

Essays on external audit committee members

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Certificate of original authorship

I, Salim Darmadi, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Business School at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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List of abbreviations

2SLS	Two-stage least squares
AC	Audit committee
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
ASX	Australian Securities Exchange
Bapepam	<i>Badan Pengawas Pasar Modal</i> (Indonesia Capital Market Supervisory Agency)
Bapepam-LK	<i>Badan Pengawas Pasar Modal dan Lembaga Keuangan</i> (Indonesia Capital Market and Financial Institutions Supervisory Agency)
BEPS	Base Erosion and Profit Shifting
BTD	Book-tax difference
CEO	Chief executive officer
CFA	Chartered Financial Analyst
CFO	Chief financial officer
COO	Chief operating officer
DiD	Difference-in-differences
ETR	Effective tax rate
FCA	Financial Conduct Authority
FSAP	Financial Sector Assessment Program
G20	Group of Twenty
GMS	General Meeting of Shareholders
IDR	Indonesian Rupiah (Indonesia's official currency)
IDX	Indonesia Stock Exchange
IMF	International Monetary Fund
IPO	Initial public offering
ITCV	Impact Threshold for a Confounding Variable
IV	Instrumental variable
JATS	Jakarta Automated Trading Systems
JSX	Jakarta Stock Exchange
KSEI	<i>Kustodian Sentral Efek Indonesia</i> (Indonesia Central Securities Depository)

LM	Lagrange multiplier
MB	Management board
MTB	Market-to-book ratio
NASDAQ	National Association of Securities Dealers Automated Quotations
NCCG	National Committee of Corporate Governance
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OJK	<i>Otoritas Jasa Keuangan</i> (Indonesia Financial Services Authority)
OLS	Ordinary least squares
PPE	Property, plant, and equipment
PT	<i>Perseroan Terbatas</i> (Limited-liability company)
ROA	Return on assets
ROSC	Report on the Observance of Standards and Codes
S&P	Standard & Poor's
SB	Supervisory board
SEC	Securities and Exchange Commission
SSX	Surabaya Stock Exchange
TICMI	The Indonesia Capital Market Institute
U.K.	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
U.S.	United States
USD	United States Dollar

Abstract

This thesis explores the economic consequences of externally-appointed audit committee (AC) members in an emerging market whose AC composition requirement is very different from many other jurisdictions worldwide. While it is a global common practice that the AC is comprised entirely of board members, Indonesia's AC regime requires listed companies to establish an AC with two elements of members, namely independent board members and externally-appointed (i.e., non-board) members. Exploiting such a unique feature of AC composition, this thesis consists of two standalone empirical essays.

The first essay examines the monitoring effectiveness of external AC members in terms of financial reporting quality. While the effects of AC attributes on financial reporting quality have been extensively examined in the literature, there is no evidence of the roles of externally-appointed AC members. Based on a sample of 4,646 firm-year observations across the period 2004-2019, the results show that there is a significant and positive association between the proportion of external AC members and financial reporting quality. The finding suggests that external AC members exert effective oversight over the financial reporting process, hence promoting higher-quality financial reporting. The results remain consistent after addressing endogeneity concerns through the difference-in-differences and instrumental variable approaches. Further, the positive association is more prominent for firms with higher levels of external AC members' expertise and tenure, lower agency costs, stronger external monitors, lesser governmental or political connections, and lower external auditor quality. Additionally, I present further evidence that there is a negative association between external AC members and audit fees, suggesting that a stronger representation of external AC members leads to reducing demands for greater audit scope and effort.

The second essay investigates the effects of external AC members on the extent of tax avoidance, considering a recent development where the scope of the AC's functions has expanded to include areas aside from financial reporting quality, including corporate tax planning. I employ a data set of 2,293 firm-year observations across the period 2004-2019 and find that the proportion of external AC members is positively associated with tax avoidance. The results remain unchanged after addressing endogeneity concerns and utilising alternative measures of tax avoidance. Such evidence suggests that external AC members tend to effectively serve advising roles, rather than monitoring ones, when it comes to tax planning. I also provide evidence that external AC members' accounting expertise and lack of independence, as well as the firm's governmental or political connections, appear to be channels through which they positively influence tax avoidance. Further, such a positive link is stronger for firms with poorer corporate governance mechanisms, lower external auditor quality, and lesser agency issues.

Given the benefits conferred by external AC members to financial reporting quality, the results of this thesis lend some support to the AC composition requirement applicable in the Indonesian market. Their expertise, complemented by certain governance mechanisms, plays an important role in such an effective oversight function. However, their contributions to strengthening the committee's monitoring effectiveness are only to a particular extent. When it comes to tax planning, they are inclined to effectively serve advising roles, leading to a higher likelihood of tax avoidance. This suggests that aggressive tax planning, which is not in the best interests of the government, appears to be an unintended consequence of a stronger presence of externally-appointed members on the AC.

Chapter 1

Introduction

1.1 Background

The audit committee (AC) has always been given emphasis as one of the key components of effective corporate governance. Corporate governance reforms introduced during the past two decades in various parts of the world have generally addressed the role of the AC as a monitoring mechanism of listed companies' financial reporting process. The independence and expertise of AC members appear to be among the key highlights mentioned in corporate governance reforms, codes, and regulations worldwide, ensuring that the committee is better equipped in exercising its oversight function over the financial reporting process.

Jurisdictions around the world have adopted varying degrees of strictness in terms of requirements for AC members. For example, while the U.S. capital market regulation has mandated the AC to be comprised entirely of independent directors, many other jurisdictions have adopted less strict requirements and only mandated the AC to be comprised of a *majority* of independent directors. Regardless of the degree of independence among AC members, there is a worldwide norm that the AC should possess accounting or financial expertise.

Despite the varying degrees of strictness adopted in different jurisdictions, the AC is generally expected to assist the board of directors in exercising the monitoring of the financial reporting process, thereby maintaining the market's confidence in financial statements issued by listed companies. The functions of the AC generally include reviewing financial reporting issues, overseeing the effectiveness of internal controls, and liaising with the external auditor. The independence of AC members, complemented by their expertise, enables them to exert an effective oversight function, resulting in better financial reporting quality.

In line with its growing prominence in practice, the AC has also received increasingly greater attention in the academic literature, especially during the past two decades. Researchers have put emphasis on the roles of AC characteristics, particularly independence and expertise, in

enhancing the monitoring effectiveness of the committee. Financial reporting quality is commonly used to measure such monitoring effectiveness, in line with the “traditional” core responsibility of the AC that is mainly related to overseeing the financial reporting process. An extensive body of empirical research has presented evidence that financial reporting quality is positively associated with AC independence (Abbott et al., 2004; Bédard et al., 2004; Klein, 2002; Vafeas, 2005; Xie et al., 2003) and AC accounting or financial expertise (Abbott et al., 2004; Bédard et al., 2004; Farber, 2005; Tanyi & Smith, 2015; Xie et al., 2003).

As the AC is also assigned to liaise with the firm’s external auditor to discuss the scope of audits, another stream of literature has attempted to examine the link between AC attributes and audit quality. It has been suggested that AC independence has a positive association with audit fees (Abbot et al., 2003; Carcello et al., 2010), supporting the notion that more independent ACs would demand higher audit quality. Further, there is also evidence that higher levels of AC expertise would lead to higher audit fees (Abbot et al., 2003; Carcello et al., 2010; Ghafran & O’Sullivan, 2017).

While the traditional core duties of the AC are in the area of the financial reporting process, there is a recent development in the scope of the committee’s oversight function. The AC’s monitoring scope has increasingly covered other related areas, including tax planning, risk management, ethics and compliance, and information technology (Deloitte, 2018; Hsu et al., 2018; KPMG, 2017). In terms of tax planning, there are reputational risks if the firm chooses to engage in aggressive tax planning (Robinson et al., 2012). Correspondingly, researchers have also investigated the role of the AC in corporate tax planning, but such an issue has only received limited attention in the literature. The existing studies have provided empirical evidence that AC independence leads to a lower likelihood of tax avoidance (Richardson et al.,

2013), but AC expertise could either positively or negatively impact the extent of tax avoidance (Hsu et al., 2018; Robinson et al., 2012; Wen et al., 2020).

However, it is important to note that prior empirical studies on AC monitoring effectiveness are generally conducted based on jurisdictions where the AC is composed entirely of board members. Such a composition has always been a common practice worldwide, as the AC is meant to be one of the board's committees, assisting the board of directors in monitoring the financial reporting process. Surprisingly, this is not the case in Indonesia, Southeast Asia's largest economy. The country's AC regulation adopts a composition that makes it undeniably distinctive from that applicable in many other jurisdictions. The regulation has mandated that the ACs of the Indonesian listed companies should be comprised of *independent supervisory board members* as well as *externally-appointed, independent members*. In other words, a part of the AC is *not* board members.

Given the presence of external members serving on the ACs of the Indonesian listed firms, there is no empirical evidence in the literature on whether such external members substantially contribute to the committee's monitoring effectiveness. Such an absence of evidence seems to be unsurprising as, to the best of my knowledge, Indonesia is the only jurisdiction with an AC regulation mandating listed firms to invite "outsiders" (i.e., non-board members) to serve on the committee. Hence, this thesis exploits such a unique AC composition requirement and seeks to investigate whether they confer benefits to the committee's oversight function. Indonesia provides an interesting setting for an empirical investigation due to its distinctive characteristics in terms of legal, economic, and financial landscapes. For example, the country is among the jurisdictions in the world that adopt a two-tier board system, where corporations have a supervisory board and an executive board in their organisational structure. Further, the Indonesian capital market has a high prevalence of ownership concentration and family control

among its listed firms (Claessens et al., 2000), amplified by its fragile institutional environment and low-speed corporate governance reforms after the Asian financial crisis (Simandjuntak, 2005).

Accordingly, employing the specific context of Indonesia, the objective of this thesis is twofold. *Firstly*, this thesis examines the effects of external AC members on financial reporting quality. Financial reporting quality appears to be the first purpose of this thesis as the traditional core duties of the AC are in the area of the financial reporting process. *Secondly*, addressing the evolving scope of the committee's oversight function, this thesis also attempts to investigate the association between external AC members and tax avoidance. Specifically, it examines whether such external AC members effectively serve either advising or monitoring roles when it comes to corporate tax planning.

1.2 Key findings

This thesis contains two empirical essays, both addressing the economic consequences of externally-appointed members on the ACs of the Indonesian listed companies. I employ a relatively large, hand-collected corporate governance data set of listed firms on the Indonesia Stock Exchange (IDX) across the period 2004-2019. Such a hand-collected corporate governance data set is merged with financial data retrieved from the Worldscope database.

The first essay (Chapter 3) examines the effects of external AC members on financial reporting quality. Overseeing the firm's financial reporting process has always been the traditional core duties of the AC. Hence, the impact of AC attributes on financial reporting quality has been extensively investigated in the literature, but they are conducted using the contexts of jurisdictions where the AC is composed exclusively of board members (Abbott et al., 2004;

Bédard et al., 2004; Faber, 2005; Klein 2002; Tanyi & Smith, 2015; Vafeas, 2005; Xie et al. 2003). Given the presence of external members on the ACs of the Indonesian listed companies, it is unknown whether they contribute to enhancing the committee's oversight function over the financial reporting process.

Based on a sample of 4,646 firm-year observations across the period 2004-2019, the results demonstrate that the proportion of external members on the AC is negatively associated with earnings management, as measured by the absolute value of discretionary accruals. The finding suggests that firms with a stronger representation of external AC members tend to engage less in earnings management. Thus, such external AC members are likely to become an effective monitoring tool of the financial reporting process, resulting in better financial reporting quality. The results remain consistent even after addressing endogeneity concerns through the difference-in-differences (using the passage of an AC regulation issued in 2012 as an exogenous event) and instrumental variable approaches.

My cross-sectional heterogeneity analysis suggests that the positive association between external AC members and financial reporting quality is stronger for firms with higher levels of accounting expertise and tenure among their external AC members. Additionally, such a positive effect is more pronounced in firms with lower agency costs, stronger external monitors, lesser governmental or political connections, and lower external auditor quality. In further analysis, looking beyond financial reporting quality, it is found that external AC members are negatively linked to audit quality (as measured by audit fees), suggesting that a stronger presence of external AC members becomes a substitute for external audits as a monitoring tool, reducing demands for greater audit scope and effort and thus lowering audit fees.

While the first essay addresses monitoring effectiveness in terms of the core duties of the AC (i.e., monitoring the financial reporting process), the second essay puts emphasis on another economic consequence, namely corporate tax planning. As previously explained, the role of the committee has recently evolved to include other related areas, including tax planning. However, empirical research addressing such an issue is very limited. Among the few studies focusing on the relation between AC attributes and tax avoidance are Robinson et al. (2012) and Hsu et al. (2018), which are all conducted based on jurisdictions where the AC is comprised solely of board members. Correspondingly, the second empirical study investigates whether and how external AC members bring about impacts on tax avoidance.

