinsically motivated executives reduces pressure on boards to closely monitor managers' business decisions. Under this assumption, having independent boards and subcommittees is unnecessary since maximising shareholders' wealth is accomplished by empowering management executives and having minimal representation of independent directors on the board (Barney, 1991; L. Donaldson & Davis, 1991; Psaros, 2009), suggesting that corporate governance structure is of less importance.

2.3 Theory Selection

The previous subsections highlighted five main theories underpinning corporate governance practices. Although there are some similarities that make them, to some extent, complementary to each other, each theory has its different purpose, implication, and validity. Notwithstanding the importance of each theory in the corporate governance context, agency theory is adopted as the theoretical basis for the current study. As discussed below, agency theory provides the most relevant theoretical

framework for examining the association between CEO power, monitoring intensity, and audit quality.

Recent thinking on the subject of strategic management business policy has been affected by agency theory (L. Donaldson & Davis, 1991). Entrenched forms of CEO power can be used to advance self-interest rather than the interests of shareholders (Weisbach, 1988). Several studies have shown how powerful CEOs' corporate decisions can have a material impact on corporate outcomes. CEOs of well-known companies such as WorldCom (Masters, 2005), Adelphia Communications (Farzad, 2005), Italy's Parmalat (Moloney & Pizzo, 2010), and AMP in Australia (Letts, 2018) have been accused of or admitted to reporting fraudulent financial information. Y. Liu and Jiraporn (2010) report that firms with powerful CEOs incur costs of debt. In a similar vein, Adams et al. (2005) contend that CEO power can also create moral hazards problems when the CEO's preferred projects are different from those of shareholders. These instances demonstrate the agency problem in which CEOs exercise their own self-interest to the detriment of shareholders' wealth.

To mitigate agency problems, the audit function is considered a vital service to protect shareholders' interests. Auditing can mitigate agency problems by ensuring the quality and accuracy of financial statements, reducing information asymmetry and providing independent assurance on the financial statements (Barroso et al., 2018; Desender et al., 2013). Financial statements are prepared by management, so an independent third party is needed to assess whether these financial statements reflect the true financial condition of the company. Therefore, the external audit is considered the connecting link between shareholders and management by providing independent assurance on the reliability of the financial statements.

Another primary recommendation to curb the CEO's opportunistic behaviour is to have strong and effective internal/external monitoring mechanisms in place to offset the influence of management (Fama & Jensen, 1983; Johnston & Nowland, 2017). Strong governance mechanisms have been crucial for enhancing the long-term value of shareholders and the integrity of financial reporting in capital markets (Cohen, Krishnamoorthy, & Wright, 2002). Internal monitoring mechanisms, such as the board of directors and audit committee, play a significant role in monitoring firm management and overseeing the financial reporting process (Johnston & Nowland, 2017). Moreover, external monitoring forces, such as institutional investors and

analysts following, have been shown to interact with CEOs and boards and can affect some corporate decisions (Aguilera et al., 2015; Gentry & Shen, 2013; Westphal & Graebner, 2010).

Given the opportunistic behaviour of powerful CEOs and the importance of effective monitoring mechanisms and audit quality in corporate structure, agency theory is the appropriate underlying theoretical perspective for this study.

2.4 Audit Quality

Auditing has become one of the most productive research streams in the accounting discipline and has attracted considerable attention (Linnenluecke, Birt, Chen, Ling, & Smith, 2017). The importance of audit arises from its critical role in mitigating agency problems. From an economic perspective, the auditor's role is to reduce agency problems through the audit of the firm's financial statements, which are prepared by management. Audit services provide independent assurance on the accuracy and fairness of the financial information contained in a firm's annual reports (Collier & Gregory, 1996; DeFond & Zhang, 2014; Knechel, Krishnan, Pevzner, Shefchik, & Velury, 2013). Specifically, the audit function serves a vital purpose in enhancing investors' confidence in the credibility of the financial reports prepared by management. In the past two decades, audit practices have changed significantly due to the growing complexity in business structures and changes associated with industrial and technological environments. The growing complexity of corporate structure and its transactions in the modern economy increases the incremental value of audit services.

Auditors not only provide their opinion on the financial information, but also provide additional services, such as reporting on the internal control quality of the business, identifying business risk, and other nonaudit services (Hamilton, Li, & Stokes, 2008; Spira Laura & Page, 2003; Y. Zhang, Zhou, & Zhou, 2007). The audit function is a fundamental part of the capital market and its quality has received great attention in the wake of many corporate accounting scandals around the world (Knechel et al., 2013). As DeFond and Zhang (2014) noted in their paper, changes of unprecedented magnitude have profoundly transformed the audit market, causing the profession to be under government regulation for the first time in history. These events

caused dramatic changes in the audit market and a surge in research to seek a better understanding of audit quality.

2.4.1 Definition and concept

A considerable amount of literature has focused on audit quality, yet there has been little consensus on how to define audit quality. In an early view, audit quality has been perceived as an outcome dependent on some auditor characteristics. One of the early definitions of audit quality that supported this view was provided by DeAngelo (1981a), who defined audit quality as "the market-assessed joint probability that a given auditor will both (a) discover a breach in a client's accounting system, and (b) report the breach" (p. 186). Knechel et al. (2013) remark that this definition provided by DeAngelo (1981a) reveals two components associated with the audit quality: the auditor's ability to discover material misstatements and the appropriate action upon the discovery of such misstatements. However, Francis (2011) is much more concerned about the depth of the definition cited in DeAngelo (1981a). He points out that the definition is intuitive and does not comprehend various factors that might influence the auditor's capacity to discover misstatements.

Francis (2011) contends that audit quality is a complex concept, and there are different levels of audit quality ranging from low to high across a continuum. Auditors should consider not only whether the financial information is not in violation of the standards, but also how faithfully the financial statements reflect the underlying company's economics (DeFond & Zhang, 2014). A recent study by Gaynor, Kelton, Mercer, and Yohn (2016) suggests that a high-quality audit necessitates the collection of sufficient and appropriate evidence by the auditor to ensure the financial statements reflect the true financial condition of the firm.

This study adopts DeFond and Zhang's (2014) definition of audit quality as "greater assurance that the financial statements faithfully reflect the firm's underlying economics, conditioned on its financial reporting system and innate characteristics" (p. 281). The faithful reflection of a firm's underlying economic condition will result in improving the usefulness and credibility of the audited financial statements. The

quality of an audit can be affected by several factors from the demand and supply sides of audit quality. [4]

2.4.2 The demand for audit quality

Client demand for audit quality originates from the incentive to reduce agency problems arising from the separation of ownership from management (Jensen & Meckling, 1976). Information asymmetry between managers and shareholders provides an incentive for managers to issue financial statements so their actions are monitored (Jensen & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1983). This in turn leads to a demand by the firm's management for an independent third party to audit the financial statements and provide assurance on the fairness of the financial information (DeFond & Zhang, 2014). Higher levels of audit quality ensure that financial statements truly reflect the economic condition of the company. Higher levels of audit quality, however, come with additional costs, which are reflected in increased audit fees (DeFond & Zhang, 2014). Firms facing larger agency problems can be in a position to demand higher audit quality. Complex firms and firms with high Research and Development intensity have also been found to demand higher audit quality (Cahan, Godfrey, Hamilton, & Jeter, 2008; Godfrey & Hamilton, 2005). Francis, Maydew, and Sparks (1999) report further that firms with high accruals are likely to hire Big N audit firms.

Corporate governance structures are also likely to affect the demand for audit quality (DeFond & Zhang, 2014). Prior studies have shown that firms with strong monitoring structures by board characteristics are likely to pay higher audit fees and appoint Big N audit firms (Beasley & Petroni, 2001; Cassell, Giroux, Myers, & Omer, 2012). Another line of research on the association between governance structures and audit quality asserts that firms with strong corporate governance, captured by audit committee effectiveness, demand higher audit fees, reflecting higher audit quality (Abbott, Parker, Peters, & Raghunandan, 2003; DeFond & Zhang, 2014; Sultana, Singh, & Rahman, 2019).

[4] Audit quality is a complex and a multidimensional construct. Details of its determinants, process, and framework are beyond the scope of this study. For more discussions on audit quality, please refer to some recent publications (DeFond & Zhang, 2014; Knechel et al., 2013; Simnett, Carson, & Vanstraelen, 2016).

2.4.3 The supply of audit quality

The supply of audit quality is affected by the auditor's incentive for independence and by their competence (Watts & Zimmerman, 1981). E. Johnson, Khurana, and Reynolds (2002) point out that auditor independence and competence are two key elements in determining the quality of audit. The auditor incentive for independence is determined by market-based factors, including litigation, reputation, and regulatory concerns (Dye, 1993). The auditor competency is reflected in the auditor's ability to deliver a high-quality audit.

Engagement risk is the auditor's risk arising from litigation risk, reputation risk, and regulation risk (Knechel, Salterio, & Ballou, 2007). These risks, however, are interrelated. Litigation risk refers to circumstances in which a firm's financial condition deteriorates, and investors sue the auditor for potential negligence or failure in the audit (Johnstone, 2000; Stanley, 2011). Hennes, Leone, and Miller (2014) show that when an auditor fails to detect material misstatements, the auditor is likely to be dismissed, thereby facing a hard time attracting new clients due to their impaired reputational capital (DeFond & Zhang, 2014). Prior studies report that the auditor's reputation can also be adversely affected when the auditor is associated with a client who engages in low financial reporting quality and disclosures (DeFond & Zhang, 2014; Johnstone, 2000). As a result, auditors change their propensity to issue going-concern opinions in order to protect themselves from litigation risk (Thoman, 1996) and to respond to any potential examination from regulators and the media (Fargher & Jiang, 2008; Geiger, Raghunandan, & Rama, 2005; Joe, 2003). Therefore, high litigation risk is considered an incentive for auditors to remain independent, deliver high audit quality, and maintain a respectable reputation.

If auditors fail to maintain their independence, they can be exposed to regulation risk. This risk refers to potential regulatory intervention, exposing auditors to financial and criminal penalties (DeFond & Zhang, 2014). The critical effect of client risk on the audit has led to a number of studies investigating the relationship between the risk associated with the client and audit fees (Bell, Doogar, & Solomon, 2008; Bell, Landsman, & Shackelford, 2001; Pratt & Stice, 1994), and the findings indicate the audit fees increase when the risk associated with the client is high.

Auditor competency plays an important role in supplying high audit quality. Auditor competency is the ability to detect material misstatements (DeAngelo, 1981b). Greater auditor competency can increase the auditor's reputation capital, which ultimately incentivises the auditor to supply a high-quality audit. The auditor's ability to deliver high audit quality reflects their client-specific knowledge, training, skills, and expertise (DeFond & Zhang, 2014). Industry-specialised auditors, for example, are expected to provide higher audit quality. Prior research findings indicate that auditors who have industry-specific knowledge, such as reporting requirements in certain industries, forward sales contracts, or off-balance financing arrangements, are able to conduct a high-quality audit (Craswell, Francis, & Taylor, 1995; Shockley & Holt, 1983). In addition to industry-specialised auditors, a large body of literature has reported that Big 4 audit firms [5] are expected to deliver high audit quality (Choi, Kim, Kim, & Zang, 2010; Francis & Yu, 2009).

2.4.4 Australia's audit environment

Audit quality plays a vital role in maintaining confidence and integrity in capital markets. Wallman (1996) and Coffee (2001) argue that in the absence of high audit quality, the capital market can be insufficient with a high cost of capital. In the last two decades, a series of corporate collapses in line with audit failures dramatically altered the perception of a high-quality audit. Audit in the Australian market has been through a number of regulatory changes and examinations to improve the quality of audit services provided by members of the audit profession. This section outlines the main statutory bodies and the main reforms with an overview of their roles.

A number of statutory bodies have distinct responsibilities for monitoring, developing standards and enforcing the financial reporting requirements (Parliamentary Joint Committee on Corporations and Financial Services, 2020):

- Australian Securities and Investments Commission (ASIC) is an independent Commonwealth body responsible for assessing compliance with audit and financial reporting requirements of the *Corporations Act 2001* (Commonwealth of Australia, 2001). ASIC is also responsible for the

[5] The Big 4 audit firms comprise the four largest international accounting/auditing practices, namely, Deloitte Touche Tohmatsu, Ernst & Young, KPMG, PricewaterhouseCoopers.

registration of company auditors and cancelling registration upon the request of the auditor.

- Financial Reporting Council is a statutory advisory body responsible for the oversight of the standard-setting process. It also provides advice to ASIC on the quality of audit and the effectiveness of the financial reporting framework in Australia.
- Australian Accounting Standards Board and Auditing and Assurance Standards Board are independent standard-setting bodies. They are responsible for developing, issuing, and maintaining Australian Accounting Standards and Australian Auditing Standards.
- Companies Auditors Disciplinary Board is a disciplinary body that can impose sanctions on auditors, including cancelling or suspending an auditor's registration.

In addition to the regulatory agencies, the Australian Professional and Ethical Standards Board (APESB) is an independent non-profit body. APESB comprises three professional accounting bodies: CPA Australia, Chartered Accountants Australia & New Zealand, and the Institute of Public Accountants. APESB sets the code of ethics and the professional standards with which accounting profession members must comply.

With regard to regulatory reforms, CLERP 9 was introduced in 2004 to enhance auditor independence in Australia. CLERP 9 imposes a number of obligations aimed at strengthening auditors' independence to conduct their audit objectively and impartially. CLERP 9 requires a 5-year rotation period followed by a cooling-off period of 2 years for audit engagement partners. CLERP 9 has also revised the requirements of the Corporations Act 2001 with regard to matters related to the financial relationship or the appointment of an audit partner by a client firm.

Another legislation aimed at the transparency of the audit process is the *Corporations Legislation Amendment (Audit Enhancement) Act 2012* of the federal government. One of the main changes under this Act is that auditors who audit 10 or more significant entities, including listed companies and authorised deposit-taking institutions, are required to release annual transparency reports. These reports disclose information about the audit firms' quality control for audits, reviews of the financial reports, and other assurance engagements. Additionally, ASIC has been given the authority to publish audit deficiency reports if an audit firm does not take appropriate

actions to remedy audit failures to comply with the auditing standards, codes of conduct, and other requirements under the Corporations Act.

2.5 Prior Research on Audit Quality

Previous archival studies have used a large number of proxies to measure audit quality. The variety of proxies used to measure audit quality signifies the diversity of perspectives among researchers regarding reliable measures of audit quality (Christensen, Glover, Omer, & Shelley, 2016). Balsam, Krishnan, and Yang (2003) point out that audit quality is multidimensional. As such, using a single proxy is not likely to gauge the overall audit quality. DeFond and Zhang (2014) provide a comprehensive review of audit research and divide audit quality measures into two categories: input-based measures and output-based measures. Input-based measures are those proxies that are considered to be inputs to the audit process, while output-based measures are those proxies that help to assess the quality of audit conducted based on the outcome of the audit process (DeFond & Zhang, 2014).

This study will use audit fees and the going-concern opinion as proxies for audit quality, which represent an input and an output of the audit process, respectively. In their comprehensive review of 130 international archival auditing and assurance research studies from 1995 to 2014, Simnett et al. (2016) report that audit fees was the most-used input measure to proxy for audit quality and going-concern/qualified opinion was the most-used output measure. Simnett et al. (2016) contend that using more than one proxy for audit quality is another trend in audit quality research in recent years.

2.5.1 Factors influencing audit fees

Audit fees represent the contracting feature between the auditor and the client firm (DeFond & Zhang, 2014). Audit fees are widely used in audit research as a proxy for audit quality because they are expected to reflect the auditor's effort, which ultimately reflects the quality of the audit conducted by the auditor (Sultana et al., 2019). Barroso et al. (2018) highlight three audit risk–related factors, based on which the auditor can evaluate the effort required to conduct the audit. The first factor is the *inherent risk*, which refers to the risk of the inclusion of a significant error in the financial statements. The second factor is the *control risk*, which refers to the risk of a

client's internal control mechanisms failing to detect such an error. The third factor is the *detection risk*, which refers to the risk of the auditor failing to detect the error. Therefore, auditors collect more evidence during the audit process to reduce the audit risk, which, in turn, increases the audit cost (Simunic & Stein, 1996). The positive relationship between client risk and audit fees has been well documented in the academic literature (Bell et al., 2001; Hogan & Wilkins, 2008; Venkataraman, Weber, & Willenborg, 2008).

Much of the available literature on audit fees has followed the seminal work by Simunic (1980) and examined a large number of audit fees determinants. These determinants, such as firm size and complexity, and auditor size and specialisation, have been found to influence audit fees across various academic studies, sample sizes, and countries (Hay, Knechel, & Wong, 2006). The audit fees model used in the current study is estimated by regressing audit fees against various measures, which proxy for different attributes hypothesised to increase or decrease audit fees (Gonthier-Besacier & Schatt, 2007; Thinggaard & Kiertzner, 2008). Studies on audit fees have categorised audit fees determinants into client attributes, auditor attributes, engagement attributes, auditor–client relationship attributes, governance attributes, and other attributes.

2.5.1.1 Client attributes

Various measures have been used in the literature to proxy for client attributes. Client size is the most common determinant of audit fees adopted in academic studies. The fact that larger firms are associated with higher audit fees is consistent among published studies (Bills, Ling Lei, & Seidel, 2017; Hay et al., 2006; Y. Kim, Li, & Li, 2015; Sultana et al., 2019). A considerable amount of literature has found that other client characteristics, such as complexity, profitability, liquidity risk, internal control and inherent risk, are also associated with audit fees (Bills et al., 2017; Gul, Khedmati, Lim, & Navissi, 2018; Hay et al., 2006; Palmrose, 1986; Simunic, 1980). Auditors consider these factors in assessing the effort and the number of audit procedures required to conduct a successful audit.

2.5.1.2 Auditor attributes

There is a large volume of published studies describing the positive association between auditor attributes and audit fees (Carson & Fargher, 2007; Choi et al., 2010; Francis, 1984; Francis & Yu, 2009; Palmrose, 1986). As captured by Big 4

membership, audit firm size is an auditor attribute that has been found to be associated with higher audit fees because of the Big 4 firms' independence, competence, and resources (DeFond & Zhang, 2014). Another attribute is auditor industry specialisation. Prior studies have documented the positive association between audit fees and industry specialist auditors (Carson, 2009; Ferguson, Francis, & Stokes, 2003; Fung, Gul, & Krishnan, 2012) because specialist auditors are expected to have greater competency and industry-related knowledge and practices, qualifying them to conduct higher quality audits than non-specialist auditors (Gul, Fung, & Jaggi, 2009).

2.5.1.3 Engagement attributes

Engagement attributes have been shown to affect audit fees in prior studies (Hay et al., 2006; Y. Kim et al., 2015). Auditor opinion and auditor change are two commonly used measures to proxy for engagement attributes. An increase in audit fees is expected when audit reports are qualified or modified, due to the risk associated with the audit (Duellman et al., 2015; Hay et al., 2006; Simunic, 1980). Conversely, it has been reported that a new auditor might charge lower audit fees to attract new clients (Hay et al., 2006; Simon & Francis, 1988).

2.5.1.4 Auditor–client relationship attributes

In regard to the auditor–client relationship, nonaudit fees and auditor tenure are two popular determinants of audit fees. In their paper, Hay et al. (2006) describe how nonaudit fees can be related to audit fees. On the one hand, nonaudit fees could be associated with higher audit fees because clients might become dependent on the auditor or because clients buying consulting fees are generally problematic. On the other hand, the provision of nonaudit fees can lead to lower audit fees due to the synergies between audit and nonaudit services. In addition, long-tenured auditors may charge higher fees to recover losses in earlier years, or they may charge lower audit fees because of the knowledge developed over time about the client, which results in lower levels of effort (Bicudo de Castro, Gul, Muttakin, & Mihret, 2019).

2.5.1.5 Governance attributes

During the past 20 years, a large and growing body of audit literature has investigated the role of corporate governance mechanisms on audit fees (Abbott et al., 2003; Carcello et al., 2002; X. Liu et al., 2020; Sultana et al., 2019). Prior studies have

shown that some audit committee characteristics, such as tenure, independence, and members' financial expertise, are associated with higher audit fees, signifying the committee's demand for higher audit quality (Abbott et al., 2003; Sultana et al., 2019).[6] Moreover, some characteristics of the board of directors, such as independence and expertise, are also associated with higher audit fees (Carcello et al., 2002).

2.5.1.6 Other attributes

Litigation risk can cause an increase in audit fees. Auditors may fail to detect material misstatements in a client's financial statements, which can lead to litigation. If auditors fail to detect a material misstatement, they face the risk of legal action from any user of the disclosed financial statements (Johnstone, 2000; Stanley, 2011). Therefore, it is likely that auditors will charge higher audit fees when litigation risk is higher. For instance, Choi, Kim, Liu, and Simunic (2008) found that auditors charge higher audit fees to client firms that are cross-listed in countries where the legal regimes are strong. Several studies have reported evidence of a high-risk premium paid to auditors by client companies to reduce the litigation risk, especially in companies where agency problems are significant (Bedard & Johnstone, 2004; Feldmann, Read, & Abdolmohammadi, 2009; Simunic & Stein, 1996).

In addition to litigation risk, the degree of audit market competition can affect audit fees. Several studies report that increased audit market competition can result in reduction of audit fees over time (Bandyopadhyay & Kao, 2001; Carson, Simnett, Soo, & Wright, 2012; Ding & Jia, 2012). Finally, audit fees can also be subject to the balance of the bargaining power between the client and the auditor (Duellman et al., 2015). Clients with greater bargaining power have the ability to impose pressure on auditors to reduce audit fees (Casterella, Francis, Lewis, & Walker, 2004).

2.5.2 Factors influencing the issuance of the going-concern opinion

Financial statements are prepared under the assumption that an entity will continue as a going concern. The going-concern assumption is a vital principle in the preparation of the financial statements (Hardies, Breesch, & Branson, 2016). This

[6] It is possible that effective internal monitoring may lower a firm's risk, which can reduce auditors' effort and audit fees. However, Knechel and Willekens (2006) demonstrate that even though audit fees might be reduced with higher internal monitoring, pressure from many other stakeholders compels such internal monitoring forces to demand higher audit coverage, creating a positive relationship between internal monitoring and audit fees.

assumption means that an entity will continue to operate for at least one year beyond the date of the financial statements. When conducting an audit, external auditors obtain a great amount of private undisclosed company information, which they use in formulating their professional opinion regarding the financial condition of the company (Beattie, Fearnley, & Brandt, 2000; Kida, 1980). Some of the information obtained from the audit procedures and process creates a salient basis to issue a going-concern opinion (Blay & Geiger, 2013; Carson, Fargher, & Zhang, 2017; Carson, Ferguson, & Simnett, 2006; Xu, Carson, Fargher, & Jiang, 2013). Therefore, the audit report plays a significant role in communicating the auditor's findings to interested market participants and, more importantly, warning users of the financial statements of any imminent going-concern issues.

In Australia, the going-concern opinion can be associated with an unmodified opinion with an emphasis-of-matter paragraph, a qualified opinion, an adverse opinion, or a disclaimer of opinion. Carson et al. (2013) explain that the auditor determines the appropriate audit opinion based on consideration of whether there is a significant going-concern doubt, whether using the assumption of going-concern is appropriate, whether there is adequate disclosure, and/or whether there is a limitation in the audit scope imposed by the entity's management to obtain sufficient evidence based on which the going-concern opinion is issued.

Auditors use the issuance of a going-concern opinion to signal their doubts regarding the survival of an entity (Y. Guo, Delaney, & Ahmed, 2020). As such, managers have incentives to pressure auditors not to issue a going-concern opinion when warranted because a going-concern opinion is likely to impose costs on the client (DeFond & Zhang, 2014). If the auditor responds to such pressures, the auditor's independence will be impaired, thus reducing audit quality. DeFond and Zhang (2014) contend that not reporting a going-concern opinion when one is warranted implies that the auditor reported the wrong audit opinion, which can be evidence of poor audit quality. Hence, Carson, Fargher, and Zhang (2016) and Chow, McNamee, and Plumlee (1987) point out that issuing a going-concern opinion is considered as one of the most difficult decisions faced by the auditing profession. The auditor's decision to issue a going-concern opinion can be influenced by client attributes, auditor attributes, auditor–client relationship attributes, and other attributes.

2.5.2.1 Client attributes

The auditing literature thus far has documented a variety of client characteristics that are associated with the issuance of going-concern opinions. Studies show that auditors are more likely to issue a going-concern opinion to clients that are smaller (Basioudis, Papakonstantinou, & Geiger, 2008; Kida, 1980; Mutchler, Hopwood, & McKeown, 1997), are less profitable (Blay & Geiger, 2013; Kida, 1980; Koh & Killough, 1990), are younger (Carey & Simnett, 2006), have lower liquidity (Gunny & Zhang, 2013; Kida, 1980; Mutchler, 1985), and are in debt default (Carcello, Hermanson, & Huss, 2000). Additionally, several studies have focused on measuring financial condition by examining the financial distress level of the client. A company's financial distress indicates the weakness of the company's financial condition (Ruiz-Barbadillo, Gómez-Aguilar, De Fuentes-Barberá, & García-Benau, 2004). Likewise, Geiger and Rama (2006) report that companies with higher levels of financial distress are more likely to receive a going-concern opinion and enter into bankruptcy. Additionally, some market-based measures, such as industry-adjusted returns and return volatility, can predict the issuance of a going-concern opinion (Carson et al., 2013). However, Carson et al. (2013) point out that extant research has not specifically addressed whether auditors use market-based variables in making their judgement whether to issue a going-concern opinion.

2.5.2.2 Auditor attributes

Issuing a going-concern opinion by the auditor is a difficult decision and requires judgement. Extant research has documented the association between several characteristics related to the auditor and the issuance of a going-concern opinion. Many studies have examined the relationship between auditor size and the likelihood of issuing a going-concern opinion, yet the results are mixed (Carson et al., 2013). On the one hand, some studies find that larger auditors have greater incentives to report more conservatively (DeAngelo, 1981b; Raghunandan & Rama, 1995), thereby issuing more going-concern opinions (Bhaskar, Krishnan, & Yu, 2017; DeFond, Erkens, & Zhang, 2017). On the other hand, several studies report that the relationship between auditor size and the issuance of a going-concern opinion is negative (Carey & Simnett, 2006) or not significant (Blay & Geiger, 2013). Additionally, recent studies have reported that the auditor judgement to issue a going-concern opinion is influenced

by previous experience and prior audit involvement (Gramling, Krishnan, & Zhang, 2011; Lehmann & Norman, 2006).

2.5.2.3 Auditor–client relationship attributes

A considerable amount of literature examining the effect of the auditor–client relationship on the audit opinion has reported that audit firm tenure and the presence of a longer audit report lag are positively associated with the likelihood of an auditor issuing a going-concern opinion (Behn, Kaplan, & Krumwiede, 2001; Geiger et al., 2005). Another auditor–client factor is the level of nonaudit services. Prior research has reported that the level of nonaudit services is not significantly associated with the audit report (Barkess & Simnett, 1994; Craswell, Stokes, & Laughton, 2002); however, some other studies have reported that the level of nonaudit fees is negatively associated with the auditor's propensity to issue a going-concern opinion (Sharma, 2001; Sharma & Sidhu, 2001).

2.5.2.4 Other attributes

Financial crises and company failures provide an impetus for renewed interest from investors, legislators, standard setters, and other market participants in the auditor's evaluation of an entity's ability to continue as a going concern (Carson et al., 2016). Fargher and Jiang (2008) point out that there will be increased regulatory review and increased litigation against auditors after corporate failures. Previous research findings have indicated that auditors were more likely to issue a going-concern opinion immediately after the corporate collapses during the period 2000–2002 (Carey, Kortum, & Moroney, 2012) and the global financial crisis in 2008–2009 (Xu et al., 2013). For instance, Carson et al. (2013) report that the frequency of going-concern opinions in the US increased from 9.82% in 2000 to 16.57% in 2002. Moreover, there was a marginal increase in the frequency of going-concern opinions to 17.67% in 2009 following the global financial crisis. In Australia, the frequency of going-concern opinions under the unmodified opinion increased from 13% in 2005 to around 22% in 2009 (Carson et al., 2016).

These findings confirm the notion that auditors become more conservative and issue more going-concern opinions after financial crises. An auditor's decision to issue a going-concern opinion is also influenced by regulatory oversight and market structure. In the US, Gramling et al. (2011) find that auditors are more likely to issue

a going-concern opinion after they receive an unfavourable inspection report from the Public Company Accounting Oversight Board (PCAOB). Finally, a study by Numan and Willekens (2012) shows that auditors are less likely to issue a going-concern opinion to a financially distressed company when the level of competition between the audit firm and their closest rivals in the industry is higher.

2.6 CEO Power

Corporate structure in the financial market has been through unprecedented changes during recent decades. The role of top management is to manage companies through these complex changes in the markets. Y. Liu and Jiraporn (2010) report that the empirical evidence thus far indicates that manager characteristics are likely to affect firm outcomes. In the corporate hierarchy, CEOs assume the highest position in their firm's management and often wield the most power. Power plays a critical role in strategic change and decision-making (Child, 1972). According to Galinsky, Magee, Gruenfeld, Whitson, and Liljenquist (2008), powerful individuals tend to be self-assured and self-confident, which allows them to remain focused on their goals despite pressures from extraneous obstacles or others' perspectives.

Recent research on the psychology of power indicates that individuals with a high sense of power are likely to be overly optimistic, which leads them to perceive risky behaviour as less risky (Anderson & Galinsky, 2006). As such, high-power individuals tend to ignore the downsides of involvement in risky behaviours (Tost, Gino, & Larrick, 2012). Moreover, research has shown that power can lead individuals to have increased confidence in their opinions and perspectives (Briñol, Petty, Valle, Rucker, & Becerra, 2007; See, Rothman, & Soll, 2010), putting them under an inflated perception of personal control (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009). Therefore, powerful individuals tend to overestimate their abilities and to believe that they have total control of circumstances and outcomes. These findings indicate that high-power individuals are likely to feel that they do not need others' advice and expertise. In the corporate structure, powerful CEOs are likely to influence key decisions in their firms and exert their will, regardless of potential opposing perspectives from other executives (Adams et al., 2005; Finkelstein, 1992).

Decision-making power in companies is concentrated in the hands of the CEO. The power held by CEOs is attributed to their legitimate authority, knowledge, and

influence over a firm and its management (Daily & Johnson, 1997). CEOs have more discretion to influence firm outcomes by having their opinions reflected directly in such outcomes. Powerful CEOs are more likely to become entrenched in the firms they serve, increasing their influence over various governance and market controls (Shleifer & Vishny, 1989).

Following well-known corporate financial scandals triggered by CEO misconduct, a growing body of literature has examined how CEO power can influence various corporate outcomes (Adams et al., 2005; Al Mamun et al., 2020; Dutta, MacAulay, & Saadi, 2011; Jaroenjitrkam, Yu, & Zurbruegg, 2020; Jiraporn, Liu, & Kim, 2014; Veprauskaitė & Adams, 2013). The power wielded by CEOs can emerge from different sources. The present study focuses on four sources of CEO power: CEO tenure, CEO duality, CEO ownership, and CEO compensation. The following subsections review the related literature for each power attribute.

2.6.1 CEO tenure

CEO tenure is regarded as the length of time a person has been in the position of CEO (Navarro & Ansón, 2009). Previous research has examined the relationship between a long-tenured CEO and the board of directors, which the CEO exploits to strengthen their power (Ting, Chueh, & Chang, 2017; Walters, Kroll, & Wright, 2010; Westphal & Zajac, 1995). Walters et al. (2010) argue that as CEO tenure increases, the CEO is likely to develop relationships with directors and gain significant influence over the board. Moreover, when CEOs stay longer in their position, their managerial expertise and discretion will increase (Shen, 2003). Taking advantage of their expertise and networks, CEOs could select compliant directors in an attempt to strengthen their power (Westphal & Zajac, 1995). As such, CEOs can manipulate the board's power distribution for their own rewards and advancements (Ting et al., 2017), so their influence and power over the firm's decision-making process increase. Consistent with this view, a recent study shows that a long-tenured CEO can overcome the moderating influence of the board of directors (Altunbaş, Thornton, & Uymaz, 2018).

Furthermore, agency problems may arise because tenure increases power (Chidambaran & Prabhala, 2003; Hermalin & Weisbach, 1998; H. E. Ryan & Wiggins, 2004). Long-tenured CEOs are more likely to become entrenched and powerful, thereby making decisions that prioritise their own interests (Hill & Phan, 1991). The

length of tenure plays an important role in building CEO decision-making autonomy (Combs, Ketchen Jr., Perryman, & Donahue, 2007; Hermalin & Weisbach, 1988). Overall, evidence suggests that length of tenure increases the power of the CEO (Hill & Phan, 1991; Shen, 2003; Voordeckers, Gils, & Heuvel, 2007).

2.6.2 CEO duality

Prior academic studies on CEO power have signified the critical role of CEO duality as a power source for a CEO (Daily & Johnson, 1997; Qu, Percy, Stewart, & Hu, 2018; Tang, 2017; Zahra & Pearce, 1989). CEO duality occurs when a CEO simultaneously serves as the chairperson of the board (Rechner & Dalton, 1991). The dual board and CEO leadership structure provides the CEO with an opportunity to dominate the board and centralise power (Daily & Johnson, 1997). This dual structure has many academic researchers and policymakers concerned about its effect on corporate outcomes and on CEO power. Prior literature has examined CEO duality from two opposing perspectives: one focuses on the benefits of CEO duality while the other focuses on the costs. The overall effect of CEO duality is dependent on the balance between its costs and its benefits, a balance that depends on the structure of the company (Tang, 2017).

A number of studies have examined CEO duality from the perspective of the stewardship theory (Davis et al., 1997), suggesting that CEO duality has some potential benefits, manifested mainly in the unity of command at the top (Dalton, Hitt, Certo, & Dalton, 2007; Finkelstein & D'aveni, 1994). The benefit of dual governance structure is the greater decision flexibility and accountability as it provides the CEO with the ability to make strategic decisions more quickly in times of market instability (Iyengar & Zampelli, 2009). Advocates of this perspective argue that CEO duality creates empowering and enabling corporate structure where the CEO can act in the best interest of the organisation and make fast and decisive decisions (Davis et al., 1997; L. Donaldson & Davis, 1991). Moreover, they contend that duality promotes a strong image of corporate leadership, which helps the company gain confidence and support from stakeholders (Pfeffer & Salancik, 1978).

On the other hand, an agency perspective on CEO duality has been explored by a large number of academic studies in the literature (Dey, Engel, & Liu, 2011; Iyengar & Zampelli, 2009; Krause, Semadeni, & Cannella, 2014; Tang, 2017). A CEO who

serves as chair of the board may exert a great influence over the board (Cannella & Shen, 2001), which enhances the CEO's power relative to the board's. The dual governance structure enables the CEO to control board meeting agendas and the type of information sent to the directors prior to meetings (Daily & Johnson, 1997). As such, decisions made by the CEO are less likely to be rigorously scrutinised in the board meeting (Tang, Crossan, & Rowe, 2011). Moreover, a CEO who also chairs the board will have a significant influence over the selection of new directors. This will increase the probability that new directors might not be fully independent of management even if they are introduced as independent (Muttakin, Khan, & Mihret, 2018). As a result, when CEO power relative to the board increases, the effectiveness of the board in monitoring and questioning CEO decisions is compromised. By compromising the board's monitoring function, CEO duality might consequently compromise the quality of the firm's strategic decisions (Tang, 2017), and it could increase the power held by the CEO. This, in turn, could provide an opportunity for powerful CEOs to make decisions aligned with their self-interest at the expense of shareholders' wealth, especially in circumstances where a conflict of interest exists between the CEO and shareholders. Hence, an independent chair is crucial as they serve as a focal point through which directors can raise their concerns regarding the CEO's decisions and performance (Roberts, McNulty, & Stiles, 2005), which might lead to dismissing an underperforming CEO (Fama & Jensen, 1983).

2.6.3 CEO ownership

Power is likely to accrue for CEOs who have high share ownership in the firms they serve (Daily & Johnson, 1997). The literature suggests that a high percentage of stock ownership increases the power of the CEO (Daily & Johnson, 1997; Muttakin et al., 2018; Petrou & Procopiou, 2016; Prahalad & Doz, 2000). Several studies have indicated that CEOs with significant shareholdings are likely to be powerful and exercise a significant influence over corporate decisions. A higher percentage of ownership gives the CEO more bargaining power, reducing the likelihood of the CEO being dismissed by the board (McConnell & Servaes, 1990; Morck, Shleifer, & Vishny, 1988).

A high level of share ownership by a CEO can play a role in aligning their incentives and interests with those of other shareholders. This feature could reduce the

agency problem arising from the separation of ownership and control and improve the quality of the firm's disclosed information (Cheng & Warfield, 2005; Warfield, Wild, & Wild, 1995).

A considerable amount of literature, on the other hand, contends that increased share ownership may result in CEOs becoming entrenched within their firm (Connelly, Hoskisson, Tihanyi, & Certo, 2010; Demsetz, 1983). A high level of share ownership provides a CEO with an opportunity to become very powerful and to control the decision-making process in the firm. Existing works document that managerial power manifested in large equity ownership can increase the likelihood of making self-centred decisions (P. McClelland, Barker, Vincent, & Oh, 2012). Consistent with this view, Lafond and Roychowdhury (2008) found that firms report less conservative earnings as managerial ownership increases. Another study conducted by H. Kim and Lu (2011) reports that a higher percentage of ownership can reduce a firm's value in the absence of external governance because it entrenches the CEO and discourages them from taking risks.

2.6.4 CEO compensation

CEO compensation has been associated with CEO power (Bebchuk, Cremers, & Peyer, 2011; Lisic, Neal, Zhang, & Zhang, 2016; Veprauskaitė & Adams, 2013). CEOs have a significant influence in setting their own compensation and they tend to exploit opportunistic pay practices that help them to receive higher levels of compensation (Bebchuk & Fried, 2003; Bebchuk, Grinstein, & Peyer, 2010; Lie, 2005; Yermack, 1997). Dutta et al. (2011) point out that the compensation a CEO receives can be associated with the power the CEO wields. This view is supported by Song and Wan (2017), who write that powerful CEOs have the ability to negotiate and choose contracts that are highly flexible in their terms. The CEO's contract negotiation tactics could be attributed to the bargaining power that many CEOs have over the board (Hermalin & Weisbach, 1998).

Previous research has used the compensation of the CEO relative to the board members or the other top executives within a firm to capture CEO power. It has been suggested that this fractional measure is a vigorous assessment of CEO power (Bebchuk et al., 2011). It also reflects the significance of the CEO among the top executives and demonstrates CEO dominance (Bebchuk, Cohen, & Ferrell, 2009).

Examining CEO pay relative to the board or other top executives is an objective approach to understanding CEO power in a corporate hierarchy. Y. Liu and Jiraporn (2010) argue that examining CEO relative compensation among top executives uncovers their significance, influence, and power in the management team. Higher CEO compensation relative to the board members or executives can signify the influence and power the CEO maintains within the firm. According to Jaroenjitrkam et al. (2020), it also indicates that the CEO will be less dependent on other executives to make decisions. Similarly, Veprauskaitė and Adams (2013) explain that this fractional measure reflects the decision-making autonomy of the CEO relative to that of the directors on the board. Bebchuk et al. (2011) found that CEO power, captured by the percentage of CEO compensation relative to that of the top five executives, is negatively associated with firm value, stock performance and accounting profitability.

2.6.5 Hypothesis 1: CEO power and audit quality

The relationship between a firm's CEO and shareholders is a demonstration of agency theory as described by Jensen and Meckling (1976). When decision-making power is concentrated in the hands of the CEO, the information asymmetry between the CEO and shareholders grows, increasing the likelihood of weak governance (Brown & Sarma, 2007). It is assumed that CEOs will act to maximise their own welfare, which could be detrimental to the wealth of shareholders. As discussed previously, CEOs derive the power to influence and control firm decisions through their tenure, dual roles, ownership, and compensation. When powerful CEOs have complete autonomy to make decisions, they can exploit this dominance to make decisions that increase their personal economic gains (Morse et al., 2011), creating moral hazard problems (Adams & Ferreira, 2007).

A growing body of literature demonstrates how CEO power has a negative impact on shareholders' wealth and a variety of corporate outcomes. Daily and Johnson (1997) contend that power provides CEOs with sufficient discretion to pursue objectives that are not in the best interests of shareholders. Bebchuk et al. (2011) remark that a firm with a strong CEO dominance reports lower firm value and poorer profitability. A study conducted by Grinstein and Hribar (2004) shows that powerful CEOs engaging in very large acquisition deals usually experience negative price reaction to their acquisition. In another study examining CEO power and firm

performance, Adams et al. (2005) report that variability in firm performance increases with the degree of CEO power as moderate decisions are less likely to be made when the CEO is more dominant. Several studies have shown that powerful CEOs can obtain excessive compensation bonuses from firms that report lower performance and earnings quality (Gul, Cheng, & Leung, 2011; Minichilli, Corbetta, & MacMillan, 2010). Prior research also provides evidence that powerful CEOs with high equity incentives put significant pressure on chief financial officers (CFOs) to engage in accounting manipulations (Feng, Ge, Luo, & Shevlin, 2011; H. Friedman, 2014). Moreover, several studies have shown that CEO power is associated with a greater likelihood of fraud (Khanna et al., 2015) and weak governance (Bebchuk et al., 2009; Bebchuk et al., 2011; Khanna et al., 2015). These findings suggest that high CEO power can be detrimental to corporate outcomes and shareholders' wealth.

The audit is considered a vital service to protect shareholders' interests. Auditing can mitigate agency problems and narrow the differences between shareholders and CEOs by ensuring the quality and accuracy of financial statements, which, in turn, reduces information asymmetry and provides independent assurance on the financial statements (Barroso et al., 2018; Desender et al., 2013). Among other factors, auditors consider client risk when determining audit fees. When planning audit work, auditors perform assessments of the client risk, including management competence and the "tone at the top" of the company. Auditors tend to increase the evidence collected and perform more audit procedures to reduce the detection risk, which ultimately increases the overall audit cost. Previous studies have reported that financial reporting risk increases audit fees since auditors will increase their billing rates and audit efforts (Gul, Chen, & Tsui, 2003; Johnstone & Bedard, 2001). As already discussed, previous research findings on CEO power have demonstrated the detrimental effect of CEO power on corporate outcomes. Therefore, if auditors recognise the "tone at the top" associated with CEO power as a factor of client risk, they are likely to demand higher audit fees to reduce the detection risk and compensate for their increased audit hours, efforts, and evidence collected. Yet, the expected increase in audit fees might not occur in a competitive audit market. The cost of an audit is subject to the bargaining power between the client and the auditor (Duellman et al., 2015), which ultimately affects the quality of the audit conducted.

Duellman et al. (2015) argue that audits are a differentiated product where clients can select the auditor and affect audit scope and the dimensions of audit quality (Ball, Jayaraman, & Shivakumar, 2012). Audit hours are associated with audit fees (Bell et al., 2001), and Emby and Davidson (1998) report that managers usually negotiate with auditors on the audit plan to achieve lower audit fees. Although the audit committee is responsible for appointing, compensating, and overseeing the auditor, recent research evidence reports that management still plays a significant role in the audit hiring and negotiation process (Almer et al., 2014; Beck & Mauldin, 2014; Cohen et al., 2011; Dhaliwal et al., 2015; Fiolleau et al., 2013). Auditors in Australia face lower litigation risks than their counterparts in the US, making Australia an interesting setting (Qu, Yao, et al., 2018) to examine the relationship between CEO power and audit quality.

The discussion on CEO power thus far illustrates not only its adverse impact on various corporate outcomes but also its potential influence on the audit process. Synthesising all this evidence and based on agency theory, this study argues that powerful CEOs will choose lower audit quality to camouflage their opportunistic character and their questionable practices. A powerful CEO could exploit their power to affect the audit and achieve lower audit fees. By reducing the audit fees, the quality of audit conducted by the auditor could be compromised as the auditor might reduce the amount of evidence gathered and procedures undertaken during the audit process. As a result, the audit opinion, the output of the audit process, might not reflect the company's true financial condition, in that the auditor might not issue a going-concern opinion when one is warranted. This line of reasoning leads to the first hypothesis and sub-hypotheses of this study:

H1: *CEO power is negatively related to audit quality*.

H1a: *CEO power is negatively related to audit fees.*

H1b: *CEO power is negatively related to the likelihood of receiving a going-concern opinion.*

2.7 Corporate Governance in Australia

The wave of major corporate scandals (e.g., HIH Insurance, Enron, WorldCom, Tyco) at the turn of the current century has led to regulatory pressure towards greater corporate governance structures and increased oversight on corporate actions. In

Australia, regulators commenced a series of reforms designed to strengthen corporate governance in the market. The following subsections discuss the main reforms that have impacted corporate governance structure in Australia.

The Australian Securities Exchange Corporate Governance Council (ASX CGC) was established in 2002. The ASX CGC introduced the first edition of its *Principles of Good Corporate Governance and Best Practice Recommendations* in March 2003 (ASX CGC, 2003); the second edition was released in 2007 under the title *Corporate Governance Principles and Recommendations* (ASX CGC, 2007). Amendments were made to the second edition in 2010 (ASX CGC, 2010). The principles document recommends that the board of directors should establish an audit committee that is sufficient in size, independence, and expertise. It recommends that the majority of board directors should be independent and encourages firms to have members on the audit committee who are financially literate, with at least one member having accounting or finance qualifications and experience.