Using a sample of 2,293 firm-year observations, it is found that the proportion of external AC members is positively associated with tax avoidance (as measured using the short-run and longer-run cash effective tax rates), suggesting that firms with a stronger presence of external AC members are more likely to be tax aggressive. This result implies that external AC members are inclined to effectively serve advising roles, instead of monitoring ones, when it comes to tax planning. It seems that external AC members tend to put more emphasis on maximising shareholder wealth, leading them to provide the firm with expert counsel on tax planning to achieve such a purpose. The baseline finding remains unchanged after addressing endogeneity issues using the instrumental variable approach, as well as after employing alternative proxy measures of tax avoidance.

Investigating a series of possible channels through which external AC members could affect tax avoidance, I also provide further evidence that external AC members' accounting expertise and lack of independence, as well as the firm's governmental or political connections, play significant roles in explaining such a positive association. In addition, the results of my cross-

sectional analyses show that the positive association is more prominent for firms with poorer corporate governance mechanisms, lower external auditor quality, and lower agency costs.

Overall, the results of these empirical studies demonstrate that external AC members contribute to enhancing the committee's monitoring function, but only to a particular extent. They seem to be particularly focused on exerting effective oversight over the financial reporting process, which is their traditional core duty and responsibility. However, when it comes to tax planning (i.e., beyond the committee's traditional core duties), such an effective monitoring role becomes no longer the case, where the external AC members are more likely to serve advising roles to support the firm's endeavours in reducing tax burdens. The results of the two essays also shed light on the important roles of corporate governance mechanisms (e.g., board independence and institutional shareholdings) in enhancing the monitoring effectiveness of external AC members.

1.3 Contributions

This thesis makes a number of contributions to the literature. *Firstly*, this thesis provides the first evidence of the monitoring effectiveness of external AC members. The existing literature examining the monitoring effectiveness of the AC are conducted based on jurisdictions with the ACs of listed firms being comprised solely of board members (Abbott et al., 2004; Bédard et al., 2004; Faber, 2005; Klein, 2002; Tanyi & Smith, 2015; Vafeas, 2005; Xie et al., 2003). This thesis extends such a stream of literature by examining the monitoring effectiveness of external, independent AC members in a setting where the AC composition requirement is starkly different from that in many other jurisdictions.

Second, not only addressing monitoring effectiveness in terms of financial reporting quality, this study adds to the rare literature examining the roles of AC attributes in areas beyond the traditional core duties of the AC, particularly in the area of tax planning (Hsu et al., 2018; Richardson et al., 2013; Robinson et al., 2012). Given the expanding scope of the AC's oversight function, it becomes important to obtain insights into the roles played by AC members aside from monitoring the financial reporting process. This is amplified by the unique AC composition requirement applicable to the Indonesian market. As such, this thesis also provides the first evidence of the advising roles of external AC members when it comes to tax planning.

Third, this thesis adds to the literature on the roles of external economic agents in corporate governance. In the areas of financial reporting and corporate tax planning, prior empirical studies have addressed the roles of certain external agents, such as external auditors (Becker et al., 2010; Francis et al., 1999; Kanagaretnam et al., 2016; McGuire et al., 2012) and external consultants (Chyz et al., 2021; Klassen et al., 2016; Omer et al., 2006). This thesis extends such a strand of literature and presents novel evidence of the roles of another external agent, namely external AC members, in the firm's financial reporting process and tax planning.

Fourth, the thesis adds to the limited literature addressing the monitoring effectiveness of board committees in a two-tier board system. Based on jurisdictions adopting a dual board structure, a limited body of literature has investigated whether board committees play a significant role in enhancing the supervisory board's oversight function (He et al. 2017; Lo et al., 2010; Nipper, 2021). Given the substantial variations in Indonesia's institutional environment, I present further evidence of the roles of independent AC members, specifically those invited from outside the supervisory board, in assisting the board to carry out its monitoring and advising functions.

1.4 Thesis structure

This thesis is structured in the following manner. Chapter 1 introduces the thesis and presents the key findings and contributions. Next, Chapter 2 firstly highlights the institutional environment of Indonesia. The topics covered in the chapter span from the history of the country's capital markets to the country's corporate governance regime, including the development of its distinctive AC regulation.

Chapters 3 and 4 represent empirical essays on the economic consequences of external AC members, but each essay is structured as a standalone research paper. Chapter 3 explores the association between external AC members and financial reporting quality, while Chapter 4 addresses the effects of external AC members on tax avoidance. Each of these two chapters begins with an introduction, followed by a literature review and hypothesis development, methodology, a series of empirical analyses and discussions, and concluding remarks. As such, there are some duplications in both chapters, especially in the introduction, literature review, and methodology sections. Finally, Chapter 5 concludes the thesis, suggests practical implications, and identifies potential avenues for future research.

Chapter 2

Institutional background

2.1 Overview of the Indonesian capital market

2.1.1 History of the Indonesian capital market

The history of Indonesia's capital markets could be traced back to the early twentieth century, when the Dutch colonial government established a stock exchange in Batavia (now Jakarta) in 1912, followed by the establishment of exchanges in other cities (Daniel, 2003). However, the markets were unable to survive amidst the tumultuous and revolutionary periods, particularly during World Wars I and II as well as during three decades after Indonesia's independence declaration in 1945. It was not until 1977 that the country's capital market was reactivated when the Indonesian government founded a designated agency under the Ministry of Finance to operate and regulate the market (Rosul, 2005).

After the reactivation, the development of the market was relatively slow, with only 24 listed companies and a very limited value of transactions (Rosul, 2005). In the late 1980s, the government carried out a series of deregulations and market liberalisations aimed at stimulating the activities of the domestic capital market. A number of fundamental transformations followed afterwards, particularly with regard to basic market infrastructures. The Surabaya Stock Exchange (SSX) was established in 1989 and the Jakarta Stock Exchange (JSX) was privatised in 1992, followed by the establishment of clearing and settlement houses. The Jakarta Automated Trading System (JATS) was then introduced in 1995.

Indonesia's capital markets were severely hit by the 1997-98 Asian financial crisis. In the aftermath of the crisis, the government implemented a wide range of structural reforms, including the enhancement of the institutional foundation of the domestic capital market. As pointed out by the Asian Development Bank (ADB, 2018), pre-crisis Indonesia experienced excess dependence on the banking system to finance economic growth, hence strengthening the role of capital markets in the country's economy became a necessity. During the 2000s,

various initiatives and reforms were introduced to improve capital market regulation and supervision, including in the area of corporate governance. Further, in 2007, the SSX was merged into the JSX, whose name was then changed into the Indonesia Stock Exchange (IDX).

In the aftermath of the 2007-08 global financial crisis, the country's capital market recovered in 2009. The Financial Sector Assessment Program (FSAP) carried out by The World Bank and the International Monetary Fund—IMF (2010) suggested that a decade of enhanced policies and structural reforms had helped Indonesia's financial systems recover quickly after being affected by the global financial crisis.

Another notable transformation occurred in 2012. The regulatory and supervisory function of the domestic capital market, which was previously held by the Ministry of Finance, was now transferred to the newly-established Indonesia Financial Services Authority (*Otoritas Jasa Keuangan*—OJK). As stipulated in the OJK Law enacted in 2011, the new body is responsible for regulating and supervising the country's financial sector, which encompasses banks, capital markets, and nonbank financial institutions.¹ Therefore, the supervisory function of the domestic financial sector, which was previously within the authorities of different institutions (namely Bank Indonesia—the country's central bank—and the Ministry of Finance), was now to be conducted by a single, unified agency.

2.1.2 Development and challenges of the Indonesian capital market

The domestic capital market has become an option for an increasing number of Indonesian corporations to access financing sources and unleash growth opportunities. The number of equity issuers on the stock exchange has grown tremendously, from only 24 in the late 1980s to 713 by the end of 2020 (see Figure 2.1). On average, the IDX has welcomed 30 new listed

¹ Article 6 of the OJK Law.

firms annually since 2010. In line with the increasing number of listed firms, market capitalisation, transaction value, and the amount of funds raised on the domestic capital market also demonstrated a substantial growth over the past two decades.

[Insert Figure 2.1 about here]

In terms of market infrastructure, the past two decades have also seen the formation of supporting institutions, aimed at boosting the efficiency and liquidity of the market. These include the securities investor protection fund, the securities funding agency, and the bond pricing agency. Additionally, to enhance the supply side of the market, the regulator has also introduced a wide range of regulations to promote new investment products, such as private equity funds, exchange-traded funds, asset-backed securities, and real estate investment trusts.

Despite such considerable growth, Indonesia's capital market has been facing notable challenges, which could hamper its desired role as an important source of financing for the country's economic growth. Limited size and liquidity appear to be among the main issues of the Indonesian capital market (Rowter, 2016). For example, as of December 2020, equity market capitalisation stood at IDR 6,970 trillion (USD 494 billion) or 45 percent of the Gross Domestic Product, comparably smaller than that of several Southeast Asian markets (see Table 2.1). Further, liquidity in the equity market is relatively low, with the average value of daily trading in 2020 at approximately 0.13 percent of market capitalisation. As highlighted by Rowter (2016), a number of factors might explain the small size of Indonesia's capital market, including the country's political upheavals, geographic spread, and underlying economic structure.

[Insert Table 2.1 about here]

Furthermore, Indonesia's financial market remains shallow, with the banking sector still a dominant source of financing (ADB, 2018). Issues persist in both the supply side and the demand side of the market. In terms of the supply side, there is a lack of variety in capital market instruments. Even though an increasing number of instruments other than common stocks and bonds have been introduced, they are still at an early stage of development. Another feature is a relatively low level of free-floating shares due to the high prevalence of ownership concentration. As of 2019, the average proportion of shares held by the public was 26 percent, while the average proportion held by the largest shareholder was 53 percent.

Meanwhile, on the demand side of the market, Indonesia's domestic investor base remains relatively narrow, for either retail or institutional investors (ADB, 2018). As of December 2020, the number of retail investors in the capital market was 3.9 million,² relatively small compared to the country's 270 million-strong population as well as its growing middle class. While in terms of domestic institutional investors, there have been rapidly-growing industries of fund management, insurance, and pension funds in the country. Nevertheless, the participation rate of Indonesians in those industries is also relatively low, which might limit such industries' capacity and power in the domestic capital market.

When the participation of domestic investors in the capital market is limited, there might be a lack of variations in behavioural patterns (Rowter, 2016). Market transactions would be dominated by foreign investors, while their domestic counterparts would tend to demonstrate herd behaviour, posing challenges to market stability when there are unexpected disruptions. Such a situation would only stress the importance of deepening the market and expanding the domestic investor base.

² Press release of the Indonesia Central Securities Depository (KSEI), 30 December 2020.

Over the past decade, in line with various initiatives to promote financial literacy education among Indonesians, the number of retail investors in the capital market, as well as the number of insurance policyholders and pension fund participants, recorded a substantial growth. Further, domestic investors have accounted for an increasingly significant portion of trading activities on the IDX. Nevertheless, as suggested by Rowter (2016), much work needs to be done in ongoing efforts to expand the domestic investor base, which would contribute to improving the liquidity and stability of the market.

2.2 Corporate governance regulations in Indonesia

Following a series of liberalisation measures in the late 1980s, Indonesia's capital market saw an influx of newly-listed companies, including those from business conglomerates and state-owned enterprises, though their ownership was usually highly concentrated (Rosser, 2003). At the same time, the market underwent major transformations in terms of market infrastructure, including the establishments of clearing and settlement houses and automated trading systems. Given such infant development of the market, good corporate governance practices for listed firms were not given much attention. Simandjuntak (2001) and Rosser (2003) suggest that, despite the introduction of some regulations related to minority shareholder protection and financial accounting standards, corporate governance reforms during this time were considered less extensive.

Then the 1997-98 Asian crisis hit the country's financial system. Poor governance, in either politics or business, was attributed as one of the factors that triggered and amplified the crisis (Simandjuntak, 2005). In the aftermath of the crisis, as part of the Indonesian government's commitment to the IMF, major reforms to improve corporate governance practices among listed companies started to take place. The National Committee of Corporate Governance

(NCCG) was set up in 1999. The committee issued its first *Indonesian Code for Good Corporate Governance* in 2000, which was later revised in 2001 and 2006. The Code had addressed a wide range of issues of corporate governance, including board independence, board committees, external audits, and minority shareholder protection. Nevertheless, the Code was intended as a reference instead of a mandatory requirement for the Indonesian listed firms (Mahy, 2013).

Based on major principles and recommendations outlined in the Code, there were a series of corporate governance regulations that came into effect in the 2000s. Initially, some principles were made mandatory through the listing rules issued by the JSX in 2001 but then came into effect through a variety of regulations enacted by the capital market regulator. As Mahy (2013) suggests, this might allow enforcement actions by the regulator when listed firms were not in compliance, though there were still problems in the implementation of such regulations. Another important development was the enactment of the 2007 Company Law, which put greater emphasis on good corporate governance practices compared to its previous versions.

The development of Indonesia's corporate governance regime has been subject to assessments conducted by international financial organisations. One of the latest assessments was that performed by The World Bank (2010) through the *2010 Report on the Observance of Standards and Codes* (ROSC). The assessment benchmarked the applicable laws and practices in the country against the OECD Principles of Corporate Governance. The 2010 report acknowledged a wide array of progress achieved by the Indonesian authorities over the decade up to 2010, but much work needed to be done for further improvements. It gave emphasis on particular features including highly concentrated ownership and a lack of transparency, which potentially result in significant minority shareholder expropriation.

Following the publication of the 2010 ROSC, the regulator took the Report's recommendations into consideration and enacted a series of revised corporate governance legislations. This continued after the regulatory function of the capital market was transferred to the newly-established OJK in 2012. As part of its continuous efforts to improve corporate governance practices in Indonesia, OJK published the *Indonesia Corporate Governance Roadmap* in 2014. There were a number of notable milestones achieved after the publication of the roadmap, such as the comply-or-explain guidelines and an enhanced information disclosure framework for listed companies.

2.3 The two-tier board system in Indonesia

Indonesia's Company Law adopts a two-tier board system, which is also found in other civil-law jurisdictions such as France, Germany, and the Netherlands. The adoption of the two-tier board system in Indonesia is one of the legacies of the Dutch colonial era. It was previously regulated under the Dutch Commercial Code (*Wetboek van Koophandel*), coming into effect in the colony, the Netherlands Indies (now Indonesia), in 1848. Such a commercial law remained in place when Indonesia declared its independence in 1945. Even though the Dutch Commercial Code stipulated that a supervisory board is optional, Indonesia's Company Law enacted in 1995 formalised the mandatory adoption of the two-tier board structure.³ Hence, it became mandatory for limited-liability companies to set up both a supervisory board (SB) and

³ Article 1 of the Indonesian Company Law of 1995.

a management board (MB).⁴ Such a mandate remained unchanged under the revised version of the Company Law enacted later in 2007.⁵

The main feature of the two-tier board model is a clear separation between the roles of the SB and the MB within a firm. As these two boards are assigned different roles and duties, overlapping membership on both boards is not possible. The General Meeting of Shareholders (GMS) is the company's highest organ that has the power to elect and remove the members of both boards.⁶ Procedures of the nomination, election, substitution, and dismissal of board members are regulated by the articles of association of a company.⁷ Furthermore, the GMS also stipulates the remuneration of the SB.⁸

The duties of the SB are supervising the performance and policies of the MB, as well as providing advice to the MB.⁹ The SB also makes decisions on the remuneration of the MB, subject to the approval of the GMS.¹⁰ There is room for the SB to suspend MB members due to specific reasons, but it has no right to dismiss them.¹¹ The Company Law also determines that the SB has a minimum of one member.¹² However, there is a different requirement for certain types of companies, including those publicly listed, which are mandated to have at least two members on the SB.¹³

⁴ The legal terminologies used in the Company Law are the Board of Commissioners (*Dewan Komisaris*) and the Board of Directors (*Direksi*) for the supervisory board and the management board, respectively. However, for the sake of simplicity, the terminologies "supervisory board" and "management board" are used throughout this thesis.

⁵ Article 1 of the Indonesian Company Law of 2007.

⁶ Articles 94 (1) and 111 (1) of the Indonesian Company Law of 2007.

⁷ Articles 94 (4) and 111 (4) of the Indonesian Company Law of 2007.

⁸ Article 113 of the Indonesian Company Law of 2007.

⁹ Articles 1 and 108 (1) of the Indonesian Company Law of 2007.

¹⁰ Article 96 (2) of the Indonesian Company Law of 2007.

¹¹ Article 106 (1) of the Indonesian Company Law of 2007.

¹² Article 108 (3) of the Indonesian Company Law of 2007.

¹³ Article 108 (5) of the Indonesian Company Law of 2007.

Meanwhile, the MB represents the highest-level executives of the company, looking after its day-to-day activities.¹⁴ The MB is assigned to manage the company in the best interests of shareholders, consistent with the objectives of the company. In addition, it also represents the company before the courts.¹⁵ Similar to the SB, the MB shall have a minimum of one member¹⁶, but listed companies and certain types of companies are required to have at least two members on the MB.¹⁷

With respect to board structure arrangement, listed companies are subject to more stringent requirements as stipulated in applicable capital market regulations. The SBs of listed companies should have at least two members, presided over by a chairman which is called a *president commissioner*.¹⁸ Further, the applicable capital market regulation stipulates that at least 30 percent of SB members shall be independent.¹⁹ In performing its functions and duties, the SB is assisted by board committees. An audit committee (AC) is mandatory²⁰, while other committees are not.²¹ The MB should also have a minimum of two members, presided over by a *president director* (i.e., a chief executive officer).²²

¹⁴ Articles 1 and 92 (1) of the Indonesian Company Law of 2007.

¹⁵ Article 98 (1) of the Indonesian Company Law of 2007.

¹⁶ Article 92 (3) of the Indonesian Company Law of 2007.

¹⁷ Article 92 (4) of the Indonesian Company Law of 2007.

¹⁸ Article 20 of the OJK Regulation Number 33/POJK.04/2014 concerning the Boards of Commissioners and Directors of Equity Issuers or Public Companies.

¹⁹ *Ibid.*

²⁰ Article 2 of the OJK Regulation Number 55/POJK.04/2015 concerning the Formation and Work Guidelines of the Audit Committee.

²¹ As stipulated in the OJK Regulation Number 34/POJK.04/2014 concerning the Nomination and Remuneration Committee of Equity Issuers or Public Companies, listed firms are required to have a nomination and remuneration *function*, which must be conducted by the SB. The SB could choose to establish a nomination and remuneration *committee* to assist it in conducting such a function.

²² Article 2 of the OJK Regulation Number 33/POJK.04/2014 concerning the Boards of Commissioners and Directors of Equity Issuers or Public Companies.

2.4 Audit committee regulations in Indonesia

As previously mentioned, in the aftermath of the 1997 Asian financial crisis, there were a series of initiatives and reforms to improve corporate governance practices in Indonesia, particularly for listed companies. In line with the rapidly-evolving developments in the global financial landscape, such reforms became increasingly intensified in the early 2000s. The AC appeared to be among the corporate governance mechanisms addressed by such initiatives and reforms. Even though the AC had long been introduced in more developed markets, the concept of the AC was relatively new in Indonesia. It was not until the early 2000s that the mandatory establishment of an AC was introduced to listed companies.

2.4.1 Requirements for AC member composition

In 2000, the Indonesia Capital Market Supervisory Agency (*Bapepam*) issued a circular letter which recommended the country's listed companies to set up an AC. Then in 2001, guidelines on the composition of AC members were provided by the *Indonesian Code for Good Corporate Governance*. The Code recommended that the SB should establish an AC, comprising certain SB members. Additionally, the Code stated that the SB *could* invite outsiders to sit on the AC with the requisite mixture of relevant skills, experience, and other qualities to achieve the AC's objectives. Hence, the Code introduced a distinct feature barely known in any other jurisdictions, where it allowed outsiders (i.e., non-board members) to hold seats on the AC. It is important to note that the implementation of the Code was *not* mandatory.

Further, also in 2001, the establishment of an AC became one of the listing requirements to be adhered to by companies listed on the JSX. The JSX's listing rule required listed companies to set up an AC.²³ The AC shall have a minimum of three members, where at least one member

²³ JSX Rule Number I-A of 2001 concerning Listing Rules for Equity Issuers.

shall be an independent SB member, which chairs the AC, and at least two members shall be external, independent members. Additionally, at least one of the external AC members shall have accounting or financial expertise. Listed firms were required to have an AC by the end of the year 2001.

Starting from 2003, the AC was to be regulated through legislations issued by the regulator, *not* through the stock exchange's listing rule anymore. A regulation enacted in 2003 was the first legislation issued by the regulator mandating listed companies to establish an AC.²⁴ Its requirements concerning AC composition echoed those of the JSX's 2001 listing rule. In terms of expertise, it was required that at least one of AC members should have educational backgrounds in the area of accounting or finance. The 2003 regulation came into effect in the financial year 2004. It was revised through a 2004 regulation, but there were no major changes in AC composition requirements.²⁵

There might be some institutional circumstances that explain why AC composition requirements in Indonesia are uniquely different from those applicable in other jurisdictions. The majority of the Indonesian listed firms are family-controlled with high ownership concentration (Claessens et al., 2000). It is common that SB members are comprised of founding family members and other individuals from various backgrounds such as politicians, retired senior government or military officials, accountants, and lawyers (Daniel, 2003). Individuals holding seats on the SB might have no sufficient accounting or financial expertise. Such a situation might limit the SB's capacity to review and exert monitoring of the firm's financial reporting process.

²⁴ Regulation of the Indonesia Capital Market Supervisory Agency (*Bapepam*) Number IX.I.5 of 2003 concerning the Formation and Work Guidelines of the Audit Committee.

²⁵ Regulation of the Indonesia Capital Market Supervisory Agency (*Bapepam*) Number IX.I.5 of 2004 concerning the Formation and Work Guidelines of the Audit Committee.

The World Bank (2010) in its ROSC also acknowledged such a unique feature. It stated that the ACs of the Indonesian listed firms have “permanent members who do not serve on either board tier, in part because commissioners are not believed to have sufficient technical skills” (p. 1). There were widely-held scepticisms among market participants that SB members could play an effective role on board committees without assistance from outside experts (The World Bank, 2010). Therefore, there were expectations that listed firms should invite externally-appointed, independent individuals to serve on the AC in order to assist the SB in overseeing the financial reporting process.

Despite such expectations, the presence of external members on the ACs of the Indonesian listed companies, as well as their effectiveness in the oversight of the firm’s financial reporting process, came into question. In other words, there might be possible negative effects of the presence of external members on the AC, as it is not in line with the internationally common practice, where the AC is comprised exclusively of board members. Additionally, some official reports had highlighted the importance of enhancing the role of independent SB members, where they should play a substantial role and take full responsibility for important decisions (The World Bank, 2010).

Furthermore, The World Bank’s (2010) report provided a recommendation that the AC should be required to have a majority of independent SB members, and outside experts (i.e., externally-appointed individuals) should only serve in an advisory role. Additionally, the Report recommended that the regulator should require at least one member of the AC to be a financial expert and all members should be financially literate. In other words, this Report underlines the importance of capacity enhancement among independent SB members in conducting their duties of monitoring and advising management.

A new AC regulation was then issued by the regulator in 2012,²⁶ but it seems that the regulator did not fully take The World Bank's recommendation into account. There were a number of notable changes in the 2012 regulation. In terms of AC composition, the AC shall have at least three members, consisting of independent SB member(s) as well as externally-appointed, independent member(s). However, the regulation did not specify the minimum numbers of AC members from either independent SB members or external members. Hence, a listed firm could opt to have an AC dominated by either independent SB members or external members. In other words, requirements for external AC members were now "less restrictive" compared to those mandated by previous regulations.

As the supervisory role over the Indonesian capital market was transferred from the Ministry of Finance to the newly-established OJK, a new AC regulation was enacted in 2015.²⁷ Nevertheless, compared to the 2012 regulation, there were no significant changes in terms of requirements for AC composition.

The development timeline of the Indonesian AC regulations across the period 2001-2015 is presented in Figure 2.2. Additionally, as an example, Figure 2.3 displays the structures of the boards and the AC of PT Astra Agro Lestari Tbk., one of the listed companies on the IDX.

[Insert Figure 2.2 about here]

[Insert Figure 2.3 about here]

²⁶ Regulation of the Indonesia Capital Market and Financial Institutions Supervisory Agency (*Bapepam-LK*) Number IX.I.5 of 2012 concerning the Formation and Work Guidelines of the Audit Committee.

²⁷ OJK Regulation Number 55/POJK.04/2015 concerning the Formation and Work Guidelines of the Audit Committee.