In response to corporate governance changes after the global financial crisis, the third edition of the principles was released in 2014 (ASX CGC, 2014). The recommendations lay out the role of the audit committee in maintaining the integrity of the financial statements and the independence of the external auditor. The third edition is somewhat less specific regarding expertise, recommending that the audit committee have financial expertise and an understanding of the industry in which the firm operates (Hay, Stewart, & Redmayne, 2017).

The ASX CGC released the fourth edition of the *Corporate Governance Principles and Recommendations* in February 2019 (ASX CGC, 2019). The key recommendations of this edition are that companies be required to develop and disclose a whistleblower policy, an anti-bribery and corruption policy, and their values. Among other revisions and changes, companies should also disclose the code of conduct and assess the directors' performance-based remunerations.

Revising the principles over time reflects the need to maintain an effective corporate governance structure in the current market (Hay, Stewart, & Redmayne, 2017). Effective corporate governance will help companies manage their risk, abide by the rules, and reduce the possibility of financial frauds. It will also help boards to perform their role of monitoring those in the management team to ensure they act in the best

interests of shareholders. As such, it is vital that effective internal and external monitoring mechanisms are maintained in the market to protect shareholders' wealth and prevent the market from financial collapses.

The monitoring function has been investigated from the perspective of agency theory (Fama & Jensen, 1983; Jensen & Meckling, 1976), given the conflict of interest arising from the separation of ownership and control (Berle & Means, 1932). In recent years, an increasing amount of literature has examined the importance of monitoring mechanisms in their two forms: internal and external. Agency problems can be mitigated by the presence of effective internal and external monitoring mechanisms (Aguilera et al., 2015; Gul & Ng, 2018; Haynes, Zattoni, Boyd, & Minichilli, 2019; Jensen & Meckling, 1976). Each type of monitoring has its unique settings and roles in enhancing the overall governance structure in corporations, thereby restraining the possible harmful impact of CEO power. Thus, this study examines the roles of several internal and external monitoring mechanisms that are intended to enhance overall monitoring intensity.

2.7.1 Internal monitoring mechanisms

Effective internal monitoring mechanisms are crucial for protecting the wealth of shareholders in a corporate business. The role of internal monitoring involves overseeing management to ensure that managers act in the best interests of shareholders and ultimately to reduce agency problems. This study examines three internal monitoring mechanisms: board independence, audit committee financial expertise, and audit committee independence. These characteristics are important to ensure the board and audit committee can perform their roles in closely monitoring the business decisions of the CEO and senior executives, enabling the committees to curb any potential opportunistic behaviour.

2.7.1.1 Board independence

Among internal monitoring mechanisms, the board of directors has been analysed as the corporate control system's apex. From an agency theory standpoint, the board's primary role is to monitor top managers to prevent managerial opportunism and maximise shareholders' wealth (Fama & Jensen, 1983; Jensen & Meckling, 1976). Other monitoring roles performed by the board include hiring and firing top managers,

overseeing the implementation of the firm's strategic plans, and rewarding top executives (Hillman & Dalziel, 2003; J. L. Johnson, Daily, & Ellstrand, 1996).

As one of the most critical board characteristics, the board's independence has attracted much attention from researchers, legislators, and investors. An independent board has been viewed as an effective way to enhance board monitoring. Fama (1980) argues that independent directors are keen to develop and retain a good reputation as skilled decision control experts. As such, they are more likely to exert greater board oversight compared to inside directors. Another study remarks that an independent board is likely to conduct intensive monitoring of management (Hermalin & Weisbach, 1998). Consistent with this idea, L. Guo and Masulis (2015) report that the sensitivity of forced CEO turnover to firm performance increases when more independent directors are on the board. Additionally, as powerful CEOs tend to make more extreme decisions, resulting in variability in firm performance (Adams et al., 2005), it can be argued that a more independent board can restrain CEO misconduct. In an investigation of the effect of board independence on audit quality, Carcello et al. (2002) found a significant and positive relationship between board independence and audit fees. This finding shows that an independent board is likely to demand high audit quality. These studies collectively underline the importance of having independent directors on the board to enhance the monitoring role.

2.7.1.2 Audit committee financial expertise

Audit committees are a fundamental element of governance and monitoring intensity in the corporate structure. A substantial amount of literature has stressed the importance of having financial experts on the audit committee. Kalbers and Fogarty (1993) contend that the ability to understand financial statements is improved when individuals have financial expertise, which ultimately improves the monitoring quality. Prior empirical research suggests that financial expertise improves audit committee effectiveness (Farber, 2005; Hoitash, Hoitash, & Bedard, 2009; J. Krishnan, 2005). Specifically, members with financial expertise enhance the audit committee's ability to effectively monitor the quality of the audit and the financial reporting process. Consistent with this view, studies have documented that audit committee financial expertise is associated with fewer internal control problems

(Hoitash et al., 2009; J. Krishnan, 2005; Y. Zhang et al., 2007) and fewer restatements (Abbott, Parker, & Peters, 2004; Agrawal & Chadha, 2005).

In addition, Bruynseels and Cardinaels (2013) report that the proportion of members with financial expertise on the audit committee is positively related to the demand for more audit effort. Higher efforts to improve the overall audit quality will result in higher audit fees. Consistent with this view, a study by Abbott et al. (2003) find that an audit committee with at least one member with financial expertise is likely to demand higher audit fees. Together, these studies confirm that having financial experts on the audit committee is likely to strengthen the overall monitoring effectiveness by enhancing the committee's ability to closely monitor powerful CEOs and question their financial practices and potential interference in the audit process.

2.7.1.3 Audit committee independence

Prior research has found that a high-quality audit committee tends to be independent, objective, and less influenced by management (Karamanou & Vafeas, 2005; J. Li, Mangena, & Pike, 2012). An audit committee with a higher proportion of independent members is less likely to be compromised in performing their roles and responsibilities. Therefore, firms with a more independent audit committee are likely to have better financial quality. Consistent with this view, prior studies have found that a more independent audit committee is negatively associated with abnormal accruals (Klein, 2002), restatements (Abbott et al., 2004), and the incidence of fraud (Beasley, Carcello, Hermanson, & Lapides, 2000; Farber, 2005). Another line of research on audit committees has found that an independent audit committee is likely to demand higher audit quality. For example, Abbott et al. (2003) found a positive relationship between audit committee independence and audit fees. Additionally, a number of studies suggest that audit committees composed of a majority of independent directors are more likely to hire industry specialist auditors (Abbott & Parker, 2000; Y. M. Chen, Moroney, & Houghton, 2005). Previous research suggests that an independent audit committee is generally more effective in monitoring management and reducing misleading financial statements (Bedard, Chtourou, & Courteau, 2004; McMullen & Raghunandan, 1996). By definition, independent audit committee members have no association with management; therefore, they will be objective and will not tolerate any attempt by powerful CEOs to influence the audit quality.

2.7.2 Hypothesis 2: The moderating role of internal monitoring

Strong internal monitoring mechanisms are essential for solving conflicts between shareholders and management. Previous research has illustrated the vital role of internal monitoring mechanisms, particularly board independence and audit committee independence and financial expertise, in demanding higher levels of audit quality (Abbott et al., 2003; Bruynseels & Cardinaels, 2013). Carcello et al. (2002) found a significant and positive relationship between board independence and audit fees. Consistent with this view, Dhaliwal et al. (2015) found that a strong audit committee mitigates the relationship between hiring an auditor affiliated with management and the lower propensity of receiving a going-concern opinion. Based on a survey of audit partners and managers from audit firms, Stewart and Munro (2007) reveal that auditors expect the audit committee to resolve conflicts with management and improve the overall audit quality. Knechel and Willekens (2006) demonstrate that even though audit fees might be reduced with higher internal monitoring, pressure from many other stakeholders compels such internal monitoring forces to demand higher audit coverage, creating a positive relationship between internal monitoring and audit fees.

The discussion thus far on internal monitoring mechanisms illustrates their unique role in improving the quality of corporate outcomes. The audit function is considered a vital service to protect shareholders' interests. As such, intense internal monitoring is expected to have direct and effective oversight of the company's audit process. This will prevent management from influencing auditors or interfering with the audit process. Particularly, this study argues that greater internal monitoring creates referent power vis-a-vis the CEO, which allows internal monitoring to moderate the potential negative effect of powerful CEOs on audit quality. Therefore, the second hypothesis of this study focuses on the relative effect of internal monitoring intensity and CEO power on audit quality. Accordingly, the second hypothesis of this study is:

H2: *Internal monitoring intensity is likely to mitigate the negative relationship between CEO power and audit quality.*

H2a: *Internal monitoring intensity is likely to mitigate the negative relationship between CEO power and audit fees.*

H2b: *Internal monitoring intensity is likely to mitigate the negative relationship between CEO power and the likelihood of receiving a going-concern opinion.*

2.7.3 External monitoring mechanisms

Although corporate governance research has focused on internal monitoring mechanisms, mainly the board of directors and the audit committee, external monitoring mechanisms can also play a key role in protecting shareholders' rights (Aguilera et al., 2015). In recent years, an increasing amount of literature has focused on the strategic role of external monitoring mechanisms in corporate governance structure (Aguilera et al., 2015; Appel, Gormley, & Keim, 2016; Yu, 2008; Zorn, Shropshire, Martin, Combs, & Ketchen Jr., 2017). Previous research has suggested that external monitoring mechanisms can strengthen governance (Bushee & Noe, 2000; Mallin et al., 2012) and restrain managers' opportunistic behaviour directly or indirectly through internal governance mechanisms (Aguilera et al., 2015; Haynes et al., 2019).

To proxy for the intensity of external monitoring mechanisms, this study focuses on two mechanisms: the number of analysts following a firm and institutional ownership. These external monitoring forces can have direct access to the firm and interact with the CEO and the board (Byard, Li, & Weintrop, 2006; Cordeiro, Veliyath, & Romal, 2007). Previous research has focused on these two external monitoring mechanisms due to their effective monitoring practices, as discussed below.

2.7.3.1 Number of analysts following

The extant literature posits that the number of analysts following a firm captures the degree of external monitoring of the CEO and top senior executives (Chang, Dasgupta, & Hilary, 2006; Dyck, Morse, & Zingales, 2010; Healy & Palepu, 2001; Jensen & Meckling, 1976; Yu, 2008). A key role of analysts in the market is collecting and assessing information on the firms they follow, based on which they provide their earnings forecasts and recommendations. Due to their industry background knowledge and financial expertise, analysts track the financial information provided by the company they follow on a regular basis, qualifying them to interact with management and raise questions on various aspects of the company's reporting (Bowen, Davis, & Matsumoto, 2002; Kimbrough, 2005; Yu, 2008). As such, prior research postulates

that CEOs are usually concerned with managing analysts' impressions to protect their personal reputation in the capital market (Bednar, Love, & Kraatz, 2015; Westphal & Graebner, 2010).

Prior research has found that the number of analysts following a firm impacts many managerial decisions and corporate outcomes. For instance, greater intensity and quality of a firm's analyst following contributes to less earnings management, higher cash holdings, higher profits, and lower leverage (Knyazeva, 2007). Similarly, Yu (2008) reports that firms tend to manage earnings less as the number of analysts increases. In line with this view, Dyck et al. (2010) report that financial analysts have played a role in uncovering several corporate frauds. As such, prior studies suggest that the number of analysts following a firm serves as an external monitoring mechanism (Doukas, Kim, & Pantzalis, 2000) and complements other forms of governance mechanisms (Knyazeva, 2007). Compared to US companies, Australian companies have a lower number of analysts following (Carvajal, Coulton, & Jackson, 2017). However, unlike analysts in the US market, it is more common for analysts in Australia to issue negative recommendations as they are less dependent on the goodwill of firms' managements (Brown, Chan, & Ho, 2009).

2.7.3.2 Institutional ownership

Prior research in corporate governance suggests that greater institutional ownership indicates stronger corporate governance (Coffee, 1991). Although historically institutional investors tended towards passive ownership and did not meddle in day-to-day operations, more recently they have become active in alerting board directors to monitoring failures and CEO opportunism (David, Hitt, & Gimeno, 2001; Gillan & Starks, 2007). Large stockholdings of institutional investors are associated with lower agency costs (Bushee & Noe, 2000) as their voting power allows them to monitor and influence management (Shleifer & Vishny, 1986). Consistent with this view, several studies report that institutional investors are likely to express criticism directly to the board or through activist actions that guide CEO outcomes into alignment with shareholders' interests (Appel et al., 2016; David et al., 2001; David, Kochhar, & Levitas, 1998). Chen, Harford, and Li (2007) found that long-term independent institutional investors will specialise in monitoring rather than trading.

Institutional ownership has been linked to improved CEO pay-for-performance sensitivity (Brav, Jiang, Partnoy, & Thomas, 2008; van Essen, Otten, & Carberry, 2012) and increased stock prices (Schnatterly, Shaw, & Jennings, 2008). Moreover, a higher number of institutional investors usually demand a high-quality audit (Kane & Velury, 2004). Additionally, Bhojraj and Sengupta (2003) report some findings consistent with institutional investors' monitoring effect: companies with greater institutional ownership have lower bond yield and better debt ratings. These findings demonstrate the active role of institutional investors as external monitors in the corporate governance structure.

One of the key characteristics of the Australian capital market is the existence of some of the most activist institutional investors, with 10% of listed capital held by superannuation plans co-sponsored by unions, making Australia one of the notable jurisdictions for institutional influence in corporate governance reform (Mees & Smith, 2019). Some of the reforms in corporate boards, executive remuneration have occurred principally through institutional activism rather than government regulation (Mees & Smith, 2019). In Australia, institutional share ownership increased by approximately 128% over the last 20 years (Muniandy, Tanewski, & Johl, 2016). Muniandy et al. (2016) point out that this figure is expected to rise further in the future. Prior literature has noted that institutional investors with significant ownership can influence the governance of firms by using the threat of exit and voice to implement specific objectives by buying or threatening to sell shares (Aggarwal, Erel, Ferreira, & Matos, 2011; Del Guercio, Seery, & Woidtke, 2008).

2.7.4 Hypothesis 3: The moderating role of external monitoring

A growing body of literature has paid attention to external monitoring's unique role in enhancing firms' governance structure and protecting shareholders' wealth (Aguilera et al., 2015; Bushee, 1998; Healy & Palepu, 2001; Yu, 2008). Financial analysts help reduce the information asymmetry between management and investors through their presence to affect corporations' quality of information (Jaroenjitrkam et al., 2020; Yu, 2008). Like analysts who convey information and thereby increase scrutiny of the CEO, institutional investors are usually involved in a firm's decision-making process to effect change when necessary (L. Ryan & Schneider, 2002). Previous research has suggested that external monitoring mechanisms can strengthen

governance (Bushee & Noe, 2000; Mallin et al., 2012) and restrain managers' opportunistic behaviour directly or indirectly through internal governance mechanisms (Aguilera et al., 2015; Haynes et al., 2019).

The discussion on external monitoring thus far shows the important roles of institutional investors and analysts following in influencing a variety of managerial decisions and corporate outcomes. Prior theoretical and empirical research provides a sound foundation to suggest that external monitoring is more likely to reduce top managers' self-serving behaviours directly and indirectly by influencing internal governance mechanisms. The value of audit is manifested in its advantage in reducing agency problems and narrowing the differences between shareholders and CEOs by ensuring the quality and the accuracy of financial statements. Building on external monitoring literature, this study expects that the presence of greater external monitoring by institutional investors and analysts following is likely to restrain CEO power pertaining to audit quality. Therefore, this study proposes the following hypothesis with respect to the moderating role of external monitoring:

H3: *External monitoring intensity is likely to mitigate the negative relationship between CEO power and audit quality.*

H3a: *External monitoring intensity is likely to mitigate the negative relationship between CEO power and audit fees.*

H3b: *External monitoring intensity is likely to mitigate the negative relationship between CEO power and the likelihood of receiving a going-concern opinion.*

2.8 Conceptual Schema

The conceptual schema shown in Figure 2.1 graphically demonstrates the general main testable hypotheses of this study.

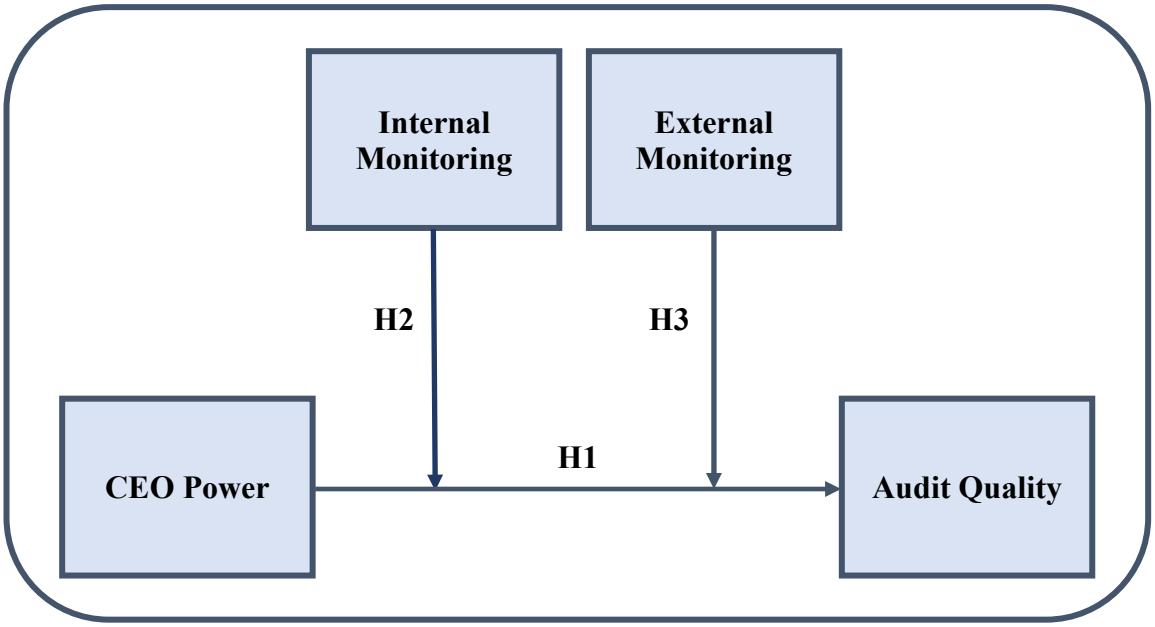

Figure 2.1 Conceptual schema.

2.9 Chapter Summary

This chapter has documented the underlying theoretical perspective of this study. A detailed review of the literature related to corporate governance theory, audit quality, CEO power, and monitoring intensity was provided. Then, testable hypotheses for this study were formulated based on the theoretical perspective and the prior literature on the subject.

Chapter 3 will provide details of the study sample and the research method adopted in this study. Additionally, details of the measurements of the independent, dependent, and control variables will be outlined. Chapter 3 will also specify the basic regression models of this study.

Chapter 3:
Research Method

3.1 Chapter Overview

The previous chapter discussed several theories underlying corporate governance and identified the key theory supporting this study. Additionally, a detailed literature review related to audit quality, CEO power, and the effectiveness of both internal and external monitoring mechanisms was documented. Based on this prior literature, testable hypotheses were formulated and a conceptual schema presented outlining the main hypothesised relationships among CEO power, monitoring intensity, and audit quality.

This chapter provides details of the research methods used to test the hypotheses developed in Chapter 2. The chapter starts with an overview of the sample selected, source documentation, and the sample time period for the present study. Then, Section 3.3 outlines the process of data preparation. Section 3.4 explains how the two proxies of audit quality – audit fees and the likelihood of a company receiving a going-concern opinion – are measured. The next two sections provide measures to operationalise the CEO power and internal and external monitoring mechanisms examined in this study. Section 3.7 details the measurements of all control variables and justifies their inclusion. Next, Section 3.8 outlines the statistical tests and models adopted in this study to test the hypotheses. Finally, Section 3.9 summarises the chapter.

3.2 Sample, Time Period, and Source Documentation

The initial sample of this study comprises all Australian firms listed on the Australian Securities Exchange (ASX) across the observation window 2004 to 2015, with the exceptions noted below. ASX-listed firms are chosen because these firms' information is publicly available in appropriate readable formats from several databases. Firms with missing values and duplicate observations are excluded. Consistent with prior research (Beck & Mauldin, 2014; Carcello et al., 2002; Sultana et al., 2019), financial institutions, banks, trusts and investments, insurance, and utility firms are excluded from the sample due to their different regulatory settings and nature.

The analysis of this study covers a 12-year period. The motivation to select the year 2004 as a starting point for data collection and analysis was the introduction and implementation of the principles of good corporate governance in 2003 (ASX CGC). Additionally, CLERP 9 (Australian Government, 2004) was implemented in 2004. These governance reforms aimed in some part to enhance corporate governance structure in companies, hold corporate management responsible for their firms' financial reporting, and improve auditor independence and auditor oversight. The sample period of this study ends in 2015 because that was the last year of CEO and governance data covered by the Securities Industry Research Centre of Asia-Pacific (SIRCA) database covers CEO and governance data.

The data for this study are obtained from a number of secondary sources. The dependent variable of this study is audit quality, which is proxied by audit fees and the likelihood of a company receiving a going-concern opinion. Data on these two proxies are retrieved primarily from SIRCA and then supplemented by data from Connect4 Boardroom.

The main independent variable of this study is CEO power, which consists of four dimensions: CEO tenure, CEO duality, CEO ownership, and CEO compensation. Data for these four variables are obtained mainly from SIRCA and then supplemented by data from Connect4.

Another independent variable in this study is the monitoring system in firms. This study examines two types of monitoring, internal and external. Three characteristics constitute the internal monitoring: audit committee financial expertise, audit committee independence, and the independence of the board of directors. Data for these characteristics are obtained from SIRCA. External monitoring consists of two components: institutional ownership and analysts following. Data on institutional ownership are retrieved from SIRCA while data on the number of analysts following a firm are obtained from the Institutional Brokers Estimate System on the Wharton Research Data Services platform.

Data regarding control variables are retrieved from different sources depending on the nature of the variable. Data used to measure variables that control for firms' financial and accounting characteristics are obtained from Morningstar DatAnalysis

Premium. Data on variables that control for audit and governance attributes are collected from SIRCA.

The final sample of this study for the audit fees statistical model (H1a and H2a) was 7737 firm-year observations, out of which 2676 firm-year observations are financially distressed and used for the going-concern opinion statistical model (H1b and H2b). Financially distressed firms are those companies that report either negative cash flow or negative income (Carey & Simnett, 2006; Defond, Raghunandan, & Subramanyam, 2002).[7] It is worth noting that the audit fees model examining the moderating effect of external monitoring (H3a) has a sample of only 2615 firm-year observations because it is limited by the number of firms with analyst-following data, one of the two components of external monitoring. For the same reason, the going-concern opinion model examining the moderating effect of external monitoring (H3b) has a sample of 656 firm-year observations. Table 3.1 presents a summary of how the final sample is constructed.

Table 3.1

Sample Construction

Sample construction	No.	No.
Firms at SIRCA with CEO data from 2004 to 2015		11218
Less		
Financial industry	(1153)	
Utilities industry	(161)	
Missing governance data	(979)	
Missing financial data	(495)	
Missing audit data	(364)	
Duplicate values	(329)	
Final usable sample for audit fees model (H1a and H2a)		7737
Non-financially distressed firms		(5061)
Financially distressed firms for GCO model (H1b and H2b)		2676
Firms with analyst-following data		2615
Sample for audit fees model (H3a)		2615
Sample for GCO model (H3b)		656

Note. SIRCA = Securities Industry Research Centre of Asia-Pacific; CEO = chief executive officer; H = hypothesis; GCO = going-concern opinion.

[7] Financially distressed firms are likely to receive a going-concern opinion. Therefore, this study examines whether financially distressed firms with powerful CEOs are less likely to receive a going-concern opinion, denoting the effect of CEO power on audit quality.

3.3 Data Preparation Process

The data collected for this study have been through a data screening process. The process involves checking missing observations, the accuracy of data entry, data distribution, and normality assessment. A proportion of variables are checked manually to ensure the accuracy of data entry.

A normality test is conducted for the continuous variables to examine the skewness and kurtosis of the variables. Additionally, data transforming techniques such as winsorising and natural logarithms are undertaken to obtain a better linear fit from the regression (Hay et al., 2006; Yao, Percy, & Hu, 2015). Consistent with prior research (Kannan, Skantz, & Higgs, 2014; Redmayne, Bradbury, & Cahan, 2010), the natural logarithm is applied for some variables such as audit fees and firm size. Additionally, outlier values can lead to heteroscedasticity, which can affect results significantly (Gujarati, 2011). Therefore, continuous variables (except the dummy or logged variables) are winsorised at the 1% and 99% levels to eliminate outliers (Duellman et al., 2015; Gul et al., 2018; Read & Yezegel, 2016). Winsorising removes the value of the outlier and replaces it with the nearest nonoutlying value. This process of data transformation enhances the interpretation accuracy of the data, so they are not driven by outliers (Friedlan, 1994).

In the following sections, measurements for audit quality, CEO power and monitoring intensity of firms are discussed.

3.4 Measurement of Audit Quality

Audit quality is multidimensional, which makes it difficult to measure using a single proxy. DeFond and Zhang (2014) divide audit quality measures into two categories: input-based and output-based measures. This study adopts one proxy from each category: audit fees and the likelihood of a company receiving a going-concern opinion. Choosing The audit fees proxy helps understand audit quality from the demand side of audit as audit fees are considered an input to the audit process. Audit fees reflect auditor efforts, time and resources, which ultimately affect the audit quality. The going-concern opinion proxy is considered an output of the audit process. Therefore, examining such an output proxy can help understand the quality of audit manifested in the audit delivered. Specifically, the auditor issuing a going-concern

opinion when warranted is an indication of due diligence by the auditor, which demonstrates the quality of the audit delivered.

3.4.1 Measurement of audit fees ($LnAF_{i,t}$)

The first proxy of audit quality is audit fees. Consistent with prior literature (Barroso et al., 2018; Duellman et al., 2015; Y. Kim et al., 2015), audit fees are measured as the natural logarithm of audit fees paid by the firm to the auditor. The natural logarithm transformation is necessary to ensure that the audit fees data are less skewed and more interpretable.

3.4.2 Measurement of going-concern opinion ($GCO_{i,t}$)

The second proxy of audit quality adopted in this study is the going-concern opinion. Consistent with prior literature (Carey & Simnett, 2006; Hossain, Chapple, & Monroe, 2016), going-concern opinion is measured as a dummy variable that takes the value of one (1) for companies receiving a going-concern opinion, and zero (0) otherwise.

3.5 Measurement of CEO Power ($CEOpower_{i,t}$)

Currently, there is no consensus on a precise measure for CEO power in the literature. Much of the prior research on the subject of CEO power has used a single proxy to measure the power of a CEO (tenure, duality, etc.). This study, however, uses principal component analysis (PCA) to formulate a CEO power index. Constructing this index helps reduce the dimensionality of interrelated power variables and gain an in-depth perspective on the effect of CEO power on audit quality. The index of CEO power consists of four proxies: CEO tenure, CEO duality, CEO ownership, and CEO compensation.

The following subsections outline the measurements used for each power proxy and provide a justification for applying the PCA technique to formulate the index of CEO power.

3.5.1 Measurement of CEO tenure ($CEOtenure_{i,t}$)

The length of a CEO's tenure is a significant contributing factor to their power (van Essen, Otten, & Carberry, 2012). A long-tenured CEO is more likely to have accumulated experience of the company hierarchy and decision-making process, helping them to be influential over corporate decisions. In the present study, CEO tenure is measured as the total number of years an individual holds the position of CEO in a company (Lisic et al., 2016; Veprauskaitė & Adams, 2013).

3.5.2 Measurement of CEO duality ($CEOdual_{i,t}$)

The power a CEO wields may be increased if the CEO simultaneously holds the board chair position (Hermalin & Weisbach, 1998). The power of CEO–chair duality arises when a CEO influences the board to make decisions that might serve the CEO's self-interest or agenda. CEO duality is measured as a dummy variable that takes the value of one (1) if the CEO serves as the board chair, and zero (0) otherwise (Huang, Jain, & Shao, 2017).

3.5.3 Measurement of CEO ownership ($CEOown_{i,t}$)

Higher stock ownership by a CEO increases the power of the CEO (Adams et al., 2005; Huang et al., 2017), resulting in more control and influence over the firm's decision-making. This study measures CEO ownership as the percentage of outstanding shares of a firm that are owned by the CEO.

3.5.4 Measurement of CEO compensation ($CEOcomp_{i,t}$)

CEO pay provides a useful measure of power as it reflects the relative pay of the CEO in the company's management. This proxy of power is vital as Bebchuk et al. (2011) found that CEO pay influences some corporate outcomes. One measure of CEO compensation is to divide the CEO total compensation by the total compensations received by the top five executives, including the CEO (Bebchuk et al., 2011; Jiraporn et al., 2014). Another measure is to divide the CEO total compensation by the total compensation of all directors on the board (Veprauskaitė & Adams, 2013).

Due to the unavailability of data for the top executives for most of the study sample companies, this study adopts the measure developed by Veprauskaitė and

Adams (2013). CEO compensation is measured as the total annual compensation a CEO receives divided by the total annual compensation of all directors on the board.

3.5.5 The use of the PCA technique

Following several studies that used PCA for their explanatory variable (Chao et al., 2017; Florackis & Sainani, 2018; Veprauskaitė & Adams, 2013), this study employs PCA to create a CEO power index ($CEOpower_{i,t}$) based on the four dimensions of power described above: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, and $CEOcomp_{i,t}$. PCA is an advantageous statistical technique that allows the four interrelated CEO power variables to be combined into a one-dimensional index. Therefore, this index effectively captures the power and influence a CEO might have over the audit quality. An advantage of using PCA is controlling for the potential multicollinearity problem among the individual power variables (Florackis & Sainani, 2018) and minimising measurement errors (Custódio et al., 2013). It also reduces the dimensionality of a data set consisting of several interrelated variables (Veprauskaitė & Adams, 2013).

3.6 Measurement of Monitoring Intensity

To examine if monitoring intensity moderates the relationship between CEO power and audit quality, this study employs two types of monitoring: internal and external. Each type of monitoring is measured by means of an index developed using PCA.

3.6.1 Measurement of internal monitoring ($IntMonitor_{i,t}$)

A large body of literature has examined the importance of effective and strong internal monitoring. In particular, board and audit committee characteristics are associated with high audit quality, reflected in their demand for higher audit fees (Abbott et al., 2003; Carcello et al., 2002; Sultana et al., 2019). This study employs three variables as proxies for internal monitoring. An internal monitoring index is constructed using PCA based on the three characteristics of audit committee financial expertise, audit committee independence, and board independence. The measurements of these characteristics are outlined below.

3.6.1.1 Measurement of audit committee financial expertise ($ACfin_{i,t}$)

The financial expertise of audit committee members is one of the key components of audit committee effectiveness. Consistent with prior literature (Dhaliwal, Niaker, & Navissi, 2010; J. Krishnan & Jong Eun, 2009; Sultana, 2015), this study measures audit committee financial expertise as an indicator variable that takes the value of one (1) if at least one member of the audit committee is an accounting or non-accounting financial expert, and zero (0) otherwise. A member is considered an accounting financial expert if they have had or currently have a job requiring accounting or auditing expertise. This includes such roles as public accountant, auditor, chief accounting officer, chief financial officer, or financial controller. A member is considered a non-accounting financial expert if they have had experience as a CEO, president of a for-profit company, managing director in investment banking or venture capital firms, or an accounting or finance professor.

3.6.1.2 Measurement of audit committee independence ($ACind_{i,t}$)

Audit committee independence is one of the main recommendations of ASX CGC (2003). Audit committee independence is considered an indicator of effective internal monitoring of CEOs (Ali & Zhang, 2015). Based on prior research (Sultana, 2015), audit committee independence is measured as a dummy variable that takes the value of one (1) if the majority of audit committee members are independent, and zero (0) otherwise.

3.6.1.3 Measurement of board independence ($BDind_{i,t}$)

An independent board of directors is considered an effective method of internal monitoring of a CEO. The more independent the board is, the better monitoring of a CEO will be in place. Following prior literature in calculating this proxy (Ali & Zhang, 2015; Klein, 2002), this study measures board independence as a dummy variable that takes the value of one (1) if the majority of board members are independent, and zero (0) otherwise.

3.6.2 Measurement of external monitoring ($ExtMonitor_{i,t}$)

This study also examines how the relationship between CEO power and audit quality changes when effective external monitoring mechanisms are in place. Based

on prior literature (Billings, Xinghua, & Yonghong, 2014; Gul et al., 2018; Yu, 2008), two proxies are employed to measure external monitoring: institutional ownership and analyst following.

3.6.2.1 Measurement of institutional ownership ($Institown_{i,t}$)

Several studies have recognised institutional ownership as a key mechanism of external monitoring due to its active role in monitoring companies and its mandate for a better quality of reporting (Ali & Zhang, 2015; Habib, Wu, Bhuiyan, & Sun, 2019). Institutional investors include insurance companies, investment trusts, financial institutions, investment companies, superannuation and pensions funds, and other companies associated with this category of institutions (koh, 2003). This study measures institutional ownership as the percentage of outstanding shares held by institutional investors (Ali & Zhang, 2015).

3.6.2.2 Measurement of analyst following ($Follow_{i,t}$)

A firm's analyst following is an important mechanism of the external monitoring index. Several studies have examined the effectiveness of analyst following as a component of the external monitoring of management (Yu, 2008). Consistent with Ali and Zhang (2015), this study measures analyst following as a 12-month average of the number of analysts who follow a firm during a year.

3.6.3 The use of the PCA technique

Internal and external monitoring are multifaceted constructs where each type of monitoring component may complement or substitute for each other. To reduce variable redundancy (Duellman et al., 2013), this study uses PCA to create two indices: internal monitoring ($IntMonitor_{i,t}$) and external monitoring ($ExtMonitor_{i,t}$). The internal monitoring index is formulated based on three components: $ACfin_{i,t}$, $ACind_{i,t}$, and $BDind_{i,t}$. The external monitoring index is formulated based on two components: $Institown_{i,t}$ and $Follow_{i,t}$. Consistent with prior research (Christensen et al., 2016; Stanley, 2011), this study retains the principal component with an eigenvalue greater than one to avoid multicollinearity complications for both internal and external monitoring indices.

3.7 Justification and Measurement of Control Variables

This study adopts two proxies for audit quality: audit fees and the likelihood of a company receiving a going-concern opinion. Each of these proxies has its own control variables based on prior literature. Thus, the audit fees model has control variables that differ from those included in the going-concern opinion model. The following subsections discuss the justification and measurement of the control variables included in the audit fees model and the going-concern opinion model.

3.7.1 The control variables for the audit fees model

Prior research on the audit fees model has included a variety of control variables. In the present study, control variables in the audit fees model have been carefully selected to ensure each control variable has been well documented in the literature on audit fees (see Section 2.5.1). This process helps to alleviate the concern of omitted variables and to build a relatively strong model. This study divides control variables in the audit fees model into five key categories: client attributes, auditor attributes, engagement attributes, auditor–client relationship attributes, and governance attributes. Each category consists of several variables that measure various aspects related to the category. Industry and year fixed effects are also controlled for in this model.

3.7.1.1 Client attributes

Auditors take into consideration client attributes when they charge their fees. This study controls for the following client attributes that could be strong determinants of audit fees: size, profitability, growth, liquidity risk, complexity, and inherent risk.

Firm size is the most dominant determinant of audit fees in the literature (Hay et al., 2006). The relationship between firm size and audit fees is expected to be positive (Simunic, 1980), as big clients require greater efforts and hours by the auditors, which will ultimately be reflected in higher audit fees (Gul et al., 2003; Simunic, 1980). Consistent with prior research (Abbott et al., 2003; Kannan et al., 2014), this study measures firm size ($Size_{i,t}$) as the natural logarithm of total assets at the fiscal year-end.

Client profitability is considered another audit fees determinant due to its risk in the event of a firm's poor performance. The lower the profitability of the company, the greater the risk to the auditor and the higher audit fees are expected to be (Hay et al.,

2006). Firms with low profitability or loss-making firms may be motivated to prepare financial statements in a way that do not represent the actual financial condition. Such risk requires that auditors devote more time and efforts to mitigate this risk, which results in increased audit fees. Therefore, this study employs two variables to control for profitability: return on assets and loss. Return on assets ($ROA_{i,t}$) is measured as earnings before interest and tax divided by total assets (Goodwin-Stewart & Kent, 2006). Loss ($Loss_{i,t}$) is a dummy variable that takes the value of one (1) if the firm reports negative income, and zero (0) otherwise (Y. Kim et al., 2015)

Growth options of firms could affect their risk, and thereby audit fees (Duellman et al., 2015). Understating the life cycle of a company helps evaluate the risk level associated with each business life-cycle stage. High growth might be related to lower audit fees. This study uses the market-to-book ratio to control for growth. Consistent with prior research (Duellman et al., 2015; X. Sun, Habib, & Bhuiyan, 2020), the market-to-book ratio ($MTB_{i,t}$) is measured as the market value of equity divided by the book value of equity.

Liquidity risk is another determinant of audit fees. Higher liquidity risk increases the probability of a client failing, thereby increasing the audit risk (Simunic, 1980). Firms facing liquidity risks may have high insolvency risk (Chan et al., 2013). Insolvent firms are less likely to pay the money they owe; therefore, these firms are in financial hardship. As a result, firms with liquidity risks are associated with high audit risk and increased audit fees. Leverage and quick ratios are used in this study to proxy for liquidity risk. Leverage ratio ($Lev_{i,t}$) is measured as total liabilities divided by total assets (Beck & Mauldin, 2014; G. Krishnan & Changjiang, 2015). Quick ratio ($Quick_{i,t}$) is measured as current assets less inventory divided by current liabilities (Taylor, 2011).

The complexity of a client firm is a driving factor for a potential increase in audit fees. When the structure and operations of a company are very complex, the auditor consumes more time and efforts to understand the complexity of the client and ultimately develop practical audit procedures that reflect the due diligence of the auditor. As a result, audit fees increase. This study employs number of subsidiaries and number of business segments as proxies for client complexity (Hay et al., 2006; Singh, Woodliff, Sultana, & Newby, 2014). A client with a high number of subsidiaries and business segments will have an increased number of complex accounting transactions, resulting in greater time and efforts by the auditor and, consequently,

higher fees. In terms of measurements, the number of subsidiaries ($Sub_{i,t}$) is measured as the number of subsidiaries a firm has. The number of business segments ($Seg_{i,t}$) is measured as the number of business segments a firm has (Sultana et al., 2019).

This study also controls for the inherent risk of a company. Such risk is manifested in some financial accounts that have a high level of errors. Hence, inherent risk is positively associated with audit fees as auditors will devote more time and efforts to detect errors or misstatements. To control for inherent risk ($Invrec_{i,t}$), the ratio of the sum of inventory and receivables to total assets is used (Axén, 2018; Gul et al., 2018; Kannan et al., 2014).

3.7.1.2 Auditor attributes

There is a large volume of published studies describing the importance of the auditor attributes as determinants of audit fees (Hay et al., 2006; Kalelkar & Khan, 2016; Yao et al., 2015). These attributes are expected to be positively associated with audit fees (Billings et al., 2014; Hay, 2013). Auditor attributes refer to the size of the audit firm and its industry expertise. When an auditor is expected to provide better audit quality, audit fees are higher.

Big 4 audit firms have the incentive, competency and resources to deliver better audit quality due to their ability to attract higher quality inputs (DeAngelo, 1981a; DeFond & Zhang, 2014). Moreover, Big 4 audit firms are strongly associated with better financial reporting quality demonstrated in more conservative reporting and less earnings management (DeFranco, Gavious, Jin, & Richardson, 2011; G. Krishnan, 2003). It can be inferred that Big 4 auditors deliver better audit quality, and because of this they charge higher audit fees. Auditor size ($Big4_{i,t}$) is measured as a dummy variable that takes the value of one (1) if the auditor is a Big 4 firm, and zero (0) otherwise.

Auditor industry expertise is another auditor attribute controlled for in this study. Auditors with industry expertise can deliver better audit quality due to their in-depth industry knowledge and their ability to meet client needs in ways that other audit firms cannot easily replicate (Mayhew & Wilkins, 2003; Porter & Advantage, 1985). Specialised knowledge is a practical quality that can be acquired. Psychology research suggests that frequency knowledge is acquired by direct practice (Hasher & Zacks, 1979; Zacks, Hasher, & Sanft, 1982). In the auditing context, knowledge about error

frequency is essential domain-specific knowledge (Ashton, 1991). Libby and Frederick (1990) indicate that perceptions about the cause of financial statement errors are more accurate for experienced auditors than for inexperienced auditors.

Extant research reports that auditor industry specialisation enhances the quality of some aspects of financial statements by imposing the auditor's industry expertise on the process of financial reporting (Romanus, Maher, & Fleming, 2008). This study adopts the recommendation in the literature of using an audit fee–based measure as proxy for calculating audit industry specialisation (Audousset-Coulier, Jeny, & Jiang, 2016). In this study, auditor industry specialisation ($Spec_{i,t}$) is measured as a dummy variable that takes the value of one (1) for the top auditor in the industry based on the proportion of audit fees, and zero (0) otherwise (Johnstone, Chan, & Shuqing, 2014).

3.7.1.3 Engagement attributes

Prior literature has shown that engagement attributes are likely to affect audit fees (Hay et al., 2006; Y. Kim et al., 2015; X. Sun et al., 2020). This study includes two proxies for engagement attributes that have been shown to be associated with audit fees. The first engagement attribute is auditor change. Companies that switch to a new auditor might receive a lower audit fee quote (Simon & Francis, 1988). Auditor change ($Newaud_{i,t}$) is a dummy variable that takes the value of one (1) if it is the first year for the auditor with the client, and zero (0) otherwise (Duellman et al., 2015). The second engagement attribute is auditor opinion. Companies receiving a modified opinion have a high level of risk, causing an increase in audit fees. Auditor opinion ($Opinion_{i,t}$) is a dummy variable that takes the value of one (1) for a modified opinion, and zero (0) otherwise (Stewart, Kent, & Routledge, 2016).

3.7.1.4 Auditor–client relationship attributes

Auditor tenure and nonaudit services fees are used to control for auditor–client relationship attributes. Prior research suggests that auditor tenure should be considered in audit fees models (Hay et al., 2006). Auditors with longer tenure could charge higher audit fees to recover losses in earlier years, or they may charge lower audit fees due to efficiency in performing audits for clients about whom they develop great knowledge during their tenure (Bicudo de Castro et al., 2019). In this study, audit firm tenure ($Audtenure_{i,t}$) is measured as the number of years the audit firm has been with the client (Ting-Chiao, Hsihui, & Jeng-Ren, 2016).

Prior research demonstrates two contradictory arguments about nonaudit services (Hay et al., 2006; Redmayne et al., 2010). On the one hand, the provision of nonaudit services may lead to lower audit fees because of cross-subsidisation or synergies between audit and nonaudit services (Hay et al., 2006). Furthermore, the auditor's additional knowledge about the client's business may help the auditor perform the audit more efficiently, thereby spending less time than normal, resulting in lower fees. On the other hand, the provision of nonaudit services may result in higher audit fees because the client may be less inclined to change auditors due to the synergies, creating monopoly power that the auditor exploits to charge higher fees (Hay et al., 2006). Another issue is that nonaudit services may compromise auditor independence because auditors might reduce audit fees to gain access to clients for consulting work (Hay, 2013). In this study, nonaudit services ($NAS_{i,t}$) is measured as the natural logarithm of nonaudit fees paid by the firm to its auditor (Gul et al., 2018; Sultana et al., 2019).

3.7.1.5 Governance attributes

Previous studies have found that some board and audit committee characteristics have been related to audit fees (Carcello et al., 2002; Sultana et al., 2019). This study includes audit committee tenure, audit committee meetings, and board tenure as control variables to control for governance effects on audit fees. Audit committee tenure ($ACtenure_{i,t}$) is measured as the average tenure in years of audit committee members (Sultana et al., 2019). Audit committee meetings ($ACmeet_{i,t}$) is measured as the number of audit committee meetings held in a year (Sultana et al., 2019). Board of directors tenure ($BDtenure_{i,t}$) is measured as the average tenure in years of directors on the board (Lai, Srinidhi, Gul, & Tsui, 2017).

3.7.1.6 Industry and year effects

Consistent with prior research (Kalelkar & Khan, 2016; Tee, 2019; Ting-Chiao et al., 2016), industry and year dummy variables are included in the model to control for potential industry-specific or time-period effects. Industry ($Industry_{i,t}$) is measured as a dummy variable that takes the value of one (1) based on the Global Industry Classification Standard (GICS) sectors. This study uses the following nine broad industry classifications: Consumer Discretionary, Consumer Staples, Energy, Health Care, Industrials, Information Technology, Materials, Real Estate, and Communication

Services. [8] Year ($Year_{i,t}$) is measured as a dummy variable that takes the value of one (1) for the specific financial year-end.