2.4.2 Appointment and responsibility of AC members

Aside from requirements for AC composition, Indonesia's applicable AC regulation has also set a series of requirements concerning other important matters, including the appointment, responsibility, and authority of AC members. In terms of the appointment of AC members, it has been mandated that they (including external AC members) are appointed and dismissed by the SB. Further, the term of office of the AC members should be no longer than that of SB members (i.e., as stipulated in the firm's articles of association), and their appointment could be extended for another term.

The regulation has also required that AC members, including those externally appointed, should fulfil certain criteria with regard to integrity, independence, and competency. They must not be the firm's shareholders, auditors, or non-assurance service providers. Additionally, AC members should have no affiliation with the firm's SB members, MB members, or shareholders. With respect to competency, AC members are all required to comprehend financial statements, the firm's business operations, and applicable capital market laws and regulations. Further, they must continuously improve their competency and skills through various training programs. The regulation has also required that at least one of the AC members must have expertise in the fields of accounting and finance.

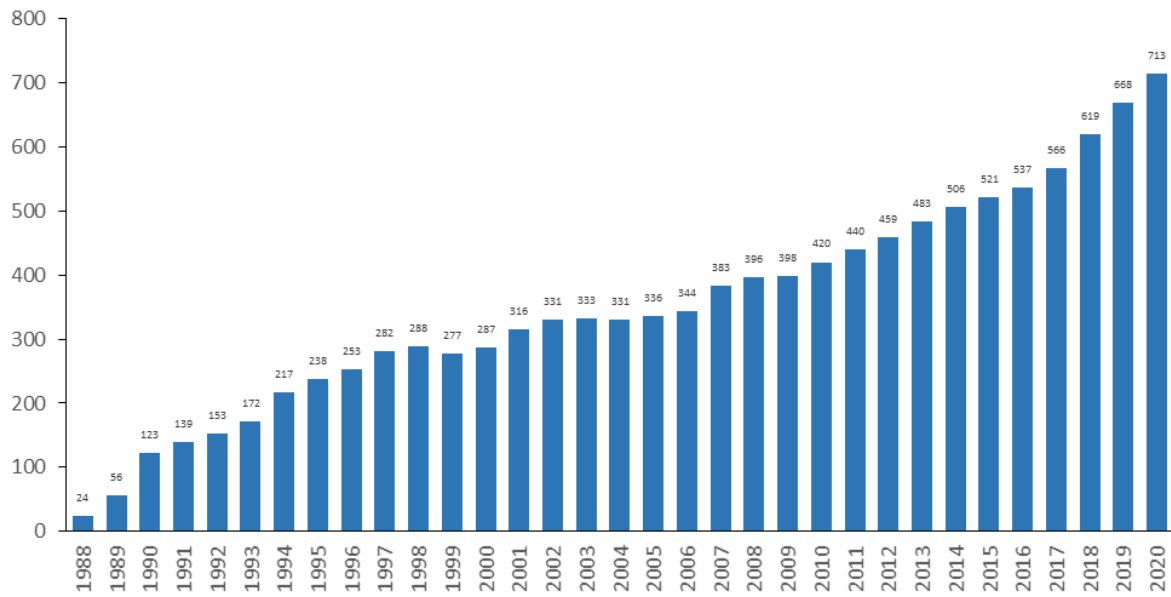
The duties and responsibilities of the AC have also been stipulated in the regulation. The committee is mandated to oversee the financial reporting process, including reviewing financial statements and the implementation of internal audits. In addition, the AC should review the firm's compliance with applicable laws and regulations relating to the firm's business operations. Furthermore, the committee is also to provide the SB with a recommendation on the appointment of the firm's external auditor, particularly on matters of the auditor's independence, audit coverage, and audit fees. In conducting its duties and responsibilities, the

AC is given the authority to access data and information on the firm's resources, to communicate with employees and the internal audit unit, to liaise with the external auditor, and to involve external independent parties to support the implementation of its duties.

Furthermore, the applicable AC regulation has mandated listed firms to establish an audit committee charter, which must be made accessible to the public. The charter must stipulate, among others, the committee's duties, responsibilities, authority, composition, criteria, work procedures, meetings, reporting, and term of office. The AC is also required to meet at least once every three months. Such a meeting must be attended by more than half of the committee's members. The minutes of AC meetings should be reported to the SB. Finally, the AC is mandated to prepare a periodic report on the implementation of its oversight function and activities. The AC report must also be disclosed in the firm's annual report.

Figure 2.1

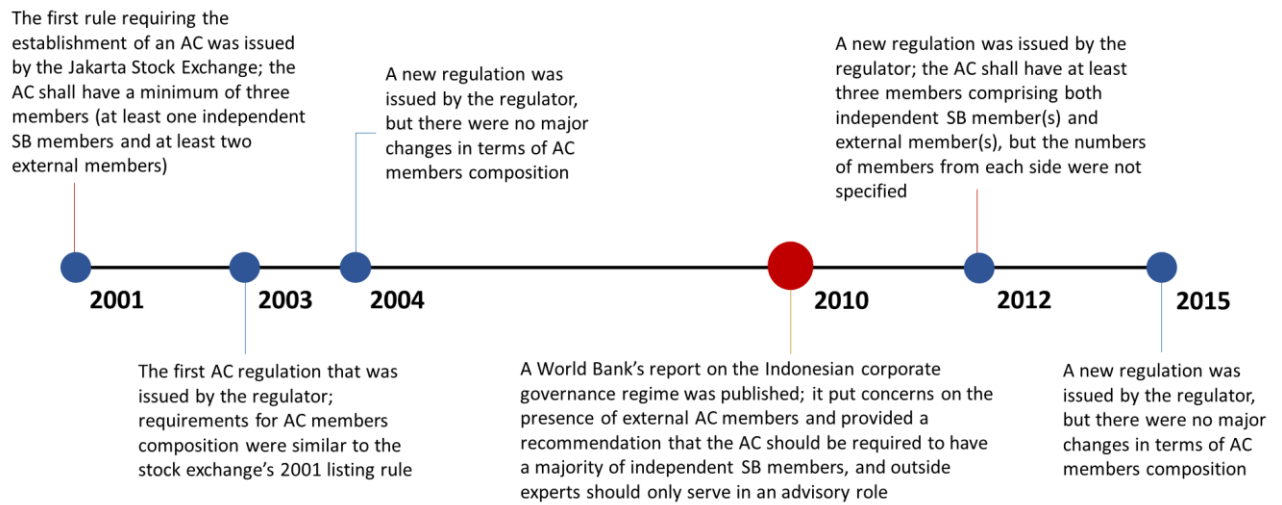
Number of Indonesian listed firms, 1988-2020



Source: Data processed by the author, based on data from the Indonesia Stock Exchange (IDX) and the Jakarta Stock Exchange (JSX).

Figure 2.2

Timeline of the development of Indonesia's AC regulation



Source: Information processed by the author, based on information from the Indonesia Capital Market Supervisory Agency (*Bapepam*), the Indonesia Capital Market and Financial Institutions Supervisory Agency (*Bapepam-LK*), the Indonesia Financial Services Authority (OJK), the Jakarta Stock Exchange (JSX), and The World Bank.

Figure 2.3

Board and audit committee structures of PT Astra Agro Lestari Tbk. (2019)

Supervisory Board

Mr Chiew Sin Cheok

President Commissioner

Mr Djoni Bunarto Tjondro

Commissioner

Mr Angky Utarya Tisnadisastra

Independent Commissioner

Mr Sidharta Utama

Independent Commissioner

Management Board

Mr Santosa

President Director (CEO)

Mr Joko Supriyono

Vice President Director

Mr Mario Casimirus Surung Gultom

Director

Mr M. Hadi Sugeng Wahyudiono

Director

Mr Rujito Purnomo

Director

Mr Nico Tahir

Director

Mr Said Fakhrullazi

Director

Audit Committee

Mr Angky Utarya Tisnadisastra

Independent Commissioner

Member and Chairman of the Audit Committee

Ms Lindawati Gani

Member of the Audit Committee

Mr Budi Frensidy

Member of the Audit Committee

External
Members

Source: Information processed by the author, based on information from the 2019 Annual Report of PT Astra Agro Lestari Tbk.

Table 2.1

Size of the financial sector in selected ASEAN economies

(% of GDP, as of December 2020)

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Bank loans	36.7	132.7	56.3	137.7	101.2	146.3
Equity market capitalisation	45.2	131.9	88.6	183.8	97.0	64.9
Outstanding government debt securities	33.6	62.1	28.4	41.8	56.5	21.6
Outstanding corporate debt securities	2.8	54.2	8.4	100.6	27.4	4.5
Insurance industry assets	9.1	18.6	9.2	86.8	22.8	5.0

Source: Data processed by the author, based on data from the Indonesia Financial Services Authority, the Indonesia Stock Exchange, Ministry of Finance of the Republic of Indonesia, and Statistics Indonesia (Indonesia); Bank Negara Malaysia and the Bond+Sukuk Information Exchange (Malaysia); Bangko Sentral ng Pilipinas, the CFA Institute Research Foundation, and the Philippine Insurance Commission (the Philippines); the Monetary Authority of Singapore, the Singapore Exchange, and Statistics Singapore (Singapore); Bank of Thailand and the International Monetary Fund (Thailand); The State Bank of Vietnam and the ADB Asia Bond Monitor (Vietnam).

Chapter 3

External audit committee members and financial reporting quality

“Sometimes it takes an outsider, someone with fresh eyes to see the truth.”

(Ally Carter, *Heist Society*, 2016)

3.1 Introduction

In many corporate governance reforms introduced around the world during the past two decades, the audit committee (AC) has been given emphasis as one of the key components of effective corporate governance. The AC is expected to effectively assist the board of directors in the oversight of the financial reporting process, hence ensuring the integrity and quality of financial statements. The functions of the AC span from reviewing financial reporting issues and monitoring the effectiveness of internal controls to overseeing the hiring of the firm’s external auditor.

In line with its gaining prominence in practice, the AC has also received increasingly greater attention in the academic literature. As reviewed by Ghafran and O’Sullivan (2013), scholars generally pay attention to the characteristics of the AC, such as composition and expertise, and their impacts on monitoring. Based largely on agency theory, there has been an extensive body of empirical evidence of the positive association between AC independence or expertise and monitoring effectiveness as proxied by financial reporting quality (Bédard et al., 2004; Chen et al., 2015; Klein, 2002; Piot & Janin, 2007; Vafeas, 2005; Wang et al., 2015).

In AC regulations applicable in many jurisdictions, it is very common that the AC is comprised exclusively of those holding seats on the board of directors. For example, it has been regulated in the U.S. market since 1999 that the AC should be comprised solely of independent directors

with at least three members.²⁸ In Australia, entities that are included in the S&P/ASX300 Index shall comply with AC-related recommendations provided by the Australian Securities Exchange (ASX) Corporate Governance Council, where the AC should consist only of non-executive directors, and the majority of AC members should be independent directors.²⁹ Similarly, U.K. companies with a premium listing are required to comply with the U.K. Corporate Governance Code, which requires them to establish an AC of at least three, or in the case of smaller companies two, independent non-executive directors.³⁰

Indonesia is unique. The country's AC regulation, which came into effect for the first time in 2001 and has undergone certain changes since then, adopts a feature that makes it starkly different from that applicable in many other jurisdictions worldwide. It is required that the ACs of the Indonesian listed companies should be comprised of independent board members as well as externally-appointed, independent members. In other words, a part of the AC is *not* board members.

Given the presence of external AC members, Indonesia's AC composition requirement is undeniably distinctive. It does not follow the internationally common practice, where the AC is comprised entirely of board members. Such a unique AC composition requirement makes it interesting to investigate whether and how the external members add value to the committee's monitoring function. It might be assumed that external AC members possess greater independence compared to board members since they are not affiliated with the board. Further, their duties and responsibilities are mainly in the areas of accounting and financial reporting. Hence, when external AC members hold seats on the AC, the independence and expertise of

²⁸ This was previously regulated through listing standards for firms listed on the New York Stock Exchange (NYSE) and the NASDAQ Stock Market. Then in July 2002, the U.S. Congress legislated those standards through the Sarbanes-Oxley Act of 2002, specifically in Title III ("Corporate responsibility"), Section 301 ("Public company audit committees").

²⁹ ASX Listing Rules, Chapter 12 ("On-going requirements"), Rules 12.7 ("Audit committee").

³⁰ Listing Rules of the Financial Conduct Authority (FCA).

the committee are presumably more assured, but their effectiveness in monitoring might also be questioned.

Employing the specific context of Indonesia, this chapter puts emphasis on the monitoring role of external AC members. Specifically, the chapter is aimed at examining whether external AC members exert better monitoring, as measured by financial reporting quality. Indeed, scholars have extensively examined the impacts of AC attributes on the committee's monitoring effectiveness. However, such studies have only been focused on jurisdictions where the AC consists solely of board members. Therefore, how the outsiders on the AC contribute to monitoring effectiveness is unknown.

The Indonesian market provides an interesting setting because of the following reasons. *First*, the country's Company Law adopts a two-tier board system, where limited-liability companies shall have two boards, namely the *Board of Commissioners* (supervisory board—SB) and the *Board of Directors* (management board—MB). The dual board structure appears to be an interesting setting due to a clear separation between the supervision and executive functions. When the AC is presided over by an independent SB member and also comprises externally-appointed independent members, there might be a greater degree of independence that potentially adds value to monitoring.

Indeed, such a two-tier board system is also adopted in other jurisdictions like Germany, the Netherlands, and China. However, in those countries, the AC is comprised solely of board members. The German Corporate Governance Code requires listed companies to form an AC comprised of SB members, where the chairman of the AC should be independent and should not serve as the SB chairman. Meanwhile, the Dutch Corporate Governance Code requires that when the SB consists of more than four members, it should establish an AC whose members are appointed from its members. In China, the Code of Corporate Governance for Listed

Companies requires the AC to be composed solely of directors, and the majority of its members should be independent directors. Thus, Indonesia's AC composition requirement is still unique even when compared to that of other two-tier board jurisdictions.

Second, the Indonesian equity market is characterised by high levels of ownership concentration and family control among its listed companies (Claessens et al., 2000), making agency conflicts between the controlling shareholder and minority shareholders (i.e., Type II agency problems) more likely to occur. Such a situation might be exacerbated by the country's relatively weak institutional environment in terms of minority shareholder protection and law enforcement (Goyal & Muckley, 2013). Hence, this phenomenon might impact the effectiveness of corporate governance mechanisms in mitigating agency problems, including how the AC executes its duties and exerts its monitoring function.

Third, Indonesia was severely affected by the 1997 Asian financial crisis, but its progress on corporate governance reforms is considered lagged behind compared to other affected economies like Korea, Malaysia, and Thailand (Rosser, 2005). Such low-speed reforms might be influenced by certain factors, such as the country's political development and underlying economic structure, as well as the infant development of its capital market (Simandjuntak, 2005). Given such circumstances, it is considered important to examine whether and how corporate governance mechanisms required by such reforms, including the presence of external members on the AC, play a role in promoting higher integrity and mitigating information asymmetry in the market.

Based on a sample of listed firms on the Indonesian equity market across the period 2004-2019, this study reveals that the proportion of external AC members is positively associated with financial reporting quality, suggesting that external members of the AC exercise effective monitoring of the firm's financial reporting process, resulting in better financial reporting

quality. The result is robust after addressing endogeneity concerns, employing both the difference-in-differences—utilising the passage of a new regulation with significant changes in AC composition requirements as an exogenous shock—and instrumental variable approaches. My further cross-sectional analysis demonstrates that the positive association between external AC members and financial reporting quality is more pronounced in firms with higher levels of accounting expertise and experience among their external AC members, as well as in firms with lower agency costs, stronger external monitors, lesser government influence, and lower external auditor quality.

This chapter contributes to the literature in several ways. *First*, the study provides the first evidence of the important role of external AC members and highlights their positive effects on financial reporting quality. Specifically, it extends the AC independence literature by examining the monitoring effectiveness of independent AC members in a setting where the AC composition requirement is very different from that in many other jurisdictions. Prior studies examining the monitoring effectiveness of the AC are based on jurisdictions where the AC is comprised entirely of board members (Abbott et al., 2004; Bédard et al., 2004; Faber, 2005; Klein, 2002; Tanyi & Smith, 2015; Vafeas, 2005; Xie et al., 2003). Further, this study adds to the literature on the role of external economic agents in corporate governance. In the existing literature, external economic agents that have been widely investigated include external auditors and external consultants (Becker et al., 2010; Francis et al., 1999; Omer et al., 2006), while evidence of the role of external AC members is still absent.

Second, the study extends the limited literature addressing the monitoring effectiveness of board committees in a two-tier board system. A limited number of empirical studies have investigated whether the AC contributes to better monitoring in jurisdictions adopting dual board structure (He et al., 2017; Lo et al., 2010; Nipper, 2021). Given the distinctive landscape

of Indonesia's institutional environment, I provide further evidence that independent AC members, especially those invited from outside the board, could be expected to exert effective oversight over the financial reporting process.

Third, employing a natural experiment to address endogeneity concerns, this study also adds to the recent AC literature that evaluates the effects of the passage of AC regulations. Previous studies generally examine the association between AC attributes and certain monitoring outcomes. Only a few have put emphasis on the impact of particular AC regulations, such as the one conducted by Kim and Klein (2017), which examine the effects of an AC-related listing rule on the U.S. capital markets issued in 1999. Thus, this study provides an important contribution to the academic literature as well as regulatory policymaking, especially on the effectiveness of external AC members in assisting the SB to monitor management and oversee the financial reporting process.

The remainder of this chapter is structured in the following manner. Section 3.2 reviews the existing literature and formulates the research hypothesis. This is followed by Section 3.3, which describes the data and variable measurements. Main empirical results are presented and discussed in Section 3.4. Sections 3.5 presents the results of cross-sectional analyses, followed by Section 3.6 where the results of sensitivity and further analyses are discussed. The results of additional analyses are presented in Section 3.7. Finally, Section 3.8 concludes the chapter.

3.2 Literature review and hypothesis development

The AC plays a vital role in safeguarding the firm's financial reporting process. This includes, among others, overseeing the integrity of financial statements, the effectiveness of internal controls, and the hiring of the firm's external auditor. As Pincus et al. (1989) point out, the AC

enhances the board's capacity in monitoring the executives, particularly in the form of its members' detailed knowledge and understanding of the firm's financial statements. Further, in terms of external audits, there is an expectation that the AC would be able to play a role as arbiter between the firm's management and external auditor, particularly when there are differences of opinion between the two parties in terms of the application of financial accounting standards (Klein, 2002).

Therefore, the AC appears to be one of the corporate governance mechanisms that play a pivotal role in addressing agency problems. Given the information asymmetry existing in the market, there is an expectation that the AC would independently help assure that financial statements issued by the firm really reflect firm performance and restrict management's opportunistic reporting, which would be detrimental to shareholder value (Kusnadi et al., 2016). In order to be able to provide such an independent oversight function, AC members' independence and technical competency substantially matter.

There has been an extensive body of empirical research providing evidence of the association between AC attributes and monitoring effectiveness. Agency theory is commonly used to explain the role of the AC in strengthening financial reporting quality. From the perspective of agency theory, the AC appears to be one of the monitoring tools used to alleviate potential agency issues in an entity (Cohen et al., 2008). Given their independence and expertise, a well-functioned AC would effectively supervise the firm's financial reporting process, thereby reducing agency costs. Such a perspective underscores the crucial role of the AC in ensuring the firm's financial integrity, hence maintaining the confidence of the market (Khoo et al., 2020).

While earlier studies generally pay greater attention to AC existence and independence, empirical research conducted later increasingly addresses other characteristics of the AC, such

as expertise, experience, and diligence. It has also been suggested in more recent studies that AC characteristics might be endogenously determined, hence endogeneity concerns resulting from the “traditional” cross-sectional tests should be addressed.

3.2.1 *AC independence and financial reporting quality*

Earlier studies examining the association between AC attributes and monitoring, conducted based on the U.S. setting, generally put emphasis on the independence of AC members. It is important to note that such U.S. studies employ data *prior* to the release of a new listing standard by the Securities and Exchange Commission (SEC) in 1999, which required listed firms to establish a fully independent AC with at least three members. Before the issuance of such a rule, listed companies on the New York Stock Exchange (NYSE) and NASDAQ were only required to form an AC with a *majority* of independent directors.

Among the earliest studies investigating the association between AC independence and financial reporting quality is the one conducted by Klein (2002). She finds a negative relationship between AC independence and earnings management, as measured by abnormal accruals. Similarly, Xie et al. (2003) and Bédard et al. (2004) provide evidence that aggressive earnings management is negatively associated with AC independence. Vafeas (2005) also reveal that insiders holding seats on the AC are associated with lower earnings quality. Employing other proxies to measure financial reporting quality, the existing literature has reported evidence that an independent AC reduces the likelihood of financial restatements (Abbott et al., 2004) and accounting irregularities (Peasnell et al., 2001).

It has been suggested in more recent studies that the firm’s governance structure (e.g., size and composition of the board or board committees) may be endogenously determined. Roberts and Whited (2012) suggest that endogeneity appears to be a notable problem in the accounting and finance empirical literature, particularly in corporate governance research. Thus, if AC

structure is similarly determined, the traditional cross-sectional empirical tests on the association between AC composition and monitoring quality might suffer from such endogeneity issues (Kim & Klein, 2017). This might explain the mixed results from the existing cross-sectional studies.

In order to provide more robust results, endogeneity problems need to be taken into account and, hence, properly addressed using a more suitable estimation technique. There are a number of research designs employed in corporate governance research to deal with endogeneity problems, with two-stage least squares (2SLS) or instrumental variables (IV) being one of the most commonly used techniques. A number of AC studies have also utilised such methods (Bruynseels & Cardinaels, 2014; Krishnan et al., 2011; Tanyi & Smith, 2015; Wang et al., 2015).

Gippel et al. (2015) suggest that such alternative techniques have limitations, and offer a more robust solution, namely natural experiments, to mitigate endogeneity and build stronger theory. They argue that using a naturally occurring and convincingly exogenous event would enable researchers “to isolate causal links, build new theory and clarify (confirm/disconfirm) existing theory by mitigating the issue of endogeneity” (p. 144). Albeit limited, there has been a few AC studies that utilise such a research design, exploiting a particularly important event (e.g., the economic downturn and the passage of a regulation) as an exogenous shock.

Kim and Klein (2017) employ the difference-in-differences approach to examine whether there are increases in market value and financial reporting quality resulting from a new rule issued by the SEC in 1999, which required public firms to set up a fully independent AC with at least three members. They find no evidence of higher market value or better financial reporting quality after the passage of such a listing rule.

3.2.2 AC expertise and financial reporting quality

The accounting or financial expertise of AC members has been widely highlighted by regulators around the world in their corporate governance reforms or initiatives. For example, the Sarbanes-Oxley Act of 2002 in the United States requires a public firm to disclose whether at least one financial expert serves on its AC or to disclose the reason for not having such an expert. The U.K. Corporate Governance Code issued by the Financial Reporting Council also suggests that at least one AC member has recent and relevant financial experience. In Australia, the Corporate Governance Principles and Recommendations with 2010 Amendments issued by the ASX recommend public companies to establish an AC with sufficient technical expertise to discharge its mandate effectively. At least one AC member should have relevant qualifications and experience in financial and accounting matters.

As argued by Tanyi and Smith (2015), it is important that financial expertise is possessed by AC members, allowing the committee to fulfil its primary responsibility in safeguarding the financial reporting practices. Thus, it is unsurprising that corporate governance regulations, reforms, and initiatives in many jurisdictions worldwide require the presence of accounting or financial experts on the AC. In the academic literature, such expertise appears to be one of the most widely-addressed attributes of the AC, along with AC independence. Prior empirical studies have examined whether AC members' financial expertise contributes to better monitoring, but they demonstrate a mixture of findings.

It has been documented that the financial expertise of AC members reduces earnings management (Bédard et al., 2004; Tanyi & Smith, 2015; Xie et al., 2003), the occurrence of financial restatements (Abbott et al., 2004), and the likelihood of fraudulent financial statements (Farber, 2005). Contrary to these findings, Vafeas (2005) and Ghosh et al. (2010)

demonstrate that AC financial expertise is not significantly associated with financial reporting quality.

3.2.3 Hypothesis development

In the aftermath of the Asian financial crisis, the Indonesian corporate governance landscape was in an infant stage of development. One of the features commonly found among listed companies at that time was that many SB members—supposed to monitor the firm’s executives—did not have sufficient capacity to properly perform their duties and responsibilities in terms of safeguarding the financial reporting process (Daniel, 2003). Such a situation was exacerbated by the high prevalence of family control (Claessens et al., 2000) and political connections (Fisman, 2001) among listed companies.

Given such circumstances, the regulator and market participants alike deemed that it was important for the SB to be assisted by an AC that included externally-appointed, independent members who were *not* SB members. This idea was highlighted in the *2001 Indonesian Code for Good Corporate Governance*. The formation of an AC—with at least three members, where at least one member is an independent SB member and at least two members are externally-appointed members—was made mandatory for the first time through a stock exchange listing rule issued in 2001, and then through a regulation enacted by the capital market regulator in 2003.