3.7.2 The control variables for the going-concern opinion model

Going-concern opinion models in prior research have included a variety of control variables that have been shown to be associated with the likelihood of an auditor issuing a going-concern opinion. In this study, control variables included in the going-concern opinion model have been carefully selected to ensure that each control variable has been well documented in the literature. This process helps to alleviate the concern of omitted variables. This study divides control variables included in the going-concern opinion model into three key categories: client attributes, auditor attributes, and auditor–client relationship attributes. Industry and year fixed effects are also controlled for in this model.

3.7.2.1 Client attributes

The first client attribute this study controls for is client size. Big clients tend to have greater negotiating power in the event of financial difficulty (Gunny & Zhang, 2013). Client size has been found to influence the likelihood of a company receiving a going-concern opinion (Carson et al., 2013). In fact, the company size is expected to be negatively related to the likelihood of receiving a going concern opinion (Basioudis et al., 2008; Mutchler et al., 1997). In this study, client size ($size_{i,t}$) is measured as the natural logarithm of total assets at the fiscal year-end (Carey & Simnett, 2006).

In addition to controlling for client size, company age is another client attribute this study controls for. Older companies have usually demonstrated their ability to survive in different financial circumstances from the year they existed; therefore, they are less likely to receive a going-concern opinion (Knechel & Vanstraelen, 2007). On the other hand, a going-concern opinion is more likely to be issued by the auditor to younger companies when they encounter financial distress (Carey & Simnett, 2006). To capture this potential effect, the model includes company age ($Age_{i,t}$) measured as the total number of years since the company incorporated (Hardies et al., 2016).

[8] Consistent with prior research (Beck & Mauldin, 2014; Carcello et al., 2002; Sultana et al., 2019), financial institutions, banks, trusts and investments, insurance, and utility firms are excluded from the sample due to their different regulatory settings and nature.

This study also controls for profitability. Return on assets and prior-year loss are both used to proxy for profitability. Companies with lower returns and loss-making companies are both more likely to receive a going-concern opinion (Koh & Killough, 1990). The issuance of a going-concern opinion is expected to have an inverse relationship with return on assets ratio but a positive relationship with prior-year loss. Return on assets ($ROA_{i,t}$) is measured as earnings before interest and tax divided by total assets (Hossain, 2013). Previous-year loss ($LLoss_{i,t}$) is a dummy variable that takes the value of one (1) if the firm reports negative income in the prior year, and zero (0) otherwise (Defond et al., 2002).

Consistent with prior studies (Carson et al., 2017; Defond et al., 2002; Hardies, Vandenhaute, & Breesch, 2018), this study controls for debt risk by employing three proxies: leverage ratio, change in leverage, and the issuance of new debt. The leverage ratio captures the risk associated with a company's debt, and the change in leverage shows movements in debt level (Carey & Simnett, 2006), which demonstrates how companies deal with this risk. Moreover, clients' plans to issue new debt reduce the probability of receiving a going-concern opinion (C. Li, 2009; Mutchler et al., 1997). Behn et al. (2001) explain that clients' new borrowing could be viewed as evidence of the client's ability to meet loan requirements. In this study, leverage ($Lev_{i,t}$) is measured as total liabilities divided by total assets (Carey & Simnett, 2006). Change in leverage ($Clev_{i,t}$) is measured as changes in leverage during the year (Hallman, Imdieke, Kim, & Pereira, 2020). New borrowing ($Nborrow_{i,t}$) is measured as a dummy variable that takes the value of one (1) if the client has new borrowings in the current year, defined as an increase in long-term debt from the previous year, and zero (0) otherwise (Carson et al., 2017).

Investments and cash flow are included to control for liquidity risk. Liquidity crisis may end firms in bankruptcy (Carey & Simnett, 2006). Firms with poor investments will have very few investments to rely on for cash in the event of financial difficulty (Defond et al., 2002), raising the likelihood of receiving a going-concern opinion. Moreover, firms with poor operating cash flow are associated with bankruptcy (Blay & Geiger, 2013). The investment variable ($Invest_{i,t}$) is measured as current assets minus debtors and inventory divided by total assets (Carey & Simnett, 2006). The operating cash flow variable ($Opcf_{i,t}$) is measured as operating cash flow divided by total assets (Berglund, Eshleman, & Guo, 2018).

Financial distress is one of the primary reasons for auditors to issue a going-concern opinion. Consistent with prior studies (Blay, Moon, & Paterson, 2016; Fargher & Jiang, 2008), this study controls for this effect by including a score predicting bankruptcy probability as a variable. This measure of financial distress was developed by Altman (1968). The probability of bankruptcy ($Zscore_{i,t}$) is measured based on Altman (1968). [9]

As in the audit fees model, the going-concern opinion model also controls for the inherent risk of a company, manifested in some accounts having a high level of errors or potential to be misstated. Inherent risk ($Invrec_{i,t}$) is measured as the ratio of the sum of inventory and receivables to total assets (Hardies et al., 2016; Hardies et al., 2018).

3.7.2.2 Auditor attributes

Audit firm size and auditor opinion are two variables that are associated with the issuance of a going-concern opinion. Auditor size is associated with audit quality (DeAngelo, 1981b). Big audit firms are more likely to issue a going-concern opinion (Mutchler et al., 1997) because if they do not issue a going-concern opinion when one is warranted, they are more likely to suffer reputation loss (C. Li, 2009). Previous literature has suggested that a qualified audit opinion in the prior year is also a predictor of the current year's opinion (Monroe & Teh, 1993). A prior-year qualified opinion is not easily resolved, and its implication could continue to the following year (Mutchler, 1984).

In terms of measurements, auditor size ($Big4_{i,t}$) is a dummy variable that takes the value of one (1) if the auditor is a Big 4 audit firm, and zero (0) otherwise. Auditor prior-year opinion ($Pqual_{i,t}$) is measured as a dummy variable that takes the value of one (1) if the auditor issued a modified opinion in the previous year, and zero (0) otherwise.

3.7.2.3 Auditor–client relationship attributes

This study considers three control variables associated with the auditor–client relationship: audit report lag, auditor tenure, and fee ratio. Prior research has

[9] Zscore = 1.2 (Working Capital/Total Assets) + 1.4 (Retained Earnings/Total Assets) + 3.3 (Earnings Before Interest and Taxes/Total Assets) + 0.6 (Market Value of Equity/Total Liabilities) + 0.999 (Sales/Total Assets). The higher the Zscore, the less likely a company is to go bankrupt (Altman, 1968).

documented that companies that receive a going-concern opinion are associated with longer audit reporting lags (Behn et al., 2001; Geiger et al., 2005) because auditing financially distressed companies is likely to be time-consuming, and auditors are inclined to delay the issuance of audit reports with going-concern opinions. Issuing a going-concern opinion is also subject to two auditor–client relationship characteristics: the length of the auditor–client relationship and the economic bond demonstrated in the proportion of nonaudit fees to total fees paid by the client (Carey & Simnett, 2006; Hossain, 2013; Ratzinger-Sakel, 2013). The auditor–client relationship length is likely to affect auditor independence. Similarly, the ratio of nonaudit fees to total fees paid by the client is included in the model to control for auditor dependence on fees from nonaudit services.

In terms of measurements, audit report lag ($Auditlag_{i,t}$) is measured as the number of days from financial year-end to audit opinion signature date (G. Krishnan & Changjiang, 2015). Auditor tenure ($Audtenure_{i,t}$) is measured as the number of years the audit firm has been with the client (Berglund et al., 2018). The fee ratio ($Feeratio_{i,t}$) is measured as the ratio of nonaudit fees to total fees paid to the incumbent auditor (Carey & Simnett, 2006).

3.7.2.4 Industry and year effects

Consistent with prior studies (Berglund et al., 2018; Chi, Douthett, & Lisic, 2012), and as in the audit fees model, industry and year dummy variables are included in the going-concern opinion model to control for potential industry-specific or time-period effects. Industry ($Industry_{i,t}$) is measured as a dummy variable that takes the value of one (1) according to the nine GICS sectors listed in Section 3.7.1.6. Year ($Year_{i,t}$) is measured as a dummy variable that takes the value of one (1) for the specific financial year-end.

3.8 Statistical Tests and Models

In this study's audit fees model, ordinary least squares (OLS) regression with two-way cluster-robust standard errors (cluster by firm and year) is applied to examine the relationship between CEO power, monitoring intensity, and audit fees. Similarly, in the going-concern opinion model, logistic regression with two-way cluster-robust standard errors (cluster by firm and year) is applied to examine the relationship

between CEO power, monitoring intensity, and going-concern opinion. Gow, Ormazabal, and Taylor (2010) point out that using two-way clustering is necessary to produce valid interpretations. Prior research has highlighted a key advantage of two-way clustering in that it adjusts for both cross-sectional and time-series dependence in panel data (Chi et al., 2012; Gow et al., 2010; Lisic et al., 2016).

3.8.1 Audit fees model

Table 3.2 presents the regression equations used in the audit fees model. Equations [1], [2] and [3] are to test H1a, H2a, and H3a, respectively. Regression equation [4] aggregates both interaction terms reported in [2] and [3] in one single regression against audit fees.

Table 3.2

Regression Equations Used in the Audit Fees Model

Hypothesis	Equation	No.
H1a	$LnAF_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[1]
H2a	$LnAF_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[2]
H3a	$LnAF_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[3]
Aggregate [2] and [3]	$LnAF_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[4]

Where:

$LnAF_{i,t}$	=	Natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*.
$CEOpower_{i,t}$	=	Power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$.
$IntMonitor_{i,t}$	=	Internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$.
$ExtMonitor_{i,t}$	=	External monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$.
$Size_{i,t}$	=	Natural logarithm of total assets for firm *i* in year *t*.
$ROA_{i,t}$	=	Earnings before interest and tax divided by total assets for firm *i* in year *t*.
$Loss_{i,t}$	=	Dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise.
$MTB_{i,t}$	=	Market value of equity divided by book value of equity for firm *i* in year *t*.
$Lev_{i,t}$	=	Total liabilities divided by total assets for firm *i* in year *t*.
$Quick_{i,t}$	=	Current assets less inventory divided by current liabilities for firm *i* in year *t*.
$Sub_{i,t}$	=	Number of subsidiaries for firm *i* in year *t*.
$Seg_{i,t}$	=	Number of business segments for firm *i* in year *t*.
$Invrec_{i,t}$	=	Ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*.
$Big4_{i,t}$	=	Dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big 4 auditor, and 0 otherwise.
$Spec_{i,t}$	=	Dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise.
$Newaud_{i,t}$	=	Dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise.
$Opinion_{i,t}$	=	Dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*, and 0 otherwise.
$Audtenure_{i,t}$	=	Number of years an audit firm has been with firm *i* as at year *t*.
$NAS_{i,t}$	=	Natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*.
$ACtenure_{i,t}$	=	Average tenure in years of audit committee members for firm *i* as at year *t*.
$ACmeet_{i,t}$	=	Number of audit committee meetings held for firm *i* in year *t*.
$BDtenure_{i,t}$	=	Average tenure in years of directors on the board for firm *i* as at year *t*.
$Industry_{i,t}$	=	Industry dummy variables to control for industry effects.
$Year_{i,t}$	=	Year dummy variables used for the specific financial year-end.
$\varepsilon_{i,t}$	=	Error term.

3.8.2 Going-concern opinion model

Table 3.3 presents the regression equations used in the going-concern opinion model. Equations [5], [6], and [7] are to test H1b, H2b, and H3b, respectively. Regression equation [8] aggregates both interaction terms reported in [6] and [7] in one single regression against the going-concern opinion.

Table 3.3

Regression Equations Used in the Going-Concern Opinion Model

Hypothesis	Equation	No.
H1b	$GCO_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[5]
H2b	$GCO_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[6]
H3b	$GCO_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[7]
Aggregate [6] and [7]	$GCO_{i,t} = \beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	[8]

Where:

$GCO_{i,t}$	=	Dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t*, and 0 otherwise.
$CEOpower_{i,t}$	=	Power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$.
$IntMonitor_{i,t}$	=	Internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$.
$ExtMonitor_{i,t}$	=	External monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$.
$Size_{i,t}$	=	Natural logarithm of total assets for firm *i* in year *t*.
$Age_{i,t}$	=	Total number of years since firm *i* incorporated.
$ROA_{i,t}$	=	Earnings before interest and tax divided by total assets for firm *i* in year *t*.

$LLoss_{i,t}$	=	Dummy variable that takes the value of 1 if firm *i* reports negative income in year *t−1,* and 0 otherwise.
$Lev_{i,t}$	=	Total liabilities divided by total assets for firm *i* in year *t*.
$Clev_{i,t}$	=	Change in leverage for firm *i* from year *t−1*.
$Nborrow_{i,t}$	=	Dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise.
$Invest_{i,t}$	=	Current assets minus debtors and inventory divided by total assets for firm *i* in year *t*.
$Opcf_{i,t}$	=	Operating cash flow divided by total assets for firm *i* in year *t*.
$Zscore_{i,t}$	=	Financial distress score based on Altman (1968).
$Invrec_{i,t}$	=	Ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*.
$Big4_{i,t}$	=	Dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise.
$Pqual_{i,t}$	=	Dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year *t−1*, and 0 otherwise.
$Auditlag_{i,t}$	=	Number of days from financial year-end to audit opinion signature date for firm *i* in year *t*.
$Audtenure_{i,t}$	=	Number of years an audit firm has been with firm *i* as at year *t*.
$Feeratio_{i,t}$	=	Ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*.
$Industry_{i,t}$	=	Industry dummy variables to control for industry effects.
$Year_{i,t}$	=	Year dummy variables used for the specific financial year-end.
$\varepsilon_{i,t}$	=	Error term.

3.9 Chapter Summary

Chapter 3 has detailed the research method used to test the hypotheses of this study. The chapter started by providing details and justification of the sample selection, time period, and source documentation. Subsequently, measures of the dependent, independent and control variables were discussed in depth. Then, the main empirical tests of this study were identified for both the audit fees and going-concern models. Chapter 4 will provide descriptive statistics and univariate analysis of the study samples.

Chapter 4:
Descriptive Statistics and Univariate Analysis

4.1 Chapter Overview

Chapter 3 detailed the sample collection process, source documentation, sample time period, and data preparation process. Chapter 3 also outlined the measurements for the dependent, independent, and control variables. The statistical tests and models adopted for the study were also explained.

This chapter starts by discussing the construction of the index for each independent variable in turn: $CEOpower_{i,t}$ (Section 4.2), $IntMonitor_{i,t}$ (Section 4.3), and $ExtMonitor_{i,t}$ (Section 4.4). The subsequent two sections provide the descriptive statistics and correlation analysis for all variables in the audit fees model and the going-concern opinion model. Finally, a summary is provided at the end of the chapter.

4.2 Construction of the CEO Power Index ($CEOpower_{i,t}$)

Table 4.1 presents the results of the PCA for the CEO power index based on the following CEO power attributes: CEO tenure ($CEOtenure_{i,t}$), CEO duality ($CEOdual_{i,t}$), CEO ownership ($CEOown_{i,t}$), and CEO compensation ($CEOcomp_{i,t}$). Panel A of Table 4.1 gives the summary descriptive statistics for the CEO power attributes. The average (median) length of CEO tenure ($CEOtenure_{i,t}$) among the study sample of the Australian firms is 6.99 (5) years, which is lower than that reported in US research. For instance, Bugeja, Matolcsy, and Spiropoulos (2017) report average CEO tenure of nearly 8 years. Panel A of Table 4.1 further shows that only in 11.9% of the study sample did CEOs hold the position of board chair ($CEOdual_{i,t}$), indicating that most Australian firms have an independent chairperson on the board.

Table 4.1

Formulation of CEO Power Index ($CEOpower_{i,t}$) *Using Principal Component Analysis*

Panel A: Descriptive statistics for CEO power variables					
Variable	Mean	SD	P25	Median	P75
$CEOtenure_{i,t}$	6.990	6.690	2.000	5.000	10.000
$CEOdual_{i,t}$	0.119	0.324	0.000	0.000	0.000
$CEOown_{i,t}$	0.066	0.133	0.002	0.014	0.055
$CEOcomp_{i,t}$	0.478	0.209	0.347	0.490	0.636

Panel B: Correlation coefficients among CEO power variables				
Variable	$CEOtenure_{i,t}$	$CEOdual_{i,t}$	$CEOown_{i,t}$	$CEOcomp_{i,t}$
$CEOtenure_{i,t}$	1.00			
$CEOdual_{i,t}$	0.13***	1.00		
$CEOown_{i,t}$	0.24***	0.27***	1.00	
$CEOcomp_{i,t}$	0.17***	0.06***	0.04***	1.00

Panel C: Principal component analysis		
Principal component	Component	Component loading
$CEOpower_{i,t}$	*CEOtenure*	0.559
	CEOdual	0.505
	CEOown	0.566
	CEOcomp	0.336
Eigenvalue	1.38	
Proportion of variance explained	34.4%	

Panel D: Principal component descriptive statistics					
Principal component	Mean	SD	P25	Median	P75
$CEOpower_{i,t}$	0	1	-0.837	-0.36	0.427

Note. CEO = chief executive officer; P25 = 25th percentile; P75 = 75th percentile; $CEOtenure_{i,t}$ = number of years the CEO has held the position of CEO in firm *i* as at year *t*; $CEOdual_{i,t}$ = dummy variable that takes the value of 1 if the CEO serves as the board chair, and 0 otherwise; $CEOown_{i,t}$ = percentage of outstanding shares of firm *i* owned by the CEO in year *t*; $CEOcomp_{i,t}$ = total annual compensation the CEO receives divided by the total annual compensation of all directors on the board of firm *i* in year *t*.
*$p < .10$. **$p < .05$. ***$p < .01$.

Panel A also shows that the mean (median) of CEO ownership ($CEOown_{i,t}$) in their firms is 0.066 (0.014) with a standard deviation of 0.133. The proportion of CEO ownership ranges from 0.002 at the 25th percentile to 0.055 at the 75th percentile. Moreover, CEOs in the Australian listed firms receive, on average, 47.8% of the total board compensation ($CEOcomp_{i,t}$), which is higher than that reported in UK research. For example, Veprauskaitė and Adams (2013) found that CEOs in UK listed firms on average received about 35% of the total board remuneration.

Panel B of Table 4.1 shows the correlation matrix of CEO power variables used to construct the index ($CEOpower_{i,t}$). The results indicate that the positive correlation coefficients among the CEO power variables demonstrate various aspects of power (Veprauskaitė & Adams, 2013).

Panel C of Table 4.1 reveals the results from the PCA, which shows an eigenvalue of 1.38. Prior research asserts that an eigenvalue greater than one indicates that the principal component has more explanatory power than each original variable by itself (Florackis & Sainani, 2018). This principal component captures 34.4% of the total variance in the data. The component loadings are also shown in Panel C. As expected, all four variables used positively contribute to the CEO power index. The positive signs of component loadings indicate strong decision-making power by CEOs. Panel D of Table 4.1 shows the relevant descriptive statistics for the CEO power index ($CEOpower_{i,t}$).

4.3 Construction of the Internal Monitoring Index ($IntMonitor_{i,t}$)

Table 4.2 presents the details of the PCA for the internal monitoring index ($IntMonitor_{i,t}$) based on the following attributes: audit committee financial expertise ($ACfin_{i,t}$), audit committee independence ($ACind_{i,t}$), and board independence ($BDind_{i,t}$). Panel A of Table 4.2 shows the descriptive statistics for the internal monitoring attributes. Panel A also shows that just under 65% of the Australian firms in the sample have at least one director on the audit committee with the necessary financial expertise ($ACfin_{i,t}$). Panel A further shows that 67.3% of the sampled firms have audit committees consisting of a majority of independent directors ($ACind_{i,t}$). Sultana et al. (2019) reported an average of 61% of Australian firms in their sample had audit committees comprising a majority of independent directors; however, their sample period ended in 2012. Additionally, Panel A shows that the average percentage of Australian firms with an independent board ($BDind_{i,t}$) is 48.4% in this study's sample.

In Panel B of Table 4.2, the correlation coefficients among internal monitoring variables are presented. Panel C of Table 4.2 presents the results from the PCA, which shows an eigenvalue greater than one. An eigenvalue greater than one indicates that the principal component has more explanatory power than each original variable by itself (Florackis & Sainani, 2018). The component loadings are also shown in Panel C. As expected, all three variables used positively contribute to the internal monitoring

index ($IntMonitor_{i,t}$). This principal component explains 44.3% of the total variance in data. Finally, Panel D shows the relevant descriptive statistics for the internal monitoring index ($IntMonitor_{i,t}$).

Table 4.2

Formulation of Internal Monitoring Index ($IntMonitor_{i,t}$) *Using Principal Component Analysis*

Panel A: Descriptive statistics for internal monitoring variables					
	Mean	SD	P25	Median	P75
$ACfin_{i,t}$	0.646	0.478	0	1	1
$ACind_{i,t}$	0.673	0.469	0	1	1
$BDind_{i,t}$	0.484	0.499	0	0	1

Panel B: Correlation coefficients among internal monitoring variables			
	$ACfin_{i,t}$	$ACind_{i,t}$	$BDind_{i,t}$
$ACfin_{i,t}$	1.00		
$ACind_{i,t}$	0.08^{***}	1.00	
$BDind_{i,t}$	-0.01	0.25^{***}	1.00

Panel C: Principal component analysis		
Principal component	Component	Component loading
$IntMonitor_{i,t}$	*ACfin*	0.113
	ACind	0.698
	BDind	0.707
Eigenvalue	1.33	
Proportion of variance explained	44.3%	

Panel D: Principal component descriptive statistics					
	Mean	SD	P25	Median	P75
$IntMonitor_{i,t}$	0	1	0.555	0.555	0.555

Note. P25 = 25th percentile; P75 = 75th percentile; $IntMonitor_{i,t}$ = internal monitoring; $ACfin_{i,t}$ = dummy variable that takes the value of 1 if at least one member of the audit committee of firm *i* in year *t* is an accounting or non-accounting financial expert, and 0 otherwise; $ACind_{i,t}$ = dummy variable that takes the value of 1 if the majority of audit committee members of firm *i* in year *t* are independent, and 0 otherwise; $BDind_{i,t}$ = dummy variable that takes the value of 1 if the majority of board members of firm *i* in year *t* are independent, and 0 otherwise.
*$p < .10$. **$p < .05$. ***$p < .01$.

4.4 Construction of the External Monitoring Index ($ExtMonitor_{i,t}$)

Table 4.3 presents the details of the PCA for the external monitoring index ($ExtMonitor_{i,t}$) based on two attributes: analyst following ($Follow_{i,t}$) and the proportion of institutional ownership ($Institown_{i,t}$). Panel A of Table 4.3 shows the descriptive statistics for these attributes. The mean (median) number of analysts following ($Follow_{i,t}$) is 4.57 (2.7), implying that, on average, 4.57 analysts follow a firm in the sample. This average is lower than the number reported by two studies in the US, where the analysts following averages 8.8 (Ali & Zhang, 2015) and 10.6 (Jiraporn et al., 2014). Moreover, the mean (median) institutional ownership ($Institown_{i,t}$) in the Australian listed firms in this study's sample is about 47% (52.5%). This average is lower than the average ownership of 65% reported in the US by Duellman et al., (2013). Panel A further shows that institutional ownership in the sample ranges from 21.29% at the 25th percentile to 71.51% at the 75th percentile.

Table 4.3

Formulation of External Monitoring Index ($ExtMonitor_{i,t}$) *Using Principal Component Analysis*

Panel A: Descriptive statistics for external monitoring variables					
	Mean	SD	P25	Median	P75
$Follow_{i,t}$	4.565	4.228	1.1	2.70	6.80
$Institown_{i,t}$	47.277	28.612	21.29	52.54	71.51
Panel B: Correlation coefficients among external monitoring variables					
		$Follow_{i,t}$		$Institown_{i,t}$	
$Follow_{i,t}$		1.00			
$Institown_{i,t}$		0.23***		1.00	
Panel C: Principal component analysis					
Principal component		Component		Component loading	
$ExtMonitor_{i,t}$		*Follow*		0.707	
		Institown		0.707	
Eigenvalue		1.230			
Proportion of variance explained		44.3%			
Panel D: Principal component descriptive statistics					
	Mean	SD	P25	Median	P75
$ExtMonitor_{i,t}$	0	1	-0.921	0.206	0.808

Note. P25 = 25th percentile; P75 = 75th percentile; $ExtMonitor_{i,t}$ = external monitoring; $Follow_{i,t}$ = 12-month average of the number of analysts following firm *i* during year *t*; $Institown_{i,t}$ = percentage of outstanding shares of firm *i* in year *t* held by institutional investors.
*$p < .10$. **$p < .05$. ***$p < .01$.

In Panel B of Table 4.3, the correlation coefficients among the external monitoring variables are presented, showing that both variables measure different aspects of external monitoring. Panel C of Table 4.3 gives the results from the PCA, which shows an eigenvalue greater than one. This principal component explains 44.3% of the total variance in data. The signs of the component loadings indicate that both variables are positively contributing to the index ($ExtMonitor_{i,t}$). Finally, Panel D presents relevant descriptive statistics for the external monitoring index ($ExtMonitor_{i,t}$).

4.5 Descriptive Statistics and Correlation Analysis: Audit Fees Model

This section first presents descriptive statistics for the first measure of audit quality, audit fees, and all control variables used in the audit fees regression model. Then, the Pearson correlations among variables included in the audit fees model are provided.

4.5.1 Descriptive statistics: Audit fees model

Table 4.4 summarises the descriptive statistics for all variables included in the audit fees model. Panel A of Table 4.4 shows that the mean audit fees in the natural logarithm format ($LnAF_{i,t}$) paid by the sampled Australian companies is 12.16, corresponding to A$190,994.50. The median value of audit fees in this study's sample is 12, corresponding to A$162,755. This average of audit fees paid to the auditor is similar to the result found by Bicudo de Castro et al. (2019) in the Australian context but lower than that reported in the US research, where, for example, J. H. Zhang (2018) and Lai et al. (2017) reported average audit fees in the natural logarithm format in their studies around 13 and 14, respectively

Panel B of Table 4.4 displays the descriptive statistics for the variables that proxy for client attributes. The first variable of this panel is the company size ($Size_{i,t}$), which is measured by the natural logarithm of total assets. In line with prior Australian studies (Bicudo de Castro et al., 2019; Sultana et al., 2019), the mean (median) firm size in the natural logarithm format is 18.7 (18.62) with a standard deviation of 2.08. This mean company size is larger than that reported in Japan, for instance, where Hossain, Yazawa, and Monroe (2017) reported the mean company size as just below 11.

Table 4.4

Descriptive Statistics: Audit Fees Model

	Mean	SD	P25	Median	P75
Panel A: Dependent variable					
$LnAF_{i,t}$	12.16	1.38	11.23	12.00	12.88
Panel B: Client attributes					
$Size_{i,t}$	18.7	2.08	17.32	18.62	20.04
$ROA_{i,t}$	-0.093	0.477	-0.093	0.038	0.088
$Loss_{i,t}$	0.411	0.492	0	0	1
$MTB_{i,t}$	2.631	3.601	0.863	1.62	3.06
$Lev_{i,t}$	0.408	0.323	0.19	0.393	0.551
$Quick_{i,t}$	3.781	6.970	0.81	1.3	3.042
$Sub_{i,t}$	22.61	30.11	5	11	24
$Seg_{i,t}$	0.163	1.03	0	0	0
$Invrec_{i,t}$	0.208	0.193	0.045	0.145	0.329
Panel C: Auditor attributes					
$Big4_{i,t}$	0.637	0.481	0	1	1
$Spec_{i,t}$	0.181	0.385	0	0	0
Panel D: Engagement attributes					
$Newaud_{i,t}$	0.105	0.307	0	0	0
$Opinion_{i,t}$	0.131	0.338	0	0	0
Panel E: Auditor–client relationship attributes					
$Audtenure_{i,t}$	5.69	3.55	3	5	8
$NAS_{i,t}$	9.02	4.73	8.67	10.62	12.09
Panel F: Governance attributes					
$ACtenure_{i,t}$	4.05	3.91	1	3	6
$ACmeet_{i,t}$	3.13	1.62	2	3	4
$BDtenure_{i,t}$	6.50	3.74	4	6	8

Note. P25 = 25th percentile; P75 = 75th percentile; $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* as at year *t*.

With regard to profitability, the mean (median) value of the return on assets ($ROA_{i,t}$) is -0.093 (0.038). The proportion of Australian firms incurring a loss ($Loss_{i,t}$) is 41%, which is higher than that reported in the US, where the percentage reported by Y. Kim et al. (2015) is 20%. This comparison shows that Australian firms are far less profitable than their US counterparts. With regard to growth, the market-to-book ratio ($MTB_{i,t}$) has a mean (median) value of 2.63 (1.62) and a standard deviation of 3.60. This mean MTB ratio is lower than that reported in Duellman et al. (2015), where the mean (median) MTB ratio in US firms is 2.91 (2.26).

Panel B further shows that the leverage ($Lev_{i,t}$) and quick ($Quick_{i,t}$) ratios measuring liquidity risk had mean (median) values of 0.408 (0.393) and 3.781 (1.3), respectively. The leverage ratio ranges from 0.19 at the 25th percentile to 0.55 at the 75th percentile, while the quick ratio ranges from 0.81 at the 25th percentile to 3.04 at the 75th percentile. In terms of firm complexity, the average (median) number of subsidiaries ($Sub_{i,t}$) in the sample is 22.61 (11) with a standard deviation of 30.11. The average number of business segments ($Seg_{i,t}$) is 0.163. With regard to inherent risk, the ratio of inventory plus receivables to the total assets ($Invrec_{i,t}$) in the sample firms has a mean (median) value of 0.208 (0.145) and ranges from 0.045 at the 25th percentile to 0.329 at the 75th percentile. This mean is lower than that found in US studies, where, for example, Kannan et al. (2014) reported the average (median) value as 0.24 (0.22).

Panel C of Table 4.4 provides descriptive statistics for two auditor characteristics: auditor size ($Big4_{i,t}$) and auditor industry specialisation ($Spec_{i,t}$). On average, 63.7% of the sampled companies are audited by a Big 4 auditing firm, which is lower than that reported in Bills et al. (2017) and J. H. Zhang (2018), where the average number of companies audited by a Big 4 auditing firm in the US is above 71%. Panel C also shows that 18% of the sampled companies are audited by an audit firm with industry expertise.

Panel D of Table 4.4 displays the descriptive statistics for two variables related to engagement attributes. The proportion of Australian companies that switched to a new audit firm during the period of the study ($Newaud_{i,t}$) is 10.5%, while the percentage of companies in the sample that received a modified audit opinion ($Opinion_{i,t}$) is 13.1%.

Panel E of Table 4.4 shows the descriptive statistics for auditor–client relationship proxies. The average (median) length of audit firm tenure ($Audtenure_{i,t}$) among this sample of Australian companies is 5.69 (5) years. The audit firm tenure ranges from 3 years at the 25th percentile to 8 years at the 75th percentile. Panel E also shows that the average (median) of nonaudit service fees ($NAS_{i,t}$) in the natural logarithm format is 9.02 (10.62) with a standard deviation of 4.73.

Panel F of Table 4.4 presents the descriptive statistics for the governance attributes included in the audit fees regression model. The average (median) tenure of audit committee members ($ACtenure_{i,t}$) in the sample firms is 4 (3) years with a standard deviation of 3.91 years. Moreover, audit committee meetings ($ACmeet_{i,t}$) were held, on average, 3 times annually. These results are similar to those reported in Sultana et al. (2019). The number of audit committee meetings ranges from 2 meetings annually at the 25th percentile to 4 meetings at the 75th percentile. Finally, Panel F shows that the average (median) tenure of directors on the board ($BDtenure_{i,t}$) in the sample firms is 6.5 (6) years with a standard deviation of 3.74.

4.5.2 Correlation analysis: Audit fees model

Table 4.5 presents the Pearson correlation among variables included in the audit fees regression model. In the Pearson correlation matrix, audit fees are significantly related to virtually all of the other variables. For instance, audit fees ($LnAF_{i,t}$) are highly correlated with company size ($Size_{i,t}$) with a correlation coefficient of 0.77, which is expected as larger companies are likely to pay higher audit fees. Therefore, it is vital to control for company size when examining the relationship between CEO power and audit fees. Table 4.5 also shows that audit fees ($LnAF_{i,t}$) are positively and significantly correlated with $ROA_{i,t}$ (coefficient of 0.18), $Lev_{i,t}$ (coefficient of 0.36), $Sub_{i,t}$ (coefficient of 0.62) and $Seg_{i,t}$ (coefficient of 0.11). Additionally, audit fees ($LnAF_{i,t}$) are positively and significantly correlated with $Big4_{i,t}$ (coefficient of 0.25), $Spec_{i,t}$ (coefficient of 0.18), and $ACmeet_{i,t}$ (coefficient of 0.34), but negatively with $Newaud_{i,t}$ (coefficient of -0.07). Notably, these bivariate correlations should be interpreted with caution as not all variables are simultaneously controlled for at this stage. Finally, since none of the correlations is more than the 0.80 threshold, multicollinearity is not of concern in the regression analyses (Gujarati, 2003; Hair, Black, Babin, Anderson, & Tatham, 2006).

Table 4.5

Pearson Correlation Matrix: Audit Fees Model

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1 $LnAF_{i,t}$	1.00																					
2 $CEOpower_{i,t}$	0.06**	1.00																				
3 $IntMonitor_{i,t}$	0.15***	0.03	1.00																			
4 $ExtMonitor_{i,t}$	0.17***	-0.05**	0.02	1.00																		
5 $Size_{i,t}$	0.77***	0.08***	0.18***	0.20***	1.00																	
6 $ROA_{i,t}$	0.18***	0.07***	0.06**	0.03	0.32***	1.00																
7 $Loss_{i,t}$	-0.34***	-0.14***	-0.11***	-0.00	-0.38***	-0.50***	1.00															
8 $MTB_{i,t}$	-0.12***	0.05*	-0.07***	-0.08***	-0.20***	-0.05*	0.03	1.00														
9 $Lev_{i,t}$	0.36***	-0.01	0.01	-0.06**	0.29***	-0.03	-0.27***	0.00	1.00													
10 $Quick_{i,t}$	-0.28***	0.00	-0.03	-0.01	-0.23***	-0.14***	0.31***	0.04*	-0.42***	1.00												
11 $Sub_{i,t}$	0.62***	0.11***	0.09***	0.05**	0.60***	0.13***	-0.26***	-0.06**	0.23***	-0.16***	1.00											
12 $Seg_{i,t}$	0.11***	-0.03	0.04	0.03	0.07***	-0.02	0.04*	0.01	0.01	-0.03	0.07***	1.00										
13 $Invrec_{i,t}$	0.19***	0.05*	0.04*	-0.13***	0.06**	0.20***	-0.37***	-0.06**	0.31***	-0.28***	0.11***	-0.04*	1.00									
14 $Big4_{i,t}$	0.25***	0.03	0.10***	0.02	0.22***	0.10***	-0.15***	0.01	0.12***	-0.10***	0.17***	0.01	0.09***	1.00								
15 $Spec_{i,t}$	0.18***	0.02	-0.01	0.02	0.11***	0.03	-0.03	0.02	0.03	-0.04*	0.08***	0.01	-0.02	0.12***	1.00							
16 $Audtenure_{i,t}$	0.20***	0.15***	0.07***	0.23***	0.23***	0.04*	-0.08***	-0.08***	-0.01	-0.01	0.14***	0.02	0.05*	0.23***	0.05**	1.00						
17 $Newaud_{i,t}$	-0.07***	-0.10***	-0.04	0.00	-0.09***	-0.02	0.05*	0.02	-0.01	0.01	-0.05**	-0.00	-0.01	-0.09***	0.00	-0.44***	1.00					
18 $Opinion_{i,t}$	-0.07***	-0.07***	-0.03	-0.01	-0.14***	-0.26***	0.29***	-0.05*	-0.01	0.01	-0.09***	0.05**	-0.10***	-0.06**	-0.02	0.02	-0.01	1.00				
19 $NAS_{i,t}$	0.43***	0.05*	0.06**	0.03	0.38***	0.11***	-0.21***	-0.03	0.21***	-0.17***	0.28***	0.01	0.12***	0.16***	0.09***	0.04	0.01	-0.05*	1.00			
20 $ACtenure_{i,t}$	0.03	0.13***	0.03	-0.27***	0.06**	0.06**	-0.07***	-0.00	0.04	-0.03	0.07***	-0.01	0.11***	0.05*	-0.01	-0.05**	-0.05**	-0.07***	0.01	1.00		
21 $ACmeet_{i,t}$	0.34***	-0.04*	0.11***	0.00	0.34***	0.12***	-0.21***	-0.06***	0.18***	-0.17***	0.25***	0.08***	0.14***	0.13***	0.09***	0.07***	-0.10***	-0.06**	0.20***	-0.02	1.00	
22 $BDtenure_{i,t}$	0.09***	0.34***	0.03	-0.01	0.08***	0.17***	-0.25***	-0.02	0.07***	-0.12***	0.10***	-0.03	0.19***	0.07***	0.05**	0.31***	-0.13***	-0.07***	0.03	0.20***	0.08***	1.00

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year *t*; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* as at year *t*.
*$p < .10$. **$p < .05$. ***$p < .01$.

4.6 Descriptive Statistics and Correlation Analysis: Going-Concern Opinion Model

This section presents descriptive statistics for the second measure of audit quality, the going-concern opinion, and all control variables used in its regression model. Then, Pearson correlations among variables are detailed.

4.6.1 Descriptive statistics: Going-concern opinion model

Table 4.6 summarises the descriptive statistics for the sample of financially distressed companies. Panel A shows that 27% of the financially distressed companies received a going-concern opinion. This average is similar to that reported in other studies using Australian data (Carson et al., 2017; Hossain, Chapple, et al., 2016). Other studies using international data have reported a lower percentage; for example, in Belgium the percentage of financially distressed companies receiving a going-concern opinion was 22% (Hardies et al., 2016).

Panel B of Table 4.6 presents the descriptive statistics for variables that proxy for client attributes. The first of these is company size ($Size_{i,t}$), which is measured by the natural logarithm of total assets. The mean (median) total assets for the financially distressed sample is 17.61 (17.58). The average listing age ($Age_{i,t}$) of the companies in the sample is 14.16 years, ranging from 7 years at the 25th percentile to 20 years at the 75th percentile. Regarding profitability, the mean (median) return on assets ($ROA_{i,t}$) is -0.307 (-0.094), implying that the firms in the sample are not profitable. Moreover, almost 74% of the financially distressed companies has incurred a loss ($LLoss_{i,t}$) in the prior year. The leverage ratio ($Lev_{i,t}$) has a mean (median) of 0.477 (0.366) with a standard deviation of 0.552. The change in leverage ratio ($Clev_{i,t}$) from the prior year is, on average, 0.053 with a standard deviation of 0.416. With regard to long-term debt, 39.7% of the financially distressed companies has an increase in their long-term debt ($Nborrow_{i,t}$) from the previous year. The mean (median) ratio of total investments to total assets ($Invest_{i,t}$) is 0.116 (0.136) with a standard deviation of 0.423. The average (median) of operating cash flow to total assets ($Opcf_{i,t}$) is -0.122 (-0.060) with a standard deviation of 0.195. The mean (median) score of bankruptcy risk ($Zscore_{i,t}$) is 2.84 (0.989), ranging from -0.610 at the 25th percentile to 3.15 at the 75th percentile. The mean (median) inherent risk ($Invrec_{i,t}$) is 0.18 (0.092).

Table 4.6

Descriptive Statistics: Going-Concern Opinion Model

	Mean	SD	P25	Median	P75
Panel A: Dependent variable					
$GCO_{i,t}$	0.27	0.44	0	0	1
Panel B: Client attributes					
$Size_{i,t}$	17.61	1.88	16.41	17.58	18.89
$Age_{i,t}$	14.16	9.70	7	12	20
$ROA_{i,t}$	-0.307	0.672	-0.304	-0.094	-0.014
$LLoss_{i,t}$	0.738	0.44	0	1	1
$Lev_{i,t}$	0.477	0.552	0.137	0.366	0.617
$Clev_{i,t}$	0.053	0.416	-0.035	0.019	0.111
$Nborrow_{i,t}$	0.397	0.489	0	0	1
$Invest_{i,t}$	0.116	0.423	-0.09	0.136	0.368
$Opcf_{i,t}$	-0.122	0.195	-0.189	-0.060	-0.009
$Zscore_{i,t}$	2.84	13.87	-0.610	0.989	3.15
$Invrec_{i,t}$	0.180	0.208	0.024	0.092	0.287
Panel C: Auditor attributes					
$Big4_{i,t}$	0.554	0.497	0	1	1
$Pqual_{i,t}$	0.243	0.429	0	0	0
Panel D: Auditor–client relationship attributes					
$Auditlag_{i,t}$	80.06	19.69	62	87	91
$Audtenure_{i,t}$	5.202	3.367	3	4	7
$Feeratio_{i,t}$	0.206	0.212	.0	0.149	0.356

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t*, and 0 otherwise; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*.

Panel C of Table 4.6 provides descriptive statistics for two auditor attributes: audit firm size ($Big4_{i,t}$) and the audit opinion in the prior year ($Pqual_{i,t}$). Panel C reveals that 55% of the companies in the sample of financially distressed companies employ a Big4 auditing firm. As audit opinion in the prior year matters, 24% of the companies had received a modified opinion by the auditor in the previous year.

Finally, Panel D of Table 4.6 shows the descriptive statistics for three variables related to the auditor–client relationship. The mean (median) of audit report lag ($Auditlag_{i,t}$), the number of days from the fiscal year-end to the audit report date, is 80.06 (87) calendar days. The average (median) length of audit firm tenure ($Audtenure_{i,t}$) is 5.20 (4) years. With regard to the economic bond effect, the mean (median) of $Feeratio_{i,t}$, the ratio of nonaudit fees to total fees, is 0.206 (0.149) with a standard deviation of 0.212.

4.6.2 Correlation analysis: Going-concern opinion model

Table 4.7 presents the Pearson correlation among variables included in the going-concern opinion regression model. In the Pearson correlation matrix, the going-concern opinion is significantly related to many of the other variables. Going-concern opinion ($GCO_{i,t}$) is significantly and inversely correlated with CEO power ($CEOpower_{i,t}$) and firm size ($Size_{i,t}$), which is expected as larger companies are less likely to receive a going-concern opinion. Moreover, going-concern opinion ($GCO_{i,t}$) is negatively correlated with $ROA_{i,t}$ (coefficient of -0.28), $Invest_{i,t}$ (coefficient of -0.07), $Opcf_{i,t}$ (coefficient of -0.27), $Zscore_{i,t}$ (coefficient of -0.08), and $Invrec_{i,t}$ (coefficient of -0.15). On the other hand, going-concern opinion ($GCO_{i,t}$) is positively correlated with $LLoss_{i,t}$ (coefficient of 0.28), $Clev_{i,t}$ (coefficient of 0.13), $Pqual_{i,t}$ (coefficient of 0.50), and $Auditlag_{i,t}$ (coefficient of 0.22). Notably, these bivariate correlations should be interpreted with caution as not all variables are simultaneously controlled for at this stage. Finally, since none of the correlations is more than the 0.80 threshold, multicollinearity is not of concern in the regression analysis (Gujarati, 2003; Hair et al., 2006).

Table 4.7

Pearson Correlation Matrix: Going-Concern Opinion Model

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 $GCO_{i,t}$	1.00																			
2 $CEOpower_{i,t}$	-0.09***	1.00																		
3 $IntMonitor_{i,t}$	-0.03	-0.00	1.00																	
4 $ExtMonitor_{i,t}$	-0.01	-0.04	0.02	1.00																
5 $Size_{i,t}$	-0.18***	0.09***	0.15***	0.19***	1.00															
6 $Age_{i,t}$	-0.04	0.09***	0.08***	0.04	0.32***	1.00														
7 $ROA_{i,t}$	-0.28***	0.09***	0.03	0.05*	0.33***	0.07**	1.00													
8 $LLoss_{i,t}$	0.28***	-0.16***	-0.09***	-0.01	-0.41***	-0.12***	-0.40***	1.00												
9 $Lev_{i,t}$	0.01	0.01	-0.03	-0.07***	0.26***	0.05*	-0.05*	-0.25***	1.00											
10 $Clev_{i,t}$	0.13***	-0.02	-0.02	-0.06**	-0.05*	-0.00	-0.28***	0.07**	0.38***	1.00										
11 $Nborrow_{i,t}$	-0.01	0.08***	0.02	-0.03	0.08***	-0.02	0.00	-0.03	0.13***	0.17***	1.00									
12 $Invest_{i,t}$	-0.07***	-0.01	-0.04	-0.03	-0.42***	-0.10***	-0.13***	0.16***	-0.47***	-0.14***	-0.21***	1.00								
13 $Opcf_{i,t}$	-0.27***	0.10***	0.04	0.06**	0.33***	0.07**	0.69***	-0.46***	-0.03	-0.25***	-0.03	-0.13***	1.00							
14 $Zscore_{i,t}$	-0.08***	0.01	-0.00	0.01	-0.15***	-0.05*	0.04*	0.15***	-0.40***	-0.18***	-0.05*	0.28***	0.01	1.00						
15 $Invrec_{i,t}$	-0.15***	0.06**	0.03	-0.12***	0.05*	0.09***	0.19***	-0.37***	0.28***	-0.02	-0.04	0.12***	0.13***	-0.12***	1.00					
16 $Big4_{i,t}$	-0.09***	0.04	0.10***	0.04	0.23***	0.14***	0.09***	-0.14***	0.08***	0.00	0.01	-0.05*	0.07***	-0.03	0.06**	1.00				
17$Pqual_{i,t}$	0.50***	-0.10***	-0.02	-0.01	-0.16***	-0.04	-0.20***	0.23***	-0.02	0.01	0.01	-0.02	-0.21***	-0.08***	-0.08***	-0.08***	1.00			
18 $Auditlag_{i,t}$	0.22***	-0.00	-0.12***	-0.08***	-0.23***	-0.06**	-0.20***	0.24***	-0.06**	0.11***	0.01	-0.00	-0.22***	0.03	-0.18***	-0.11***	0.16***	1.00		
19 $Audtenure_{i,t}$	0.01	0.13***	0.05*	0.27***	0.22***	0.29***	0.03	-0.11***	0.01	-0.00	-0.02	0.02	0.05*	-0.04	0.04*	0.22***	-0.01	-0.10***	1.00	
20 $Feeratio_{i,t}$	-0.04	0.01	0.00	0.01	0.08***	-0.05*	0.03	-0.04	-0.00	-0.01	0.00	0.01	0.01	0.05*	-0.06**	0.08***	-0.02	-0.02	-0.04	1.00

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t*, and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_it$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t−1,* and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year *t−1*; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year *t−1*, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t; *$Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*.

*$p < .10$. **$p < .05$. ***$p < .01$.

4.7 Chapter Summary

This chapter has documented in detail the construction of all indices of the independent variables in this study. Then, descriptive statistics and Pearson correlation matrices for all variables included in the audit fees model and the going-concern opinion model were presented and discussed.

In the next chapter, regression results examining the effect of CEO power on audit fees and the moderating effect of internal and external monitoring mechanisms will be presented and discussed. In addition, regression results examining the relationship between CEO power and the likelihood of receiving a going-concern opinion, and the moderating effect of internal and external monitoring mechanisms, will also be detailed.

Chapter 5:
Multivariate Analysis

5.1 Chapter Overview

The previous chapter provided details about the construction of the indices of this study – $CEOpower_{i,t}$, $IntMonitor_{i,t}$, and $ExtMonitor_{i,t}$ – then provided and discussed the descriptive statistics and Pearson correlation matrix for all variables included in the audit fees and the going-concern opinion models.

This chapter reports and discusses the main empirical results of the study. Section 5.2 presents the multivariate results examining the relationship between CEO power and audit fees with the moderating effects of internal and external monitoring. Then, Section 5.3 presents the multivariate results testing the association between CEO power and the likelihood of a company receiving a going-concern opinion with the moderating effects of internal and external monitoring. Finally, Section 5.4 provides a summary of the chapter.

5.2 Multivariate Results: Audit Fees Model

Table 5.1 displays the results of the regressions regarding the association between CEO power and audit fees, in addition to showing the moderating effects of internal and external monitoring on this association. Column (1) of Table 5.1 presents the OLS regression results of H1a, where the effect of CEO power ($CEOpower_{i,t}$) on audit fees ($LnAF_{i,t}$) is examined. Column (1) shows that the main variable of interest, $CEOpower_{i,t}$, has a negative and statistically significant coefficient at 1% level (*t*-statistics = -2.98). This result is consistent with H1a, suggesting that a powerful CEO is associated with lower audit fees. To understand how audit fees are affected by a one-unit increase in $CEOpower_{i,t}$, the exponentiation of the CEO power coefficient will be taken since exponentiation is the inverse of the natural logarithm function (Taplin, 2016).

Table 5.1

Regression Results: Audit Fees Model

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.0259***	-0.0243***	-0.0158	-0.0178
	(-2.9768)	(-2.7623)	(-1.1590)	(-1.3197)
$IntMonitor_{i,t}$		-0.0023		0.0098
		(-0.3151)		(0.8581)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0142**		0.0340***
		(2.0373)		(3.0787)
$ExtMonitor_{i,t}$			0.0360*	0.0346*
			(1.9107)	(1.8255)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0127	-0.0139
			(-0.9292)	(-1.0195)
$Size_{i,t}$	0.4154***	0.4154***	0.4290***	0.4269***
	(54.9172)	(54.6792)	(25.0856)	(24.8795)
$ROA_{i,t}$	-0.2388***	-0.2386***	-0.2375***	-0.2363***
	(-12.2166)	(-12.1936)	(-5.4898)	(-5.3808)
$Loss_{i,t}$	-0.0013	-0.0019	-0.0303	-0.0311
	(-0.0578)	(-0.0853)	(-0.8501)	(-0.8777)
$MTB_{i,t}$	0.0017	0.0017	0.0026	0.0028
	(0.6555)	(0.6431)	(0.6388)	(0.6858)
$Lev_{i,t}$	0.2296***	0.2299***	0.3152***	0.3151***
	(8.1669)	(8.1932)	(4.8784)	(4.8975)
$Quick_{i,t}$	-0.0103***	-0.0103***	-0.0069***	-0.0070***
	(-10.9972)	(-10.9550)	(-3.9027)	(-3.9121)
$Sub_{i,t}$	0.0069***	0.0069***	0.0071***	0.0072***
	(19.9904)	(19.9963)	(12.1163)	(12.2268)
$Seg_{i,t}$	0.1149***	0.1151***	0.0783***	0.0785***
	(10.0268)	(10.0350)	(3.0755)	(3.0747)
$Invrec_{i,t}$	0.6811***	0.6772***	0.6417***	0.6181***
	(13.3426)	(13.2702)	(7.6204)	(7.3146)
$Big4_{i,t}$	0.1370***	0.1361***	0.1146***	0.1121***
	(7.8232)	(7.7778)	(3.9911)	(3.8931)
$Spec_{i,t}$	0.2388***	0.2376***	0.2276***	0.2257***
	(8.2744)	(8.2321)	(5.5604)	(5.4799)
$Newaud_{i,t}$	-0.0725**	-0.0734**	-0.0725	-0.0747
	(-2.2160)	(-2.2435)	(-1.1240)	(-1.1556)
$Opinion_{i,t}$	-0.0021	-0.0022	-0.0038	-0.0043
	(-0.6038)	(-0.6501)	(-0.7103)	(-0.7968)
$Audtenure_{i,t}$	0.0827***	0.0818***	0.1790***	0.1835***
	(2.8759)	(2.8481)	(3.1524)	(3.2568)
$NAS_{i,t}$	0.0293***	0.0294***	0.0310***	0.0311***
	(11.6142)	(11.6079)	(8.3050)	(8.3505)
$ACtenure_{i,t}$	-0.0026	-0.0026	0.0050	0.0044
	(-1.2407)	(-1.2283)	(1.4673)	(1.2862)
$ACmeet_{i,t}$	0.0210***	0.0213***	0.0133	0.0130
	(3.7346)	(3.7890)	(1.6327)	(1.5857)
$BDtenure_{i,t}$	-0.0018	-0.0016	-0.0081**	-0.0072**
	(-0.7960)	(-0.7035)	(-2.3021)	(-2.0493)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	7,737	7,737	2,615	2,615
Adjusted R^2	0.74	0.74	0.71	0.71

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* as at year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

Therefore, after exponentiating the coefficient of $CEOpower_{i,t}$ and then subtracting one ($e^{-0.0259} - 1 = -0.0256$), the results indicate that audit fees decrease by 2.56% for a one unit increase in $CEOpower_{i,t}$. The reduction in audit fees could be 10% in a case where $CEOpower_{i,t}$ increases by four units from -2 to +2. Such a reduction in audit fees by 10% could significantly affect the auditor's work by limiting the audit scope and procedures, which would ultimately impact the quality of the audit. This finding is in line with the prophecy of agency theory, which suggests that a high level of decision-making autonomy allows CEOs to be powerful and, therefore, has a possible negative effect on audit fees.

A further review of column (1) shows that the results of the control variables are generally consistent with prior research. Specifically, column (1) indicates audit fees are significantly higher for companies that are larger ($Size_{i,t}$), have poorer accounting performance (lower $ROA_{i,t}$), have a higher leverage ratio ($Lev_{i,t}$), or have lower liquidity ($Quick_{i,t}$). Moreover, audit fees significantly increase when companies are more complex ($Sub_{i,t}$ and $Seg_{i,t}$) and have greater inventory and receivables intensity ($Invrec_{i,t}$). Column (1) of Table 5.1 further shows that audit fees are higher for companies that are audited by a Big4 audit firm ($Big4_{i,t}$), an industry specialist ($Spec_{i,t}$), or a long-tenured auditor ($Audtenure_{i,t}$). Audit fees also are positively and significantly associated with nonaudit service fees ($NAS_{i,t}$) and the number of audit committee meetings ($ACmeet_{i,t}$). With an adjusted R^2 of 74%, the variables in Table 5.1 column (1) fit the model well in terms of explaining the variations in the dependent variable, audit fees ($LnAF_{i,t}$).

Column (2) of Table 5.1 presents the OLS regression results of H2a where the moderating effect of the internal monitoring on the relationship between CEO power ($CEOpower_{i,t}$) and audit fees ($LnAF_{i,t}$) is examined. In the presence of the interaction term ($CEOpower_{i,t}$*$IntMonitor_{i,t}$), the effect of CEO power on audit fees is not only limited to the coefficient of $CEOpower_{i,t}$ but also depends on the value of the coefficient of $CEOpower_{i,t}$*$IntMonitor_{i,t}$ (Taplin, 2016). Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level (t-statistics=2.04). In a model where interaction with the logarithmic transformed dependent variable is included, the exponentiation of the interaction term coefficient describes how the effect of x_1 (CEO power) on Y (audit fees) depends now on the value of x_2 (internal monitoring; Taplin, 2016). Therefore,

the following equation is used to show how the effect of CEO power on audit fees depends on the value of internal monitoring:

The coefficient of *CEOpower* = -0.0243 + [0.0142**IntMonitor*] [1]

Using equation (1), the coefficient for $CEOpower_{i,t}$ for observations with values of $IntMonitor_{i,t}$ at -2 is (-0.0243 + [0.0142*-2] = -0.0527), showing $LnAF_{i,t}$ increases by -0.0527 if $CEOpower_{i,t}$ increases by 1. This means that audit fees (in dollars) decrease by 5.13% ($e^{-0.0527} - 1 = -0.0513$) if $CEOpower_{i,t}$ increases by 1. Conversely, for observations with values of $IntMonitor_{i,t}$ at +2, the coefficient of $CEOpower_{i,t}$ to predict $LnAF_{i,t}$ swaps sign and becomes positive (-0.0243 + [0.0142*2] = 0.0041), increasing audit fees (in dollars) by 0.41% ($e^{0.0041} - 1 = 0.0041$) if $CEOpower_{i,t}$ increases by 1. Therefore, when the value of internal monitoring increases (more effective internal monitoring), the negative relationship between CEO power and audit fees becomes positive.

A further review of column (2) shows that audit fees increase with client size ($Size_{i,t}$), less profitable firms (lower $ROA_{i,t}$), leverage ($Lev_{i,t}$), and complexity ($Sub_{i,t}$ and $Seg_{i,t}$). Audit fees are also significantly higher for companies that have greater inventory and receivables intensity ($Invrec_{i,t}$) and are audited by a Big 4 firm ($Big4_{i,t}$), an industry specialist ($Spec_{i,t}$), or a long-tenured auditor ($Audtenure_{i,t}$). Audit fees are also positively and significantly associated with nonaudit service fees ($NAS_{i,t}$) and the number of audit committee meetings ($ACmeet_{i,t}$). The proportion of variance in the dependent variable, audit fees, that is explained by variables in the model of column (2) remains at 74%.

Column (3) of Table 5.1 presents the OLS regression results of H3a examining the effect of the external monitoring on the relationship between CEO power ($CEOpower_{i,t}$) and audit fees ($LnAF_{i,t}$). Column (3) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is not significant, thereby not supporting H3a. Column (3) shows that $ExtMonitor_{i,t}$ has a positive and statistically significant coefficient at 10% level (*t*-statistics = 1.91).

Table 5.1 column (3) shows that the coefficients of client size ($Size_{i,t}$), leverage ($Lev_{i,t}$), complexity ($Sub_{i,t}$ and $Seg_{i,t}$), and inventory and receivables intensity ($Invrec_{i,t}$) are positive and significant. Further, the coefficients of return on assets ($ROA_{i,t}$) and quick ratio ($Quick_{i,t}$) are negative and significant, suggesting that audit fees are higher

when companies are less profitable and have lower liquidity. Table 5.1 column (3) shows that audit fees ($LnAF_{i,t}$) are also significantly higher for companies that are audited by a Big 4 audit firm ($Big4_{i,t}$), an industry specialist ($Spec_{i,t}$), or a long-tenured auditor ($Audtenure_{i,t}$). The inclusion of number of analysts following in the external monitoring index ($ExtMonitor_{i,t}$) has caused the number of firm-year observations to be lower in the column (3) model due to the lower number of observations available for analysts following. With an adjusted R^2 of 71%, the variables in Table 5.1 column (3) fit the model well in terms of explaining the variations in the dependent variable, audit fees ($LnAF_{i,t}$). The drop in adjusted R^2 compared to what is reported in columns (1) and (2) is due to the lower number of observations.

Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. Column (4) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 1% level (t-statistics = 3.08). In this interaction, the effect of CEO power on audit fees depends on the value of internal monitoring. Therefore, the coefficient for $CEOpower_{i,t}$ for observations with values of $IntMonitor_{i,t}$ at -2 is (-0.0178 + [0.0340*-2] = -0.0858), showing that $LnAF_{i,t}$ increases by -.0858. This means that audit fees (in dollars) decrease by 8.22% ($e^{-0.0858} - 1 = -0.0822$). Conversely, for observations with values of $IntMonitor_{i,t}$ at +2, the combined coefficients indicate the relationship between CEO power and audit fees swaps sign and becomes positive (-0.0178 + [0.0340*2] = 0.0502), increasing audit fees by 5.14% ($e^{0.0502} - 1 = 0.0514$). The coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is now more significant than it is in column (2). This result confirms the effective role of strong internal monitoring in mitigating the negative impact of CEO power on audit fees. In regard to the moderating role of external monitoring, the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant.

In terms of control variables, Table 5.1 column (4) shows that the coefficients of client size ($Size_{i,t}$), leverage ($Lev_{i,t}$), complexity ($Sub_{i,t}$ and $Seg_{i,t}$), and inventory and receivables intensity ($Invrec_{i,t}$) are positive and significant. Column (4) of Table 5.1 further shows that audit fees are higher for companies that are audited by a Big 4 firm ($Big4_{i,t}$), an industry specialist ($Spec_{i,t}$), or a long-tenured auditor ($Audtenure_{i,t}$). Audit fees are also positively and significantly associated with nonaudit service fees ($NAS_{i,t}$).

Overall, the results in Table 5.1 column (1) suggest that powerful CEOs are associated with lower audit fees. This inverse association supports the agency theory–based notion that powerful CEOs could be motivated to exploit information asymmetries and use their influence to maximise their personal wealth. Specifically, the results of Table 5.1 column (1) show that powerful CEOs are associated with lower audit quality, measured by audit fees, as high audit quality can limit powerful CEOs from pursuing self-interest practices.[10]

Additionally, the results of Table 5.1 column (2) and column (4) show that the existence of effective internal monitoring has the ability to moderate the inverse relationship between CEO power and audit fees. The results reveal that the relationship between CEO power and audit fees is reversed from negative to positive as a result of effective internal monitoring. These findings demonstrate how the power held by CEOs can be constrained by effective internal monitoring in place when it comes to negotiation with external auditors on audit fees. The importance of audit fees arises from its reflection of the magnitude of the audit procedures and scope determined by the auditor. Therefore, the results show the need for effective internal monitoring in Australian firms due to its crucial role in enhancing the quality of audit by the increase in audit fees. Moreover, the results reveal that the role of internal monitoring is heightened in the subsample where external monitoring is in place. Finally, the results do not reveal any significant findings on the role of external monitoring in moderating the relationship between CEO power and audit fees.

5.3 Multivariate Results: Going-Concern Opinion Model

Table 5.2 presents the results of the association between CEO power and the likelihood of receiving a going-concern opinion in the subsample of financially distressed companies.[11] In addition, Table 5.2 presents the results of the moderating effects of internal and external monitoring on this association.

[10] A regression analysis of audit fees change model is also conducted and the results are consistent with those reported in Table 5.1.

[11] Financially distressed companies are those companies that report either negative cash flow or negative income (Carey & Simnett, 2006; Defond et al., 2002). The study also conducts the analysis for a more restricted sample where financially distressed companies are defined as firms that report both negative cash flow and negative income (Blay & Geiger, 2013), and the results remain consistent.

Table 5.2

Regression Results: Going-Concern Opinion Model

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.2474***	-0.2394***	0.1421	0.1193
	(-3.8914)	(-3.7298)	(0.7413)	(0.6102)
$IntMonitor_{i,t}$		-0.0454		-0.1168
		(-0.7698)		(-0.6655)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0217		-0.2845
		(0.3592)		(-1.6119)
$ExtMonitor_{i,t}$			-0.3706	-0.3455
			(-1.3960)	(-1.2735)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0286	0.0173
			(-0.1331)	(0.0787)
$Size_{i,t}$	-0.3362***	-0.3362***	-0.2915	-0.2551
	(-6.4759)	(-6.4807)	(-1.5299)	(-1.3689)
$Age_{i,t}$	0.0023	0.0023	-0.0096	-0.0056
	(0.3507)	(0.3482)	(-0.5887)	(-0.3419)
$ROA_{i,t}$	0.0627	0.0619	0.1744	0.1333
	(0.3027)	(0.2987)	(0.4958)	(0.3585)
$LLoss_{i,t}$	-0.0022	-0.0077	-0.4948	-0.4644
	(-0.0135)	(-0.0464)	(-1.1102)	(-1.0242)
$Lev_{i,t}$	-0.5193**	-0.5197**	-0.2091	-0.2709
	(-2.0628)	(-2.0706)	(-0.1835)	(-0.2303)
$Clev_{i,t}$	0.3790*	0.3792*	1.9967	1.9403
	(1.7763)	(1.7811)	(1.5168)	(1.5063)
$Nborrow_{i,t}$	-0.4049***	-0.4020***	-0.8555**	-0.8673**
	(-3.1562)	(-3.1273)	(-2.3317)	(-2.3018)
$Invest_{i,t}$	-2.2390***	-2.2351***	-3.6860***	-3.7173***
	(-9.1970)	(-9.1691)	(-4.4884)	(-4.4919)
$Opcf_{i,t}$	-0.7445**	-0.7446**	-0.1436	-0.2479
	(-2.4764)	(-2.4724)	(-0.1741)	(-0.2996)
$Zscore_{i,t}$	-0.0019	-0.0019	0.0051	0.0050
	(-0.7290)	(-0.7379)	(1.4203)	(1.3886)
$Invrec_{i,t}$	0.9763***	0.9350**	-1.0171	-0.6872
	(2.6316)	(2.4968)	(-0.7917)	(-0.5240)
$Big4_{i,t}$	0.0444	0.0503	0.0790	0.0303
	(0.3415)	(0.3858)	(0.2172)	(0.0835)
$Pqual_{i,t}$	2.4794***	2.4853***	3.1718***	3.1380***
	(18.1810)	(18.2431)	(7.4552)	(7.4739)
$Auditlag_{i,t}$	0.0207***	0.0205***	0.0357***	0.0358***
	(5.1605)	(5.1152)	(4.2853)	(4.2563)
$Audtenure_{i,t}$	-0.0040	-0.0044	0.0008	0.0042
	(-0.1974)	(-0.2186)	(0.0185)	(0.0886)
$Feeratio_{i,t}$	-0.0597	-0.0608	-0.1068	-0.1034
	(-0.6375)	(-0.6409)	(-0.5623)	(-0.5583)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	2,676	2,676	656	656
Pseudo-R^2	0.41	0.41	0.48	0.48

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t*, and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

Column (1) of Table 5.2 shows the logistic regression results of H1b, where the effect of CEO power ($CEOpower_{i,t}$) on receiving a going-concern opinion ($GCO_{i,t}$) is examined. Column (1) shows that the main variable of interest, $CEOpower_{i,t}$, has a negative and statistically significant coefficient at 1% level. The coefficient for $CEOpower_{i,t}$ is -0.2474, indicating that a decrease of -0.2474 is expected in the log odds of $GCO_{i,t}$ with a one-unit increase in $CEOpower_{i,t.}$ This means that a 21.9% decrease is expected in the odds of receiving a $GCO_{i,t}$ when $CEOpower_{i,t}$ increases by one unit ($e^{-0.2474} - 1 = -0.2192$). This finding is consistent with H1b, suggesting that companies with powerful CEOs are less likely to receive a going-concern opinion even if their companies are financially distressed.

Table 5.2 column (1) further shows that the likelihood of receiving a going-concern opinion is significantly and positively associated with increased debt ($Clev_{i,t}$), inherent risk ($Invrec_{i,t}$), prior-year qualified opinion ($Pqual_{i,t}$), and audit lag ($Auditlag_{i,t}$). On the other hand, the likelihood of receiving a going-concern opinion is significantly and negatively associated with company size ($Size_{i,t}$), leverage ($Lev_{i,t}$), new borrowings ($Nborrow_{i,t}$), investment ($Invest_{i,t}$), and the ratio of operating cash flow to total assets ($Opcf_{i,t}$). The model is reasonably well fitted, with a pseudo-R^2 of 0.41.

Column (2) of Table 5.2 presents the logistic regression results of H2b where the moderating effect of the internal monitoring on the relationship between CEO power ($CEOpower_{i,t}$) and going-concern opinion ($GCO_{i,t}$) is examined. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is not significant, thereby not supporting H2b. Therefore, the result of the relationship between CEO power and going-concern opinion reported in column (1) of Table 5.2 does not depend significantly on internal monitoring.

Table 5.2 column (2) further shows that the likelihood of receiving a going-concern opinion is significantly and positively associated with increased debt ($Clev_{i,t}$), inherent risk ($Invrec_{i,t}$), prior-year qualified opinion ($Pqual_{i,t}$), and audit lag ($Auditlag_{i,t}$). The likelihood of receiving a going-concern opinion is significantly and negatively associated with company size ($Size_{i,t}$), leverage ($Lev_{i,t}$), new borrowings ($Nborrow_{i,t}$), investment ($Invest_{i,t}$), and the ratio of operating cash flow to total assets ($Opcf_{i,t}$). The model is reasonably well fitted, with a pseudo-R^2 of 0.41.

Column (3) of Table 5.2 presents the results of H3b examining the effect of the external monitoring on the relationship between CEO power ($CEOpower_{i,t}$) and going-concern opinion ($GCO_{i,t}$). Column (3) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is not significant, thereby not supporting H3b. Column (4) presents the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The coefficients of both interaction terms are not significant.

In terms of control variables, going-concern opinion is positively associated with prior-year qualified opinion ($Pqual_{i,t}$) and audit lag ($Auditlag_{i,t}$) but is negatively associated with new borrowings ($Nborrow_{i,t}$) and investment ($Invest_{i,t}$). As with the audit fees model, the inclusion of number of analysts following in the external monitoring index ($ExtMonitor_{i,t}$) has caused the number of observations to be lower in the column (3) and (4) models. The models in columns (3) and (4) are reasonably well fitted, with a pseudo-R^2 of 0.48.

Overall, the results in Table 5.2 show that financially distressed companies with powerful CEOs are less likely to receive a going-concern opinion when other variables are held constant. Not receiving a going-concern opinion when one is warranted is a sign of low quality of audit. The audit opinion is an output of the audit process that begins with audit fees, which determine the audit scope and the amount of work performed by the auditor. Therefore, when powerful CEOs are associated with lower audit fees as reported in Table 5.1, this association will result in lower audit quality delivered, reflected in not issuing the appropriate audit opinion (e.g., GCO). This finding confirms what is reported by DeFond and Zhang (2014) that managers could pressure auditors not to issue a going-concern opinion because such an opinion could impose costs on the client. Finally, the results in Table 5.2 do not reveal any significant findings on the role of internal and external monitoring in moderating the relationship between CEO power and going-concern opinion.

5.4 Chapter Summary

This chapter has presented the results of the main multivariate analyses examining the association between CEO power and two proxies of audit quality: audit fees and going-concern opinion. Moreover, the moderating effects of internal and external monitoring on this association were also examined.

The next chapter presents additional tests and analyses to examine the sensitivity and robustness of the main results reported in this chapter.

Chapter 6:
Robustness and Sensitivity Analysis

6.1 Chapter Overview

Chapter 5 presented the main empirical results of the study. Multivariate results testing the relationship between CEO power and audit fees and the moderating effects of internal and external monitoring were examined and discussed. Subsequently, multivariate results testing the association between CEO power in financially distressed companies and the likelihood of receiving a going-concern opinion, together with the moderating effects of internal and external monitoring, were also examined and discussed.

This chapter presents and discusses a variety of sensitivity tests to check whether the main regression results presented in Chapter 5 are robust to alternative variable definitions, model specifications, different sample partitioning approaches, and econometric methods.

6.2 Alternative Dependent Variables

This section investigates whether the main results reported in Chapter 5 are robust to alternative dependent variables. Therefore, the regressions presented in Tables 5.1 and 5.2 are re-performed based on the alternative variables of total auditor remuneration and first-time going-concern opinion to test the robustness of the results.

6.2.1 Total auditor remuneration

Knowledge spillovers can be related to the provision of nonaudit services provided by the auditor (Palmrose, 1986). Several studies have revealed the significant relationship between audit fees and nonaudit fees (Basioudis et al., 2008; Kinney & Libby, 2002). Clients may pursue cost savings through either lower audit fees or lower nonaudit fees (Yao et al., 2015). Therefore, it is expected that lower audit fees may be offset by higher nonaudit fees or vice versa (Seetharaman, Gul, & Lynn, 2002). Following Yao et al. (2015), the main regressions in Table 5.1 are re-estimated using

the natural logarithm of the total disclosed auditor remuneration ($Aud\_Rem_{i,t}$) as an alternative measure of audit fees to provide additional validity to the main results reported in Chapter 5.

Table 6.1 presents the regression results when total auditor remuneration ($Aud\_Rem_{i,t}$) is used as an alternative variable of audit fees. Generally, the regression results shown in Table 6.1 support the main findings reported in Chapter 5. Specifically, column (1) of Table 6.1 shows that $CEOpower_{i,t}$ has a negative and statistically significant coefficient at 1% level (t-statistics = -3.12). Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level (t-statistics = 2), indicating that the negative effect of CEO power on audit fees is moderated by effective internal monitoring.

The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is insignificant in column (3). Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level (t-statistics = 2.52) while the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant.

Overall, the regression results reported in Table 6.1 support the main results reported in Table 5.1 that internal monitoring moderates the inverse association between CEO power and audit fees. When $IntMonitor_{i,t}$ is low, there is a negative relationship between CEO power ($CEOpower_{i,t}$) and audit fees ($LnAF_{i,t}$). However, when $IntMonitor_{i,t}$ is high, the relationship between CEO power ($CEOpower_{i,t}$) and audit fees ($LnAF_{i,t}$) becomes significant and positive.

Table 6.1

Regression Results – Alternative Measure of Audit Fees: Total Auditor Remuneration Model

Variable	$Aud\_Rem_{i,t}$	$Aud\_Rem_{i,t}$	$Aud\_Rem_{i,t}$	$Aud\_Rem_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.0294***	-0.0283***	-0.0088	-0.0108
	(-3.1221)	(-2.9661)	(-0.5614)	(-0.6899)
$IntMonitor_{i,t}$		0.0082		0.0104
		(0.9967)		(0.7558)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0154**		0.0339**
		(2.0009)		(2.5179)
$ExtMonitor_{i,t}$			0.0448**	0.0435**
			(2.1575)	(2.0821)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0064	-0.0077
			(-0.4116)	(-0.4942)
$Size_{i,t}$	0.4823***	0.4809***	0.5167***	0.5140***
	(64.9731)	(63.7397)	(28.8982)	(28.7203)
$ROA_{i,t}$	-0.2603***	-0.2586***	-0.2698***	-0.2681***
	(-12.6705)	(-12.5744)	(-5.3925)	(-5.3040)
$Loss_{i,t}$	-0.0073	-0.0072	0.0116	0.0106
	(-0.2994)	(-0.2934)	(0.2709)	(0.2483)
$MTB_{i,t}$	-0.0005**	-0.0005**	0.0030	0.0031*
	(-2.5625)	(-2.5531)	(1.5436)	(1.6740)
$Lev_{i,t}$	0.2407***	0.2407***	0.3112***	0.3113***
	(8.2628)	(8.2804)	(4.0822)	(4.1007)
$Quick_{i,t}$	-0.0059***	-0.0059***	-0.0038***	-0.0039***
	(-6.8134)	(-6.8411)	(-2.6853)	(-2.7183)
$Sub_{i,t}$	0.0069***	0.0069***	0.0060***	0.0061***
	(18.8102)	(18.8356)	(10.1202)	(10.1986)
$Seg_{i,t}$	0.0997***	0.0998***	0.0705**	0.0706**
	(7.7936)	(7.7893)	(2.2233)	(2.2188)
$Invrec_{i,t}$	0.6014***	0.5957***	0.4847***	0.4605***
	(10.9754)	(10.8922)	(4.9455)	(4.6896)
$Big4_{i,t}$	0.1529***	0.1507***	0.1736***	0.1695***
	(7.8061)	(7.6748)	(5.0661)	(4.9385)
$Spec_{i,t}$	0.1108***	0.1109***	0.0915***	0.0928***
	(13.8277)	(13.8437)	(6.9156)	(7.0287)
$Newaud_{i,t}$	0.0287	0.0280	0.0671	0.0650
	(0.7986)	(0.7804)	(0.8949)	(0.8677)
$Opinion_{i,t}$	0.0482*	0.0479	0.1474**	0.1517**
	(1.6473)	(1.6411)	(2.3437)	(2.4294)
$Audtenure_{i,t}$	-0.0057	-0.0058	-0.0119**	-0.0123**
	(-1.5616)	(-1.5977)	(-1.9968)	(-2.0686)
$ACtenure_{i,t}$	-0.0051**	-0.0051**	-0.0034	-0.0039
	(-2.2148)	(-2.2143)	(-0.8474)	(-0.9901)
$ACmeet_{i,t}$	0.0939***	0.0939***	0.0649**	0.0661**
	(4.6018)	(4.6162)	(2.1340)	(2.1755)
$BDtenure_{i,t}$	-0.0031	-0.0029	-0.0133***	-0.0125***
	(-1.2103)	(-1.1095)	(-3.0166)	(-2.8322)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	7,737	7,737	2,615	2,615
Adjusted R^2	0.72	0.72	0.65	0.65

Legend:		
$Aud\_Rem_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} ACtenure_{i,t} + \beta_{17} ACmeet_{i,t} + \beta_{18} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$Aud\_Rem_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} ACtenure_{i,t} + \beta_{19} ACmeet_{i,t} + \beta_{20} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$Aud\_Rem_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} ACtenure_{i,t} + \beta_{19} ACmeet_{i,t} + \beta_{20} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$Aud\_Rem_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} ACtenure_{i,t} + \beta_{21} ACmeet_{i,t} + \beta_{22} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $Aud\_Rem_{i,t}$ = natural logarithm of the sum of disclosed audit and nonaudit fees paid by firm *i* to its auditor for year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year *t*; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years of audit firm tenure with firm *i* in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* as at year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.2.2 First-time going-concern opinion

A useful test of auditor judgement is examining a first-time going-concern opinion (Hossain, Chapple, et al., 2016). Auditors may be reluctant to issue a first-time going-concern opinion to a client, especially if the client company has a powerful CEO. Issuing a first-time going-concern opinion signifies a reporting decision within that particular period, as opposed to a continuing going-concern opinion, which might reflect circumstances related to the period when the first-time going-concern opinion was issued (Carey et al., 2012). Therefore, the regression equations in Table 5.2 are re-estimated to examine the relationship between CEO power and the likelihood of a financially distressed company receiving a first-time going-concern opinion ($FTGCO_{i,t}$). [12]

Table 6.2 presents the regression results when first-time going-concern opinion ($FTGCO_{i,t}$) is used as an alternative variable. The regression results in Table 6.2 support the main findings reported in Chapter 5. Column (1) shows that $CEOpower_{i,t}$ has a negative and statistically significant coefficient at 1% level. The coefficient for $CEOpower_{i,t}$ indicates that a decrease of -0.2989 is expected in the log odds of $FTGCO_{i,t}$ with a one-unit increase in $CEOpower_{i,t}$. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is not significant. Therefore, the result of the relationship between CEO power and first-time going-concern opinion reported in column (1) does not depend significantly on internal monitoring. Column (3) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is not significant. Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The coefficients of both interaction terms are insignificant.

Overall, the results reported in Table 6.2 support the main findings of the study reported in Chapter 5 and show that powerful CEOs are able to impose pressures on auditors not to issue a first-time going-concern opinion. These findings continue to show that financially distressed companies with powerful CEOs are less likely to receive a going-concern opinion.

[12] Companies that had received a previous going-concern opinion were removed from this subsample.

Table 6.2

Regression Results: First-Time Going-Concern Opinion Model

Variable	$FTGCO_{i,t}$	$FTGCO_{i,t}$	$FTGCO_{i,t}$	$FTGCO_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.2989***	-0.2922***	0.1116	0.1103
	(-3.8293)	(-3.6783)	(0.4974)	(0.4775)
$IntMonitor_{i,t}$		-0.0778		0.0896
		(-1.1076)		(0.4373)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		-0.0143		-0.1939
		(-0.1974)		(-0.8848)
$ExtMonitor_{i,t}$			-0.3161	-0.3206
			(-0.9611)	(-0.9520)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.2032	-0.1895
			(-0.7516)	(-0.6767)
$Size_{i,t}$	-0.3421***	-0.3402***	-0.2864	-0.2819
	(-5.2298)	(-5.1855)	(-1.1812)	(-1.1975)
$Age_{i,t}$	-0.0049	-0.0045	-0.0470*	-0.0482*
	(-0.5673)	(-0.5199)	(-1.8769)	(-1.9481)
$ROA_{i,t}$	0.0650	0.0596	0.0583	0.0459
	(0.2738)	(0.2478)	(0.1435)	(0.1107)
$LLoss_{i,t}$	0.1146	0.1135	-0.4428	-0.4450
	(0.5820)	(0.5756)	(-0.8469)	(-0.8649)
$Lev_{i,t}$	-0.5116*	-0.5201*	0.1849	0.2777
	(-1.6553)	(-1.6665)	(0.1626)	(0.2477)
$Clev_{i,t}$	0.1051	0.1150	3.8999***	3.8284***
	(0.3613)	(0.3894)	(3.0328)	(3.0176)
$Nborrow_{i,t}$	-0.4506***	-0.4440***	-1.3404***	-1.3309***
	(-2.8050)	(-2.7557)	(-3.3032)	(-3.2741)
$Invest_{i,t}$	-2.3040***	-2.3052***	-3.4781***	-3.6182***
	(-7.6735)	(-7.5541)	(-3.3361)	(-3.4492)
$Opcf_{i,t}$	-0.6006*	-0.5961*	-0.8577	-0.8867
	(-1.7206)	(-1.6823)	(-0.7912)	(-0.8233)
$Zscore_{i,t}$	-0.0000*	-0.0000*	-0.0032	-0.0028
	(-1.9058)	(-1.9361)	(-0.3721)	(-0.3439)
$Invrec_{i,t}$	0.5503	0.5201	-0.9357	-0.3742
	(1.1524)	(1.0723)	(-0.5339)	(-0.2040)
$Big4_{i,t}$	-0.0824	-0.0770	0.4052	0.3712
	(-0.5075)	(-0.4729)	(0.9068)	(0.8369)
$Pqual_{i,t}$	2.2283***	2.2323***	2.6493***	2.6244***
	(12.9241)	(12.9349)	(5.4712)	(5.5433)
$Auditlag_{i,t}$	0.0190***	0.0188***	0.0337***	0.0351***
	(4.1569)	(4.0955)	(3.3888)	(3.3742)
$Audtenure_{i,t}$	-0.0184	-0.0186	-0.0323	-0.0240
	(-0.7780)	(-0.7870)	(-0.6120)	(-0.4636)
$Feeratio_{i,t}$	-0.0415	-0.0444	-0.1581	-0.1227
	(-0.3825)	(-0.4063)	(-0.7573)	(-0.5979)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,451	1,451	342	342
Pseudo-R^2	0.36	0.36	0.43	0.43

Legend:		
$FTGCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$FTGCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$FTGCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$FTGCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $FTGCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a first-time going-concern opinion in year *t*, and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if the firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

6.3 Partitioning Samples by Client Firm Characteristics

This section investigates whether the main results reported in Chapter 5 are robust to different sample partitioning approaches based on a range of client firm characteristics. Therefore, the regressions presented in Tables 5.1 and 5.2 are re-performed after partitioning the samples by the client firm characteristics of complexity, growth, risk, and age to test the robustness of the results.

6.3.1 Partitioning by client firm complexity: Audit fees model

The literature on audit fees has highlighted the association between audit fees and client firm complexity (Beck & Mauldin, 2014; Hay et al., 2006; Redmayne et al., 2010). Complex firms require that auditors spend a considerable amount of time and effort to conduct the audit, thereby increasing audit fees (Simunic, 1980). Therefore, to eliminate the possibility that the main findings in Table 5.1 may have been driven by the complexity of client firms rather than CEO power, the sample is partitioned by client firm complexity[13] to get an in-depth understanding of the extent of the power held by CEOs and how it could affect audit fees in very complex firms compared to that in less complex ones.

Columns (1) to (4) of Table 6.3 present the regression results of the relationship between CEO power and audit fees in complex firms and the moderating effects of internal and external monitoring on this relationship. Column (1) reveals that $CEOpower_{i,t}$ has a negative and statistically significant coefficient at the 5% level. Column (2) shows that the effect of CEO power does depend on the value of internal monitoring as the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level, which is consistent with the results reported in column (2) of Table 5.1.

Further, the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (3) is insignificant. Column (4) reports the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and

[13] Firm complexity is measured by the number of subsidiaries, and the split point is the median. Firms above the sample median value are considered complex firms whereas firms under the median value are considered less complex firms.

significant at the 10% level, while the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant.

Columns (5) to (8) of Table 6.3 present the regression results of the relationship between CEO power and audit fees in less complex firms and the moderating effects of the internal and external monitoring on this relationship. The results in columns (5) to (8) of Table 6.3 for those less complex companies are also consistent with the main results in Table 5.1. Specifically, column (5) reveals that $CEOpower_{i,t}$ has a negative and statistically significant coefficient at the 5% level. The coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ in column (6) is positive and significant at the 5% level, implying that the negative relationship between CEO power and audit fees is mitigated by internal monitoring. The coefficient on the interaction term $CEOpower_{i,t}$* $ExtMonitor_{i,t}$ in column (7) is insignificant. Further, column (8) reports the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The interaction term $CEOpower_{i,t}$* $IntMonitor_{i,t}$ is positive and significant at the 10% level, while the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is insignificant.

Overall, the additional tests reported in Table 6.3, when the audit fees sample is partitioned by client firm complexity, support the results reported in Table 5.1, thereby suggesting that the complexity of client firms does not drive the main findings.

Table 6.3

Regression Results: Audit Fees Model – Partitioning by Client Firm Complexity

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
Complex firms				
$CEOpower_{i,t}$	-0.0289**	0.0140	0.0155	0.0136
	(-2.4841)	(1.2432)	(1.0153)	(0.8896)
$IntMonitor_{i,t}$		0.0582***		0.0305**
		(5.0668)		(2.0641)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0170**		0.0241*
		(2.0682)		(1.7772)
$ExtMonitor_{i,t}$			0.0436**	0.0428*
			(1.9717)	(1.9259)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0099	-0.0116
			(-0.7193)	(-0.8344)
$Size_{i,t}$	0.4445***	0.4237***	0.4444***	0.4418***
	(41.7714)	(36.0919)	(20.1230)	(19.9693)
$ROA_{i,t}$	-0.2870***	-0.2687***	-0.1178	-0.1118
	(-6.8551)	(-6.2313)	(-1.6384)	(-1.5893)
$Loss_{i,t}$	0.0128	0.0210	0.0254	0.0250
	(0.3936)	(0.6221)	(0.5395)	(0.5314)
$MTB_{i,t}$	-0.0034	-0.0043	0.0002	0.0003
	(-1.0595)	(-1.2922)	(0.1226)	(0.1521)
$Lev_{i,t}$	0.3685***	0.3820***	0.4530***	0.4529***
	(6.6258)	(6.4572)	(4.5919)	(4.6189)
$Quick_{i,t}$	-0.0054***	-0.0045***	-0.0039	-0.0042
	(-3.5840)	(-3.0338)	(-1.5010)	(-1.6070)
$Sub_{i,t}$	0.0054***	0.0052***	0.0057***	0.0057***
	(13.5553)	(13.0435)	(8.0755)	(8.1510)
$Seg_{i,t}$	0.1253***	0.1176***	0.0808**	0.0810**
	(9.0842)	(9.8125)	(1.9970)	(1.9953)
$Invrec_{i,t}$	0.6023***	0.5816***	0.5870***	0.5666***
	(8.6554)	(8.0372)	(6.5104)	(6.2732)
$Big4_{i,t}$	0.0938***	0.0891***	0.0821**	0.0749*
	(3.5690)	(3.2461)	(2.0066)	(1.7979)
$Spec_{i,t}$	0.2419***	0.2476***	0.1846***	0.1847***
	(6.6079)	(6.3413)	(4.1201)	(4.0914)
$Newaud_{i,t}$	-0.0952*	-0.0904*	-0.0110	-0.0170
	(-1.8885)	(-1.7251)	(-0.1121)	(-0.1724)
$Opinion_{i,t}$	0.1615***	0.1814***	0.2987**	0.3053**
	(2.7016)	(2.9231)	(2.0083)	(2.0569)
$Audtenure_{i,t}$	-0.0001	-0.0036	0.0091	0.0089
	(-0.0266)	(-0.6833)	(1.2935)	(1.2670)
$NAS_{i,t}$	0.0371***	0.0361***	0.0387***	0.0386***
	(9.6804)	(9.0722)	(7.6637)	(7.5935)
$ACtenure_{i,t}$	-0.0035	-0.0056*	0.0074*	0.0072*
	(-1.1973)	(-1.8443)	(1.7734)	(1.7179)
$ACmeet_{i,t}$	0.0870***	0.0878***	0.0913***	0.0886***
	(3.6239)	(3.5256)	(3.0779)	(2.9864)
$BDtenure_{i,t}$	-0.0009	-0.0021	-0.0192***	-0.0193***
	(-0.3033)	(-0.6401)	(-4.0793)	(-4.1221)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	4,309	4, 309	1,660	1,660
Adjusted R^2	0.72	0.72	0.71	0.71

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(5)	(6)	(7)	(8)
Less complex firms				
$CEOpower_{i,t}$	-0.0275** (-2.0257)	-0.0258** (-1.9615)	0.0044 (0.1999)	0.0448 (1.6336)
$IntMonitor_{i,t}$		0.0062 (0.6374)		-0.0064 (-0.3524)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0187** (1.9833)		0.0298* (1.6646)
$ExtMonitor_{i,t}$			0.0148 (0.4691)	0.0118 (0.3740)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0287 (-1.2213)	-0.0249 (-1.3467)
$Size_{i,t}$	0.3801*** (33.4504)	0.3890*** (35.6647)	0.4312*** (15.6596)	0.4287*** (15.7799)
$ROA_{i,t}$	-0.2181*** (-9.0942)	-0.2304*** (-9.7520)	-0.3175*** (-4.9856)	-0.3190*** (-5.0885)
$Loss_{i,t}$	-0.0067 (-0.2016)	-0.0020 (-0.0625)	-0.1243** (-2.0468)	-0.1203** (-1.9979)
$MTB_{i,t}$	0.0023 (0.5549)	0.0023 (0.5790)	-0.0001 (-0.1070)	-0.0002 (-0.2245)
$Lev_{i,t}$	0.1785*** (5.3417)	0.1678*** (5.4381)	0.0768 (0.7750)	0.0657 (0.6430)
$Quick_{i,t}$	-0.0080*** (-6.8740)	-0.0075*** (-6.9351)	-0.0055*** (-4.2819)	-0.0058*** (-4.2488)
$Sub_{i,t}$	0.0088 (1.5920)	0.0088* (1.6970)	0.0287*** (3.1107)	0.0262*** (2.7905)
$Seg_{i,t}$	0.0829*** (5.0273)	0.0874*** (5.1864)	0.1260*** (5.2119)	0.1301*** (5.2593)
$Invrec_{i,t}$	0.8342*** (10.8921)	0.8531*** (12.1930)	0.8553*** (4.7940)	0.8318*** (4.7006)
$Big4_{i,t}$	0.1812*** (7.4216)	0.1455*** (6.3249)	0.1186*** (2.7496)	0.1233*** (2.7932)
$Spec_{i,t}$	0.1964*** (4.4995)	0.1747*** (4.3576)	0.2387*** (3.9738)	0.2301*** (3.8672)
$Newaud_{i,t}$	-0.0487 (-1.1738)	-0.0403 (-1.0306)	-0.1751** (-2.0766)	-0.1806** (-2.1225)
$Opinion_{i,t}$	0.0501 (1.6164)	0.0505* (1.7488)	0.2089*** (3.4162)	0.2078*** (3.3924)
$Audtenure_{i,t}$	-0.0067 (-1.4539)	-0.0059 (-1.2834)	-0.0776** (-2.0986)	-0.0824** (-2.2386)
$NAS_{i,t}$	0.0202*** (5.9637)	0.0228*** (7.0359)	0.0157*** (2.8464)	0.0167*** (3.0000)
$ACtenure_{i,t}$	-0.0075** (-2.3622)	-0.0074** (-2.5041)	0.0006 (0.1063)	0.0009 (0.1483)
$ACmeet_{i,t}$	0.1065*** (3.5874)	0.1073*** (3.8300)	0.0475 (0.9320)	0.0516 (1.0257)
$BDtenure_{i,t}$	0.0032 (0.8282)	0.0018 (0.5035)	0.0434 (1.0315)	0.0334 (0.7932)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	3,428	3,428	955	955
Adjusted R^2	0.58	0.58	0.47	0.48

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,tt}$	Columns (1) & (5)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year *t*; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.3.2 Partitioning by client firm growth: Audit fees model

A number of recent studies have found that audit fees are associated with growth opportunities of companies (Blankley, Hurtt, & MacGregor, 2012; Duellman et al., 2015; Hay, 2013). Duellman et al. (2015) point out that the growth options can affect the risk of a company and thus audit fees. Therefore, the audit fees sample is partitioned into high- and low-growth client firms [14] to address the possible concern that decreases in audit fees could be due to the growth opportunities of a company. Table 6.4 presents the regression results of the relationship between CEO power and audit fees in high- and low-growth firms and the moderating effects of internal and external monitoring on this relationship.