One question might arise: *Does the presence of such externally-appointed, independent members on the AC enhance the committee’s monitoring capacity?* There is no evidence in the existing literature whether such external AC members substantially add value to monitoring. It is not surprising because, to the best of my knowledge, Indonesia is the only jurisdiction which requires the ACs of listed companies to invite externally-appointed, independent members.

Such a requirement was starkly different from the commonly adopted practices around the world, where the AC is comprised exclusively of board members.

On the one hand, external AC members are independent individuals invited to serve on the committee, but they are *not* part of the firm's SB. Hence, when external individuals are present, the independence of the AC is presumably more assured, leading to a higher quality of monitoring. Particularly in a setting where the institutional environment tends to be weak, the presence of external independent members on the AC might contribute to effective oversight over the firm's financial reporting practices.

Much evidence from the AC literature has suggested that greater AC independence leads to enhanced monitoring capacity as proxied by better financial reporting quality (Abbott et al., 2004; Klein, 2002). Additionally, there is also evidence from the boardroom literature that independent members would be able to control managers' opportunistic behaviour (Williamson, 1985) and perform better in particular tasks (Bhagat & Black, 2001). These findings support the notion that a stronger presence of external AC members, which represents greater AC independence, would lead to better capacity in monitoring.

Furthermore, external AC members are invited to sit on the AC due to, among others, their particular positive qualities. They might possess certain expertise, skills, or experience that could not be accumulated internally. Even though a firm already has internal functions that require financial expertise (e.g., the chief financial officer (CFO) and the internal audit unit), these functions might not have deep expertise or understanding of evolving developments in the field. Hence, the presence of outside experts, which possibly have better knowledge in the areas of financial reporting and auditing, could help improve internal practices. This is particularly helpful when SB members do not have sufficient capacity to monitor the firm's financial reporting process. Findings from prior studies lend support to the proposition that AC

expertise is positively associated with financial reporting quality (Bédard et al., 2004; Tanyi & Smith, 2015; Xie et al., 2003; Yang & Krishnan, 2005).

Additionally, evidence from the management literature demonstrates that the presence of outside experts could be advantageous for the firm's decision-making process. For example, it has been documented that the use of technical-related external consultants reduces the uncertainty associated with the innovation process (Bessant & Rush, 1995), improves product quality (Barthélemy, 2014), and promotes systemic and incremental innovations (Mol & Birkinshaw, 2014). Additionally, firms might choose to hire management-related outside experts to help them solve managerial issues or improve management practices, such as promoting the organisational diversity and inclusion agenda (Kirton & Greene, 2018), providing accurate and reliable information (Chen et al., 1993), seizing investment opportunities (Foss et al., 2013; Hoppmann et al., 2018), and developing information technology (Bloomfield & Danieli, 1995).

Drawing on such insights from the management literature, as well as prior findings on the positive association between AC independence or expertise and monitoring effectiveness, the presence of external AC members could arguably bring about favourable effects on the committee's monitoring effectiveness. Further, such external members might also be more concerned about their reputation in the job market. Such a concern would lead them to maintain professional credibility and provide objective views in conducting their monitoring duties (Walton, 2012).

On the other hand, the effectiveness of external AC members in monitoring might be questioned. They are likely to be invited to hold seats on the AC because of their connections or social ties with the firm's controlling shareholder and executives, not merely because of their expertise or technical competency. This could lead them to build allegiance to

management and, thus, loosen their monitoring activities. Their independence is therefore compromised, making them less effective in challenging management and exercising oversight over financial reporting practices. Evidence from the board co-option literature has demonstrated that monitoring effectiveness decreases as the degree of co-option increases (Cassell et al., 2018; Coles et al., 2014; Dikolli et al., 2021). In the context of external AC members, they might have a negative effect on financial reporting quality as they tend to tolerate managerial discretion over the financial reporting process due to such allegiance.

In addition to the abovementioned two conflicting arguments, external AC members might be argued to not significantly affect financial reporting quality. Beasley et al. (2009) suggest that the implementation of the AC concept could be symbolic, where it is not really utilised as a monitoring tool to conduct vigilant monitoring of financial reporting practices. Further, Lin et al. (2008) argue that the role of the AC tends to be ceremonial, where the committee is employed to provide legitimacy that the firm has already implemented good corporate governance and complied with applicable regulations. In the context of external AC members, firms might hire them simply to demonstrate that they already comply with the AC regulation, making such external AC members not significantly affecting financial reporting quality.

Given the competing predictions as highlighted above, the hypothesis is presented in the null form:

H1: The proportion of external AC members is not significantly associated with financial reporting quality.

3.3 Data and variable measurements

3.3.1 Sample

There are two groups of data obtained for the purpose of this study. *First*, data on corporate governance and several firm-level characteristics are manually collected from the annual reports of listed firms, which are downloadable from the directory of The Indonesia Capital Market Institute (TICMI). *Second*, financial data are retrieved from the Worldscope database, supplemented by the annual reports and financial statements of sample firms.

The initial sample of this study consists of all firms listed on the Indonesia Stock Exchange (IDX), previously the Jakarta Stock Exchange (JSX), across the period 2004-2019. There are 7,407 firm-year observations captured in the initial sample. Financial firms (e.g., banks, insurance companies, securities companies, and financing companies) are excluded from the sample because they are subject to specific regulatory requirements, including more stringent AC regulations. I further delete observations with missing corporate governance and financial data. This selection process results in a final usable sample of 4,646 firm-year observations. To date, my sample appears to be the largest one using comprehensive, hand-collected corporate governance data of the Indonesian listed firms. Panel A of Table 3.1 provides the details of the sample construction process.

The breakdown of the final sample based on industry sectors is displayed in Panel B of Table 3.1. The trade and services sector constitutes the largest proportion of the sample (26.9 percent), while the smallest proportions belong to the agriculture and mining sectors, which account for 4.4 percent and 8.2 percent, respectively, of the final sample.

[Insert Table 3.1 about here]

3.3.2 Measurement of financial reporting quality

The dependent variable in my empirical analysis, to proxy for monitoring effectiveness, is financial reporting quality. There are a variety of measurements of financial reporting quality used by researchers and, as suggested by Chen et al. (2011), a universally accepted proxy is absent. In this study, I employ two measures of accruals-based earnings management that have been widely used in the financial reporting literature. The first measure is the absolute value of discretionary accruals based on the modified Jones model (*AbsDA_MJM*) as developed by Dechow et al. (1995), while the second measure is the absolute value of discretionary accruals based on the performance-adjusted modified Jones model (*AbsDA_PA-MJM*) as developed by Kothari et al. (2005).

To compute discretionary accruals for each firm-year observation, I run the following models for all firms in the same industry with at least eight observations in a particular year. Equations (1) and (2) are estimated for the purpose of computing discretionary accruals based on the modified Jones model and the performance-adjusted modified Jones model, respectively.

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{Assets_{i,t-1}} \right) + \alpha_2 \left(\frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{Assets_{i,t-1}} \right) + \alpha_3 \left(\frac{PPE_{i,t}}{Assets_{i,t-1}} \right) + \varepsilon_{i,t} \quad (1)$$

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{Assets_{i,t-1}} \right) + \alpha_2 \left(\frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{Assets_{i,t-1}} \right) + \alpha_3 \left(\frac{PPE_{i,t}}{Assets_{i,t-1}} \right) + \alpha_4 ROA_{i,t-1} + \varepsilon_{i,t} \quad (2)$$

$TA_{i,t}$ is total accruals, computed as net income before extraordinary items and discontinued operations minus cashflows from operations; $Assets_{i,t-1}$ is total assets in year $t-1$; $\Delta Sales_{i,t}$ is the change in sales revenue from year $t-1$ to year t ; $\Delta AR_{i,t}$ is the change in accounts receivable from year $t-1$ to year t ; $PPE_{i,t}$ is net property, plant, and equipment; and $ROA_{i,t-1}$ is net income before extraordinary items and discontinued operations divided by total assets in year $t-1$.

Discretionary accruals are obtained from residuals after estimating the above regression models. In my analysis, I use the absolute values of discretionary accruals based on the modified Jones model (*AbsDA_MJM*) and the performance-adjusted modified Jones model (*AbsDA_PA-MJM*). Hence, lower values of *AbsDA_MJM* and *AbsDA_PA-MJM* indicate better financial reporting quality.

3.3.3 *Measurement of external AC members*

The independent variable of interest is the proportion of external AC members (*External_AC_%*), computed as the number of external AC members divided by the total number of AC members. It is hypothesised, in the null form, that the proportion of external AC members is not significantly associated with financial reporting quality. Thus, employing the absolute values of discretionary accruals (*AbsDA_MJM* and *AbsDA_PA-MJM*) as the dependent variable, if the proportion of external AC members is positively associated with financial reporting quality, the coefficient of *External_AC_%* would be negative and statistically significant. In contrast, if the proportion of external AC members is negatively associated with financial reporting quality, the coefficient of *External_AC_%* would be positive and statistically significant.

3.3.4 *Control variables*

Based on the extant literature, I include a number of control variables that could influence the quality of financial reporting in my analysis. The control variables are grouped into five categories, namely corporate governance structure, corporate ownership, auditor quality, fundamental characteristics, and business characteristics.

Corporate governance structure. Firstly, I control for the total number of AC members (*AC_size*). Van den Berghe and Levrau (2004) argue that a larger AC size represents a wider

pool of expertise, thereby enhancing the committee's capacity in exercising its oversight function. Prior empirical studies have documented that the association between AC size and financial reporting quality could be either positive (Sultana et al., 2019) or negative (Tanyi & Smith, 2015). In addition, with regard to board structure, it is also argued that board independence appears to be another monitoring tool to mitigate agency issues, hence encouraging better financial reporting quality (Klein, 2002). A positive association between board independence and financial reporting quality is confirmed by several studies, such as Krishnan et al. (2011) and Chen et al. (2015). In my analysis, I control for board independence (*Board_indep*), computed as the number of independent SB members divided by the total number of SB members.

Corporate ownership. When ownership is concentrated in the hands of the largest shareholder, higher levels of agency issues and information asymmetry might persist. Such a situation might encourage the controlling shareholder to expropriate the firm's resources at the expense of minority shareholders through suboptimal investments or opportunistic financial statements (Jaggi et al., 2009). There has been empirical evidence from prior research that financial reporting quality is negatively associated with ownership concentration and family control, such as Achleitner et al. (2014) and Razzaque et al. (2015). The two features are highly prevalent in the Indonesian equity market; thus, I control for the proportion of shares held by the largest shareholder (*Largest_SH*) and the presence of family control (*Family*), which equals to 1 if a firm is family-controlled and 0 otherwise.³¹

³¹ Information on firm ownership and control is obtained from annual reports, complemented by other sources such as notes to the financial statements, company websites, and the Internet search engine. Similar to prior studies, such as Faccio and Lang (2002) and Setia-Atmaja et al. (2009), the controlling shareholder is the largest shareholder that owns at least 20 percent of the firm's shares. Based on information on ownership structure, a firm is categorised as a family-controlled one if its controlling shareholder is an Indonesian individual or family. When the controlling shareholder of a listed firm is a privately-held, unlisted company or another listed company, I trace the firm's control chain until I could identify its ultimate controlling shareholder (Lin et al., 2012). If a firm's ultimate controlling

Auditor quality. External auditors provide independent assurance and verification that financial statements have been fairly stated in conformity with applicable accounting standards, thereby enhancing the credibility of the firm's financial statements. Previous research suggests that high-quality external audits would contribute to constraining earnings management (Lin & Hwang, 2010; Van Tendeloo & Vanstraelen, 2008). To proxy for audit quality, the external auditor's size or brand name is a widely used measure in the literature. Likewise, I control for auditor size (*Big4*) in my analysis. This is a dichotomous variable, which equals to 1 if the firm is audited by a Big-4 audit firm (Deloitte, EY, KPMG, or PricewaterhouseCoopers) and 0 otherwise.

Fundamental characteristics. A variety of financial-related characteristics might also affect financial reporting quality. I control for firm size as measured by the natural logarithm of total assets (*Firm_size*), based on the argument that larger firms might have better financial reporting quality because their operations tend to be more stable and predictable (Dechow & Dichev, 2002; Francis & Yu, 2009). Prior research also suggests that firms with higher financial leverage are more likely to engage in earnings management (Kothari et al., 2005). Hence, I control for financial leverage (*Leverage*), computed as total liabilities divided by total assets. Further, firm performance as measured by return on assets (*ROA*) is also employed as a control variable. Previous studies, such as Wang et al. (2015), have demonstrated that firms with higher performance is less likely to engage in earnings management.

I also control for growth opportunities as measured by the market-to-book ratio (*MTB*). It is argued that firms with a lower market-to-book ratio are more likely to choose more aggressive accounting choices (Rainsbury et al., 2009). Additionally, with respect to sales growth, Asbaugh-Skaife et al. (2008) argue that firms experiencing rapid sales growth are likely to have

shareholder is an Indonesian individual or family, then the firm is categorised as a family-controlled firm.

a lower quality of financial reporting. Hence, the firm's growth of sales revenue (*Sales_growth*) is included as one of the control variables. Finally, I control for sales volatility (*Sales_stdev*), measured as the standard deviation of the revenue-to-assets ratio over the past three years. The existing studies have documented that firms with higher sales volatility are more likely to engage in earnings management (Krishnan et al., 2011; Wang et al., 2015).

Business characteristics. I control for two business characteristics, namely the number of business segments (*Segment*) and firm age (*Firm_age*). Asbaugh-Skaife et al. (2008) argue that firms with a higher level of business complexity tend to have lower-quality financial reporting due to various measurement problems. This is confirmed by the findings of Rainsbury et al. (2009) and Sultana et al. (2019), among others. Additionally, it is argued that there is a positive association between firm age and financial reporting quality (Abbott et al., 2004), as older firms may have a financial reporting system that is more established and has been kept in place for a longer period of time.

3.3.5 Summary statistics

Table 3.2 presents the summary statistics of the variables used in my analysis. The mean and median values of both measures of financial reporting quality (*AbsDA_MJM* and *AbsDA_PAMJM*) are approximately 0.09 and 0.06, respectively. The figures are similar or close to those provided by prior Indonesian studies employing the absolute value of discretionary accruals as a measure of financial reporting quality, such as Harymawan and Nowland (2016) and Habib et al. (2017).³²

³² In Harymawan and Nowland (2016), based on an Indonesian sample of 2,073 firm-year observations, the average absolute value of discretionary accruals based on the modified Jones model is 0.09. Meanwhile, Habib et al. (2017) employ a sample of 1,756 firm-year observations and use discretionary accruals based on the performance-adjusted modified Jones model. Their figure for the average absolute value of discretionary accruals is 0.10.

In terms of AC-related variables, the median values of *External_AC_%* and *AC_size* are 66.7 percent and three members, respectively. Meanwhile, the mean values of the two variables are 63.3 percent and 3.1 members, respectively. With regard to board independence, the mean and median values of *Board_indep* are 40.3 and 37.5 percent, respectively. This suggests that the Indonesian listed firms have generally complied with the applicable regulation on board independence, which mandates that at least 30 percent of SB members must be independent.

My sample once again confirms the high magnitude of ownership concentration among the Indonesian listed firms. The mean and median values of *Largest_SH* are 50.2 percent and 51 percent, respectively. It could also be seen that families remain the most common controlling shareholder of the Indonesian listed firms. As shown by the mean value of *Family*, 57 percent of my observations are family-controlled firms. Further, in terms of the external auditor, 38 percent of my sample firms are audited by Indonesian accounting firms affiliated with Big-4. With respect to fundamental characteristics, the sample firms have a leverage ratio of 26.3 percent and a return on assets of 5.4 percent, on average. The mean values of sales growth and sales volatility are 14.2 percent and 12.1 percent, respectively. Finally, the sample firms are 31 years of age and have around three business segments, on average.

[Insert Table 3.2 about here]

3.4 Main results

3.4.1 Baseline results

To test the hypothesis, I undertake a multivariate analysis of the association between the proportion of external AC members and financial reporting quality. Such an analysis is conducted by estimating the following model:

$$AbsDA = \beta_0 + \beta_1 External_AC_ \%_{i,t} + \gamma X_{i,t} + Firm\ FE + Year\ FE + \varepsilon_{i,t} \quad (3)$$

AbsDA is the absolute values of discretionary accruals, as measured using the modified Jones model (*AbsDA_MJM*) and the performance-adjusted modified Jones model (*AbsDA_PAMJM*). The proportion of external AC members (*External_AC_ %*) is the number of external AC members divided by the total number of AC members. *X* represents a series of control variables included in the regression model, namely the natural logarithm of AC size (*AC_size*), SB independence (*Board_indep*), the proportion of shares owned by the largest shareholder (*Largest_SH*), the presence of family control (*Family*), the presence of a Big-4 auditor (*Big4*), the natural logarithm of total assets (*Firm_size*), financial leverage (*Leverage*), return on assets (*ROA*), the market-to-book ratio (*MTB*), sales growth (*Sales_growth*), sales volatility (*Sales_stdev*), the natural logarithm of firm age (*Firm_age*), and the natural logarithm of the number of business segments (*Segment*).

I also include firm fixed effects to address endogeneity issues. The inclusion of firm fixed effects would help address unobserved time-constant firm heterogeneity. Additionally, year fixed effects are also included in the regression model. To overcome the effects of outliers, all continuous variables are winsorised at the 1 percent level at both tails of their distributions. Additionally, standard errors are clustered at the firm level.

Table 3.3 reports the results of the OLS regression analyses based on Equation (3). *External_AC_ %* is found to be negatively and significantly associated with both measures of discretionary accruals in Columns (1) and (2). As both proxies for discretionary accruals are stated in their absolute values, this finding suggests that a higher proportion of external AC members is associated with better financial reporting quality. In other words, the finding from the baseline regression analyses implies that external AC members confer benefits to financial reporting quality.

Further, the effect of external AC members is economically significant. Using *AbsDA_MJM* as the dependent variable in Column (1), the coefficient of *External_AC_%* is -0.038 , suggesting that a one standard deviation increase in *External_AC_%* leads to a decrease in *AbsDA_MJM* of 0.40 percent of total assets ($-0.038 \times 0.106 = -0.0040$). Meanwhile, when *AbsDA_PA-MJM* is used as the dependent variable as reported in Column (2), a one standard deviation increase in *External_AC_%* corresponds to a decrease in *AbsDA_PA-MJM* of 0.37 percent of total assets ($-0.035 \times 0.106 = -0.0037$).

External AC members seem to be able to provide independent and objective views in performing their duties. When their representation on the AC is higher, they seem to enjoy greater opportunities to pursue their monitoring agenda and, hence, ensure the integrity of financial statements. A stronger presence would provide them with a more significant voice, pushing their effort to exert effective monitoring of the firm's financial reporting practices. As the AC is meant to assist the SB in overseeing management, such a stronger presence enables the external AC members to effectively influence and strengthen the monitoring function of the SB. Given that Indonesia's institutional environment is relatively weak, a higher representation of external AC members seems to be advantageous in mitigating agency issues and information asymmetry.

External AC members might be invited to sit on the firm's AC due to their particular positive qualities, such as expertise and experiences. Such positive attributes would impact their effectiveness in exerting monitoring of the firm's financial reporting practices. However, the positive qualities might not be too meaningful when their representation is low. In such a situation, their voice and opportunities to influence the SB's monitoring agenda might be limited, thus preventing them from exercising effective oversight over the firm's financial reporting process.

Additionally, a stronger representation of external AC members is likely to represent a wider pool of expertise, hence strengthening their capacity in exercising the monitoring function. Indeed, a firm already has functions with financial expertise, such as the CFO and the internal audit unit, but they are not the firm's independent organs. It is likely that external AC members possess expertise that could not be accumulated internally as they are more exposed to developments outside the firm. Such a wider pool of expertise, complemented by a greater degree of independence, would enhance monitoring of the firm's financial reporting process; thereby effectively curtailing earnings management and enhancing financial reporting quality.

As Indonesia is—to the best of my knowledge—the only jurisdiction adopting such a unique AC composition requirement, my empirical result might not be directly comparable to that of prior AC studies, which are conducted using the setting of jurisdictions with a different AC composition requirement. Nevertheless, my result is relatively in line with much evidence from the existing literature that greater AC independence and expertise are positively associated with financial reporting quality.

With respect to control variables, a number of variables are found to be significant. *Leverage* is positive and significant at the 5 percent level in Column (1), suggesting that firms with higher financial leverage tend to engage in earnings management in order not to violate debt covenants (Chevis et al., 2002). *Sales_growth* is positive and marginally significant at the 10 percent level in Column (1), supporting the conjecture of Asbaugh-Skaife et al. (2008) that firms experiencing rapid growth are inclined to demonstrate lower-quality accruals, caused by “absorption costing distortions to income when inventory build-ups occur in anticipation of future sales growth” (p. 226). Additionally, *Sales_stdev* are positive and significant in both Columns (1) and (2), lending support to the argument that firms with higher variability in sales

are exposed to uncertainty in earnings, causing accruals to be harder to estimate (Dechow & Dichev, 2002).

Other variables are not significant in explaining either *AbsDA_MJM* or *AbsDA_PA-MJM*. For example, *Family* is found not to be significant, suggesting that family-controlled firms do not necessarily choose to engage in more aggressive earnings management. Additionally, *Big4* is also insignificant, implying that those audited by a Big-4 audit firm do not necessarily demonstrate a higher level of financial reporting quality compared to their peers audited by a non-Big-4 audit firm. Likewise, particular corporate governance mechanisms, namely AC size and board independence, demonstrate insignificant coefficients in both models. As such, the roles of these mechanisms seem not to be significant in constraining earnings management and enhancing financial reporting quality.

[Insert Table 3.3 about here]

3.4.2 *Difference-in-differences approach*

It is important to note that the finding from the baseline regression analysis does not address the causal effects of the proportion of external AC members on financial reporting quality. To mitigate such endogeneity concerns, I employ two identification strategies to test the causal effects of the representation of external AC members on financial reporting quality, namely the difference-in-differences and instrumental variable approaches.

As highlighted in Chapter 2, Indonesia's unique requirements for AC composition did not go unquestioned. The World Bank (2010), in its *Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment – Indonesia*, recommended that the AC should be required to have a majority of independent SB members, and outside experts (i.e., externally-appointed, independent individuals) should only serve on the AC in an advisory

role. Following the publication of The World Bank's report, the Indonesian capital market regulator issued a new regulation in December 2012, which came into effect in 2013. The regulation still required that the AC should be comprised of both independent SB members and external members, but it no longer specified the minimum numbers of AC members from each side. Hence, a listed firm could have an AC dominated by either independent SB members or external members.

Utilising a quasi-natural experiment, I employ the passage of the 2012 AC regulation as an exogenous event in the difference-in-differences analysis. I posit that such a regulation would drive some listed firms to change the composition of their AC, from the one previously dominated by external members into the one dominated by independent SB members. As the regulation came into effect in 2013, the sample period includes four financial years each before and after 2013. As such, I use the period 2009-2017 in the difference-in-differences analysis with 2,411 firm-year observations.

To investigate whether the proportion of external AC members affects financial reporting quality, I categorise the observations into two groups: those changing their AC composition by reducing the proportion of external AC members (*the treatment group*), and those that did not change their AC composition (*the control group*). For the difference-in-differences analysis, I estimate the following model:

$$AbsDA = \beta_0 + \beta_1 (Treatment_{i,t} \times Post_{i,t}) + \gamma X_{i,t} + Firm\ FE + Year\ FE + \varepsilon_{i,t} \quad (4)$$

where *Treatment* is an indicator variable, which equals to 1 if the firm is included in the treatment group, and 0 otherwise; *Post* is an indicator variable, which equals to 1 for firm-year observations in 2013 or afterwards, and 0 otherwise; and *X* represents control variables that are previously included in the OLS regressions. Similar to the baseline regressions, I incorporate firm and year fixed effects in the difference-in-differences analysis. Since firm and

year fixed effects are included in the model, I exclude the standalone variables *Treatment* and *Post* to avoid the multicollinearity problem.

The results of the OLS regressions demonstrate that the proportion of external AC members is positively associated with financial reporting quality. Under the framework of the difference-in-differences approach, it is expected that firms reducing the proportion of external AC members would demonstrate a lower level of financial reporting quality. Therefore, the coefficient of $Treatment \times Post$ in Equation (4) is expected to be positive and statistically significant.

The results of the difference-in-differences analysis are reported in Panel A of Table 3.4. In line with my expectation, using both measures of financial reporting quality as the dependent variables, the coefficient of $Treatment \times Post$ is found to be positive and significant. This suggests that, after the passage of the 2012 AC regulation, the financial reporting quality of firms in the treatment group (i.e., those reducing the proportion of external AC members) is significantly lower than that of their peers in the control group. This is consistent with the baseline result that the proportion of external AC members has a positive association with financial reporting quality. In other words, my result is consistent even after addressing the causal effects of the proportion of external AC members on financial reporting quality.

To ensure the validity of the difference-in-differences results, I perform a parallel trend assumption test, following the approach of Bertrand and Mullainathan (2003). Conducting such a test would enable me to ascertain that both treatment and control groups demonstrate a similar behaviour in the absence of the exogenous shock (i.e., prior to the implementation of the 2012 AC regulation). Panel B of Table 3.4 reports the results of the test. The variables of interest are interaction terms between *Treatment* and the financial years before 2013.