Columns (1) to (4) present the regression results for the high-growth companies. Column (1) shows that the main variable of interest, $CEOpower_{i,t}$, has a negative and significant coefficient at the 5% level. Further, the coefficient on the interaction term $CEOpower_{i,t}*IntMonitor_{i,t}$ in columns (2) and (4) is positive and significant at the 5% and 10% level, respectively, indicating that the negative effect of CEO power on audit fees is attenuated by internal monitoring. The coefficient on the interaction term $CEOpower_{i,t}*ExtMonitor_{i,t}$ is insignificant, as shown in columns (3) and (4).

Columns (5) to (8) in Table 6.4 present the regression results for the low-growth subsample. Column (5) shows that the main variable of interest, $CEOpower_{i,t}$, has a negative and significant coefficient at the 5% level. Further, the coefficient on the interaction term $CEOpower_{i,t}*IntMonitor_{i,t}$ is positive and significant at the 1% and 5% levels in columns (6) and (8), respectively, indicating that the negative effect of CEO power on audit fees is mitigated by internal monitoring. The coefficient on the interaction term $CEOpower_{i,t}*ExtMonitor_{i,t}$ is insignificant, as shown in columns (7) and (8).

Overall, the additional tests reported in Table 6.4 support the results reported in Table 5.1, thereby suggesting that client firm growth does not drive the main results of the study.

[14] Growth is measured by the market-to-book ratio, and the split point is the median. Firms above the sample median value are considered high growth firms whereas firms under the median value are considered low growth firms.

Table 6.4

Regression Results: Audit Fees Model – Partitioning by Client Firm Growth

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
High-growth firms				
$CEOpower_{i,t}$	-0.0287**	-0.0118	0.0209	0.0191
	(-2.5374)	(-1.1827)	(1.4344)	(1.3434)
$IntMonitor_{i,t}$		0.0757***		0.1073***
		(6.5419)		(6.1628)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0183**		0.0257*
		(1.9953)		(1.7043)
$ExtMonitor_{i,t}$			0.0226	0.0632**
			(0.8978)	(2.5342)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0126	-0.0190
			(-1.0279)	(-1.6363)
$Size_{i,t}$	0.4238***	0.3907***	0.4754***	0.4269***
	(38.5708)	(34.6618)	(20.3603)	(22.4496)
$ROA_{i,t}$	-0.2792***	-0.2566***	-0.3278***	-0.3118***
	(-10.4971)	(-9.7864)	(-3.5417)	(-3.7521)
$Loss_{i,t}$	-0.0173	-0.0185	-0.1153**	-0.1089*
	(-0.5070)	(-0.5287)	(-1.9843)	(-1.9046)
$MTB_{i,t}$	0.0036	0.0020	0.0100**	0.0058
	(1.0874)	(0.5829)	(2.0207)	(1.1435)
$Lev_{i,t}$	0.2716***	0.3371***	0.0765	0.2042**
	(4.2875)	(5.1595)	(0.7689)	(2.0813)
$Quick_{i,t}$	-0.0098***	-0.0091***	-0.0080***	-0.0073***
	(-6.5783)	(-6.1605)	(-3.0532)	(-2.6920)
$Sub_{i,t}$	0.0068***	0.0068***	0.0067***	0.0060***
	(15.6380)	(15.5065)	(8.7121)	(11.8508)
$Seg_{i,t}$	0.1079***	0.1028***	0.1177**	0.0967***
	(6.3953)	(7.3516)	(2.0810)	(4.1899)
$Invrec_{i,t}$	0.6597***	0.6351***	0.7197***	0.5947***
	(9.0916)	(8.4473)	(6.9574)	(5.6288)
$Big4_{i,t}$	0.1345***	0.1309***	0.0958***	0.0832***
	(5.7832)	(5.4653)	(2.9760)	(2.5938)
$Spec_{i,t}$	0.2190***	0.2131***	0.2644***	0.2078***
	(6.5237)	(6.1475)	(6.4729)	(5.3033)
$Newaud_{i,t}$	-0.0491	-0.0544	-0.0503	-0.0699
	(-1.2378)	(-1.3448)	(-0.8555)	(-1.1985)
$Opinion_{i,t}$	0.0977**	0.0878**	0.2568***	0.2372***
	(2.3372)	(2.0818)	(3.1539)	(3.0968)
$Audtenure_{i,t}$	0.0095**	0.0051	0.0121*	0.0034
	(2.1037)	(1.0992)	(1.7893)	(0.4980)
$NAS_{i,t}$	0.0230***	0.0214***	0.0206***	0.0192***
	(7.0684)	(6.4385)	(4.6088)	(4.4865)
$ACtenure_{i,t}$	0.0001	-0.0024	0.0127***	0.0077*
	(0.0252)	(-0.8608)	(3.0769)	(1.9511)
$ACmeet_{i,t}$	0.1116***	0.1034***	0.0566*	0.0503
	(4.5482)	(4.1020)	(1.7704)	(1.6167)
$BDtenure_{i,t}$	-0.0014	0.0019	-0.0163***	-0.0070*
	(-0.4334)	(0.5830)	(-3.9994)	(-1.7330)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	3,973	3,973	1,471	1,471
Adjusted R^2	0.78	0.78	0.77	0.77

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(5)	(6)	(7)	(8)
Low-growth firms				
$CEOpower_{i,t}$	-0.0331**	0.0047	0.0170	-0.0358
	(-2.4753)	(0.3513)	(0.6936)	(-1.5889)
$IntMonitor_{i,t}$		0.0660***		0.0125
		(5.4044)		(0.6527)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0286***		0.0455**
		(3.1229)		(2.5620)
$ExtMonitor_{i,t}$			0.0459	0.0524*
			(1.5338)	(1.7526)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0227	0.0177
			(-0.9989)	(0.7832)
$Size_{i,t}$	0.4035***	0.3836***	0.4026***	0.3981***
	(38.6658)	(32.7373)	(15.2171)	(14.9791)
$ROA_{i,t}$	-0.1982***	-0.1919***	-0.1811***	-0.1869***
	(-6.7692)	(-6.3051)	(-3.2732)	(-3.4982)
$Loss_{i,t}$	0.0076	0.0060	0.0120	-0.0066
	(0.2513)	(0.1852)	(0.2393)	(-0.1324)
$MTB_{i,t}$	-0.0464***	-0.0450***	-0.0510*	-0.0506*
	(-3.8213)	(-3.6883)	(-1.9462)	(-1.8851)
$Lev_{i,t}$	0.1884***	0.1893***	0.3350***	0.3158***
	(5.3216)	(5.2257)	(3.0985)	(2.9831)
$Quick_{i,t}$	-0.0094***	-0.0097***	-0.0069***	-0.0073***
	(-7.6414)	(-7.8417)	(-2.8013)	(-2.9482)
$Sub_{i,t}$	0.0073***	0.0070***	0.0053***	0.0055***
	(12.5087)	(11.6915)	(5.3408)	(5.4754)
$Seg_{i,t}$	0.1169***	0.1068***	0.0614**	0.0620*
	(7.6528)	(7.3383)	(1.9666)	(1.9563)
$Invrec_{i,t}$	0.7059***	0.7023***	0.6755***	0.6201***
	(9.8562)	(9.3301)	(5.0221)	(4.5414)
$Big4_{i,t}$	0.1168***	0.1187***	0.1190**	0.1125**
	(4.4912)	(4.4050)	(2.2712)	(2.0938)
$Spec_{i,t}$	0.3029***	0.2929***	0.1859***	0.1867***
	(7.0728)	(6.4186)	(3.0001)	(2.9863)
$Newaud_{i,t}$	-0.0856*	-0.0891*	-0.0833	-0.0945
	(-1.6698)	(-1.6624)	(-0.6745)	(-0.7580)
$Opinion_{i,t}$	0.0314	0.0328	0.1303*	0.1367*
	(0.8336)	(0.8361)	(1.8316)	(1.9594)
$Audtenure_{i,t}$	-0.0127**	-0.0160***	-0.0188**	-0.0182**
	(-2.5297)	(-3.1233)	(-2.2381)	(-2.1646)
$NAS_{i,t}$	0.0355***	0.0348***	0.0444***	0.0455***
	(9.3326)	(8.7165)	(6.9131)	(6.8963)
$ACtenure_{i,t}$	-0.0042	-0.0038	-0.0042	-0.0048
	(-1.3241)	(-1.1244)	(-0.6575)	(-0.7390)
$ACmeet_{i,t}$	0.0740***	0.0568*	0.0615	0.0542
	(2.6233)	(1.9419)	(1.4114)	(1.2399)
$BDtenure_{i,t}$	-0.0000	-0.0031	-0.0116*	-0.0077
	(-0.0099)	(-0.9092)	(-1.6848)	(-1.1356)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	3,764	3,764	1,144	1,144
Adjusted R^2	0.69	0.69	0.60	0.60

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* as at year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.3.3 Partitioning by client firm risk: Going-concern opinion model

Recent evidence suggests that riskier client firms are more likely to receive a going-concern opinion (Hardies et al., 2016). Therefore, the going-concern opinion sample is partitioned by the inherent risk [15] to test the robustness of the main results in Chapter 5. Partitioning by inherent risk can help to get an in-depth understanding of the extent of the power held by CEOs and how it could affect the likelihood of receiving a going-concern opinion in firms with high and low inherent risk (Hardies et al., 2016). Results from the regressions using high and low inherent risk are reported in Table 6.5.

The additional tests reported in Table 6.5 support the main results in Table 5.2. Columns (1) to (4) show the regression results for the high-risk firms. The coefficient on $CEOpower_{i,t}$ is negative and statistically significant at the 5% level in columns (1) and (2). The coefficients for both interactions $CEOpower_{i,t}*IntMonitor_{i,t}$ and $CEOpower_{i,t}*ExtMonitor_{i,t}$ are not statistically significant. This suggests that neither internal nor external monitoring mitigates the negative relationship between CEO power and the going-concern opinion in high-risk firms.

Columns (5) to (8) show the regression results for the low-risk firms. The coefficient on $CEOpower_{i,t}$ is negative and statistically significant at 1% level in columns (5) and (6). The coefficients for both interactions $CEOpower_{i,t}*IntMonitor_{i,t}$ and $CEOpower_{i,t}*ExtMonitor_{i,t}$ are not statistically significant, indicating that CEO power does not depend on the values of internal and external monitoring in low-risk firms.

Overall, the additional tests reported in Table 6.5 support the results reported in Table 5.2, thereby suggesting that the main findings are not driven by client firm risk.

[15] Inherent risk is measured as the ratio of the sum of inventory and accounts receivable to total assets, and the split point is the median. Firms above the sample median value are considered high-risk firms whereas firms under the median value are considered low-risk firms.

Table 6.5

Regression Results: Going-Concern Opinion Model – Partitioning by Client Firm Risk

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
High-risk firms				
$CEOpower_{i,t}$	-0.2115**	-0.2038**	-0.2470	-0.1539
	(-2.1614)	(-2.0315)	(-0.5720)	(-0.3255)
$IntMonitor_{i,t}$		-0.0643		-0.7304**
		(-0.7336)		(-2.3547)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0013		-0.4444
		(0.0149)		(-1.4256)
$ExtMonitor_{i,t}$			-0.4061	-0.4873
			(-0.7139)	(-0.7664)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			0.2311	0.4237
			(0.4291)	(0.7007)
$Size_{i,t}$	-0.3851***	-0.3864***	-0.1626	-0.1298
	(-4.9218)	(-4.9238)	(-0.5593)	(-0.4128)
$Age_{i,t}$	-0.0243**	-0.0244**	-0.0115	-0.0003
	(-2.3150)	(-2.3362)	(-0.3599)	(-0.0103)
$ROA_{i,t}$	-0.1210	-0.1245	-0.4385	-0.1171
	(-0.2271)	(-0.2370)	(-0.3564)	(-0.0963)
$LLoss_{i,t}$	-0.0425	-0.0525	-0.0349	-0.0171
	(-0.1997)	(-0.2459)	(-0.0529)	(-0.0256)
$Lev_{i,t}$	0.5794	0.5769	-1.1096	-1.5545
	(1.1638)	(1.1568)	(-0.8413)	(-1.0157)
$Clev_{i,t}$	0.3303	0.3214	1.7509	2.3163
	(0.6091)	(0.5911)	(0.9080)	(1.2900)
$Nborrow_{i,t}$	-0.3928**	-0.3818**	-1.1622*	-1.3434*
	(-2.1013)	(-2.0131)	(-1.9071)	(-1.8576)
$Invest_{i,t}$	-1.3443***	-1.3487***	-3.0629***	-3.2614***
	(-3.8330)	(-3.8252)	(-3.2011)	(-3.2802)
$Opcf_{i,t}$	-0.1827	-0.1855	-1.1976	-1.6878
	(-0.4135)	(-0.4213)	(-0.8087)	(-1.1069)
$Zscore_{i,t}$	0.0015**	0.0015**	0.0056	0.0019
	(2.1344)	(2.1418)	(0.3672)	(0.1216)
$Invrec_{i,t}$	1.0962**	1.0593*	-1.8752	-2.5480
	(2.0117)	(1.9310)	(-0.9270)	(-1.1120)
$Big4_{i,t}$	0.0695	0.0809	-0.3267	-0.3302
	(0.3544)	(0.4100)	(-0.5423)	(-0.5341)
$Pqual_{i,t}$	2.2323***	2.2380***	3.4382***	3.4426***
	(10.5359)	(10.5709)	(4.4042)	(4.4783)
$Auditlag_{i,t}$	0.0177***	0.0174***	0.0454**	0.0492**
	(2.8814)	(2.8225)	(2.2754)	(2.3041)
$Audtenure_{i,t}$	-0.0147	-0.0142	0.0754	0.0748
	(-0.4535)	(-0.4402)	(1.0733)	(1.0167)
$Feeratio_{i,t}$	-0.1944	-0.2009	-0.3473	-0.3838*
	(-1.3747)	(-1.4293)	(-1.6241)	(-1.8058)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,131	1,131	281	281
Pseudo-R^2	0.40	0.40	0.51	0.51

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(5)	(6)	(7)	(8)
Low-risk firms				
$CEOpower_{i,t}$	-0.2694*** (-2.9307)	-0.2633*** (-2.8588)	0.1440 (0.6041)	0.1347 (0.5626)
$IntMonitor_{i,t}$		-0.0668 (-0.7874)		0.0222 (0.0930)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0332 (0.3880)		-0.1317 (-0.6048)
$ExtMonitor_{i,t}$			-0.3225 (-0.9396)	-0.3238 (-0.9269)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0885 (-0.3254)	-0.0759 (-0.2816)
$Size_{i,t}$	-0.3330*** (-4.3706)	-0.3325*** (-4.3574)	-0.4010 (-1.5028)	-0.3904 (-1.4239)
$Age_{i,t}$	0.0188** (2.0941)	0.0191** (2.1060)	-0.0118 (-0.5292)	-0.0110 (-0.4924)
$ROA_{i,t}$	0.0718 (0.3041)	0.0752 (0.3176)	0.0322 (0.0905)	0.0400 (0.1028)
$LLoss_{i,t}$	0.0344 (0.1193)	0.0333 (0.1148)	-0.7830 (-1.2699)	-0.7930 (-1.2804)
$Lev_{i,t}$	-1.2015*** (-3.4243)	-1.2064*** (-3.4506)	-2.5807 (-1.3632)	-2.4630 (-1.2469)
$Clev_{i,t}$	0.3913 (1.5363)	0.3950 (1.5687)	2.5595 (1.3058)	2.5024 (1.2914)
$Nborrow_{i,t}$	-0.4201** (-2.2956)	-0.4186** (-2.2902)	-1.0624* (-1.9210)	-1.0680* (-1.9358)
$Invest_{i,t}$	-3.0408*** (-7.7930)	-3.0406*** (-7.7857)	-6.2099*** (-4.8456)	-6.1345*** (-4.7686)
$Opcf_{i,t}$	-1.1903*** (-2.9205)	-1.1960*** (-2.9352)	-0.5470 (-0.3992)	-0.5237 (-0.3756)
$Zscore_{i,t}$	-0.0012 (-0.8499)	-0.0012 (-0.8709)	-0.0041 (-0.6675)	-0.0041 (-0.6702)
$Invrec_{i,t}$	3.0059 (1.1964)	2.8202 (1.1118)	1.0159 (0.1400)	1.6643 (0.2169)
$Big4_{i,t}$	0.0227 (0.1272)	0.0258 (0.1438)	0.0973 (0.1951)	0.0724 (0.1501)
$Pqual_{i,t}$	2.6033*** (13.8166)	2.6095*** (13.8900)	2.8126*** (5.5128)	2.8245*** (5.5560)
$Auditlag_{i,t}$	0.0227*** (4.1866)	0.0226*** (4.1727)	0.0379*** (3.0453)	0.0381*** (2.9902)
$Audtenure_{i,t}$	0.0112 (0.4062)	0.0100 (0.3604)	-0.0537 (-0.7684)	-0.0488 (-0.7028)
$Feeratio_{i,t}$	0.0458 (0.3849)	0.0523 (0.4360)	-0.1224 (-0.3507)	-0.1191 (-0.3575)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,545	1,545	375	375
Pseudo-R^2	0.44	0.44	0.49	0.49

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

6.3.4 Partitioning by client firm age: Going-concern opinion model

The existing body of research has recognised the association between company age and the likelihood of receiving a going-concern opinion (Hossain, 2013; Hossain, Monroe, Wilson, & Jubb, 2016; Knechel & Vanstraelen, 2007). Knechel and Vanstraelen (2007) argue that older companies have proven their ability to survive, so they are less likely to suffer financial distress or to receive a going-concern opinion. On the other hand, younger companies have a higher risk of failure (Blay & Geiger, 2013) and are more likely to encounter financial distress (Carey & Simnett, 2006). Therefore, the going-concern opinion sample is partitioned into older and younger companies [16] to ensure that any differences in client firm age do not drive the main results reported in Table 5.2.

The main regressions in Table 5.2 are re-performed for older and younger companies, and the results are presented in Table 6.6. Columns (1) to (4) show the results of the regressions for older companies. The coefficient on $CEOpower_{i,t}$ is negative and statistically significant at the 1% level in columns (1) and (2). The coefficients for both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are not statistically significant in columns (2) to (4).

Columns (5) to (8) show the results of the regressions for the subsample of younger companies. The coefficient on $CEOpower_{i,t}$ is negative and statistically significant at the 5% level in columns (5) and (6). The coefficients for both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are not statistically significant in columns (6) to (8).

Overall, the additional tests reported in Table 6.6 support the results reported in Table 5.2, thereby suggesting that the main findings are not driven by client firm age.

[16] The variable $age_{i,t}$ is used to partition the sample, and the split point is the median value.

Table 6.6

Regression Results: Going-Concern Opinion Model – Partitioning by Client Firm Age

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
Older firms				
$CEOpower_{i,t}$	-0.3011***	-0.2941***	-0.0532	-0.2175
	(-3.3278)	(-3.2152)	(-0.0757)	(-0.2446)
$IntMonitor_{i,t}$		-0.0329		1.1518**
		(-0.3744)		(2.0808)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0172		0.0844
		(0.1877)		(0.1434)
$ExtMonitor_{i,t}$			-1.1519	-1.5477
			(-1.4183)	(-1.6394)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.3478	-0.3557
			(-0.6743)	(-0.6345)
$Size_{i,t}$	-0.3949***	-0.3946***	-0.6053	-0.7173
	(-4.9211)	(-4.9171)	(-1.4990)	(-1.5016)
$Age_{i,t}$	0.0112	0.0109	0.0093	0.0098
	(1.0030)	(0.9687)	(0.2893)	(0.2332)
$ROA_{i,t}$	0.1458	0.1413	-0.8610	-0.5501
	(0.3752)	(0.3608)	(-0.4830)	(-0.2447)
$LLoss_{i,t}$	0.1701	0.1670	-0.2078	-0.0698
	(0.7459)	(0.7326)	(-0.2876)	(-0.0745)
$Lev_{i,t}$	-0.7621***	-0.7602***	0.5851	2.7372
	(-2.9142)	(-2.8977)	(0.2064)	(0.8380)
$Clev_{i,t}$	0.6473**	0.6425**	2.8579	3.0610
	(2.4137)	(2.3790)	(0.6999)	(0.9283)
$Nborrow_{i,t}$	-0.5644	-0.5681	2.0940	2.5451
	(-0.9554)	(-0.9588)	(1.0302)	(1.1807)
$Invest_{i,t}$	-0.3949***	-0.3946***	-0.6053	-0.7173
	(-4.9211)	(-4.9171)	(-1.4990)	(-1.5016)
$Opcf_{i,t}$	0.0112	0.0109	0.0093	0.0098
	(1.0030)	(0.9687)	(0.2893)	(0.2332)
$Zscore_{i,t}$	-0.0014	-0.0013	-0.0020	0.0034
	(-0.3555)	(-0.3214)	(-0.1455)	(0.2605)
$Invrec_{i,t}$	0.5058	0.4868	2.7665	2.2246
	(0.9681)	(0.9299)	(0.8569)	(0.5496)
$Big4_{i,t}$	0.0695	0.0809	-0.3267	-0.3302
	(0.3544)	(0.4100)	(-0.5423)	(-0.5341)
$Pqual_{i,t}$	2.7841***	2.7884***	4.3848***	4.4546***
	(13.8913)	(13.9051)	(5.7749)	(5.0734)
$Auditlag_{i,t}$	0.0165***	0.0165***	0.0157	0.0365
	(2.6690)	(2.6634)	(0.8787)	(1.2764)
$Audtenure_{i,t}$	-0.0076	-0.0081	-0.0185	0.0426
	(-0.2888)	(-0.3078)	(-0.1894)	(0.3726)
$Feeratio_{i,t}$	0.1602	0.1612	0.7455*	0.8419
	(1.2643)	(1.2664)	(1.7397)	(1.5105)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,283	1,283	216	216
Pseudo-R^2	0.44	0.44	0.57	0.59

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(5)	(6)	(7)	(8)
Newer firms				
$CEOpower_{i,t}$	-0.2177**	-0.2099**	0.2634	0.1745
	(-2.1774)	(-2.0641)	(0.9066)	(0.5969)
$IntMonitor_{i,t}$		-0.0442		-0.2685
		(-0.5218)		(-0.9963)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0262		-0.1098
		(0.2924)		(-0.4567)
$ExtMonitor_{i,t}$			0.0780	0.1037
			(0.1977)	(0.2628)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.3560	-0.2605
			(-0.9313)	(-0.6329)
$Size_{i,t}$	-0.3633***	-0.3630***	-0.8183**	-0.7246*
	(-4.8048)	(-4.7857)	(-2.0252)	(-1.8197)
$Age_{i,t}$	0.0151	0.0152	0.3048**	0.2951**
	(0.4113)	(0.4135)	(2.2804)	(2.2527)
$ROA_{i,t}$	0.0490	0.0529	0.1888	0.2071
	(0.1891)	(0.2049)	(0.4343)	(0.4861)
$LLoss_{i,t}$	-0.0830	-0.0909	-0.8101	-0.7242
	(-0.3205)	(-0.3504)	(-1.2256)	(-1.0291)
$Lev_{i,t}$	-0.1160	-0.1150	0.6637	0.2309
	(-0.2778)	(-0.2783)	(0.3108)	(0.1042)
$Clev_{i,t}$	-0.0094	-0.0026	2.0011	2.2781
	(-0.0337)	(-0.0093)	(1.1047)	(1.2021)
$Nborrow_{i,t}$	-0.9425**	-0.9425**	-2.7046**	-2.9317**
	(-2.3324)	(-2.3510)	(-2.0797)	(-2.4147)
$Invest_{i,t}$	-0.3633***	-0.3630***	-0.8183**	-0.7246*
	(-4.8048)	(-4.7857)	(-2.0252)	(-1.8197)
$Opcf_{i,t}$	0.0151	0.0152	0.3048**	0.2951**
	(0.4113)	(0.4135)	(2.2804)	(2.2527)
$Zscore_{i,t}$	-0.0019	-0.0020	0.0056	0.0055
	(-0.4584)	(-0.4903)	(0.6593)	(0.6474)
$Invrec_{i,t}$	1.7561***	1.6987***	0.8167	0.9190
	(3.2142)	(3.0577)	(0.3282)	(0.3450)
$Big4_{i,t}$	0.0227	0.0258	0.0973	0.0724
	(0.1272)	(0.1438)	(0.1951)	(0.1501)
$Pqual_{i,t}$	2.0891***	2.0938***	2.1203***	2.2213***
	(9.7504)	(9.8044)	(3.2309)	(3.0525)
$Auditlag_{i,t}$	0.0227***	0.0224***	0.0560***	0.0559***
	(3.7359)	(3.6913)	(3.6841)	(3.7795)
$Audtenure_{i,t}$	0.0374	0.0366	-0.0690	-0.0846
	(0.9420)	(0.9245)	(-0.6964)	(-0.8538)
$Feeratio_{i,t}$	-0.1848	-0.1860	-0.4960*	-0.5569*
	(-1.5416)	(-1.5502)	(-1.7163)	(-1.7157)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,393	1,393	440	440
Pseudo-R^2	0.39	0.39	0.52	0.52

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

6.4 Partitioning Samples by Audit Characteristics

This section investigates whether the main results reported in Chapter 5 are robust to different sample partitioning approaches based on a range of audit characteristics. The regressions reported in Tables 5.1 and 5.2 are re-performed after partitioning the samples by the audit characteristics of auditor brand, audit firm change, auditor tenure, and audit reporting lag to test the robustness of the results.

6.4.1 Partitioning by auditor brand: Audit fees model

There has been a large volume of published studies describing the role of the audit firm brand (Big 4 vs. non-Big 4) in audit quality (Hay et al., 2006; Sultana et al., 2019; F. Sun, Wu, & Li, 2014; Yao et al., 2015). Thus far, prior research has indicated that Big 4 audit firms are regarded as having higher audit quality and are associated with higher audit fees (Ting-Chiao et al., 2016; Yao et al., 2015). To address the possible concern that decreases in audit fees could be due to audit firm size, the main regressions in Table 5.1 are re-run after partitioning the audit fees sample into companies audited by Big 4 firms and companies audited by non-Big 4 firms. Results are reported in Table 6.7.

Columns (1) to (4) present the results for companies audited by Big 4 firms. Column (1) shows that the coefficient on $CEOpower_{i,t}$ is negative and significant at the 10% level. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 10% level, indicating that the effect of CEO power on audit fees is attenuated by internal monitoring. The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is not significant in column (3). Column (4) aggregates both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in the same regression. The interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 1% level, while the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant. These results are consistent with the results reported in Table 5.1.

Columns (5) to (8) present the results for companies audited by non-Big 4 firms. Column (5) shows that the coefficient on $CEOpower_{i,t}$ is negative and significant at the 1% level. Column (6) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 10% level, indicating that the effect of CEO power on audit fees is attenuated by internal monitoring. The coefficient

on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (7) is insignificant. Column (8) presents the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression, and both are insignificant. These results for the subsample of companies audited by non-Big 4 firms are generally consistent with the results reported in Table 5.1 except for the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ in column (8) when both interactions are included in the regression. This means that CEO power does not depend on the value of internal monitoring in companies audited by non-Big 4 firms, particularly when external monitoring is in place.

Table 6.7

Regression Results: Audit Fees Model – Partitioning by Audit Firm Brand

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
Big 4 auditor				
$CEOpower_{i,t}$	-0.0204* (-1.7840)	-0.0196* (-1.7305)	0.0059 (0.3344)	-0.0009 (-0.0551)
$IntMonitor_{i,t}$		-0.0040 (-0.4092)		0.0117 (0.8010)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0159* (1.7363)		0.0486*** (3.3722)
$ExtMonitor_{i,t}$			0.0286 (1.0630)	0.0276 (1.0273)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0089 (-0.5181)	-0.0108 (-0.6243)
$Size_{i,t}$	0.4405*** (43.1490)	0.4405*** (43.3166)	0.4490*** (20.1763)	0.4457*** (19.9129)
$ROA_{i,t}$	-0.2788*** (-9.7686)	-0.2781*** (-9.7493)	-0.2373*** (-3.9331)	-0.2292*** (-3.8047)
$Loss_{i,t}$	-0.0133 (-0.4437)	-0.0150 (-0.5015)	-0.1079** (-2.3876)	-0.1102** (-2.4683)
$MTB_{i,t}$	0.0045 (1.1881)	0.0044 (1.1662)	0.0105** (2.0922)	0.0107** (2.1398)
$Lev_{i,t}$	0.3265*** (7.4773)	0.3272*** (7.5225)	0.3881*** (4.9021)	0.3867*** (4.9181)
$Quick_{i,t}$	-0.0094*** (-6.9676)	-0.0093*** (-6.9516)	-0.0052** (-2.0545)	-0.0056** (-2.2254)
$Sub_{i,t}$	0.0063*** (15.8408)	0.0063*** (15.8406)	0.0065*** (9.5344)	0.0066*** (9.6270)
$Seg_{i,t}$	0.1150*** (9.7409)	0.1153*** (9.7594)	0.0857*** (2.8790)	0.0859*** (2.8754)
$Invrec_{i,t}$	0.7039*** (10.8833)	0.6983*** (10.7893)	0.7808*** (7.0771)	0.7355*** (6.5663)
$Spec_{i,t}$	0.2191*** (6.8047)	0.2177*** (6.7620)	0.2316*** (4.9010)	0.2300*** (4.8461)
$Newaud_{i,t}$	-0.1136*** (-2.5797)	-0.1155*** (-2.6359)	-0.1886*** (-2.7794)	-0.1938*** (-2.8777)
$Opinion_{i,t}$	0.0342 (0.9198)	0.0338 (0.9092)	0.1108** (2.0456)	0.1202** (2.2579)
$Audtenure_{i,t}$	-0.0028 (-0.5826)	-0.0029 (-0.6035)	-0.0076 (-0.9882)	-0.0076 (-0.9983)
$NAS_{i,t}$	0.0264*** (7.5099)	0.0265*** (7.5268)	0.0279*** (5.1153)	0.0278*** (5.1019)
$ACtenure_{i,t}$	-0.0036 (-1.2570)	-0.0036 (-1.2564)	0.0116** (2.4499)	0.0105** (2.2191)
$ACmeet_{i,t}$	0.0687*** (2.9208)	0.0706*** (3.0032)	0.0495 (1.5426)	0.0528 (1.6417)
$BDtenure_{i,t}$	-0.0025 (-0.8054)	-0.0023 (-0.7476)	-0.0127*** (-2.7534)	-0.0113** (-2.4509)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	4,925	4,925	1,714	1,714
Adjusted R^2	0.74	0.74	0.71	0.71

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(5)	(6)	(7)	(8)
Non-Big 4 auditor				
$CEOpower_{i,t}$	-0.0360*** (-2.8073)	-0.0315** (-2.3894)	0.0056 (0.3060)	0.0038 (0.2023)
$IntMonitor_{i,t}$		-0.0030 (-0.2715)		0.0036 (0.2097)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0173* (1.6699)		-0.0103 (-0.6468)
$ExtMonitor_{i,t}$			0.0440* (1.8273)	0.0453* (1.8480)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0152 (-1.0887)	-0.0148 (-1.0567)
$Size_{i,t}$	0.3698*** (33.3195)	0.3699*** (32.4602)	0.3762*** (15.6976)	0.3758*** (15.6989)
$ROA_{i,t}$	-0.2027*** (-7.9155)	-0.2038*** (-7.9431)	-0.2509*** (-4.0118)	-0.2507*** (-4.0285)
$Loss_{i,t}$	0.0083 (0.2412)	0.0081 (0.2385)	0.0581 (1.0439)	0.0597 (1.0737)
$MTB_{i,t}$	-0.0019 (-0.6203)	-0.0019 (-0.6184)	-0.0148** (-2.1703)	-0.0146** (-2.1475)
$Lev_{i,t}$	0.1243*** (3.7571)	0.1233*** (3.7464)	0.3042*** (3.0536)	0.3097*** (3.1291)
$Quick_{i,t}$	-0.0078*** (-5.6666)	-0.0078*** (-5.7058)	-0.0090*** (-4.1564)	-0.0090*** (-4.1517)
$Sub_{i,t}$	0.0081*** (11.2591)	0.0081*** (11.2327)	0.0077*** (6.8846)	0.0077*** (6.9096)
$Seg_{i,t}$	0.0726** (2.0776)	0.0726** (2.0771)	0.0368 (1.0591)	0.0355 (1.0042)
$Invrec_{i,t}$	0.5749*** (6.8869)	0.5719*** (6.8612)	0.2144* (1.6573)	0.2238* (1.7261)
$Spec_{i,t}$	0.2870*** (4.4561)	0.2861*** (4.4410)	0.1511* (1.8755)	0.1511* (1.8742)
$Newaud_{i,t}$	-0.0325 (-0.6940)	-0.0330 (-0.7042)	0.0700 (0.6768)	0.0724 (0.6923)
$Opinion_{i,t}$	0.1155*** (2.6366)	0.1139*** (2.6095)	0.1840 (1.6321)	0.1842 (1.6292)
$Audtenure_{i,t}$	-0.0041 (-0.8337)	-0.0044 (-0.9075)	-0.0074 (-1.1483)	-0.0069 (-1.0622)
$NAS_{i,t}$	0.0318*** (9.1166)	0.0318*** (9.1109)	0.0311*** (6.7143)	0.0310*** (6.6702)
$ACtenure_{i,t}$	-0.0014 (-0.4825)	-0.0013 (-0.4604)	-0.0010 (-0.2232)	-0.0008 (-0.1683)
$ACmeet_{i,t}$	0.0257*** (2.8336)	0.0258*** (2.8485)	0.0105 (0.7924)	0.0102 (0.7615)
$BDtenure_{i,t}$	0.0013 (0.3978)	0.0015 (0.4557)	-0.0045 (-0.8384)	-0.0051 (-0.9280)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	2,812	2,812	901	901
Adjusted R^2	0.68	0.68	0.65	0.65

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Spec_{i,t} + \beta_{12} Newaud_{i,t} + \beta_{13} Opinion_{i,t} + \beta_{14} Audtenure_{i,t} + \beta_{15} NAS_{i,t} + \beta_{16} ACtenure_{i,t} + \beta_{17} ACmeet_{i,t} + \beta_{18} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Spec_{i,t} + \beta_{14} Newaud_{i,t} + \beta_{15} Opinion_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} NAS_{i,t} + \beta_{18} ACtenure_{i,t} + \beta_{19} ACmeet_{i,t} + \beta_{20} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (5)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Spec_{i,t} + \beta_{14} Newaud_{i,t} + \beta_{15} Opinion_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} NAS_{i,t} + \beta_{18} ACtenure_{i,t} + \beta_{19} ACmeet_{i,t} + \beta_{20} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Spec_{i,t} + \beta_{16} Newaud_{i,t} + \beta_{17} Opinion_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} NAS_{i,t} + \beta_{20} ACtenure_{i,t} + \beta_{21} ACmeet_{i,t} + \beta_{22} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* as at year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.4.2 Partitioning by audit firm change: Audit fees model

Previous research findings have reported that clients may change auditors to obtain a quote of lower audit fees from a new audit firm that might offer their services at a lower rate to attract a new client (Duellman et al., 2015; Hay et al., 2006). To address the possible concern that the effect of CEO power on audit fees could be due to audit firm change, the audit fees sample is partitioned into companies with a new auditor and companies with a continuous auditor. Therefore, the main regressions in Table 5.1 are re-run, and the results are reported in Table 6.8.

Columns (1) to (4) present the results for companies audited by a new audit firm. Column (1) shows that the coefficient on $CEOpower_{i,t}$ is negative and significant at the 5% level. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 10% level, indicating that the effect of CEO power on audit fees is attenuated by internal monitoring. The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (3) is not significant. Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression, and both are insignificant. These results for the subsample of companies audited by a new audit firm are generally consistent with the main findings reported in Chapter 5 except for the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ in column (4). This means that CEO power does not depend on the value of internal monitoring in companies audited by a new auditor, particularly when there is external monitoring in place.

Columns (5) to (8) present the results for companies that did not change their auditor. Column (5) shows that the coefficient on $CEOpower_{i,t}$ is negative and significant at the 1% level. Column (6) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 10% level, indicating that the effect of CEO power on audit fees is attenuated by internal monitoring. The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (7) is not significant. Column (8) aggregates both interactions in the same regression. The interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 1% level, while the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant. These results are consistent with the main findings reported in Chapter 5.

Table 6.8

Regression Results: Audit Fees Model – Partitioning by Audit Firm Change

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
New auditor				
$CEOpower_{i,t}$	-0.0691**	-0.0598**	-0.1062	-0.1056
	(-2.4133)	(-2.0264)	(-1.5667)	(-1.5370)
$IntMonitor_{i,t}$		-0.0030		0.0430
		(-0.1234)		(0.8263)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0418*		-0.0072
		(1.8638)		(-0.1096)
$ExtMonitor_{i,t}$			-0.1082	-0.0991
			(-1.4930)	(-1.3542)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0077	-0.0067
			(-0.1250)	(-0.1068)
$Size_{i,t}$	0.4303***	0.4294***	0.4229***	0.4189***
	(21.7131)	(22.0446)	(6.8642)	(6.6655)
$ROA_{i,t}$	-0.3305***	-0.3332***	-0.3052	-0.2980
	(-5.7308)	(-5.8028)	(-1.2754)	(-1.2120)
$Loss_{i,t}$	-0.0808	-0.0844	-0.1652	-0.1416
	(-1.2991)	(-1.3750)	(-1.0461)	(-0.8784)
$MTB_{i,t}$	-0.0060	-0.0059	-0.0031	-0.0038
	(-0.8874)	(-0.8720)	(-0.1653)	(-0.1903)
$Lev_{i,t}$	0.1971***	0.1900***	0.4385	0.4768
	(2.5973)	(2.5923)	(1.4228)	(1.5874)
$Quick_{i,t}$	-0.0087***	-0.0085***	-0.0022	-0.0021
	(-3.2520)	(-3.1926)	(-0.2324)	(-0.2038)
$Sub_{i,t}$	0.0040***	0.0040***	0.0060***	0.0059***
	(3.3536)	(3.3952)	(3.0985)	(2.9607)
$Seg_{i,t}$	0.1313***	0.1319***	0.0598	0.0670
	(5.0066)	(5.0789)	(1.0480)	(1.1847)
$Invrec_{i,t}$	0.4260***	0.4229***	0.3155	0.3407
	(2.9787)	(2.9755)	(1.1935)	(1.3251)
$Big4_{i,t}$	0.0539	0.0480	-0.1409	-0.1434
	(0.9292)	(0.8406)	(-1.0297)	(-1.0688)
$Spec_{i,t}$	0.2238*	0.2199*	0.3573*	0.3664*
	(1.7709)	(1.7171)	(1.7872)	(1.6601)
$Opinion_{i,t}$	0.1129	0.1063	0.5828	0.6031
	(1.2091)	(1.1224)	(1.2615)	(1.2710)
$Audtenure_{i,t}$	-	-	-	-
$NAS_{i,t}$	0.0213***	0.0221***	0.0475***	0.0469***
	(2.9434)	(3.0509)	(3.1684)	(3.2113)
$ACtenure_{i,t}$	0.0056	0.0054	0.0124	0.0127
	(0.8663)	(0.8328)	(0.9550)	(0.9638)
$ACmeet_{i,t}$	0.1024	0.1057	0.1271	0.1063
	(1.3992)	(1.4319)	(0.9859)	(0.7907)
$BDtenure_{i,t}$	-0.0050	-0.0046	-0.0109	-0.0119
	(-0.6388)	(-0.5954)	(-0.8563)	(-0.9243)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	836	836	240	240
Adjusted R^2	0.66	0.66	0.56	0.56

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(5)	(6)	(7)	(8)
Continuous auditor				
$CEOpower_{i,t}$	-0.0237*** (-2.6365)	-0.0224** (-2.4574)	-0.0050 (-0.3527)	-0.0073 (-0.5166)
$IntMonitor_{i,t}$		-0.0032 (-0.4162)		0.0048 (0.4262)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0122* (1.6711)		0.0361*** (3.1930)
$ExtMonitor_{i,t}$			0.0433** (2.1774)	0.0417** (2.0876)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0115 (-0.8168)	-0.0125 (-0.8902)
$Size_{i,t}$	0.4177*** (52.1798)	0.4178*** (51.7340)	0.4452*** (25.2467)	0.4435*** (24.9687)
$ROA_{i,t}$	-0.2314*** (-11.2122)	-0.2312*** (-11.1769)	-0.2510*** (-5.8883)	-0.2502*** (-5.7673)
$Loss_{i,t}$	0.0002 (0.0072)	-0.0003 (-0.0133)	-0.0267 (-0.7175)	-0.0279 (-0.7551)
$MTB_{i,t}$	0.0024 (0.8575)	0.0024 (0.8438)	0.0030 (0.7199)	0.0029 (0.6985)
$Lev_{i,t}$	0.2424*** (8.0315)	0.2431*** (8.0519)	0.3084*** (4.7405)	0.3073*** (4.7221)
$Quick_{i,t}$	-0.0098*** (-9.7394)	-0.0098*** (-9.7179)	-0.0069*** (-3.7105)	-0.0070*** (-3.7632)
$Sub_{i,t}$	0.0059*** (19.7300)	0.0059*** (19.7143)	0.0057*** (10.5056)	0.0057*** (10.5651)
$Seg_{i,t}$	0.1071*** (8.7606)	0.1073*** (8.7661)	0.0708*** (2.6022)	0.0711*** (2.6099)
$Invrec_{i,t}$	0.7127*** (13.0679)	0.7093*** (13.0076)	0.7012*** (7.8224)	0.6762*** (7.5117)
$Big4_{i,t}$	0.1387*** (7.7403)	0.1381*** (7.7175)	0.1414*** (5.3925)	0.1392*** (5.3520)
$Spec_{i,t}$	0.2376*** (8.0434)	0.2366*** (8.0173)	0.2067*** (5.1176)	0.2054*** (5.0787)
$Opinion_{i,t}$	0.0754** (2.5440)	0.0748** (2.5277)	0.1431*** (3.2702)	0.1474*** (3.3997)
$Audtenure_{i,t}$	-0.0023 (-0.6430)	-0.0024 (-0.6776)	-0.0050 (-0.9101)	-0.0054 (-0.9904)
$NAS_{i,t}$	0.0301*** (11.2901)	0.0301*** (11.2735)	0.0287*** (7.4976)	0.0288*** (7.5315)
$ACtenure_{i,t}$	-0.0028 (-1.2534)	-0.0027 (-1.2385)	0.0047 (1.3069)	0.0041 (1.1334)
$ACmeet_{i,t}$	0.0985*** (5.0950)	0.0997*** (5.1933)	0.0562** (2.1787)	0.0579** (2.2451)
$BDtenure_{i,t}$	-0.0011 (-0.4795)	-0.0010 (-0.4045)	-0.0076** (-2.0270)	-0.0067* (-1.7964)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	6,901	6,901	2,375	2,375
Adjusted R^2	0.75	0.75	0.72	0.72

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Opinion_{i,t} + \beta_{14} Audtenure_{i,t} + \beta_{15} NAS_{i,t} + \beta_{16} ACtenure_{i,t} + \beta_{17} ACmeet_{i,t} + \beta_{18} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Opinion_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} NAS_{i,t} + \beta_{18} ACtenure_{i,t} + \beta_{19} ACmeet_{i,t} + \beta_{20} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Opinion_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} NAS_{i,t} + \beta_{18} ACtenure_{i,t} + \beta_{19} ACmeet_{i,t} + \beta_{20} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Opinion_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} NAS_{i,t} + \beta_{20} ACtenure_{i,t} + \beta_{21} ACmeet_{i,t} + \beta_{22} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* as at year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.4.3 Partitioning by audit firm tenure: Going-concern opinion model

Several studies have investigated the relationship between audit firm tenure and the propensity to issue a going-concern opinion (Carson et al., 2013; Ratzinger-Sakel, 2013). Carson et al. (2013) suggest that a long time with a client may enable auditors to gain better knowledge, thereby allowing them to report a going-concern opinion. To address the possible concern that the negative relationship between CEO power and the likelihood of receiving a going-concern opinion might occur due to the length of the relationship between the audit firm and the client, the sample of the going-concern opinion model is partitioned by length of audit firm tenure.[17] Therefore, the main regressions in Table 5.2 are re-run, and the results are reported in Table 6.9.

Columns (1) to (4) present the results for companies audited by a long-tenured audit firm. Column (1) shows that the coefficient on $CEOpower_{i,t}$ is negative and significant at the 5% level. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is insignificant. Moreover, the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (3) is also insignificant. Column (4) aggregates both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in the same regression. Both interactions remain insignificant.

Columns (5) to (8) present the results for companies audited by a short-tenured audit firm. Column (5) shows that the coefficient on $CEOpower_{i,t}$ is negative and significant at the 1% level. Column (6) reveals that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is insignificant. The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (7) is also insignificant. Column (8) aggregates both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in the same regression and both remain insignificant.

Overall, the results reported in Table 6.9 support the results presented in Table 5.2, suggesting that the main findings in Chapter 5 are not driven by the length of audit firm tenure.

[17] Audit tenure ($Audtenure_{i,t}$) is measured by number of years an audit firm has been with firm i as at year t, and the split point is the median. Firms above the sample median value are considered long-tenured whereas those under the median value are considered short-tenured.

Table 6.9

Regression Results: Going-Concern Opinion Model – Partitioning by Audit Firm Tenure

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
Longer tenure				
$CEOpower_{i,t}$	-0.1987**	-0.1917**	0.0088	-0.0463
	(-2.1183)	(-2.0072)	(0.0293)	(-0.1472)
$IntMonitor_{i,t}$		-0.0284		-0.2546
		(-0.3344)		(-1.1283)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0168		-0.3606
		(0.1936)		(-1.5416)
$ExtMonitor_{i,t}$			-0.1111	-0.0979
			(-0.3048)	(-0.2660)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			0.1962	0.2600
			(0.6177)	(0.8312)
$Size_{i,t}$	-0.4367***	-0.4359***	-0.6531***	-0.5887**
	(-5.7157)	(-5.7196)	(-2.5946)	(-2.3969)
$Age_{i,t}$	-0.0132	-0.0131	-0.0083	-0.0010
	(-1.2862)	(-1.2690)	(-0.3515)	(-0.0423)
$ROA_{i,t}$	-0.0817	-0.0801	-0.6290	-0.8382
	(-0.3293)	(-0.3190)	(-0.6442)	(-0.8516)
$LLoss_{i,t}$	0.1814	0.1755	0.1272	0.2185
	(0.7431)	(0.7188)	(0.2122)	(0.3440)
$Lev_{i,t}$	-0.2507	-0.2452	3.5224**	3.3439**
	(-0.5864)	(-0.5722)	(2.5682)	(2.4140)
$Clev_{i,t}$	0.5082	0.5033	0.3241	0.4292
	(1.3946)	(1.3746)	(0.1787)	(0.2250)
$Nborrow_{i,t}$	0.0681	0.0678	0.7590	0.8857
	(0.3901)	(0.3889)	(0.5340)	(0.6571)
$Invest_{i,t}$	-0.4367***	-0.4359***	-0.6531***	-0.5887**
	(-5.7157)	(-5.7196)	(-2.5946)	(-2.3969)
$Opcf_{i,t}$	-0.0132	-0.0131	-0.0083	-0.0010
	(-1.2862)	(-1.2690)	(-0.3515)	(-0.0423)
$Zscore_{i,t}$	-0.0060	-0.0060	-0.0029	-0.0049
	(-1.4080)	(-1.4090)	(-0.3317)	(-0.5563)
$Invrec_{i,t}$	0.7757	0.7566	-0.9587	-0.4220
	(1.3543)	(1.3159)	(-0.4176)	(-0.1825)
$Big4_{i,t}$	0.2441	0.2489	1.0331*	0.9525*
	(1.2789)	(1.3027)	(1.8049)	(1.7057)
$Pqual_{i,t}$	2.5410***	2.5429***	2.9941***	3.0386***
	(12.2369)	(12.2601)	(5.2350)	(5.1048)
$Auditlag_{i,t}$	0.0232***	0.0231***	0.0335***	0.0341***
	(4.2638)	(4.2445)	(3.2441)	(3.1813)
$Audtenure_{i,t}$	0.0152	0.0147	-0.1460*	-0.1517*
	(0.3757)	(0.3605)	(-1.6739)	(-1.7853)
$Feeratio_{i,t}$	-0.2151	-0.2138	-0.3970	-0.4560
	(-1.3480)	(-1.3520)	(-1.2593)	(-1.2896)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,560	1,560	383	383
Pseudo-R^2	0.42	0.42	0.49	0.50

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(5)	(6)	(7)	(8)
Shorter tenure				
$CEOpower_{i,t}$	-0.4484***	-0.4558***	0.4885	0.5412
	(-4.1727)	(-4.1960)	(1.2582)	(1.4888)
$IntMonitor_{i,t}$		-0.0274		0.2802
		(-0.2671)		(0.6420)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		-0.0580		-0.8369
		(-0.5721)		(-1.5970)
$ExtMonitor_{i,t}$			-1.3824**	-1.4957*
			(-2.0327)	(-1.6662)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.2351	-0.5066
			(-0.3117)	(-0.5329)
$Size_{i,t}$	-0.3447***	-0.3451***	0.8854*	0.8731
	(-3.9738)	(-3.9594)	(1.7433)	(1.2769)
$Age_{i,t}$	0.0242**	0.0247**	-0.0752	-0.1145**
	(2.2324)	(2.2698)	(-1.4788)	(-2.3410)
$ROA_{i,t}$	0.2209	0.2169	-0.8878**	-0.9740**
	(0.9360)	(0.9122)	(-2.3419)	(-2.1652)
$LLoss_{i,t}$	0.1322	0.1290	-0.4271	-0.0961
	(0.4620)	(0.4529)	(-0.3896)	(-0.0651)
$Lev_{i,t}$	-0.3705	-0.3867	-1.2714	-1.1233
	(-0.8199)	(-0.8505)	(-0.6971)	(-0.5161)
$Clev_{i,t}$	0.1900	0.1991	1.2315	0.6638
	(0.6822)	(0.7075)	(0.3664)	(0.2399)
$Nborrow_{i,t}$	-0.0099	-0.0102	-2.8391	-2.7752*
	(-1.1984)	(-1.1342)	(-1.6003)	(-1.7107)
$Invest_{i,t}$	-0.3447***	-0.3451***	0.8854*	0.8731
	(-3.9738)	(-3.9594)	(1.7433)	(1.2769)
$Opcf_{i,t}$	0.0242**	0.0247**	-0.0752	-0.1145**
	(2.2324)	(2.2698)	(-1.4788)	(-2.3410)
$Zscore_{i,t}$	-0.0060	-0.0060	0.0056	0.0076
	(-1.1150)	(-1.1053)	(0.7787)	(0.9069)
$Invrec_{i,t}$	1.0461	1.0736*	-1.4817	-0.6347
	(1.6390)	(1.6613)	(-0.4391)	(-0.1523)
$Big4_{i,t}$	-0.1956	-0.1830	-0.3081	-0.3032
	(-0.9256)	(-0.8582)	(-0.5515)	(-0.5140)
$Pqual_{i,t}$	2.2106***	2.2148***	3.1131***	3.8711***
	(9.7876)	(9.7950)	(4.0786)	(4.5474)
$Auditlag_{i,t}$	0.0212***	0.0210***	0.1371**	0.1550**
	(3.0449)	(3.0235)	(2.3598)	(2.0820)
$Audtenure_{i,t}$	0.0414	0.0388	-0.1184	-0.2571
	(0.3349)	(0.3139)	(-0.2953)	(-0.6568)
$Feeratio_{i,t}$	0.0499	0.0506	0.1749	0.1905
	(0.4304)	(0.4397)	(0.4159)	(0.3948)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,110	1,110	273	273
Pseudo-R^2	0.42	0.42	0.54	0.57

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$. $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

6.4.4 Partitioning by audit reporting lag: Going-concern opinion model

Prior research has pointed out that the type of audit opinion can be associated with the time between the company fiscal year-end and the audit report date (K. C. Chen & Church, 1992; Francis, 1984). Auditing financially distressed companies is likely to be time-consuming. Prior research posits that issuing a going-concern opinion is associated with a longer audit reporting lag (Behn et al., 2001; Blay & Geiger, 2013). Therefore, partitioning the going-concern opinion sample by the audit reporting lag can help to understand the extent of the power held by CEOs and how it could affect the likelihood of receiving a going-concern opinion in firms with longer and shorter audit reporting lags. Table 6.10 presents the results for the going-concern opinion sample of financially distressed companies when partitioned by audit reporting lag. [18]

For firms with a longer audit reporting lag, the coefficient on $CEOpower_{i,t}$ is negative and statistically significant at the 1% level, as shown in columns (1) and (2). The coefficients for both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$* $ExtMonitor_{i,t}$ are not statistically significant. Although it has been established in the literature that longer audit reporting lag is associated with the issuance of a going-concern opinion, previous research has not considered the effect of powerful CEOs in such circumstances. The additional tests reported in Table 6.10 reveal that financially distressed companies with powerful CEOs are less likely to receive a going-concern opinion even if the audit reporting lag is long.

For firms with a shorter audit reporting lag, the coefficient on $CEOpower_{i,t}$ is negative and significant at the 5% level as shown in columns (5) and (6). The coefficients for both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are not statistically significant.

Overall, the additional tests reported in Table 6.10 support the main results presented in Table 5.2, eliminating the possible concern that the main findings of the study for the going-concern opinion model are driven by the audit reporting lag.

[18] Audit reporting lag ($Auditlag_{i,t}$) is measured by number of days from financial year-end to audit opinion signature date for firm *i* in year *t*, and the sample split point is the median.

Table 6.10

Regression Results: Going-Concern Opinion Model – Partitioning by Audit Reporting Lag

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
Longer audit lag				
$CEOpower_{i,t}$	-0.2460***	-0.2353***	0.2432	0.2367
	(-3.3247)	(-3.1408)	(0.9720)	(0.9105)
$IntMonitor_{i,t}$		-0.0661		-0.0660
		(-0.9603)		(-0.3135)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0302		-0.3708
		(0.4467)		(-1.5920)
$ExtMonitor_{i,t}$			-0.3792	-0.3382
			(-0.9568)	(-0.8408)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.1123	-0.0217
			(-0.4239)	(-0.0838)
$Size_{i,t}$	-0.3352***	-0.3365***	-0.4862**	-0.4583**
	(-5.4121)	(-5.4327)	(-2.1220)	(-2.0506)
$Age_{i,t}$	0.0064	0.0068	-0.0198	-0.0171
	(0.8070)	(0.8420)	(-0.8543)	(-0.7311)
$ROA_{i,t}$	-0.0343	-0.0368	-0.0890	-0.0867
	(-0.2031)	(-0.2177)	(-0.2333)	(-0.2201)
$LLoss_{i,t}$	-0.0119	-0.0155	-0.8733	-0.9225*
	(-0.0591)	(-0.0768)	(-1.5738)	(-1.7057)
$Lev_{i,t}$	-0.5448**	-0.5427**	0.4894	0.6256
	(-2.1004)	(-2.1003)	(0.2990)	(0.3633)
$Clev_{i,t}$	0.5450**	0.5468**	3.0021*	2.9053*
	(2.4181)	(2.4242)	(1.8322)	(1.7785)
$Nborrow_{i,t}$	-0.2102	-0.2068	-0.7668*	-0.7736*
	(-1.4057)	(-1.3804)	(-1.6957)	(-1.6639)
$Invest_{i,t}$	-2.2521***	-2.2477***	-3.8509***	-3.8958***
	(-8.1727)	(-8.1481)	(-3.3248)	(-3.3296)
$Opcf_{i,t}$	0.0047	0.0045	0.8930***	0.8460***
	(0.6283)	(0.6393)	(2.8515)	(2.7523)
$Zscore_{i,t}$	-0.0000	-0.0000	0.0036	0.0039
	(-0.5064)	(-0.5076)	(0.7452)	(0.7802)
$Invrec_{i,t}$	0.9079**	0.8496**	-2.0704	-1.7674
	(2.0990)	(1.9607)	(-1.1053)	(-0.9252)
$Big4_{i,t}$	-0.0184	-0.0133	0.2054	0.1519
	(-0.1227)	(-0.0884)	(0.4156)	(0.3166)
$Pqual_{i,t}$	2.4087***	2.4195***	3.1344***	3.1194***
	(14.9162)	(14.9766)	(6.7155)	(6.8222)
$Auditlag_{i,t}$	0.0160**	0.0157**	0.0446***	0.0443***
	(2.4955)	(2.4488)	(3.0230)	(2.8163)
$Audtenure_{i,t}$	-0.0088	-0.0099	-0.0120	-0.0050
	(-0.3630)	(-0.4076)	(-0.2036)	(-0.0803)
$Feeratio_{i,t}$	0.0044	0.0099	0.1084	0.1024
	(0.0371)	(0.0818)	(0.3155)	(0.3164)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,653	1,653	292	292
Pseudo-R^2	0.37	0.37	0.45	0.45

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(5)	(6)	(7)	(8)
Shorter audit lag				
$CEOpower_{i,t}$	-0.1920** (-1.9601)	-0.2022** (-2.0463)	0.1505 (0.4860)	0.1691 (0.5207)
$IntMonitor_{i,t}$		0.0162 (0.1735)		0.2252 (0.7753)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		-0.0944 (-1.0135)		-0.5260 (-1.5697)
$ExtMonitor_{i,t}$			-0.0234 (-0.0477)	0.1380 (0.2653)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			0.3921 (0.8455)	0.3150 (0.7143)
$Size_{i,t}$	-0.4704*** (-5.7562)	-0.4764*** (-5.8030)	-0.5988* (-1.7921)	-0.7542** (-2.4659)
$Age_{i,t}$	-0.0182* (-1.7808)	-0.0174* (-1.6742)	-0.0553 (-1.5231)	-0.0560 (-1.4174)
$ROA_{i,t}$	-0.5186** (-2.1395)	-0.5283** (-2.1406)	0.3709 (0.7417)	0.5606 (0.8274)
$LLoss_{i,t}$	0.3081 (1.2220)	0.3261 (1.2938)	0.7289 (0.8925)	1.0449 (1.1378)
$Lev_{i,t}$	0.0722 (0.1742)	0.0780 (0.1876)	1.9875 (0.6937)	1.4968 (0.4879)
$Clev_{i,t}$	0.0928 (0.3999)	0.1045 (0.4461)	0.3768 (0.1101)	0.5283 (0.1438)
$Nborrow_{i,t}$	-0.8329*** (-3.5964)	-0.8389*** (-3.6372)	-1.6556** (-2.1216)	-1.6448** (-2.0241)
$Invest_{i,t}$	-2.1456*** (-5.2704)	-2.1609*** (-5.2671)	-4.4799*** (-3.0300)	-4.6970*** (-3.3622)
$Opcf_{i,t}$	0.0043 (0.0117)	0.0234 (0.0643)	-0.7306 (-0.5605)	-0.4673 (-0.3449)
$Zscore_{i,t}$	-0.0034 (-1.0062)	-0.0034 (-1.0397)	-0.0473* (-1.7188)	-0.0424 (-1.6233)
$Invrec_{i,t}$	1.6165*** (2.9194)	1.6465*** (2.9969)	-4.6993 (-1.5118)	-4.2728 (-1.2295)
$Big4_{i,t}$	0.1803 (0.9059)	0.1937 (0.9734)	0.5287 (0.8627)	0.6995 (1.0391)
$Pqual_{i,t}$	2.8733*** (13.8918)	2.8777*** (13.9377)	3.9371*** (5.4692)	4.1606*** (5.6580)
$Auditlag_{i,t}$	0.0106 (1.1754)	0.0101 (1.1054)	0.0156 (0.4728)	0.0206 (0.6187)
$Audtenure_{i,t}$	0.0231 (0.7686)	0.0238 (0.7929)	0.1586* (1.8232)	0.1629* (1.8355)
$Feeratio_{i,t}$	-0.3736* (-1.9393)	-0.3636* (-1.8777)	-0.7475* (-1.8974)	-0.4968* (-1.9232)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,023	1,023	364	364
Pseudo-R^2	0.42	0.42	0.55	0.57

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (1) & (5)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (2) & (6)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (3) & (7)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Columns (4) & (8)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* in year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.5 Dealing with Endogeneity

Previous studies in accounting research have highlighted problems associated with endogeneity. Endogeneity occurs when an independent variable of interest is correlated with the error term. Several factors could cause endogeneity. These factors include reverse causality, selection bias, measurement error, and omitted variables.

The first source of endogeneity is reverse causality, which occurs when it can be claimed that either X causes Y or Y causes X. In the context of this study, it is not feasible that the dependent variables of this study, audit fees and the going-concern opinion, are likely to affect the power held by CEOs.

The second source of endogeneity is selection bias, which could be a problem in this study because differences in characteristics between firms with high CEO power and firms with low CEO power might bias toward the main results. This concern of selection bias is addressed in this study by using a propensity score matching (PSM) technique.

The third endogeneity problem is measurement error, which occurs when the independent variable is not measured correctly. The issue of measurement error is addressed in this study by using an alternative measure of CEO power in the analysis.

The fourth possible source of endogeneity is omitted variables, which refers to variables that are likely to affect the dependent variable and should be included in the model as control variables, but they are not. This study minimises the impact of omitted variables by including various control variables that are likely to affect the dependent variables of this study, audit fees and the going-concern opinion. The control variables were thoroughly selected for each main model following prior literature.[19] However, for further robustness, this study applies alternative control variables to each of the audit fees and going-concern models to ensure that omitted variables do not drive the main results.

[19] For the audit fees model, Hay et al. (2006) perform a comprehensive meta-analysis of audit fees research with a detailed discussion of audit fees determinants. For the going-concern opinion model, Carson et al. (2013) synthesise and discuss prior literature on the going-concern opinion and its determinants.

6.5.1 Selection bias

The main results may be influenced by selection bias or differences in characteristics between companies with high-power CEOs and companies with low-power CEOs. To address this concern, the PSM technique is adopted, as originally proposed by Rosenbaum and Rubin (1983), which many accounting studies have used (Berglund et al., 2018; Duellman et al., 2015; Gul et al., 2018; Hossain, Chapple, et al., 2016). PSM involves matching treatment companies with control (non-treatment) companies with similar characteristics based on the function of covariates (Rosenbaum & Rubin, 1983, 1985). PSM is used to identify companies with similar characteristics that differ in the power level held by the CEOs so that the results can be interpreted with greater confidence. In particular, PSM allows comparison of the audit quality of two groups of companies that are similar in observable firm characteristics except that the companies in one group are managed by CEOs with a high level of power (treatment group) and the companies in the other group are managed by less powerful CEOs (control group). The advantage of the PSM procedure over other methods of controlling for endogeneity is that it does not depend on a clear source of identification of exogenous variables.

The PSM procedure in this study involves the following steps. First, the propensity score predicting that a company has a CEO with a high level of power is calculated using a logistic regression where the dependent variable ($High\_CEOpower_{i,t}$) is measured as a dummy variable equal to one if a CEO is in the ninth or tenth percentile, and 0 otherwise. The probability of being a very powerful CEO is calculated as a function of firm size, profitability, growth, liquidity, complexity, inherent risk, and the board's number of meetings and independence. The following logistic model estimates the probability that a company has a very powerful CEO, and the first-stage results are reported in Table 6.11:

$$High\_CEOpower_{i,t} = \beta_1 Size_{i,t} + \beta_2 ROA_{i,t} + \beta_3 MTB_{i,t} + \beta_4 Lev_{i,t} + \beta_5 Sub_{i,t} + \beta_6 Invrec_{i,t} + \beta_7 BDind_{i,t} + \beta_8 BDmeet_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$$

Table 6.11

Stage-One Logistic Regression Results – Dependent Variable: High CEO Power (High_CEOpower$_{i,t}$)

Variable	Audit fees sample	Going-concern opinion sample
	(1)	(2)
$Size_{i,t}$	-0.0770***	-0.1173***
	(-4.45)	(-4.84)
$ROA_{i,t}$	0.3110***	0.2311***
	(5.89)	(4.04)
$MTB_{i,t}$	0.0160***	0.0128*
	(2.75)	(1.85)
$Lev_{i,t}$	0.3146***	0.2062***
	(4.89)	(3.13)
$Sub_{i,t}$	0.0043***	0.0059***
	(4.31)	(2.20)
$Invrec_{i,t}$	0.4137***	0.5962***
	(3.46)	(3.12)
$BDind_{i,t}$	-0.1248***	-0.1172***
	(-5.65)	(-4.99)
$BDmeet_{i,t}$	-0.0333***	-0.0375***
	(-7.41)	(-5.01)
Year and industry effect	Yes	Yes
Observations	7,737	2676
Pseudo-R^2	0.02	0.03

Note. $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $BDind_{i,t}$ = percentage of independent directors on the board for firm *i* in year *t*; $BDtmeet_{i,t}$ = average number of board meetings for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*p < .10. **p < .05. ***p < .01.

Then, the calculated propensity score of having a CEO with high power is used to match each high-CEO-power firm-year observation with a low-CEO-power firm-year observation. This study adopts the caliper matching method without replacement using a caliper of 0.01. This matching method yields a matched sample of 4491 firm-year observations for the audit fees model and 1502 firm-year observations for the going-concern opinion model. Further, there are no significant differences at the 10% level in the means of the observable company characteristics between the treatment and control groups, indicating effective PSM. After matching, the main equations for the audit fees model and the going-concern model are re-performed using the observations that comprise the matched sample. The results are presented in Table 6.12 and Table 6.13.

Table 6.12

Propensity Score Matched Sample: Audit Fees Model

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.0418***	-0.0048	-0.0313	-0.0311
	(-3.4777)	(-0.5157)	(-1.5995)	(-1.5667)
$IntMonitor_{i,t}$		-0.0089		0.0110
		(-0.8663)		(0.6902)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0143**		0.0323**
		(2.0656)		(2.1217)
$ExtMonitor_{i,t}$			0.0458*	0.0190
			(1.7951)	(0.6937)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0247	-0.0217
			(-1.3038)	(-1.0824)
$Size_{i,t}$	0.4052***	0.4045***	0.4424***	0.4392***
	(37.2803)	(37.0332)	(17.5654)	(17.3769)
$ROA_{i,t}$	-0.2451***	-0.2420***	-0.2556***	-0.2531***
	(-8.4767)	(-8.4182)	(-4.4242)	(-4.3706)
$Loss_{i,t}$	-0.0167	-0.0126	-0.0600	-0.0609
	(-0.5266)	(-0.3967)	(-1.1719)	(-1.1975)
$MTB_{i,t}$	-0.0011	-0.0011	-0.0013	-0.0009
	(-0.3041)	(-0.3128)	(-0.2518)	(-0.1707)
$Lev_{i,t}$	0.1930***	0.1977***	0.2600***	0.2588***
	(5.3360)	(5.4598)	(3.0481)	(3.0699)
$Quick_{i,t}$	-0.0055***	-0.0055***	-0.0041***	-0.0041***
	(-6.4643)	(-6.3795)	(-3.1934)	(-3.2390)
$Sub_{i,t}$	0.0071***	0.0071***	0.0051***	0.0051***
	(16.0495)	(15.8047)	(8.0991)	(8.1670)
$Seg_{i,t}$	0.1142***	0.1148***	0.0338	0.0349
	(6.0630)	(6.0910)	(0.5491)	(0.5691)
$Invrec_{i,t}$	0.6073***	0.6142***	0.5975***	0.5740***
	(9.3066)	(9.4088)	(5.2915)	(5.0535)
$Big4_{i,t}$	0.1383***	0.1407***	0.1077**	0.1033**
	(5.8417)	(5.9484)	(2.4767)	(2.3766)
$Spec_{i,t}$	0.2756***	0.2785***	0.2379***	0.2357***
	(6.7040)	(6.7456)	(4.4432)	(4.3566)
$Newaud_{i,t}$	-0.0034	-0.0045	0.0037	0.0027
	(-0.7165)	(-0.9692)	(0.5394)	(0.3988)
$Opinion_{i,t}$	-0.0711*	-0.0690	-0.0757	-0.0817
	(-1.6979)	(-1.6438)	(-0.8788)	(-0.9462)
$Audtenure_{i,t}$	0.0518	0.0554	0.2019***	0.2090***
	(1.3458)	(1.4594)	(3.2068)	(3.3641)
$NAS_{i,t}$	0.0304***	0.0302***	0.0357***	0.0360***
	(9.0443)	(8.9762)	(6.5510)	(6.6338)
$ACtenure_{i,t}$	-0.0010	-0.0012	0.0052	0.0044
	(-0.3562)	(-0.4332)	(1.2142)	(1.0221)
$ACmeet_{i,t}$	0.1069***	0.1071***	0.0475	0.0475
	(4.0342)	(4.0931)	(1.3246)	(1.3343)
$BDtenure_{i,t}$	0.0013	-0.0016	-0.0087**	-0.0076*
	(0.4306)	(-0.5447)	(-1.9739)	(-1.7186)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	4,491	4,491	1,498	1,498
Adjusted R^2	0.72	0.72	0.68	0.68

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* in year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure of directors on the board for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*p < .10. **p < .05. ***p < .01.

Table 6.12 reports the PSM results for the audit fees sample. The results in Table 6.12 confirm the main results reported in Table 5.1. Specifically, column (1) of Table 6.12 shows $CEOpower_{i,t}$ has a negative and statistically significant coefficient at the 1% level. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level, indicating that the negative effect of CEO power on audit fees is moderated by effective internal monitoring.

The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ in column (3) is insignificant. Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level, while the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant.

Table 6.13 reports the PSM results for the going-concern opinion sample, which confirm the main results reported in Table 5.2. Column (1) shows that $CEOpower_{i,t}$ has a negative and statistically significant coefficient at 1% level. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is not significant. Therefore, the result of the relationship between CEO power and going-concern opinion reported in column (1) does not depend significantly on internal monitoring. Column (3) shows that the coefficient on the interaction term $CEOpower_{i,t}$* $ExtMonitor_{i,t}$ is not significant. Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The coefficients of both interaction terms are insignificant.

Overall, regressions results based on the matched samples imply that differences in observable company characteristics between the treatment and control companies are unlikely to bias towards the main findings of the study. This eliminates the possible concern of the self-selection bias effect on the main findings. Therefore, it reaffirms the main findings in Chapter 5 that powerful CEOs are associated with lower likelihood of receiving a going-concern opinion and lower audit fees unless there is effective internal monitoring in place.

Table 6.13

Propensity Score Matched Sample: Going-Concern Opinion Model

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.2885*** (-3.4652)	-0.2825*** (-3.3784)	0.1303 (0.6945)	0.0951 (0.5038)
$IntMonitor_{i,t}$		-0.0480 (-0.6227)		-0.2709 (-1.3003)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0070 (0.0916)		-0.1523 (-0.7877)
$ExtMonitor_{i,t}$			-0.5406 (-1.6303)	-0.5558 (-1.6299)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			0.1728 (0.7321)	0.1512 (0.6124)
$Size_{i,t}$	-0.3564*** (-5.2156)	-0.3568*** (-5.2316)	-0.0862 (-0.3971)	-0.0538 (-0.2528)
$Age_{i,t}$	-0.0002 (-0.0259)	-0.0001 (-0.0105)	-0.0389* (-1.9258)	-0.0345 (-1.6096)
$ROA_{i,t}$	0.0984 (0.4634)	0.1012 (0.4721)	-0.5159* (-1.7316)	-0.5220* (-1.7418)
$LLoss_{i,t}$	-0.2610 (-1.1943)	-0.2642 (-1.2083)	-0.2628 (-0.5357)	-0.2575 (-0.5163)
$Lev_{i,t}$	-0.7375** (-2.5456)	-0.7397** (-2.5496)	-2.1196** (-2.4142)	-2.1567** (-2.5457)
$Clev_{i,t}$	0.4410* (1.7522)	0.4453* (1.7656)	0.8103 (1.0777)	0.6440 (0.8521)
$Nborrow_{i,t}$	-0.1561 (-0.9456)	-0.1537 (-0.9299)	-0.4427 (-0.9576)	-0.5136 (-1.1077)
$Invest_{i,t}$	-2.1963*** (-6.9368)	-2.1975*** (-6.9223)	-4.1539*** (-4.5465)	-4.1669*** (-4.5828)
$Opcf_{i,t}$	-0.7690** (-2.4148)	-0.7736** (-2.4198)	-0.1760 (-0.2063)	-0.3386 (-0.4224)
$Zscore_{i,t}$	-0.0001 (-0.0331)	-0.0001 (-0.0297)	-0.0048 (-0.8427)	-0.0053 (-0.8157)
$Invrec_{i,t}$	1.0133** (2.1487)	0.9849** (2.0682)	-1.4582 (-0.8098)	-1.5195 (-0.8419)
$Big4_{i,t}$	-0.2168 (-1.2744)	-0.2114 (-1.2388)	-0.4604 (-1.1958)	-0.3815 (-0.9843)
$Pqual_{i,t}$	2.7264*** (14.6904)	2.7306*** (14.7351)	3.0162*** (6.2376)	2.9884*** (6.2086)
$Auditlag_{i,t}$	0.0204*** (3.6743)	0.0202*** (3.6080)	0.0546*** (4.0023)	0.0540*** (3.8146)
$Audtenure_{i,t}$	0.0030 (0.1067)	0.0027 (0.0943)	0.0510 (0.9548)	0.0482 (0.9164)
$Feeratio_{i,t}$	0.0459 (0.3665)	0.0461 (0.3667)	0.2453 (0.9600)	0.2237 (0.8576)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	1,502	1,502	393	393
Pseudo-R^2	0.43	0.43	0.42	0.43

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

6.5.2 Measurement error

The regressions analyses reported in Chapter 5 are re-estimated using an alternative measure of CEO power to address the endogeneity concern arising from the potential measurement error in the main power index. The new CEO power variable is constructed following several steps. First, a dummy variable is created from each continuous variable used in $CEOpower_{i,t}$ [20] (i.e., $CEOtenure_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$). Second, each newly created dummy variable is given a value of one (1) if the value of the continuous variable is higher than the median, and 0 otherwise. As a result, four dummy variables are formulated and become the basis for constructing the new CEO power variable. If two or more of these dummy variables score one (1), the newly constructed CEO power variable takes the value of (1), and 0 otherwise.

Regressions reported in Table 5.1 are re-performed using this alternative CEO power measure ($CEOpower2_{i,t}$), and the results of the regressions are reported in Table 6.14. The results in column (1) show that $CEOpower2_{i,t}$ has a significant negative coefficient at 10% level. Column (2) shows that the coefficient on the interaction term $CEOpower2_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 10% level, indicating that the effect of CEO power on audit fees is attenuated by internal monitoring, which is consistent with the main results in Table 5.1. The coefficient on the interaction term $CEOpower2_{i,t}$*$ExtMonitor_{i,t}$ in column (3) is not significant. Column (4) shows the results when both interactions $CEOpower2_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower2_{i,t}$* $ExtMonitor_{i,t}$ are simultaneously included in the regression. The interaction term $CEOpower2_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 10% level, while the interaction term $CEOpower2_{i,t}$ * $ExtMonitor_{i,t}$ remains insignificant.

In regard to the going-concern opinion model, the results of the regressions using the alternative CEO power measure ($CEOpower2_{i,t}$) are reported in Table 6.15. These results are consistent with those reported in Table 5.2. The alternative measure of CEO power ($CEOpower2_{i,t}$) has a negative and significant coefficient at the 10% level as shown in columns (1) and (2). Column (2) shows that the coefficient on the interaction term $CEOpower2_{i,t}$*$IntMonitor_{i,t}$ is not significant. The insignificant interaction term indicates that the relationship between CEO power and the going-concern opinion does

[20] The main power index ($CEOpower_{i,t}$) is constructed using four proxies: $CEOtenure_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$, and $CEOdual_{i,t}$. The latter variable is the only dummy variable among the four proxies in the index.

not depend significantly on internal monitoring. Column 3 of Table 6.15 further shows that the coefficient on the interaction term $CEOpower2_{i,t}$*$ExtMonitor_{i,t}$ is not significant. Column (4) shows the results when both interactions $CEOpower2_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower2_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The coefficients of both interaction terms are not significant.

The regression results from using an alternative measure of CEO power continue to be consistent with the main results reported in Chapter 5. The consistency of the results eliminates the potential endogeneity concern arising from possible measurement error in the main variable of interest.

Table 6.14

Regression Results: Audit Fees Model – Alternative CEO Power Measure

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower2_{i,t}$	-0.0309* (-1.8990)	-0.0273* (-1.6471)	0.0190 (0.7377)	0.0167 (0.6505)
$IntMonitor_{i,t}$		-0.0161 (-1.4731)		-0.0074 (-0.4425)
$CEOpower2_{i,t}$*$IntMonitor_{i,t}$		0.0247* (1.7636)		0.0394* (1.7571)
$ExtMonitor_{i,t}$			0.0384* (1.7110)	0.0393* (1.7481)
$CEOpower2_{i,t}$*$ExtMonitor_{i,t}$			-0.0054 (-0.2051)	-0.0065 (-0.2468)
$Size_{i,t}$	0.4161*** (55.3145)	0.4164*** (55.0070)	0.4336*** (25.6035)	0.4318*** (25.3914)
$ROA_{i,t}$	-0.2494*** (-12.9392)	-0.2496*** (-12.9226)	-0.2414*** (-5.5567)	-0.2412*** (-5.4904)
$Loss_{i,t}$	0.0020 (0.0886)	0.0016 (0.0698)	-0.0215 (-0.6033)	-0.0204 (-0.5747)
$MTB_{i,t}$	0.0010 (0.3742)	0.0010 (0.3836)	0.0013 (0.3277)	0.0018 (0.4421)
$Lev_{i,t}$	0.2188*** (8.0724)	0.2197*** (8.1074)	0.3094*** (4.8343)	0.3103*** (4.8677)
$Quick_{i,t}$	-0.0098*** (-10.4642)	-0.0098*** (-10.4255)	-0.0071*** (-4.1439)	-0.0071*** (-4.1398)
$Sub_{i,t}$	0.0070*** (20.2638)	0.0070*** (20.2592)	0.0069*** (11.8961)	0.0070*** (11.9760)
$Seg_{i,t}$	0.1150*** (10.0943)	0.1152*** (10.0977)	0.0792*** (3.1126)	0.0794*** (3.1147)
$Invrec_{i,t}$	0.6861*** (13.6502)	0.6834*** (13.6141)	0.6554*** (7.8371)	0.6451*** (7.7179)
$Big4_{i,t}$	0.1305*** (7.5292)	0.1300*** (7.5056)	0.1098*** (3.8191)	0.1084*** (3.7450)
$Spec_{i,t}$	0.2465*** (8.5829)	0.2456*** (8.5620)	0.2304*** (5.6321)	0.2292*** (5.5658)
$Newaud_{i,t}$	-0.0752** (-2.3431)	-0.0755** (-2.3539)	-0.0719 (-1.1310)	-0.0735 (-1.1517)
$Opinion_{i,t}$	0.0823*** (2.9077)	0.0811*** (2.8689)	0.1815*** (3.2388)	0.1810*** (3.2380)
$Audtenure_{i,t}$	-0.0029 (-0.8525)	-0.0031 (-0.8985)	-0.0042 (-0.7799)	-0.0046 (-0.8550)
$NAS_{i,t}$	0.0287*** (11.6080)	0.0287*** (11.5929)	0.0307*** (8.2825)	0.0307*** (8.2868)
$ACtenure_{i,t}$	-0.0024 (-1.1518)	-0.0024 (-1.1275)	0.0058* (1.7392)	0.0056* (1.6646)
$ACmeet_{i,t}$	0.0961*** (5.1476)	0.0972*** (5.2329)	0.0625** (2.4009)	0.0619** (2.3746)
$BDtenure_{i,t}$	-0.0021 (-0.9515)	-0.0020 (-0.9187)	-0.0099*** (-2.8173)	-0.0095*** (-2.6931)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	7,712	7,712	2,604	2,604
Adjusted R^2	0.74	0.74	0.70	0.70

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 Size_{i,t} + \beta_3 ROA_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Quick_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t}2 * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower2_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Quick_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower2_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower2_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Quick_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower2_{i,t}$ = dummy variable that takes the value of 1 if two or more variables of the four dummy power variables equal 1, and 0 otherwise: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Quick_{i,t}$ = current assets less inventory divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year t; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to its auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* in year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

Table 6.15

Regression Results: Going-Concern Opinion Model – Alternative CEO Power Measure

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower2_{i,t}$	-0.2519* (-1.9451)	-0.2354* (-1.7932)	-0.2684 (-0.7265)	-0.2657 (-0.7244)
$IntMonitor_{i,t}$		-0.1009 (-1.2726)		-0.0938 (-0.3818)
$CEOpower2_{i,t}$*$IntMonitor_{i,t}$		0.0529 (0.4552)		0.0773 (0.1897)
$ExtMonitor_{i,t}$			-0.1303 (-0.4289)	-0.1237 (-0.4122)
$CEOpower2_{i,t}$*$ExtMonitor_{i,t}$			-0.6305 (-1.4222)	-0.6308 (-1.4198)
$Size_{i,t}$	-0.3307*** (-6.1230)	-0.3300*** (-6.1155)	-0.4038** (-2.0471)	-0.4028** (-2.0522)
$Age_{i,t}$	0.0026 (0.4015)	0.0028 (0.4284)	-0.0073 (-0.3768)	-0.0066 (-0.3467)
$ROA_{i,t}$	0.0936 (0.4448)	0.0933 (0.4458)	0.3238 (0.9218)	0.3092 (0.8887)
$LLoss_{i,t}$	-0.0360 (-0.1994)	-0.0496 (-0.2742)	-0.3849 (-0.7911)	-0.4062 (-0.8193)
$Lev_{i,t}$	-0.6480** (-2.4757)	-0.6480** (-2.4864)	-0.6584 (-0.5061)	-0.7288 (-0.5571)
$Clev_{i,t}$	0.3432 (1.5727)	0.3465 (1.5932)	1.5999 (1.0690)	1.6100 (1.0654)
$Nborrow_{i,t}$	-0.3833*** (-2.8614)	-0.3792*** (-2.8304)	-0.6683* (-1.7427)	-0.6711* (-1.7508)
$Invest_{i,t}$	-2.4005*** (-9.0871)	-2.4009*** (-9.0930)	-4.0141*** (-4.5219)	-4.0364*** (-4.5903)
$Opcf_{i,t}$	-0.9892*** (-3.1740)	-0.9926*** (-3.1954)	-0.3431 (-0.3953)	-0.3921 (-0.4545)
$Zscore_{i,t}$	-0.0010 (-0.3837)	-0.0010 (-0.3982)	0.0019 (0.3031)	0.0020 (0.3254)
$Invrec_{i,t}$	1.2052*** (2.9085)	1.1414*** (2.7447)	0.9779 (0.5798)	0.8029 (0.4534)
$Big4_{i,t}$	0.0640 (0.4731)	0.0729 (0.5362)	0.0134 (0.0349)	0.0369 (0.0967)
$Pqual_{i,t}$	2.4743*** (17.2987)	2.4883*** (17.3612)	3.0432*** (7.1548)	3.0528*** (7.0398)
$Auditlag_{i,t}$	0.0202*** (5.0043)	0.0200*** (4.9499)	0.0324*** (3.8582)	0.0322*** (3.8760)
$Audtenure_{i,t}$	-0.0032 (-0.1533)	-0.0041 (-0.1965)	-0.0210 (-0.4086)	-0.0264 (-0.4915)
$Feeratio_{i,t}$	-0.0308 (-0.2869)	-0.0331 (-0.3029)	-0.1711 (-0.5478)	-0.1877 (-0.5660)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	2,308	2,308	464	464
Pseudo-R^2	0.41	0.41	0.48	0.48

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 Size_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Clev_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Zscore_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower2_{i,t} * IntMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower2_{i,t} * ExtMonitor_{i,t} + \beta_4 Size_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Lev_{i,t} + \beta_9 Clev_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Zscore_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower2_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower2_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower2_{i,t} * ExtMonitor_{i,t} + \beta_6 Size_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROA_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Lev_{i,t} + \beta_{11} Clev_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Zscore_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower2_{i,t}$ = dummy variable that takes the value of 1 if two or more variables of the four dummy power variables equal 1, and 0 otherwise: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $Size_{i,t}$ = natural logarithm of total assets for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated; $ROA_{i,t}$ = earnings before interest and tax divided by total assets for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Lev_{i,t}$ = total liabilities divided by total assets for firm *i* in year *t*; $Clev_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Zscore_{i,t}$ = financial distress score based on Altman (1968); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years an audit firm has been with firm *i* in year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
$^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

6.5.3 Omitted variables

The regression analyses reported in Chapter 5 are re-performed using alternative control variables to test whether other omitted control variables are potentially correlated with the dependent variables.

For the audit fees model, consistent with Hay et al. (2006), firm size is measured alternatively using the natural logarithm of total sales, and return on equity ratio is included to control for profitability. Leverage is measured in this regression as the ratio of total debt to total assets (Hollingsworth, Neal, & Reid, 2020). The current ratio is added to the model to control for liquidity instead of the quick ratio (Ettredge, Fuerherm, & Li, 2014).

Using these alternative control variable measures, the regression results in Table 6.16 support the main results reported in Table 5.1. Specifically, column (1) of Table 6.16 shows that the main variable of interest, $CEOpower_{i,t}$, has a negative and statistically significant coefficient at the 1% level. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and significant at the 5% level, suggesting that the inverse relationship between CEO power and audit fees is mitigated by strong internal monitoring.

Consistent with the main findings in Chapter 5, Table 6.16 column (3) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is not significant. Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is positive and more significant at the 1% level. The coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ remains insignificant.

Overall, the regression results reported in Table 6.16 support the main results reported in Table 5.1 that internal monitoring moderates the negative relationship between CEO power and audit fees. When $IntMonitor_{i,t}$ is low, there is a negative relationship between CEO power ($CEOpower_{i,t}$) and audit fees ($LnAF_{i,t}$). However, when $IntMonitor_{i,t}$ is high, the relationship between CEO power ($CEOpower_{i,t}$) and audit fees ($LnAF_{i,t}$) becomes significant and positive.

Table 6.16

Regression Results: Audit Fees Model – Alternative Control Variables

Variable	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$	$LnAF_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.0260***	-0.0263***	-0.0036	-0.0071
	(-2.6952)	(-2.6981)	(-0.2241)	(-0.4490)
$IntMonitor_{i,t}$		0.0341***		0.0375***
		(4.1603)		(2.9294)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0156**		0.0404***
		(2.0194)		(3.2167)
$ExtMonitor_{i,t}$			0.0636***	0.0625***
			(3.0194)	(2.9467)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			-0.0097	-0.0127
			(-0.6345)	(-0.8289)
$LnSales_{i,t}$	0.2114***	0.2099***	0.1941***	0.1928***
	(35.8397)	(35.7737)	(17.3034)	(17.3132)
$ROE_{i,t}$	-0.0309***	-0.0305***	-0.0412	-0.0436*
	(-3.1231)	(-3.0821)	(-1.6280)	(-1.7349)
$Loss_{i,t}$	0.1444***	0.1463***	0.1536***	0.1533***
	(5.6436)	(5.7227)	(3.6473)	(3.6580)
$MTB_{i,t}$	-0.0098***	-0.0097***	-0.0101**	-0.0094**
	(-3.1905)	(-3.1973)	(-2.2129)	(-2.0880)
$Leve_{i,t}$	0.3410***	0.3391***	0.6203***	0.6165***
	(5.9231)	(5.9058)	(5.8731)	(5.8410)
$Current_{i,t}$	-0.0021	-0.0022	0.0014	0.0010
	(-1.5487)	(-1.6426)	(0.5305)	(0.3797)
$Sub_{i,t}$	0.0113***	0.0113***	0.0111***	0.0111***
	(30.6120)	(30.6401)	(20.1325)	(20.2135)
$Seg_{i,t}$	0.1158***	0.1154***	0.0904***	0.0896***
	(8.4539)	(8.4133)	(3.1520)	(3.1310)
$Invrec_{i,t}$	-0.2611***	-0.2602***	-0.4588***	-0.4780***
	(-4.5525)	(-4.5502)	(-4.6625)	(-4.8648)
$Big4_{i,t}$	0.1446***	0.1403***	0.1501***	0.1432***
	(7.4641)	(7.2629)	(4.6574)	(4.4493)
$Spec_{i,t}$	-0.0152	-0.0162	-0.0672***	-0.0701***
	(-1.2995)	(-1.3835)	(-3.8558)	(-3.9827)
$Newaud_{i,t}$	-0.0761**	-0.0755**	-0.0291	-0.0325
	(-2.1032)	(-2.0874)	(-0.4214)	(-0.4716)
$Opinion_{i,t}$	0.0121	0.0154	0.2826***	0.2868***
	(0.3967)	(0.5044)	(4.0997)	(4.1997)
$Audtenure_{i,t}$	0.0074*	0.0071*	0.0096	0.0088
	(1.9166)	(1.8458)	(1.6399)	(1.4998)
$NAS_{i,t}$	0.0467***	0.0463***	0.0431***	0.0429***
	(17.2945)	(17.0520)	(10.2554)	(10.2902)
$ACtenure_{i,t}$	-0.0019	-0.0020	0.0124***	0.0114***
	(-0.8166)	(-0.8693)	(3.0994)	(2.8325)
$ACmeet_{i,t}$	0.2471***	0.2427***	0.2073***	0.2032***
	(11.8434)	(11.6947)	(6.9670)	(6.8348)
$BDtenure_{i,t}$	-0.0082***	-0.0078***	-0.0178***	-0.0166***
	(-3.2613)	(-3.1254)	(-4.9235)	(-4.5915)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	7,239	7,239	2,477	2,477
Adjusted R^2	0.69	0.69	0.65	0.65

Legend:		
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 LnSales_{i,t} + \beta_3 ROE_{i,t} + \beta_4 Loss_{i,t} + \beta_5 MTB_{i,t} + \beta_6 Leve_{i,t} + \beta_7 Current_{i,t} + \beta_8 Sub_{i,t} + \beta_9 Seg_{i,t} + \beta_{10} Invrec_{i,t} + \beta_{11} Big4_{i,t} + \beta_{12} Spec_{i,t} + \beta_{13} Newaud_{i,t} + \beta_{14} Opinion_{i,t} + \beta_{15} Audtenure_{i,t} + \beta_{16} NAS_{i,t} + \beta_{17} ACtenure_{i,t} + \beta_{18} ACmeet_{i,t} + \beta_{19} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 LnSales_{i,t} + \beta_5 ROE_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Leve_{i,t} + \beta_9 Current_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 LnSales_{i,t} + \beta_5 ROE_{i,t} + \beta_6 Loss_{i,t} + \beta_7 MTB_{i,t} + \beta_8 Leve_{i,t} + \beta_9 Current_{i,t} + \beta_{10} Sub_{i,t} + \beta_{11} Seg_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Spec_{i,t} + \beta_{15} Newaud_{i,t} + \beta_{16} Opinion_{i,t} + \beta_{17} Audtenure_{i,t} + \beta_{18} NAS_{i,t} + \beta_{19} ACtenure_{i,t} + \beta_{20} ACmeet_{i,t} + \beta_{21} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$LnAF_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 LnSales_{i,t} + \beta_7 ROE_{i,t} + \beta_8 Loss_{i,t} + \beta_9 MTB_{i,t} + \beta_{10} Leve_{i,t} + \beta_{11} Current_{i,t} + \beta_{12} Sub_{i,t} + \beta_{13} Seg_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Spec_{i,t} + \beta_{17} Newaud_{i,t} + \beta_{18} Opinion_{i,t} + \beta_{19} Audtenure_{i,t} + \beta_{20} NAS_{i,t} + \beta_{21} ACtenure_{i,t} + \beta_{22} ACmeet_{i,t} + \beta_{23} BDtenure_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $LnAF_{i,t}$ = natural logarithm of audit fees paid by firm *i* to its auditor for audit services in year *t*; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $LnSales_{i,t}$ = natural logarithm of total sales for firm *i* in year *t*; $ROE_{i,t}$ = net income before extraordinary items divided by total equity for firm *i* in year *t*; $Loss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year *t*, and 0 otherwise; $MTB_{i,t}$ = market value of equity divided by book value of equity for firm *i* in year *t*; $Leve_{i,t}$ = total debt divided by total assets for firm *i* in year *t*; $Current_{i,t}$ = current assets divided by current liabilities for firm *i* in year *t*; $Sub_{i,t}$ = number of subsidiaries for firm *i* in year *t*; $Seg_{i,t}$ = number of business segments for firm *i* in year *t*; $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Spec_{i,t}$ = dummy variable that takes the value of 1 for the top auditor leader in the industry based on the proportion of audit fees, and 0 otherwise; $Newaud_{i,t}$ = dummy variable that takes the value of 1 if it is the first year for the auditor with firm *i* in year *t*, and 0 otherwise; $Opinion_{i,t}$ = dummy variable that takes the value of 1 for a modified opinion for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years of audit firm tenure with firm *i* as at year *t*; $NAS_{i,t}$ = natural logarithm of nonaudit fees paid by firm *i* to the auditor in year *t*; $ACtenure_{i,t}$ = average tenure in years of audit committee members for firm *i* in year *t*; $ACmeet_{i,t}$ = number of audit committee meetings held for firm *i* in year *t*; $BDtenure_{i,t}$ = average tenure in years of directors on the board for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term. $^*p < .10$. $^{**}p < .05$. $^{***}p < .01$.

For the going-concern opinion model, firm size is measured using the natural logarithm of total sales (Knechel & Vanstraelen, 2007). Return on equity ratio is included to control for profitability. Leverage is measured in this regression as the ratio of total debt to total assets, and the change in leverage is adjusted accordingly. An alternative measure of the client firm's probability of bankruptcy score is used based on Zmijewski (1984). [21]

Using these alternative control variable measures, the regression results in Table 6.17 support the main results reported in Table 5.2 in Chapter 5. Specifically, column (1) of Table 6.17 shows that the main variable of interest, $CEOpower_{i,t}$, has a negative and statistically significant coefficient at the 1% level. The coefficient for $CEOpower_{i,t}$ is -0.1765, indicating that a decrease of -0.1765 is expected in the log odds of $GCO_{i,t}$ with a one-unit increase in $CEOpower_{i,t}$. Column (2) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$IntMonitor_{i,t}$ is not significant, indicating that the relationship between CEO power and going-concern opinion reported in column (1) does not depend significantly on internal monitoring. Column (3) shows that the coefficient on the interaction term $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ is not significant. Column (4) shows the results when both interactions $CEOpower_{i,t}$*$IntMonitor_{i,t}$ and $CEOpower_{i,t}$*$ExtMonitor_{i,t}$ are simultaneously included in the regression. The coefficients of both interaction terms are not significant, which is consistent with the main results reported in Table 5.2.

Overall, the regression results from using alternative control variables support the main findings of the study. The consistency of the results eliminates the concern of possible omitted variables that might bias the results.

[21] Consistent with Carcello, Hermanson, and Huss (1995), the score of Zmijewski (1984) is calculated as: b = −4.803 − 3.6(net profit after tax divided by total assets) + 5.4(total liabilities divided by total assets) – 0.1(current assets divided by current liabilities).

Table 6.17

Regression Results: Going-Concern Opinion Model – Alternative Control Variables

Variable	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$	$GCO_{i,t}$
	(1)	(2)	(3)	(4)
$CEOpower_{i,t}$	-0.1765***	-0.1675***	0.0834	0.0671
	(-2.7579)	(-2.5919)	(0.4163)	(0.3284)
$IntMonitor_{i,t}$		-0.0521		-0.2298
		(-0.8670)		(-1.2549)
$CEOpower_{i,t}$*$IntMonitor_{i,t}$		0.0254		-0.2936
		(0.4119)		(-1.6147)
$ExtMonitor_{i,t}$			-0.4055	-0.3663
			(-1.5412)	(-1.3494)
$CEOpower_{i,t}$*$ExtMonitor_{i,t}$			0.0471	0.1069
			(0.2153)	(0.4773)
$LnSales_{i,t}$	-0.1283***	-0.1289***	-0.1337	-0.1421
	(-5.0550)	(-5.0753)	(-1.5472)	(-1.6205)
$Age_{i,t}$	0.0080	0.0081	-0.0100	-0.0061
	(1.2425)	(1.2587)	(-0.5571)	(-0.3336)
$ROE_{i,t}$	-0.2187***	-0.2175***	-0.1847	-0.1419
	(-4.3292)	(-4.3163)	(-0.7815)	(-0.6040)
$LLoss_{i,t}$	0.1699	0.1632	-0.6149	-0.6429
	(1.0041)	(0.9626)	(-1.3559)	(-1.3696)
$Leve_{i,t}$	-0.4889	-0.4943	-1.0279	-0.8383
	(-1.0324)	(-1.0409)	(-0.6004)	(-0.4933)
$Cleve_{i,t}$	-0.4825	-0.4869	0.1135	-0.2925
	(-1.2454)	(-1.2519)	(0.0706)	(-0.1845)
$Nborrow_{i,t}$	-0.3319**	-0.3287**	-0.7632*	-0.7419*
	(-2.4340)	(-2.4068)	(-1.8993)	(-1.8512)
$Invest_{i,t}$	-2.0141***	-2.0146***	-4.2192***	-4.2091***
	(-9.0133)	(-9.0126)	(-5.0199)	(-5.1030)
$Opcf_{i,t}$	0.0287**	0.0285**	-1.1814	-1.1734
	(2.1786)	(2.1837)	(-1.1158)	(-1.1651)
$Prob\_Bank_{i,t}$	0.0117	0.0117	0.0034	0.0065
	(1.2103)	(1.2264)	(0.1146)	(0.1348)
$Invrec_{i,t}$	1.9316***	1.8861***	0.8454	1.0018
	(4.3849)	(4.2558)	(0.6723)	(0.7491)
$Big4_{i,t}$	-0.0912	-0.0822	0.0230	0.0008
	(-0.7058)	(-0.6319)	(0.0635)	(0.0022)
$Pqual_{i,t}$	2.3864***	2.3936***	2.8635***	2.8977***
	(17.7492)	(17.7715)	(6.6289)	(6.5956)
$Auditlag_{i,t}$	0.0234***	0.0233***	0.0338***	0.0337***
	(5.7421)	(5.6719)	(3.9963)	(4.0108)
$Audtenure_{i,t}$	-0.0250	-0.0256	-0.0121	-0.0126
	(-1.2488)	(-1.2764)	(-0.2566)	(-0.2558)
$Feeratio_{i,t}$	-0.1662*	-0.1662*	-0.1346	-0.1306
	(-1.7515)	(-1.7530)	(-0.7942)	(-0.7518)
Year and industry effect	Yes	Yes	Yes	Yes
Observations	2,424	2,424	513	513
Pseudo-R^2	0.38	0.38	0.48	0.48

Legend:		
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 LnSales_{i,t} + \beta_3 Age_{i,t} + \beta_4 ROE_{i,t} + \beta_5 LLoss_{i,t} + \beta_6 Leve_{i,t} + \beta_7 Cleve_{i,t} + \beta_8 Nborrow_{i,t} + \beta_9 Invest_{i,t} + \beta_{10} Opcf_{i,t} + \beta_{11} Prob\_Bank_{i,t} + \beta_{12} Invrec_{i,t} + \beta_{13} Big4_{i,t} + \beta_{14} Pqual_{i,t} + \beta_{15} Auditlag_{i,t} + \beta_{16} Audtenure_{i,t} + \beta_{17} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (1)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_4 LnSales_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Leve_{i,t} + \beta_9 Cleve_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Prob\_Bank_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (2)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 ExtMonitor_{i,t} + \beta_3 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_4 LnSales_{i,t} + \beta_5 Age_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LLoss_{i,t} + \beta_8 Leve_{i,t} + \beta_9 Cleve_{i,t} + \beta_{10} Nborrow_{i,t} + \beta_{11} Invest_{i,t} + \beta_{12} Opcf_{i,t} + \beta_{13} Prob\_Bank_{i,t} + \beta_{14} Invrec_{i,t} + \beta_{15} Big4_{i,t} + \beta_{16} Pqual_{i,t} + \beta_{17} Auditlag_{i,t} + \beta_{18} Audtenure_{i,t} + \beta_{19} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (3)
$GCO_{i,t}$ =	$\beta_0 + \beta_1 CEOpower_{i,t} + \beta_2 IntMonitor_{i,t} + \beta_3 ExtMonitor_{i,t} + \beta_4 CEOpower_{i,t} * IntMonitor_{i,t} + \beta_5 CEOpower_{i,t} * ExtMonitor_{i,t} + \beta_6 LnSales_{i,t} + \beta_7 Age_{i,t} + \beta_8 ROE_{i,t} + \beta_9 LLoss_{i,t} + \beta_{10} Leve_{i,t} + \beta_{11} Cleve_{i,t} + \beta_{12} Nborrow_{i,t} + \beta_{13} Invest_{i,t} + \beta_{14} Opcf_{i,t} + \beta_{15} Prob\_Bank_{i,t} + \beta_{16} Invrec_{i,t} + \beta_{17} Big4_{i,t} + \beta_{18} Pqual_{i,t} + \beta_{19} Auditlag_{i,t} + \beta_{20} Audtenure_{i,t} + \beta_{21} Feeratio_{i,t} + Industry_{i,t} + Year_{i,t} + \varepsilon_{i,t}$	Column (4)

Note. $GCO_{i,t}$ = dummy variable that takes the value of 1 if a firm *i* receives a going-concern opinion in year *t,* and 0 otherwise; $CEOpower_{i,t}$ = power index constructed using principal component analysis after combining four power attributes: $CEOtenure_{i,t}$, $CEOdual_{i,t}$, $CEOown_{i,t}$, $CEOcomp_{i,t}$; $IntMonitor_{i,t}$ = internal monitoring index constructed using principal component analysis after combining three internal monitoring characteristics: $ACfin_{i,t}$, $ACind_{i,t}$, $BDind_{i,t}$; $ExtMonitor_{i,t}$ = external monitoring index constructed using principal component analysis after combining two external monitoring characteristics: $Institown_{i,t}$ and $Follow_{i,t}$; $LnSales_{i,t}$ = natural logarithm of total sales for firm *i* in year *t*; $Age_{i,t}$ = total number of years since firm *i* incorporated in year *t*; $ROE_{i,t}$ = net income before extraordinary items divided by total equity for firm *i* in year *t*; $LLoss_{i,t}$ = dummy variable that takes the value of 1 if firm *i* reports negative income in year $t-1$, and 0 otherwise; $Leve_{i,t}$ = total debt divided by total assets for firm *i* in year *t*; $Cleve_{i,t}$ = change in leverage for firm *i* from year $t-1$; $Nborrow_{i,t}$ = dummy variable that takes the value of 1 if firm *i* has new borrowings in year *t*, defined as an increase in long-term debt from the previous year, and 0 otherwise; $Invest_{i,t}$ = current assets minus debtors and inventory divided by total assets for firm *i* in year *t*; $Opcf_{i,t}$ = operating cash flow divided by total assets for firm *i* in year *t*; $Prob\_Bank_{i,t}$ = financial distress score based on Zmijewski (1984); $Invrec_{i,t}$ = ratio of the sum of inventory and receivables to total assets for firm *i* in year *t*; $Big4_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* in year *t* is a Big4 auditor, and 0 otherwise; $Pqual_{i,t}$ = dummy variable that takes the value of 1 if the auditor for firm *i* issued a modified opinion in year $t-1$, and 0 otherwise; $Auditlag_{i,t}$ = number of days from financial year-end to audit opinion signature date for firm *i* in year *t*; $Audtenure_{i,t}$ = number of years of auditor tenure for firm *i* in year *t*; $Feeratio_{i,t}$ = ratio of nonaudit fees to total fees paid to the incumbent auditor for firm *i* in year *t*; $Industry_{i,t}$ = industry dummy variables to control for industry effects; $Year_{i,t}$ = year dummy variables used for the specific financial year-end; $\varepsilon_{i,t}$ = error term.
*$p < .10$. **$p < .05$. ***$p < .01$.

6.6 Chapter Summary

This chapter has discussed the robustness and sensitivity of the main results reported in Chapter 5. Alternative measures are used for the audit fees and going-concern opinion models to check the sensitivity of the results in Chapter 5. To check the robustness of the results, different partitioning approaches are applied to eliminate any potential concern that the main findings could be driven by some company or audit characteristics. Moreover, some additional tests are conducted to address the endogeneity issues in this study. Chapter 7, the final chapter, will outline the overall conclusions, implications, limitations, and contributions of the study.

Chapter 7:
Conclusions and Implications

7.1 Chapter Overview

This chapter summarises the major conclusions and implications of the study. The hypotheses are accepted or rejected based on the main findings of the study. Then, the implications of the study are discussed. Finally, the study's limitations are outlined and some future research opportunities are highlighted.

7.2 Major Conclusions

Using agency theory as the underpinning theoretical framework, this study is conducted to examine the association between CEO power and audit quality in the Australian capital market. In addition, the study investigates the moderating effect of monitoring intensity (i.e., internal and external) on this association. Two measures of audit quality are adopted in the study: audit fees and the likelihood of a company receiving a going-concern opinion.

Table 7.1 summarises the testable hypotheses formulated and examined in this study with the respective acceptance or rejection of each hypothesis based on the results of the statistical analysis conducted.

As indicated in Table 7.1, hypothesis H1 postulated that powerful CEOs are likely to be associated with lower levels of audit quality. The study's multivariate analyses fully support the acceptance of H1a and H1b by showing a significant negative association between CEO power and both audit fees and the likelihood of receiving a going-concern opinion. This finding suggests that firms with powerful CEOs on the top of the corporate hierarchy pay lower audit fees and are less likely to receive a going-concern opinion even if such firms are financially distressed.

Table 7.1

Acceptance or Rejection of Hypotheses

Hypothesis	Description	Accept/Reject
Panel A: CEO power and audit quality		
H1	CEO power is negatively related to audit quality.	
H1a	CEO power is negatively related to audit fees.	Accept
H1b	CEO power is negatively related to the likelihood of receiving a going-concern opinion.	Accept
Panel B: The role of internal monitoring intensity		
H2	Internal monitoring intensity is likely to mitigate the negative relationship between CEO power and audit quality.	
H2a	Internal monitoring intensity is likely to mitigate the negative relationship between CEO power and audit fees.	Accept
H2b	Internal monitoring intensity is likely to mitigate the negative relationship between CEO power and the likelihood of receiving a going-concern opinion.	Reject
Panel C: The role of external monitoring intensity		
H3	External monitoring intensity is likely to mitigate the negative relationship between CEO power and audit quality.	
H3a	External monitoring intensity is likely to mitigate the negative relationship between CEO power and audit fees.	Reject
H3b	External monitoring intensity is likely to mitigate the negative relationship between CEO power and the likelihood of receiving a going-concern opinion.	Reject

Note. CEO = chief executive officer; H = hypothesis.

With regard to hypothesis H2, it was postulated that internal monitoring intensity is likely to mitigate the negative association between CEO power and audit quality. The main results support the acceptance of H2a because the coefficient on the interaction term CEO power and internal monitoring is significant and positively related to audit fees, suggesting that the presence of strong internal monitoring plays a mitigating role by demanding higher audit fees. Regarding hypothesis H2b, the results do not support the acceptance of the hypothesis because the coefficient on the interaction term CEO power and internal monitoring is insignificantly related to the going-concern opinion, suggesting that internal monitoring does not mitigate the negative effect of CEO power on the issuance of the going-concern opinion. Hence, H2b was rejected. The lack of statistical significance may be attributed to the fact that internal monitors are likely to ensure that audit quality is maintained during the audit

process. Yet, they do not maintain the oversight until the audit opinion is issued without influence from management.

The premise of hypothesis H3 was that external monitoring intensity is likely to mitigate the negative association between CEO power audit quality. The main results do not support the acceptance of this hypothesis because the moderating role of external monitoring was statistically insignificant for both audit fees and the going-concern opinion. The lack of empirical support for the moderating role of external monitoring in the association between CEO power and audit quality resulted in the rejection of hypotheses H3a and H3b, suggesting that external monitoring does not play a significant role in mitigating the inverse relationship between CEO power and audit quality. The lack of statistical significance can be attributed to the fact that external monitors do not have direct oversight and involvement in the audit process and do not interact with the external auditor.

7.3 Implications

Findings from the current study offer important implications for several key stakeholders, including regulators, the auditing profession, investors and companies, and academic researchers. The following subsections discuss the main implications for the respective stakeholders.

7.3.1 Regulators

The findings of this study have important implications for regulators in Australia and beyond. This study views a CEO as powerful based on four attributes: their tenure, duality, ownership, and compensation. CEOs have been responsible for several corporate scandals around the world (e.g., Enron, HIH Insurance, WorldCom); therefore, increased scrutiny from regulators has been put in place to restrain CEOs' opportunistic practices. For instance, Section 259A of the Australian Corporations Act 2001 requires CEOs of listed companies to sign off the financial statements, verifying that the financial reports present a true and fair view in accordance with relevant accounting standards. However, this study confirms the findings of previous research (Almer et al., 2014; Beck & Mauldin, 2014; Cohen et al., 2011; Dhaliwal et al., 2015; Fiolleau et al., 2013) that the CEO and management can still have an influence on the audit process.

An important implication arising from the study results for regulators is that it shows the detrimental impact of CEO power can be extended to the quality of the audit. The study can be valuable for regulatory bodies to review CEO power attributes in Australian entities and how these attributes can collectively be detrimental. The findings of the study may be of importance for regulators to consider further legislation in order to constrain CEO power. One way to limit CEO power would be to encourage internal monitors of management to release a periodical report evaluating the overall practices of the CEO and their management team, disclosing any misconduct in general or attempts to influence the audit process in particular. This would ensure that internal monitors keep a continuous oversight of management, and would also restrict CEOs from malpractice and interference in the audit.

In addition, the findings of the study show the presence of strong internal monitoring attenuates the inverse relationship between CEO power and audit fees. Yet, it does not mitigate the negative associations between CEO power and the likelihood of receiving a going-concern opinion. This could indicate that internal monitoring plays a significant role in demanding better inputs to the audit process (e.g., higher audit fees) but does not mitigate the negative impact of CEO power on the output of the audit process (e.g., a going-concern opinion when one is warranted). Therefore, it is recommended that the regulatory bodies promote and enhance internal governance in companies to ensure its effective role until the audit process is completed and the appropriate audit opinion is issued.

7.3.2 Auditing profession

The results from this study also have important implications for the auditing profession. Given this study reveals that powerful CEOs are associated with lower levels of audit quality in the absence of effective internal monitoring, auditors can use this information to their advantage and improve audit quality. Specifically, auditors should consider the "tone at the top" demonstrated by CEO power when they plan their audit. Such consideration can help auditors manage the bilateral relationship carefully to prevent CEOs from influencing the audit.

Given the results reveal that internal monitoring can mitigate the negative influence of the CEO on audit fees, which ultimately determine the overall work of the audit, it is important that auditors establish effective communication with the internal

monitors of management. Establishing effective continuous communication with internal monitors helps auditors convey any concerns about the CEO's potential interference in the audit process on a timely basis.

Moreover, should an auditor accept an engagement with a firm with a powerful CEO, approaches such as expanding the number of analytical procedures and increasing the level of professional scepticism during risk assessment should be implemented. These tactics would assist auditors to expand the audit scope, which would be reflected in increased audit fees. Auditors would then be better equipped to issue an appropriate audit opinion, such as issuing the going-concern opinion when one is warranted. Otherwise, auditors could be exposed to litigation risk if they fail to issue the appropriate audit opinion.

7.3.3 Investors and companies

Accounting and finance literature has widely recognised the significant information asymmetry between management and shareholders (Francis, 1984; Huang et al., 2017; Neal, Hermanson, Carcello, & Beasley, 2009; Veprauskaitė & Adams, 2013). The asymmetrical information gap presents investors with some difficulties accessing true inside information that helps them make accurate investment decisions. A fundamental purpose of an external audit is to add credibility to the financial information included in the financial statements (Barroso et al., 2018; Desender et al., 2013). The external audit is conducted with an expectation to limit managerial opportunism and provide independent verification of the reliability of the financial statements prepared by management. Greater audit quality enhances the credibility and the quality of the financial information available to investors.

Traditionally, investors assess the quality of the audit by examining some auditor characteristics (e.g., Big 4 and industry specialist). However, the findings of the current study provide investors with new perspectives on assessing the overall quality of the audit. Based on the evidence revealed in this thesis, it is advisable for investors to look beyond the auditor attributes to evaluate the audit quality. Specifically, investors and even other stakeholders should assess the power held by CEOs as the results of this study show that powerful CEOs can negatively influence audit quality. Additionally, the study results support the idea that strong internal monitoring is vital in enhancing audit quality and constraining the effect of CEO power on audit fees.

Therefore, investors should also review the internal monitoring strength of a company because of its effectiveness in mitigating the inverse association between CEO power and audit fees by demanding higher audit fees.

In addition, corporate investors should take several practical steps to limit the detrimental impact of CEO power. One way is to enhance internal monitoring mechanisms in the corporate structure by involving internal monitors of management in a company's work structure to keep a close oversight of the CEO and their top executive team. Another way is to design work responsibilities in companies in ways that promote non-hierarchical cultures (Tost et al., 2012). Decentralising decision-making power limits CEO power and allows people with the best information to make appropriate decisions for organisations.

Collectively, the results of the study suggest that investors in the Australian capital market may need to consider additional ways of assessing audit quality besides auditor characteristics. In addition to considering the auditor characteristics, investors should assess the power held by the CEO and the strength of the internal monitoring mechanisms and how all these interrelated factors affect the quality of the audit, and thereby the credibility of the financial information in the annual reports.

7.3.4 Academic researchers

This study has several implications for governance and managerial power research. Consistent with the theoretical framework of the study (i.e., agency theory), the results indicate that the detrimental impact of CEO power can be extended to audit quality in the absence of effective monitoring. The findings of the study also reveal that board and audit committee independence and audit committee financial expertise facilitate internal monitoring of management, and consequently mitigate the harmful effects of CEO power on audit fees. As such, this thesis emphasises that effective internal monitoring mechanisms are vital to providing proper checks and balances over the CEO's use of power.

Consequently, scholars undertaking future research on CEO power should take into consideration internal monitoring mechanisms. When examining the effect of CEO power in a corporate context, scholars should not ignore the relative effectiveness and the roles of internal monitoring mechanisms in the corporate structure. Both CEO

power and internal monitoring mechanisms affect corporate outcomes; therefore, examining CEO power without considering the role of internal monitoring could lead to results that do not reflect the complete picture. Specifically, taking internal monitoring into consideration when examining CEO power in future research could help identify those corporate outcomes where internal monitoring can be effective in limiting CEOs' negative influence and those where it cannot.

7.4 Limitations and Future Research

Despite the important findings and implications from this research, this study is not without limitations. First, the sample period was set from 2004 to 2015 due to the availability of some governance and CEO data (e.g., audit committee meetings, CEO ownership). It is possible that analysing the association between CEO power and audit quality for periods after 2015 when the data become available may result in different findings.

Second, being a nation-specific study focusing on companies in Australia, there might be a limitation in generalising the study findings to different institutional settings as legal enforcement systems, culture, practices, and regulations differ across countries. Future research could be undertaken outside Australia in countries with different regulatory and institutional settings.

Third, although the CEO power proxies adopted in this study are widely used in the literature, different psychological, social, and economic factors could affect the power held by a CEO. The lack of data on these factors may be a limitation of this study. Future research could consider alternative research methods (e.g., qualitative research) to examine CEO power in different settings and contexts.

Fourth, this study uses publicly available information to measure audit quality. However, the auditor also has access to private information, based on which the audit is conducted and the opinion is issued. Unlike the auditor, the general public cannot access such private information about the client. Therefore, it should be noted that the results presented in this study should not be given any more weight than is warranted in light of such a limitation.

Fifth, although the results of the study are robust across various models, different sample partitioning approaches, alternative variable definitions, and different analysis

techniques, the possibility that the results could be driven by potential underlying endogeneity cannot be ruled out completely.

Finally, this study excludes financial and utility firms due to their different regulatory settings. Therefore, future research could undertake in-depth analyses focusing on companies in the financial and utilities sectors.

7.5 Overall Summary of the Study

The effect of CEO power on various corporate outcomes has attracted a great deal of attention from market participants and researchers, especially after several corporate scandals triggered by CEO misconduct. Yet, the relationship between CEO power and audit quality had not been explored in the literature. To fill this gap, this study has undertaken a comprehensive, empirical analysis to examine the association between CEO power and two audit quality measures: audit fees and the likelihood of a company receiving a going-concern opinion. In addition, this study investigated the moderating role of internal and external monitoring mechanisms on such association.

The empirical tests yielded insightful results. Consistent with expectations, the findings revealed that higher CEO power is associated with lower levels of audit quality. Specifically, CEO power is associated with lower audit fees. Also, financially distressed companies with powerful CEOs are less likely to receive a going-concern opinion. Further, the results showed that strong internal monitoring attenuates the negative association between CEO power and audit fees but not that between CEO power and the going-concern opinion. The empirical results also revealed that external monitoring does not moderate the inverse relationship between CEO power and audit quality measures.

Overall, this study has provided practical insights and a broader understanding of CEO power in the corporate structure. Findings from the study hold several implications for regulators, auditors, investors, and researchers. This study is not without limitations, but these limitations also provide an avenue for future research opportunities.

References

Abbott, L., & Parker, S. (2000). Auditor selection and audit committee characteristics. *Auditing: A Journal of Practice & Theory, 19*(2), 47–66.

Abbott, L., Parker, S., Peters, G., & Raghunandan, K. (2003). The association between audit committee characteristics and audit fees. *Auditing: A Journal of Practice & Theory, 22*(2), 17–32.

Abbott, L., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory, 23*(1), 69–87.

Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *Review of Financial Studies, 18*(4), 1403–1432.

Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. *The Journal of Finance, 62*(1), 217–250.

Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics, 100*(1), 154-181.

Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *The Journal of Law and Economics, 48*(2), 371–406.

Aguilera, R. V., Desender, K., Bednar, M. K., & Lee, J. H. (2015). Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *The Academy of Management Annals, 9*(1), 483–573.

Al Mamun, M., Balachandran, B., & Duong, H. N. (2020). Powerful CEOs and stock price crash risk. *Journal of Corporate Finance, 62*, 101582.

Ali, A., & Zhang, W. N. (2015). CEO tenure and earnings management. *Journal of Accounting and Economics, 59*(1), 60–79.

Almer, E. D., Philbrick, D. R., & Rupley, K. H. (2014). What drives auditor selection? *Current Issues in Auditing, 8*(1), A26–A42.

Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance, 23*(4), 589–609.

Altunbaş, Y., Thornton, J., & Uymaz, Y. (2018). CEO tenure and corporate misconduct: Evidence from US banks. *Finance Research Letters, 26*, 1–8.

Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. *European Journal of Social Psychology, 36*(4), 511–536.

Appel, I. R., Gormley, T. A., & Keim, D. B. (2016). Passive investors, not passive owners. *Journal of Financial Economics, 121*(1), 111–141.

Arthurs, J. D., & Busenitz, L. W. (2003). The boundaries and limitations of agency theory and stewardship theory in the venture capitalist/entrepreneur relationship. *Entrepreneurship Theory and Practice, 28*(2), 145–162.

Ashton, A. H. (1991). Experience and error frequency knowledge as potential determinants of audit expertise. *The Accounting Review, 66*(2), 218–239.

Aslan, H., & Kumar, P. (2012). Strategic ownership structure and the cost of debt. *The Review of Financial Studies, 25*(7), 2257–2299.

Audousset-Coulier, S., Jeny, A., & Jiang, L. (2016). The validity of auditor industry specialization measures. *Auditing: A Journal of Practice & Theory, 35*(1), 139–161.

Australian Securities Exchange Corporate Governance Council. (2003). *Principles of Good Corporate Governance and Best Practice Recommendations*. Sydney, Australia: ASX Corporate Governance Council.

Australian Securities Exchange Corporate Governance Council. (2007). *Corporate Governance Principles and Recommendations* (2nd ed.). Sydney, Australia: ASX Corporate Governance Council.

Australian Securities Exchange Corporate Governance Council. (2010). *Corporate Governance Principles and Recommendations with 2010 Amendments*. Sydney, Australia: ASX Corporate Governance Council.

Australian Securities Exchange Corporate Governance Council. (2014). *Corporate Governance Principles and Recommendations* (3rd ed.). Sydney, Australia: ASX Corporate Governance Council.

Australian Securities Exchange Corporate Governance Council. (2019). *Corporate Governance Principles and Recommendations* (4th ed.). Sydney, Australia: ASX Corporate Governance Council.

Axén, L. (2018). Exploring the association between the content of internal audit disclosures and external audit fees: Evidence from Sweden. *International Journal of Auditing, 22*(2), 285–297.

Baiman, S. (1982). Agency research in managerial accounting: A survey. *Journal of Accounting Literature, 1*, 154–213.

Baiman, S. (1990). Agency research in managerial accounting: A second look. *Accounting, Organizations and Society, 15*(4), 341–371.

Ball, R., Jayaraman, S., & Shivakumar, L. (2012). Audited financial reporting and voluntary disclosure as complements: A test of the Confirmation Hypothesis. *Journal of Accounting and Economics, 53*(1), 136–166.

Balsam, S., Krishnan, J., & Yang, J. S. (2003). Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice & Theory, 22*(2), 71–97.

Bandyopadhyay, S. P., & Kao, J. L. (2001). Competition and big 6 brand name reputation: Evidence from the Ontario municipal audit market. *Contemporary Accounting Research, 18*(1), 27–64.

Barkess, L., & Simnett, R. (1994). The provision of other services by auditors: Independence and pricing issues. *Accounting and Business Research, 24*(94), 99–108.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Barroso, R., Ben Ali, C., & Lesage, C. (2018). Blockholders' ownership and audit fees: The impact of the corporate governance model. *European Accounting Review, 27*(1), 149–172.

Basioudis, I. G., Papakonstantinou, E., & Geiger, M. A. (2008). Audit fees, non-audit fees and auditor going-concern reporting decisions in the United Kingdom. *Abacus, 44*(3), 284–309.

Beasley, M. S., Carcello, J. V., Hermanson, D. R., & Lapides, P. D. (2000). Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizons, 14*(4), 441–454.

Beasley, M. S., & Petroni, K. R. (2001). Board independence and audit-firm type. *Auditing: A Journal of Practice & Theory, 20*(1), 97–114.

Beattie, V., Fearnley, S., & Brandt, R. (2000). Behind the audit report: A descriptive study of discussions and negotiations between auditors and directors. *International Journal of Auditing, 4*(2), 177–202.

Bebchuk, L. A., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *The Review of Financial Studies, 22*(2), 783–827.

Bebchuk, L. A., Cremers, K. J. M., & Peyer, U. C. (2011). The CEO pay slice. *Journal of Financial Economics, 102*(1), 199–221.

Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives, 17*(3), 71–92.
Bebchuk, L. A., Grinstein, Y., & Peyer, U. (2010). Lucky CEOs and lucky directors. *The Journal of Finance, 65*(6), 2363–2401.
Beck, M. J., & Mauldin, E. G. (2014). Who's really in charge? Audit committee versus CFO power and audit fees. *The Accounting Review, 89*(6), 2057–2085.
Bedard, J. C., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory, 23*(2), 13–35.
Bedard, J. C., & Johnstone, K. M. (2004). Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review, 79*(2), 277–304.
Bednar, M. K., Love, E. G., & Kraatz, M. (2015). Paying the price? The impact of controversial governance practices on managerial reputation. *Academy of Management Journal, 58*(6), 1740–1760.
Behn, B. K., Kaplan, S. E., & Krumwiede, K. R. (2001). Further evidence on the auditor's going-concern report: The influence of management plans. *Auditing: A Journal of Practice & Theory, 20*(1), 13–28.
Bell, T. B., Doogar, R., & Solomon, I. (2008). Audit labor usage and fees under business risk auditing. *Journal of Accounting Research, 46*(4), 729–760.
Bell, T. B., Landsman, W. R., & Shackelford, D. A. (2001). Auditors' perceived business risk and audit fees: Analysis and evidence. *Journal of Accounting Research, 39*(1), 35–43.
Berglund, N. R., Eshleman, J. D., & Guo, P. (2018). Auditor size and going concern reporting. *Auditing: A Journal of Practice & Theory, 37*(2), 1–25.
Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York, USA: MacMillan.
Bhaskar, L. S., Krishnan, G. V., & Yu, W. (2017). Debt covenant violations, firm financial distress, and auditor actions. *Contemporary Accounting Research, 34*(1), 186–215.
Bhojraj, S., & Sengupta, P. (2003). Effect of corporate governance on bond ratings and yields: The role of institutional investors and outside directors. *The Journal of Business, 76*(3), 455–475.
Bicudo de Castro, V., Gul, F. A., Muttakin, M. B., & Mihret, D. G. (2019). Optimistic tone and audit fees: Some Australian evidence. *International Journal of Auditing, 23*(2), 352–364.
Billings, B. A., Xinghua, G., & Yonghong, J. (2014). CEO and CFO equity incentives and the pricing of audit services. *Auditing: A Journal of Practice & Theory, 33*(2), 1–25.
Bills, K. L., Ling Lei, L., & Seidel, T. A. (2017). Do CEO succession and succession planning affect stakeholders' perceptions of financial reporting risk? Evidence from audit fees. *The Accounting Review, 92*(4), 27–52.
Blair, M. M. (1995). *Ownership and control: Rethinking corporate governance for the 21st century*. Washington DC, USA: Brookings Institution.
Blankley, A. I., Hurtt, D. N., & MacGregor, J. E. (2012). Abnormal audit fees and restatements. *Auditing: A Journal of Practice & Theory, 31*(1), 79–96.
Blay, A. D., & Geiger, M. A. (2013). Auditor fees and auditor independence: Evidence from going concern reporting decisions. *Contemporary Accounting Research, 30*(2), 579–606.

Blay, A. D., Moon, J. R., & Paterson, J. S. (2016). There's no place like home: The influence of home-state going-concern reporting rates on going-concern opinion propensity and accuracy. *Auditing: A Journal of Practice & Theory, 35*(2), 23–51.

Booth, P., & Schulz, A. K. D. (2004). The impact of an ethical environment on managers' project evaluation judgments under agency problem conditions. *Accounting Organizations and Society, 29*(5–6), 473–488.

Bosse, D. A., & Phillips, R. A. (2016). Agency theory and bounded self-interest. *Academy of Management Review, 41*(2), 276–297.

Bowen, R. M., Davis, A. K., & Matsumoto, D. A. (2002). Do conference calls affect analysts' forecasts? *The Accounting Review, 77*(2), 285–316.

Brav, A., Jiang, W., Partnoy, F., & Thomas, R. (2008). Hedge fund activism, corporate governance, and firm performance. *The Journal of Finance, 63*(4), 1729–1775.

Briñol, P., Petty, R. E., Valle, C., Rucker, D. D., & Becerra, A. (2007). The effects of message recipients' power before and after persuasion: A self-validation analysis. *Journal of Personality and Social Psychology, 93*(6), 1040–1053.

Brown, R., Chan, H. W. H., & Ho, Y. K. (2009). Analysts' recommendations: From which signal does the market take its lead? *Review of Quantitative Finance and Accounting, 33*(2), 91-111.

Brown, R., & Sarma, N. (2007). CEO overconfidence, CEO dominance and corporate acquisitions. *Journal of Economics and Business, 59*(5), 358–379.

Bruynseels, L., & Cardinaels, E. (2013). The audit committee: Management watchdog or personal friend of the CEO? *The Accounting Review, 89*(1), 113–145.

Bugeja, M., Matolcsy, Z., & Spiropoulos, H. (2017). The CEO pay slice: Managerial power or efficient contracting? Some indirect evidence. *Journal of Contemporary Accounting & Economics, 13*(1), 69–87.

Bushee, B. J. (1998). The influence of institutional investors on myopic R&D investment behavior. *The Accounting Review, 73*(3), 305–333.

Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research, 38*, 171–202.

Byard, D., Li, Y., & Weintrop, J. (2006). Corporate governance and the quality of financial analysts' information. *Journal of Accounting and Public Policy, 25*(5), 609–625.

Cahan, S. F., Godfrey, J. M., Hamilton, J., & Jeter, D. C. (2008). Auditor specialization, auditor dominance, and audit fees: The role of investment opportunities. *The Accounting Review, 83*(6), 1393–1423.

Cannella, A. A. J., & Shen, W. (2001). So close and yet so far: Promotion versus exit for CEO heirs apparent. *Academy of Management Journal, 44*(2), 252–270.

Carcello, J. V., Hermanson, D. R., & Huss, H. F. (1995). Temporal changes in bankruptcy-related reporting. *Auditing: A Journal of Practice & Theory, 14*(2), 133.

Carcello, J. V., Hermanson, D. R., & Huss, H. F. (2000). Going-concern opinions: The effects of partner compensation plans and client size. *Auditing: A Journal of Practice & Theory, 19*(1), 67–77.

Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley, R. A. (2002). Board characteristics and audit fees. *Contemporary Accounting Research, 19*(3), 365–384.

Carcello, J. V., & Neal, T. L. (2003). Audit committee characteristics and auditor dismissals following "new" going-concern reports. *The Accounting Review, 78*(1), 95–117.

Carey, P., Kortum, S., & Moroney, R. (2012). Auditors' going-concern-modified opinions after 2001: Measuring reporting accuracy. *Accounting and Finance, 52*(4), 1041–1059.

Carey, P., & Simnett, R. (2006). Audit partner tenure and audit quality. *The Accounting Review, 81*(3), 653–676.

Carpenter, V. L., & Feroz, E. H. (2001). Institutional theory and accounting rule choice: an analysis of four US state governments' decisions to adopt generally accepted accounting principles. *Accounting, Organizations and Society, 26*(7), 565–596.

Carson, E. (2009). Industry specialization by global audit firm networks. *The Accounting Review, 84*(2), 355–382.

Carson, E., & Fargher, N. (2007). Note on audit fee premiums to client size and industry specialization. *Accounting and Finance, 47*(3), 423–446.

Carson, E., Fargher, N., & Zhang, Y. (2016). Trends in auditor reporting in Australia: A synthesis and opportunities for research. *Australian Accounting Review, 26*(3), 226–242.

Carson, E., Fargher, N., & Zhang, Y. (2017). Explaining auditors' propensity to issue going-concern opinions in Australia after the global financial crisis. *Accounting and Finance, 59*(4)

Carson, E., Fargher, N. L., Geiger, M. A., Lennox, C. S., Raghunandan, K., & Willekens, M. (2013). Audit reporting for going-concern uncertainty: A research synthesis. *Auditing: A Journal of Practice & Theory, 32*(Supplement 1), 353–384.

Carson, E., Ferguson, A., & Simnett, R. (2006). Australian audit reports: 1996–2003. *Australian Accounting Review, 16*(40), 89–96.

Carson, E., Simnett, R., Soo, B. S., & Wright, A. M. (2012). Changes in audit market competition and the big N premium. *Auditing: A Journal of Practice & Theory, 31*(3), 47–73.

Carvajal, M., Coulton, J. J., & Jackson, A. B. (2017). Earnings benchmark hierarchy. *Accounting and Finance, 57*(1), 87-111.

Cassell, C. A., Giroux, G. A., Myers, L. A., & Omer, T. C. (2012). The effect of corporate governance on auditor-client realignments. *Auditing: A Journal of Practice & Theory, 31*(2), 167–188.

Casterella, J. R., Francis, J. R., Lewis, B. L., & Walker, P. L. (2004). Auditor industry specialization, client bargaining power, and audit pricing. *Auditing: A Journal of Practice & Theory, 23*(1), 123–140.

Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review, 28*(3), 432–446.

Chan, A. M. Y., Liu, G., & Sun, J. (2013). Independent audit committee members' board tenure and audit fees. *Accounting and Finance, 53*(4), 1129–1147.

Chang, X., Dasgupta, S., & Hilary, G. (2006). Analyst coverage and financing decisions. *The Journal of Finance, 61*(6), 3009–3048.

Chao, C. C., Hu, M., Munir, Q., & Li, T. X. (2017). The impact of CEO power on corporate capital structure: New evidence from dynamic panel threshold analysis. *International Review of Economics & Finance, 51*, 107–120.

Chen, K. C., & Church, B. K. (1992). Default on debt obligations and the issuance of going-concern opinions. *Auditing: A Journal of Practice & Theory, 11*(2), 30.
Chen, X., Harford, J., & Li, K. (2007). Monitoring: Which institutions matter? *Journal of Financial Economics, 86*(2), 279–305.
Chen, Y. M., Moroney, R., & Houghton, K. (2005). Audit committee composition and the use of an industry specialist audit firm. *Accounting and Finance, 45*(2), 217–239.
Cheng, Q., & Warfield, T. D. (2005). Equity incentives and earnings management. *The Accounting Review, 80*(2), 441–476.
Chi, W., Douthett, E. B., & Lisic, L. L. (2012). Client importance and audit partner independence. *Journal of Accounting and Public Policy, 31*(3), 320–336.
Chidambaran, N. K., & Prabhala, N. R. (2003). Executive stock option repricing, internal governance mechanisms, and management turnover. *Journal of Financial Economics, 69*(1), 153–189.
Child, J. (1972). Organization structure and strategies of control: A replication of the Aston study. *Administrative Science Quarterly, 17*(2), 163–177.
Choi, J.-H., Kim, C., Kim, J.-B., & Zang, Y. (2010). Audit office size, audit quality, and audit pricing. *Auditing: A Journal of Practice & Theory, 29*(1), 73–97.
Choi, J.-H., Kim, J.-B., Liu, X., & Simunic, D. A. (2008). Audit pricing, legal liability regimes, and Big 4 premiums: Theory and cross-country evidence. *Contemporary Accounting Research, 25*(1), 55–99.
Chow, C. W., McNamee, A. H., & Plumlee, R. D. (1987). Practitioners' perceptions of audit step difficulty and criticalness: Implications for audit research. *Auditing: A Journal of Practice & Theory, 6*(2), 123–133.
Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2016). Understanding audit quality: Insights from audit professionals and investors. *Contemporary Accounting Research, 33*(4), 1648–1684.
Clarkson, M. (1994). *A risk based model of stakeholder theory*. Paper presented at the Second Toronto Conference on Stakeholder Theory, University of Toronto, Canada.
Coffee, J. C. (1991). Liquidity versus control: The institutional investor as corporate monitor. *Columbia Law Review, 91*(6), 1277–1368.
Coffee, J. C. (2001). *The acquiescent gatekeeper: Reputational intermediaries, auditor independence and the governance of accounting* (Columbia Law and Economics Working Paper No. 191). Retrieved from Columbia Law School, Scholarship Repository website: https://scholarship.law.columbia.edu/faculty_scholarship/1249
Cohen, J. R., Gaynor, L. M., Krishnamoorthy, G., & Wright, A. M. (2011). The impact on auditor judgments of CEO influence on audit committee independence. *Auditing: A Journal of Practice & Theory, 30*(4), 129–147.
Cohen, J. R., Krishnamoorthy, G., & Wright, A. M. (2002). Corporate governance and the audit process. *Contemporary Accounting Research, 19*(4), 573–594.
Collier, P., & Gregory, A. (1996). Audit committee effectiveness and the audit fee. *European Accounting Review, 5*(2), 177–198.
Combs, J. G., Ketchen Jr., D. J., Perryman, A. A., & Donahue, M. S. (2007). The moderating effect of CEO power on the board composition–firm performance relationship. *Journal of Management Studies, 44*(8), 1299–1323.
Commonwealth of Australia. 2001. The Corporations Act 2001. Canberra, ACT: Commonwealth of Australia.

Commonwealth of Australia. 2004. Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Act 2004. (CLERP 9). Canberra, ACT: Commonwealth of Australia.

Connelly, B. L., Hoskisson, R. E., Tihanyi, L., & Certo, S. T. (2010). Ownership as a form of corporate governance. *Journal of Management Studies, 47*(8), 1561–1589.

Corbetta, G., & Salvato, C. (2004). Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: A commentary on "Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence". *Entrepreneurship Theory and Practice, 28*(4), 355–362.

Cordeiro, J. J., Veliyath, R., & Romal, J. B. (2007). Moderators of the relationship between director stock-based compensation and firm performance. *Corporate Governance: An International Review, 15*(6), 1384–1393.

Craswell, A., Francis, J. R., & Taylor, S. L. (1995). Auditor brand name reputations and industry specializations. *Journal of Accounting and Economics, 20*(3), 297–322.

Craswell, A., Stokes, D. J., & Laughton, J. (2002). Auditor independence and fee dependence. *Journal of Accounting and Economics, 33*(2), 253–275.

Cruz, C. C., Gómez-Mejia, L. R., & Becerra, M. (2010). Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms. *Academy of Management Journal, 53*(1), 69–89.

Cuñat, V., & Guadalupe, M. (2005). How does product market competition shape incentive contracts? *Journal of the European Economic Association, 3*(5), 1058-1082.

Custódio, C., Ferreira, M. A., & Matos, P. (2013). Generalists versus specialists: Lifetime work experience and chief executive officer pay. *Journal of Financial Economics, 108*(2), 471–492.

Daily, C. M., & Johnson, J. L. (1997). Sources of CEO power and firm financial performance: A longitudinal assessment. *Journal of Management, 23*(2), 97–117.

Daily, C. M., Johnson, J. L., Ellstrand, A. E., & Dalton, D. R. (1998). Compensation committee composition as a determinant of CEO compensation. *Academy of Management Journal, 41*(2), 209–220.

Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal, 42*(6), 674–686.

Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. (2007). The fundamental agency problem and its mitigation. *Academy of Management Annals, 1*(1), 1–64.

David, P., Hitt, M. A., & Gimeno, J. (2001). The influence of activism by institutional investors on R&D. *Academy of Management Journal, 44*(1), 144–157.

David, P., Kochhar, R., & Levitas, E. (1998). The effect of institutional investors on the level and mix of CEO compensation. *Academy of Management Journal, 41*(2), 200–208.

Davis, J. H., Allen, M. R., & Hayes, H. D. (2010). Is blood thicker than water? A study of stewardship perceptions in family business. *Entrepreneurship Theory and Practice, 34*(6), 1093–1116.

Davis, J. H., Schoorman, F., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review, 22*(1), 20–47.

DeAngelo, L. E. (1981a). Auditor independence, “low balling”, and disclosure regulation. *Journal of Accounting and Economics, 3*(2), 113–127.

DeAngelo, L. E. (1981b). Auditor size and audit quality. *Journal of Accounting and Economics, 3*(3), 183–199.

DeFond, M., Erkens, D. H., & Zhang, J. (2017). Do client characteristics really drive the Big N audit quality effect? New evidence from propensity score matching. *Management Science, 63*(11), 3628–3649.

DeFond, M., Raghunandan, K., & Subramanyam, K. R. (2002). Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research, 40*(4), 1247–1274.

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics, 58*(2–3), 275–326.

DeFranco, G., Gavious, I., Jin, J. Y., & Richardson, G. D. (2011). Do private company targets that hire Big 4 auditors receive higher proceeds? *Contemporary Accounting Research, 28*(1), 215–262.

Del Guercio, D., Seery, L., & Woidtke, T. (2008). Do boards pay attention when institutional investor activists “just vote no”? *Journal of Financial Economics, 90*(1), 84-103.

Demsetz, H. (1983). The structure of ownership and the theory of the firm. *The Journal of Law and Economics, 26*(2), 375–390.

Desender, K. A., Aguilera, R. V., Crespi, R., & GarcÍa-cestona, M. (2013). When does ownership matter? Board characteristics and behavior. *Strategic Management Journal, 34*(7), 823–842.

Dey, A., Engel, E., & Liu, X. (2011). CEO and board chair roles: To split or not to split? *Journal of Corporate Finance, 17*(5), 1595–1618.

Dhaliwal, D., Lamoreaux, P. T., Lennox, C. S., & Mauler, L. M. (2015). Management influence on auditor selection and subsequent impairments of auditor independence during the post-SOX period. *Contemporary Accounting Research, 32*(2), 575–607.

Dhaliwal, D., Niaker, V., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research, 27*(3), 787–827.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160.

Ding, R., & Jia, Y. (2012). Auditor mergers, audit quality and audit fees: Evidence from the PricewaterhouseCoopers merger in the UK. *Journal of Accounting and Public Policy, 31*(1), 69–85.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, *16*(1), 49.

Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91.

Donelson, D. C., McInnis, J. M., & Mergenthaler, R. D. (2012). Rules-based accounting standards and litigation. *The Accounting Review, 87*(4), 1247–1279.

Doukas, J. A., Kim, C., & Pantzalis, C. (2000). Security analysis, agency costs, and company characteristics. *Financial Analysts Journal, 56*(6), 54–63.

Duellman, S., Ahmed, A. S., & Abdel-Meguid, A. M. (2013). An empirical analysis of the effects of monitoring intensity on the relation between equity incentives and earnings management. *Journal of Accounting and Public Policy, 32*(6), 495–517.

Duellman, S., Hurwitz, H., & Sun, Y. (2015). Managerial overconfidence and audit fees. *Journal of Contemporary Accounting & Economics, 11*(2), 148–165.

Dutta, S., MacAulay, K., & Saadi, S. (2011). CEO power, M&A decisions, and market reactions. *Journal of Multinational Financial Management, 21*(5), 257–278.

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

Dye, R. A. (1993). Auditing standards, legal liability, and auditor wealth. *Journal of Political Economy, 101*(5), 887–914.

Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing, 22*(4), 545–565.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review, 14*(1), 57–74.

Emby, C., & Davidson, R. A. (1998). The effects of engagement factors on auditor independence: Canadian evidence. *Journal of International Accounting, Auditing and Taxation, 7*(2), 163–179.

Ettredge, M., Fuerherm, E. E., & Li, C. (2014). Fee pressure and audit quality. *Accounting, Organizations and Society, 39*(4), 247–263.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88*(2), 288–307.

Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics, 26*(2), 327–349.

Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *The Accounting Review, 80*(2), 539–561.

Fargher, N. L., & Jiang, L. (2008). Changes in the audit environment and auditors' propensity to issue going-concern opinions. *Auditing: A Journal of Practice & Theory, 27*(2), 55–77.

Farzad, R. (2005, June 21). Jail terms for 2 at top of Adelphia. *The New York Times.* Retrieved from https://www.nytimes.com/2005/06/21/business/jail-terms-for-2-at-top-of-adelphia.html

Fast, N. J., Gruenfeld, D. H., Sivanathan, N., & Galinsky, A. D. (2009). Illusory control: A generative force behind power's far-reaching effects. *Psychological Science, 20*(4), 502–508.

Feldmann, D. A., Read, W. J., & Abdolmohammadi, M. J. (2009). Financial restatements, audit fees, and the moderating effect of CFO turnover. *Auditing: A Journal of Practice & Theory, 28*(1), 205–223.

Feng, M., Ge, W., Luo, S., & Shevlin, T. (2011). Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics, 51*(1), 21–36.

Ferguson, A., Francis, J. R., & Stokes, D. J. (2003). The effects of firm-wide and office-level industry expertise on audit pricing. *The Accounting Review, 78*(2), 429–448.

Filatotchev, I., & Boyd, B. K. (2009). Taking stock of corporate governance research while looking to the future. *Corporate Governance: An International Review, 17*(3), 257–265.

Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management Journal, 35*(3), 505–538.
Finkelstein, S., & D'aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal, 37*(5), 1079–1108.
Fiolleau, K., Hoang, K., Jamal, K., & Sunder, S. (2013). How do regulatory reforms to enhance auditor independence work in practice? *Contemporary Accounting Research, 30*(3), 864–890.
Florackis, C., & Ozkan, A. (2009). The impact of managerial entrenchment on agency costs: An empirical investigation using UK panel data. *European Financial Management, 15*(3), 497–528.
Florackis, C., & Sainani, S. (2018). How do chief financial officers influence corporate cash policies? *Journal of Corporate Finance, 52*, 168–191.
Francis, J. R. (1984). The effect of audit firm size on audit prices: A study of the Australian market. *Journal of Accounting and Economics, 6*(2), 133–151.
Francis, J. R. (2011). A framework for understanding and researching audit quality. *Auditing: A Journal of Practice & Theory, 30*(2), 125–152.
Francis, J. R., Maydew, E. L., & Sparks, H. C. (1999). The role of big 6 auditors in the credible reporting of accruals. *Auditing: A Journal of Practice & Theory, 18*(2), 17–34.
Francis, J. R., & Yu, M. D. (2009). Big 4 office size and audit quality. *The Accounting Review, 84*(5), 1521–1552.
Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Massachusetts, USA: Pitman Press.
Friedlan, J. M. (1994). Accounting choices of issuers of initial public offerings. *Contemporary Accounting Research, 11*(1), 1–31.
Friedman, H. (2014). Implications of power: When the CEO can pressure the CFO to bias reports. *Journal of Accounting and Economics, 58*(1), 117–141.
Fung, S. Y. K., Gul, F. A., & Krishnan, J. (2012). City-level auditor industry specialization, economies of scale, and audit pricing. *The Accounting Review, 87*(4), 1281–1307.
Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology, 95*(6), 1450.
Gaynor, L., Kelton, A., Mercer, M., & Yohn, T. (2016). Understanding the relation between financial reporting quality and audit quality. *Auditing: A Journal of Practice & Theory, 35*(4), 1–22.
Geiger, M. A., Raghunandan, K., & Rama, D. V. (2005). Recent changes in the association between bankruptcies and prior audit opinions. *Auditing: A Journal of Practice & Theory, 24*(1), 21–35.
Geiger, M. A., & Rama, D. V. (2006). Audit firm size and going-concern reporting accuracy. *Accounting Horizons, 20*(1), 1–17.
Gendron, Y., & Bédard, J. (2006). On the constitution of audit committee effectiveness. *Accounting, Organizations and Society, 31*(3), 211-239.
Gentry, R. J., & Shen, W. (2013). The impacts of performance relative to analyst forecasts and analyst coverage on firm R&D intensity. *Strategic Management Journal, 34*(1), 121–130.
Gillan, S., & Starks, L. T. (2007). The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance, 19*(1), 55–73.

Godfrey, J. M., & Hamilton, J. (2005). The impact of R&D intensity on demand for specialist auditor services. *Contemporary Accounting Research, 22*(1), 55–93.
Gonthier-Besacier, N., & Schatt, A. (2007). Determinants of audit fees for French quoted firms. *Managerial Auditing Journal, 22*(2), 139–160.
Goodwin-Stewart, J., & Kent, P. (2006). Relation between external audit fees, audit committee characteristics and internal audit. *Accounting and Finance, 46*(3), 387–404.
Gow, I. D., Ormazabal, G., & Taylor, D. J. (2010). Correcting for cross-sectional and time-series dependence in accounting research. *The Accounting Review, 85*(2), 483–512.
Gramling, A. A., Krishnan, J., & Zhang, Y. (2011). Are PCAOB-identified audit deficiencies associated with a change in reporting decisions of triennially inspected audit firms? *Auditing: A Journal of Practice & Theory, 30*(3), 59–79.
Grinstein, Y., & Hribar, P. (2004). CEO compensation and incentives: Evidence from M&A bonuses. *Journal of Financial Economics, 73*(1), 119–143.
Gujarati, D. (2003). *Basic econometrics* (4th ed.). New York, NY, USA: McGraw-Hill.
Gujarati, D. (2011). *Econometrics by example*. London, UK: Palgrave Macmillan.
Gul, F. A., Chen, C. J. P., & Tsui, J. S. L. (2003). Discretionary accounting accruals, managers' incentives, and audit fees. *Contemporary Accounting Research, 20*(3), 441–464.
Gul, F. A., Cheng, L. T. W., & Leung, T. Y. (2011). Perks and the informativeness of stock prices in the Chinese market. *Journal of Corporate Finance, 17*(5), 1410–1429.
Gul, F. A., Fung, S. Y. K., & Jaggi, B. (2009). Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. *Journal of Accounting and Economics, 47*(3), 265–287.
Gul, F. A., Khedmati, M., Lim, E. K., & Navissi, F. (2018). Managerial ability, financial distress, and audit fees. *Accounting Horizons, 32*(1), 29–51.
Gul, F. A., & Ng, A. C. (2018). Auditee religiosity, external monitoring, and the pricing of audit services. *Journal of Business Ethics, 152*(2), 409–436.
Gunny, K. A., & Zhang, T. C. (2013). PCAOB inspection reports and audit quality. *Journal of Accounting and Public Policy, 32*(2), 136–160.
Guo, L., & Masulis, R. W. (2015). Board structure and monitoring: New evidence from CEO turnovers. *The Review of Financial Studies, 28*(10), 2770–2811.
Guo, Y., Delaney, D., & Ahmed, A. (2020). Is an auditor's propensity to issue going concern opinions a valid measure of audit quality? *Australian Accounting Review, 30*(2), 144–153.
Habib, A., Wu, J., Bhuiyan, M. B. U., & Sun, X. (2019). Determinants of auditor choice: Review of the empirical literature. *International Journal of Auditing, 23*(2), 308–335.
Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
Hallman, N., Imdieke, A. J., Kim, K., & Pereira, R. (2020). On the relation between insider trading and going concern opinions. *Auditing: A Journal of Practice & Theory, 39*(1), 43–70.

Hamilton, J., Li, Y., & Stokes, D. (2008). Is the audit services market competitive following Arthur Andersen's collapse? *Accounting and Finance, 48*(2), 233–258.

Hardies, K., Breesch, D., & Branson, J. (2016). Do (fe)male auditors impair audit quality? Evidence from going-concern opinions. *European Accounting Review, 25*(1), 7–34.

Hardies, K., Vandenhaute, M.-L., & Breesch, D. (2018). An analysis of auditors' going-concern reporting accuracy in private firms. *Accounting Horizons, 32*(4), 117–132.

Hasher, L., & Zacks, R. T. (1979). Automatic and effortful processes in memory. *Journal of Experimental Psychology: General, 108*(3), 356–388.

Haunschild, P. R. (1993). Interorganizational limitation: The impact of interlocks on corporate acquisition activity. *Administrative Science Quarterly, 38*(4), 564–592.

Hay, D. (2013). Further evidence from meta-analysis of audit fee research. *International Journal of Auditing, 17*(2), 162–176.

Hay, D., Knechel, W. R., & Wong, N. (2006). Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research, 23*(1), 141–191.

Hay, D., Stewart, J., & Redmayne, N. B. (2017). The role of auditing in corporate governance in Australia and New Zealand: A research synthesis. *Australian Accounting Review, 27*(4), 457–479.

Haynes, K. T., Zattoni, A., Boyd, B. K., & Minichilli, A. (2019). Figureheads or potentates? CEO power and board oversight in the context of Sarbanes Oxley. *Corporate Governance: An International Review, 27*(6), 402–426.

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

Hennes, K. M., Leone, A. J., & Miller, B. P. (2014). Determinants and market consequences of auditor dismissals after accounting restatements. *The Accounting Review, 89*(3), 1051–1082.

Hermalin, B. E., & Weisbach, M. S. (1988). The determinants of board composition. *The RAND Journal of Economics, 19*(4), 589–606.

Hermalin, B. E., & Weisbach, M. S. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *The American Economic Review, 88*(1), 96–118.

Hill, C. W. L., & Phan, P. (1991). CEO tenure as a determinant of CEO pay. *Academy of Management Journal, 34*(3), 707–717.

Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies, 37*(2), 235–256.

Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review, 28*(3), 383–396.

Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Academy of Management Journal, 42*(4), 351–371.

Hogan, C. E., & Wilkins, M. S. (2008). Evidence on the audit risk model: Do auditors increase audit fees in the presence of internal control deficiencies? *Contemporary Accounting Research, 25*(1), 219–242.

Hoi, C. K., Wu, Q., & Zhang, H. (2019). Does social capital mitigate agency problems? Evidence from Chief Executive Officer (CEO) compensation. *Journal of Financial Economics, 133*(2), 498–519.

Hoitash, U., Hoitash, R., & Bedard, J. C. (2009). Corporate governance and internal control over financial reporting: A comparison of regulatory regimes. *The Accounting Review, 84*(3), 839–867.

Hollingsworth, C. W., Neal, T. L., & Reid, C. D. (2020). The effect of office changes within audit firms on clients' audit quality and audit fees. *Auditing: A Journal of Practice & Theory, 39*(1), 71–99.

Hossain, S. (2013). Effect of regulatory changes on auditor independence and audit quality. *International Journal of Auditing, 17*(3), 246–264.

Hossain, S., Chapple, L., & Monroe, G. S. (2016). Does auditor gender affect issuing going-concern decisions for financially distressed clients? *Accounting and Finance, 58*(4).

Hossain, S., Monroe, G. S., Wilson, M., & Jubb, C. (2016). The effect of networked clients' economic importance on audit quality. *Auditing: A Journal of Practice & Theory, 35*(4), 79–103.

Hossain, S., Yazawa, K., & Monroe, G. S. (2017). The relationship between audit team composition, audit fees, and quality. *Auditing: A Journal of Practice & Theory, 36*(3), 115–135.

Huang, J., Jain, B. A., & Shao, Y. (2017). CEO power, product market competition and the acquisition motive for going public. *Accounting and Finance, 59*(4), 2479–2507.

Iyengar, R. J., & Zampelli, E. M. (2009). Self-selection, endogeneity, and the relationship between CEO duality and firm performance. *Strategic Management Journal, 30*(10), 1092–1112.

Jaroenjitrkam, A., Yu, C.-F., & Zurbruegg, R. (2020). Does market power discipline CEO power? An agency perspective. *European Financial Management, 26*(3), 724–752.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance, 48*(3), 831–880.

Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance, 14*(3), 8–21.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.

Jiraporn, P., Liu, Y., & Kim, Y. S. (2014). How do powerful CEOs affect analyst coverage? *European Financial Management, 20*(3), 652–676.

Joe, J. R. (2003). Why press coverage of a client influences the audit opinion. *Journal of Accounting Research, 41*(1), 109–133.

Johnson, E., Khurana, I. K., & Reynolds, J. K. (2002). Audit-firm tenure and the quality of financial reports. *Contemporary Accounting Research, 19*(4), 637–660.

Johnson, J. L., Daily, C. M., & Ellstrand, A. E. (1996). Boards of directors: A review and research agenda. *Journal of Management, 22*(3), 409–438.

Johnston, J., & Nowland, J. (2017). A research note: The informational benefits of CEO attendance-by-invitation at audit committee meetings. *Journal of Contemporary Accounting & Economics, 13*(2), 108–118.

Johnstone, K. M. (2000). Client-acceptance decisions: Simultaneous effects of client business risk, audit risk, auditor business risk, and risk adaptation. *Auditing: A Journal of Practice & Theory, 19*(1), 1–25.

Johnstone, K. M., & Bedard, J. C. (2001). Engagement planning, bid pricing, and client response in the market for initial attest engagements. *The Accounting Review, 76*(2), 199–220.

Johnstone, K. M., Chan, L., & Shuqing, L. (2014). Client-auditor supply chain relationships, audit quality, and audit pricing. *Auditing: A Journal of Practice & Theory, 33*(4), 119–166.

Kalbers, L. P., & Fogarty, T. J. (1993). Audit committee effectiveness: An empirical investigation of the contribution of power. *Auditing: A Journal of Practice & Theory, 12*(1), 24.

Kalbers, L. P., & Fogarty, T. J. (1998). Organizational and economic explanations of audit committee oversight. *Journal of Managerial Issues, 10*(2), 129–150.

Kalelkar, R., & Khan, S. (2016). CEO financial background and audit pricing. *Accounting Horizons, 30*(3), 325–339.

Kane, G. D., & Velury, U. (2004). The role of institutional ownership in the market for auditing services: An empirical investigation. *Journal of Business Research, 57*(9), 976–983.

Kannan, Y. H., Skantz, T. R., & Higgs, J. L. (2014). The impact of CEO and CFO equity incentives on audit scope and perceived risks as revealed through audit fees. *Auditing: A Journal of Practice & Theory, 33*(2), 111–139.

Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research, 43*(3), 453–486.

Khanna, V., Kim, E. H., & Lu, Y. (2015). CEO connectedness and corporate fraud. *The Journal of Finance, 70*(3), 1203–1252.

Kida, T. (1980). An investigation into auditors' continuity and related qualification judgments. *Journal of Accounting Research, 18*(2), 506–523.

Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review, 11*(3), 189–205.

Kim, H., & Lu, Y. (2011). CEO ownership, external governance, and risk-taking. *Journal of Financial Economics, 102*(2), 272–292.

Kim, Y., Li, H., & Li, S. (2015). CEO equity incentives and audit fees. *Contemporary Accounting Research, 32*(2), 608–638.

Kimbrough, M. D. (2005). The effect of conference calls on analyst and market underreaction to earnings announcements. *The Accounting Review, 80*(1), 189–219.

Kinney, W. R., & Libby, R. (2002). The relation between auditors' fees for nonaudit services and earnings management: Discussion. *The Accounting Review, 77*, 107–114.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics, 33* (3), 375–400.

Knechel, W. R., Krishnan, G. V., Pevzner, M., Shefchik, L. B., & Velury, U. K. (2013). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory, 32*(Supplement 1), 385–421.

Knechel, W. R., Salterio, S., & Ballou, B. (2007). *Auditing: Assurance and risk.* Cincinnati, OH, USA: South-Western College Publishing.

Knechel, W. R., & Vanstraelen, A. (2007). The relationship between auditor tenure and audit quality implied by going concern opinions. *Auditing: A Journal of Practice & Theory, 26*(1), 113–131.

Knechel, W. R., & Willekens, M. (2006). The role of risk management and governance in determining audit demand. *Journal of Business Finance & Accounting, 33*(9-10), 1344–1367.

Knyazeva, D. (2007). *Corporate governance, analyst following, and firm behavior*. [Working paper]. University of Rochester. Retrieved from https://www.efmaefm.org/0EFMAMEETINGS/EFMA%20ANNUAL%20MEETINGS/2008-Athens/papers/Diana.pdf

Koh, H. C., & Killough, L. N. (1990). The use of multiple discriminant analysis in the assessment of the going-concern status of an audit client. *Journal of Business Finance & Accounting, 17*(2), 179–192.

Koh, P.S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review, 35*(2), 105-128.

Krause, R., Semadeni, M., & Cannella, A. A. (2014). CEO duality: A review and research agenda. *Journal of Management, 40*(1), 256–286.

Krishnan, G. (2003). Audit quality and the pricing of discretionary accruals. *Auditing: A Journal of Practice & Theory, 22*(1), 109–126.

Krishnan, G., & Changjiang, W. (2015). The relation between managerial ability and audit fees and going concern opinions. *Auditing: A Journal of Practice & Theory, 34*(3), 139–160.

Krishnan, J. (2005). Audit committee quality and internal control: An empirical analysis. *The Accounting Review, 80*(2), 649–675.

Krishnan, J., & Jong Eun, L. (2009). Audit committee financial expertise, litigation risk, and corporate governance. *Auditing: A Journal of Practice & Theory, 28*(1), 241–261.

Kumar, P., & Zattoni, A. (2013). How much do country-level or firm-level variables matter in corporate governance studies? *Corporate Governance: An International Review, 21*(3), 199–200.

Kumar, P., & Zattoni, A. (2019). Farewell editorial: Exiting editors' perspective on current and future challenges in corporate governance research. *Corporate Governance: An International Review, 27*(1), 2–11.

Lafond, R., & Roychowdhury, S. (2008). Managerial ownership and accounting conservatism. *Journal of Accounting Research, 46*(1), 101–135.

Lai, K. M. Y., Srinidhi, B., Gul, F. A., & Tsui, J. S. L. (2017). Board gender diversity, auditor fees, and auditor choice. *Contemporary Accounting Research, 34*(3), 1681–1714.

Lehmann, C. M., & Norman, C. S. (2006). The effects of experience on complex problem representation and judgment in auditing: An experimental investigation. *Behavioral Research in Accounting, 18*(1), 65–83.

Letts, S. (2018, April 20). AMP boss Craig Meller steps down, company apologises after scandals revealed at banking royal commission. *ABC News.* Retrieved from https://www.abc.net.au/news/2018–04–20/amp-ceo-craig-meller-steps-down-banking-royal-commission/9679138

Li, C. (2009). Does client importance affect auditor independence at the office level? Empirical evidence from going-concern opinions. *Contemporary Accounting Research, 26*(1), 201–230.

Li, J., Mangena, M., & Pike, R. (2012). The effect of audit committee characteristics on intellectual capital disclosure. *The British Accounting Review, 44*(2), 98–110.

Li, M., Lu, Y., & Phillips, G. M. (2019). CEOs and the product market: When are powerful CEOs beneficial? *Journal of Financial and Quantitative Analysis, 54*(6), 2295-2326.

Libby, R., & Frederick, D. M. (1990). Experience and the ability to explain audit findings. *Journal of Accounting Research, 28*(2), 348–367.

Lie, E. (2005). On the timing of CEO stock option awards. *Management Science, 51*(5), 802–812.

Linnenluecke, M. K., Birt, J., Chen, X., Ling, X., & Smith, T. (2017). Accounting research in Abacus, A&F, AAR, and AJM from 2008–2015: A review and research agenda. *Abacus, 53*(2), 159–179.

Lisic, L. L., Neal, T. L., Zhang, I. X., & Zhang, Y. (2016). CEO power, internal control quality, and audit committee effectiveness in substance versus in form. *Contemporary Accounting Research, 33*(3), 1199–1237.

Liu, X., Lobo, G. J., & Yu, H. C. (2020). Is audit committee equity compensation related to audit fees? *Contemporary Accounting Research, 38*(1), 740–769.

Liu, Y., & Jiraporn, P. (2010). The effect of CEO power on bond ratings and yields. *Journal of Empirical Finance, 17*(4), 744–762.

Mallin, C., Michelon, G., & Raggi, D. (2012). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure? *Journal of Business Ethics, 114*(1), 29–43.

March, J. G., & Simon, H. A. (1958). *Organizations*. New York, NY: Wiley.

Masters, B. (2005, February 15). WorldCom exec tells of 'pressure'. *The Washington Post.* Retrieved from https://www.washingtonpost.com/archive/business/2005/02/15/worldcom-exec-tells-of-pressure/2d8c6339–5008–42dc-8201-f7560f5f01d5/

Mayhew, B. W., & Wilkins, M. S. (2003). Audit firm industry specialization as a differentiation strategy: Evidence from fees charged to firms going public. *Auditing: A Journal of Practice & Theory, 22*(2), 33–52.

McClelland, D. (1961). *Achieving society*. Princeton, NJ, USA: Van Nostrand.

McClelland, P., Barker, Vincent, & Oh, W.-Y. (2012). CEO career horizon and tenure: Future performance implications under different contingencies. *Journal of Business Research, 65*(9), 1387–1393.

McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics, 27*(2), 595–612.

McMullen, D. A., & Raghunandan, K. (1996). Enhancing audit committee effectiveness. *Journal of Accountancy, 182*(2), 79–81.

Mees, B., & Smith, S. A. (2019). Corporate governance reform in Australia: A new institutional approach. *British Journal of Management, 30*(1), 75-89.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340–363.

Minichilli, A., Corbetta, G., & MacMillan, I. C. (2010). Top management teams in family-controlled companies: "Familiness", "Faultlines", and their impact on financial performance. *Journal of Management Studies, 47*(2), 205–222.

Misangyi, V. F., & Acharya, A. G. (2014). Substitutes or complements? A configurational examination of corporate governance mechanisms. *Academy of Management Journal, 57*(6), 1681–1705.

Moloney, L., & Pizzo, S. (2010, December 10). Parmalat founder receives 18-year prison sentence. *The Wall Street Journal.* Retrieved from https://www.wsj.com/articles/SB10001424052748703766704576009454272081990

Monroe, G. S., & Teh, S. T. (1993). Predicting uncertainty audit qualifications in Australia using publicly available information. *Accounting and Finance, 33*(2), 79–106.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics, 20*, 293–315.

Morse, A., Nanda, V., & Seru, A. (2011). Are incentive contracts rigged by powerful CEOs? *The Journal of Finance, 66*(5), 1779–1821.

Muniandy, P., Tanewski, G., & Johl, S. K. (2016). Institutional investors in Australia: Do they play a homogenous monitoring role? *Pacific-Basin Finance Journal, 40*, 266-288.

Mutchler, J. (1984). Auditors' perceptions of the going-concern opinion decision. *Auditing: A Journal of Practice & Theory, 3*(2), 17–30.

Mutchler, J. (1985). A multivariate analysis of the auditor's going-concern opinion decision. *Journal of Accounting Research, 23*(2), 668–682.

Mutchler, J., Hopwood, W., & McKeown, J. M. (1997). The influence of contrary information and mitigating factors on audit opinion decisions on bankrupt companies. *Journal of Accounting Research, 35*(2), 295–310.

Muttakin, M. B., Khan, A., & Mihret, D. G. (2018). The effect of board capital and CEO power on corporate social responsibility disclosures. *Journal of Business Ethics, 150*(1), 41–56.

Navarro, M. S., & Ansón, S. G. (2009). Do families shape corporate governance structures? *Journal of Management & Organization, 15*(3), 327–345.

Neal, T. L., Hermanson, D. R., Carcello, J. V., & Beasley, M. S. (2009). The audit committee oversight process. *Contemporary Accounting Research, 26*(1), 65–122.

Numan, W., & Willekens, M. (2012). *Competitive pressure, audit quality and industry specialization*. Retrieved from https://www.ou.edu/dam/price/accounting/files/quality_competition_Oklahoma_May2012.pdf

Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal, 18*(9), 697–713.

Palmrose, Z.-V. (1986). Audit fees and auditor size: Further evidence. *Journal of Accounting Research, 24*(1), 97–110.

Parliamentary Joint Committee on Corporations and Financial Services. (2020). *Regulation of auditing in Australia: Interim report*. Retrieved from https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Corporations_and_Financial_Services/RegulationofAuditing/Interim_Report

Petrou, A. P., & Procopiou, A. (2016). CEO shareholdings and earnings manipulation: A behavioral explanation. *European Management Review, 13*(2), 137–148.

Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly, 17*(2), 218–228.

Pfeffer, J. (1973). Size, composition, and function of hospital boards of directors: A study of organization-environment linkage. *Administrative Science Quarterly, 18*(3), 349–364.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Upper Saddle River, New Jersey, USA: Pearson Education.

Porter, M. E., & Advantage, C. (1985). Creating and sustaining superior performance. *Competitive advantage, 167*, 167–206.

Prahalad, C., & Doz, Y. (2000). The CEO: A visible hand in wealth creation? *Journal of Applied Corporate Finance, 13*(3), 20–34.

Pratt, J., & Stice, J. D. (1994). The effects of client characteristics on auditor litigation risk judgments, required audit evidence, and recommended audit fees. *The Accounting Review, 69*(4), 639–656.

Pratt, J., & Zeckhauser, R. J. (1985). *Principals and agents: The structure of busines*s. Boston, MA: Harvard Business School Press.

Psaros, J. (2009). *Australian corporate governance: A review and analysis of key issues*. Frenchs Forest, NSW: Pearson Education.

Qu, X., Percy, M., Stewart, J., & Hu, F. (2018). Executive stock option vesting conditions, corporate governance and CEO attributes: Evidence from Australia. *Accounting and Finance, 58*(2), 503–533.

Qu, X., Yao, D., & Percy, M. (2018). How the design of CEO equity-based compensation can lead to lower audit fees: Evidence from Australia. *Journal of Business Ethics, 165*(2), 281–308.

Raghunandan, K., & Rama, D. V. (1995). Audit reports for companies in financial distress: Before and after SAS No. 59. *Auditing: A Journal of Practice & Theory, 14*(1), 50.

Ratzinger-Sakel, N. V. S. (2013). Auditor fees and auditor independence—Evidence from going concern reporting decisions in Germany. *Auditing: A Journal of Practice & Theory, 32*(4), 129–168.

Read, W. J., & Yezegel, A. (2016). Auditor tenure and going concern opinions for bankrupt clients: Additional evidence. *Auditing: A Journal of Practice & Theory, 35*(1), 163–179.

Rechner, P. L., & Dalton, D. R. (1991). CEO duality and organizational performance: A longitudinal analysis. *Strategic Management Journal, 12*(2), 155–160.

Redmayne, N. B., Bradbury, M. E., & Cahan, S. F. (2010). The effect of political visibility on audit effort and audit pricing. *Accounting and Finance, 50*(4), 921–939.

Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *British Journal of Management, 16*(s1), S5–S26.

Romanus, R. N., Maher, J. J., & Fleming, D. M. (2008). Auditor industry specialization, auditor changes, and accounting restatements. *Accounting Horizons, 22*(4), 389–413.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika, 70*(1), 41–55.

Rosenbaum, P. R., & Rubin, D. B. (1985). Constructing a control group using multivariate matched sampling methods that incorporate the propensity score. *The American Statistician, 39*(1), 33–38.

Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American Economic Review, 63*(2), 134–139.

Ruiz-Barbadillo, E., Gómez-Aguilar, N., De Fuentes-Barberá, C., & García-Benau, M. A. (2004). Audit quality and the going-concern decision-making process: Spanish evidence. *European Accounting Review, 13*(4), 597–620.

Ryan, H. E., & Wiggins, R. A. (2004). Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring. *Journal of Financial Economics, 73*(3), 497–524.
Ryan, L., & Schneider, M. (2002). The antecedents of institutional investor activism. *Academy of Management Review, 27*(4), 554–573.
Schnatterly, K., Shaw, K. W., & Jennings, W. W. (2008). Information advantages of large institutional owners. *Strategic Management Journal, 29*(2), 219–227.
Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly, 32*(4), 493–511.
See, K. E., Rothman, N. B., & Soll, J. B. (2010). Powerful and unpersuaded: The implications of power for confidence, advice taking, and accuracy. *Academy of Management Proceedings, 2010*(1), 1–6.
Seetharaman, A., Gul, F. A., & Lynn, S. G. (2002). Litigation risk and audit fees: Evidence from UK firms cross-listed on US markets. *Journal of Accounting and Economics, 33*(1), 91–115.
Sharma, D. S. (2001). The association between non-audit services and the propensity of going concern qualifications: Implications for audit independence. *Asia-Pacific Journal of Accounting & Economics, 8*(2), 143–155.
Sharma, D. S., & Sidhu, J. (2001). Professionalism vs commercialism: The association between non-audit services (NAS) and audit independence. *Journal of Business Finance & Accounting, 28*(5-6), 563–594.
Shen, W. (2003). The dynamics of the CEO-board relationship: An evolutionary perspective. *Academy of Management Review, 28*(3), 466–476.
Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy, 94*(3, Part 1), 461–488.
Shleifer, A., & Vishny, R. W. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics, 25*(1), 123–139.
Shockley, R. A., & Holt, R. N. (1983). A behavioral investigation of supplier differentiation in the market for audit services. *Journal of Accounting Research, 21*(2), 545–564.
Simnett, R., Carson, E., & Vanstraelen, A. (2016). International archival auditing and assurance research: Trends, methodological issues, and opportunities. *Auditing: A Journal of Practice & Theory, 35*(3), 1–32.
Simon, D. T., & Francis, J. R. (1988). The effects of auditor change on audit fees: Tests of price cutting and price recovery. *The Accounting Review, 63*(2), 255–269.
Simunic, D. A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research, 18*(1), 161–190.
Simunic, D. A., & Stein, M. T. (1996). Impact of litigation risk on audit pricing: A review of the economics and the evidence. *Auditing: A Journal of Practice & Theory, 15*, 119–134.
Singh, H., Woodliff, D., Sultana, N., & Newby, R. (2014). Additional evidence on the relationship between an internal audit function and external audit fees in Australia. *International Journal of Auditing, 18*(1), 27–39.
Song, W.-L., & Wan, K.-M. (2017). Explicit employment contracts and CEO compensation. *Journal of Corporate Finance, 44*, 540–560.
Spira Laura, F., & Page, M. (2003). Risk management: The reinvention of internal control and the changing role of internal audit. *Accounting, Auditing & Accountability Journal, 16*(4), 640–661.

Stanley, J. D. (2011). Is the audit fee disclosure a leading indicator of clients' business risk? *Auditing: A Journal of Practice & Theory, 30*(3), 157–179.
Stewart, J., Kent, P., & Routledge, J. (2016). The association between audit partner rotation and audit fees: Empirical evidence from the Australian market. *Auditing: A Journal of Practice & Theory, 35*(1), 181–197.
Stewart, J., & Munro, L. (2007). The impact of audit committee existence and audit committee meeting frequency on the external audit: Perceptions of Australian auditors. *International Journal of Auditing, 11*(1), 51–69.
Sultana, N. (2015). Audit committee characteristics and accounting conservatism. *International Journal of Auditing, 19*(2), 88–102.
Sultana, N., Singh, H., & Rahman, A. (2019). Experience of audit committee members and audit quality. *European Accounting Review, 28*(5), 1–29.
Sun, F., Wu, F., & Li, S. F. (2014). CEO inside debt and audit fees. *International Journal of Auditing, 18*(1), 2–13.
Sun, X. S., Habib, A., & Bhuiyan, M. B. U. (2020). Workforce environment and audit fees: International evidence. *Journal of Contemporary Accounting & Economics, 16*(1), 1–22.
Tang, J. (2017). CEO duality and firm performance: The moderating roles of other executives and blockholding outside directors. *European Management Journal, 35*(3), 362–372.
Tang, J., Crossan, M., & Rowe, W. G. (2011). Dominant CEO, deviant strategy, and extreme performance: The moderating role of a powerful board. *Journal of Management Studies, 48*(7), 1479–1503.
Taplin, R. H. (2016). Research involving limited dependent variables: Issues in the literature and recommendations for improvement. *Quality & Quantity, 50*(5), 2121–2140.
Taylor, S. D. (2011). Does audit fee homogeneity exist? Premiums and discounts attributable to individual partners. *Auditing: A Journal of Practice & Theory, 30*(4), 249–272.
Tee, C. M. (2019). CEO power and audit fees: Evidence from Malaysia. *International Journal of Auditing, 23*(3), 365–386.
Thinggaard, F., & Kiertzner, L. (2008). Determinants of audit fees: Evidence from a small capital market with a joint audit requirement. *International Journal of Auditing, 12*(2), 141–158.
Thoman, L. (1996). Legal damages and auditor efforts. *Contemporary Accounting Research, 13*(1), 275–306.
Ting-Chiao, H., Hsihui, C., & Jeng-Ren, C. (2016). Audit market concentration, audit fees, and audit quality: Evidence from China. *Auditing: A Journal of Practice & Theory, 35*(2), 121–145.
Ting, H. I., Chueh, H., & Chang, P. R. (2017). CEO power and its effect on performance and governance: Evidence from Chinese banks. *Emerging Markets Review, 33*, 42–61.
Tosi, H. L., Brownlee, A. L., Silva, P., & Katz, J. P. (2003). An empirical exploration of decision-making under agency controls and stewardship structure. *Journal of Management Studies, 40*(8), 2053–2071.
Tost, L. P., Gino, F., & Larrick, R. P. (2012). Power, competitiveness, and advice taking: Why the powerful don't listen. *Organizational Behavior and Human Decision Processes, 117*(1), 53–65.
U.S. House of Representatives. 2002. The Sarbanes-Oxley Act of 2002. Public Law 107-204 [H.R. 3763]. Washington, DC: Government Printing Office.

van Essen, M., Otten, J., & Carberry, E. J. (2012). Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management, 41*(1), 164–202.
Venkataraman, R., Weber, J. P., & Willenborg, M. (2008). Litigation risk, audit quality, and audit fees: Evidence from initial public offerings. *The Accounting Review, 83*(5), 1315–1345.
Veprauskaitė, E., & Adams, M. (2013). Do powerful chief executives influence the financial performance of UK firms? *The British Accounting Review, 45*(3), 229–241.
Voordeckers, W., Gils, A. V., & Heuvel, J. V. D. (2007). Board composition in small and medium-sized family firms. *Journal of Small Business Management, 45*(1), 137–156.
Wallman, S. M. H. (1996). The future of accounting, Part III: Reliability and auditor independence. *Accounting Horizons, 10*(4), 76–97.
Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal, 33*(8), 885–913.
Walters, B. A., Kroll, M., & Wright, P. (2010). The impact of TMT board member control and environment on post-IPO performance. *Academy of Management Journal, 53*(3), 572–595.
Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics, 20*(1), 61–91.
Watts, R. (1977). Corporate financial statements, a product of the market and political process. *Australian Journal of Management (University of New South Wales), 2*(1), 53.
Watts, R., & Zimmerman, J. (1981). *The markets for independence and independent auditors* (Working Paper Series No. GPB 80–10). Retrieved from University of Rochester, UR Research website: http://hdl.handle.net/1802/4864
Watts, R., & Zimmerman, J. (1983). Agency problems, auditing, and the theory of the firm: Some evidence. *The Journal of Law and Economics, 26*(3), 613–633.
Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics, 20*, 431–460.
Westphal, J. D., & Graebner, M. E. (2010). A matter of appearances: How corporate leaders manage the impressions of financial analysts about the conduct of their boards. *Academy of Management Journal, 53*(1), 15–44.
Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly, 40*(1), 60–83.
Xu, Y., Carson, E., Fargher, N., & Jiang, L. (2013). Responses by Australian auditors to the global financial crisis. *Accounting and Finance, 53*(1), 301–338.
Yao, D. F., Percy, M., & Hu, F. (2015). Fair value accounting for non-current assets and audit fees: Evidence from Australian companies. *Journal of Contemporary Accounting & Economics, 11*(1), 31–45.
Yermack, D. (1997). Good timing: CEO stock option awards and company news announcements. *The Journal of Finance, 52*(2), 449–476.
Yin, X., & Shanley, M. (2008). Industry determinants of the "merger versus alliance" decision. *Academy of Management Review, 33*(2), 473–491.
Yu, F. F. (2008). Analyst coverage and earnings management. *Journal of Financial Economics, 88*(2), 245–271.

Zacks, R. T., Hasher, L., & Sanft, H. (1982). Automatic encoding of event frequency: Further findings. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 8*(2), 106–116.

Zahra, S. A., Hayton, J. C., Neubaum, D. O., Dibrell, C., & Craig, J. (2008). Culture of family commitment and strategic flexibility: The moderating effect of stewardship. *Entrepreneurship Theory and Practice, 32*(6), 1035–1054.

Zahra, S. A., & Pearce, J. A. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management, 15*(2), 291–334.

Zhang, J. H. (2018). Accounting comparability, audit effort, and audit outcomes. *Contemporary Accounting Research, 35*(1), 245–276.

Zhang, Y., Zhou, J., & Zhou, N. (2007). Audit committee quality, auditor independence, and internal control weaknesses. *Journal of Accounting and Public Policy, 26*(3), 300–327.

Zmijewski, M. E. (1984). Methodological issues related to the estimation of financial distress prediction models. *Journal of Accounting Research, 22*, 59–82.

Zorn, M. L., Shropshire, C., Martin, J. A., Combs, J. G., & Ketchen Jr., D. J. (2017). Home alone: The effects of lone-insider boards on CEO pay, financial misconduct, and firm performance. *Strategic Management Journal, 38*(13), 2623–2646.

Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology, 13*(1), 443–464.