It could be seen that the results are consistent with the expectation. The coefficients of $Year2009 \times Treatment$, $Year2010 \times Treatment$, $Year2011 \times Treatment$, and $Year2012 \times Treatment$ are all insignificant in both columns. This suggests that, before the implementation of the 2012 AC regulation, there was a similar trend in financial reporting quality for both the treatment and control groups. This is different from interaction terms between *Treatment* and the period following the implementation of the regulation, where the coefficient of $Year2016 \times Treatment$ is found to be significant. This demonstrates that there was a diverging trend between the treatment and control groups after the 2012 regulation came into effect. To conclude, the results of the parallel trend assumption tests lend support to the expectation that treatment firms did not show any significant differences in financial reporting quality prior to the implementation of the regulation, but their financial reporting quality demonstrated a significant decrease afterwards.

[Insert Table 3.4 about here]

3.4.3 *Instrumental variable approach*

Another technique that could be used to address endogeneity problems is the instrumental variable approach, which is also used in the existing AC studies, such as Krishnan et al. (2011) and Bruynseels and Cardinaels (2014), among others. Employing such an approach, I would need to pick an instrument that is significantly associated with the proportion of external AC members but not directly related to financial reporting quality.

Following prior studies in the corporate governance literature (Jiraporn et al., 2015; Sheikh, 2018; Wen et al., 2020), I use the industry-average proportion of external AC members from year $t-1$ as the instrument. Changes in the proportion of external AC members at the industry-level are believed to be beyond one firm's control and, therefore, they are likely to be exogenous. The model estimated for the first-stage regression is:

$$External_AC_%_{i,t} = \beta_0 + \beta_1 Industry_mean_{i,t-1} + \gamma X_{i,t} + Firm\ FE + Year\ FE + \varepsilon_{i,t} \quad (5)$$

where $Industry_mean_{i,t-1}$ is the industry-average proportion of external AC members from year $t-1$; and X is a set of control variables which are used in the baseline regression analysis. Firm and year fixed effects are also included in the model.

The results of the IV analysis are displayed in Panel A of Table 3.5. Column (1) reports the estimation of the first-stage regression. Consistent with my expectation, the proportion of external AC members in the current year is positively and significantly associated with the industry-average proportion of external AC members in the previous year, indicating that the instrument meets the validity requirement. In Columns (2) and (3), I estimate the second-stage regressions. Consistent with those reported in Table 3.3, the results demonstrate that the proportion of external AC members is positively and significantly associated with financial reporting quality.

I further conduct a series of statistical tests to ensure that the instrument I use in the IV analysis is strong and valid, similar to those conducted by Bhagat and Bolton (2019). The results are reported in Panel B of Table 3.5. Firstly, based on Hausman (1978), I perform the Durbin-Wu-Hausman test in order to determine whether endogeneity affects my model. From two models with $AbsDA_MJM$ and $AbsDA_PA-MJM$ as the dependent variables, the Durbin test statistics are 6.74 (p -value < 0.01) and 3.85 (p -value < 0.05), respectively. Meanwhile, the Wu-Hausman F -statistic values using $AbsDA_MJM$ and $AbsDA_PA-MJM$ as the dependent variables are 6.70 (p -value < 0.01) and 3.83 (p -value < 0.10), respectively. These results suggest that endogeneity appears to be an issue in my models and, hence, the results of the IV approach are considered more efficient and consistent than those of the OLS analysis.

Secondly, I perform a number of tests to evaluate the strength of the instrument, namely the industry-average of the proportion of external AC members from the previous year. I first run

a weakness identification test suggested by Cragg and Donald (1993), from which I obtained the Cragg-Donald Wald F -statistic of 68.28, which is highly significant (p -value < 0.01). Next, I conduct a test for weak instruments suggested by Stock and Yogo (2004). This test reports critical values for the Cragg-Donald test statistic. The result shows that such critical values are well below the Cragg-Donald Wald F -statistic (68.28), suggesting that the instrument is strong. Separately, I conduct a test for weak instruments as suggested by Olea and Pflueger (2013). Consistent with the result of the Cragg-Donald test, I obtain the effective first-stage F -statistic of 68.28, effectively exceeding the critical values.

Finally, based on Kleibergen and Paap (2006), I run an under-identification test to determine whether the equation is appropriately identified and whether the instrument is sufficiently relevant (i.e., significantly correlated with the endogenous regressor). From such a test, the Kleibergen-Paap rk LM statistic is 58.33 (p -value < 0.01), suggesting that the models are appropriately identified and that the instrument is relevant. Hence, all these tests provide evidence that the instrument employed in the IV analysis is strong and that the potential weak instrument bias should not be a concern in the models.

[Insert Table 3.5 about here]

Overall, the abovementioned results confirm that the baseline findings are robust across different approaches, providing an assurance that they are not entirely influenced by endogeneity concerns. Moreover, the results from both the difference-in-differences and instrumental variable approaches indicate the existence of the causal effects of external AC members on financial reporting quality.

3.5 Cross-sectional analysis

In the cross-sectional analysis, I examine the roles of particular attributes in explaining the association between the proportion of external AC members and financial reporting quality. I put emphasis on five groups of attributes, namely the expertise and experience of external AC members, the presence of agency issues, external monitors, government influence, and other firm-level characteristics.

3.5.1 *Expertise and experience of external AC members*

Firstly, I specifically address two qualities of external AC members that are likely to enhance their oversight capacity, namely accounting expertise and experience (measured by tenure with the company as external AC members). It is likely that external AC members are invited by the firm to serve on the AC because of their expertise and experience, which would equip them with relevant skills, knowledge, or familiarity that are needed to assist the SB in monitoring the financial reporting process.

Indonesia's applicable AC regulation requires that at least one AC member should have accounting and financial expertise.³³ Hence, such expertise could be in the field of accounting or nonaccounting (e.g., finance, management, and economics). For the purpose of this cross-sectional analysis, similar to Krishnan et al. (2011), I put emphasis on the accounting expertise of external AC members as the main duties of the AC are mainly concerning oversight over the firm's financial reporting practices.

³³ Based on the comply-or-explain framework, the Sarbanes-Oxley Act of 2002 requires that at least one member of the AC must be a "financial expert". Further, the SEC (2003) decided to use the term "audit committee financial experts", which could be from either accounting or nonaccounting financial expertise. The U.K. Corporate Governance Code states that at least one member of the AC "should have recent and relevant financial experience". Meanwhile, the ASX Corporate Governance Principles and Recommendations state that the AC "should be of sufficient size and independence, and its members between them should have the accounting and financial expertise and a sufficient understanding of the industry in which the entity operates, to be able to discharge the committee's mandate effectively".

It is expected that when the presence of accounting experts among external AC members is stronger, they would be able to exert more effective monitoring, thereby constraining earnings management and strengthening financial reporting quality. Prior empirical studies have provided evidence that AC members' accounting expertise has a positive association with financial reporting quality (Bédard et al., 2004; Tanyi & Smith, 2015; Xie et al., 2003).

To examine the effects of accounting expertise on the external AC members-financial reporting quality nexus, I divide the sample into two subsamples, namely *firms with higher accounting expertise* (if the proportion of external AC members with accounting expertise is above the median) and *those with lower accounting expertise* (if the proportion of external AC members with accounting expertise is equal to or below the median). The results are reported in Panel A of Table 3.6.

Using both measures of financial reporting quality, the coefficients of *External_AC_%* are of a higher magnitude for the subsample of *higher accounting expertise*; with the difference in *External_AC_%* between the two subsamples being significant at the 5 percent level when using *AbsDA_MJM* as the dependent variable. This suggests that the positive association between the proportion of external AC members and financial reporting quality is more pronounced in firms with a stronger presence of accounting experts among their external AC members. Lending support to my expectation, when external individuals with accounting expertise are invited to serve on the AC, they would be able to perform their oversight roles more effectively. Such expertise appears to be the relevant skills needed to oversee the firm's financial reporting practices, hence enhancing monitoring and promoting better financial reporting quality.

In addition to accounting expertise, experience appears to be another attribute that enhances the monitoring capacity of external AC members. Even though there are a variety of measures

in the literature to proxy for AC members' experience, I put emphasis on the tenure (i.e., length of service with a firm) of external AC members.

On the one hand, it is believed that AC members with longer tenure would provide benefits to the oversight agenda in the sense that they already accumulate firm-specific expertise as well as knowledge of the firm's business environment and financial reporting. With such knowledge and better understanding, they can identify risks in the financial reporting process and thus challenge the executives (Sharma & Iselin, 2012). Having built career portfolio and experience for a certain period of time, they might be concerned about their reputation, driving them to perform better (DeZoort, 1998). Prior studies have also provided empirical evidence of the positive association between AC members' tenure and their monitoring effectiveness, including Bédard et al., (2004), Yang and Krishnan (2005), and Dhaliwal et al. (2010).

On the other hand, it is also possible to presume that AC members with longer tenure might not be able to perform effective monitoring of management. Such a longer period of time working with the firm could lead them to develop social ties with management, which in turn compromise their independence and oversight functions (Sultana et al., 2019). Sharma and Iselin (2012) find that the tenure of AC members is positively associated with the likelihood of financial misstatements. Additionally, Bruynseels and Cardinaels (2014) reveal that social ties between AC members and the CEO are negatively associated with financial reporting quality.

To investigate whether longer tenure enhances or reduces the monitoring effectiveness of external AC members, the sample is again split into two subsamples based on the average tenure of their external AC members. The *longer tenure* subsample represents firms whose average tenure of external AC members is above the median, while the *shorter tenure* subsample is comprised of those whose average tenure of external AC members is equal to or below the median.

Panel B of Table 3.6 reports the results. The coefficients of *External_AC_%* show higher levels of magnitude and significance in the *longer tenure* subsample, with the difference in *External_AC_%* between the two groups being significant at the 10 percent level. This suggests that the positive association between the proportion of external AC members and financial reporting quality is stronger for firms whose external AC members have longer average tenure. This seems to imply that deeper knowledge and a better understanding of the firm's financial reporting system, which could be acquired as the tenure progresses, substantially matter in explaining external AC members' monitoring effectiveness. External members who just join a firm's AC might need more time to learn and familiarise themselves with their new workplace's business environment, thereby affecting the quality of their oversight functions.

3.5.2 Agency issues

Further, I also examine whether agency issues due to the presence of ownership concentration and family control would impact the monitoring effectiveness of external AC members. As previously reported in Table 3.2, ownership concentration among the Indonesian listed firms tends to be high, with the average proportion of shares owned by the largest shareholder being 50.2 percent. On the one hand, a high level of ownership concentration aligns the interests of managers and the controlling shareholder. On the other hand, such a phenomenon would provide the controlling shareholder with opportunities to extract private benefits at the expense of minority shareholders (Shleifer & Vishny, 1997).

Considering the presence of such agency costs, I investigate whether ownership concentration strengthens or impedes the monitoring effectiveness of external AC members. Prior empirical research has indicated that ownership concentration could affect the monitoring functions of certain corporate governance mechanisms. For example, Jaggi et al. (2009) find that ownership concentration weakens the monitoring effectiveness of independent board members.

In this analysis, to address the role of ownership concentration, the sample is partitioned into two subsamples, namely *firms with higher ownership concentration* (i.e., those with the proportion of shares owned by the largest shareholder above the median) and *those with lower ownership concentration* (i.e., those with the proportion of shares owned by the largest shareholder equal to or below the median).

From the results presented in Panel C of Table 3.6, the coefficients of *External_AC_%* are of higher magnitude and significance for the *lower ownership concentration* subsample, while the difference in *External_AC_%* between the two subsamples is significant at the 1 percent level. The results suggest that the positive association between the proportion of external AC members and financial reporting quality is more pronounced in firms with a low level of ownership concentration. It seems that a high level of ownership concentration creates a challenging environment for external AC members to exercise their monitoring duties. They might face limited opportunities to challenge management and oversee the firm's financial reporting practices. In contrast, when the firm's ownership structure is less concentrated, external AC members seem to enjoy more opportunities to effectively exercise their monitoring duties, resulting in less aggressive earnings management and higher-quality financial reporting.

In terms of family control, the summary statistics provided in Table 3.2 has indicated that the majority of my sample firms are family-controlled. The concentration of ownership in the hands of the controlling family, while aligning the interests of managers and the controlling shareholder, could lead to exacerbating the Type II agency problems. Prior studies have documented that family control is associated with a greater magnitude of earnings management (Setia-Atmaja et al., 2011), less voluntary disclosure (Chen et al., 2008), and a lower likelihood of hiring higher-quality auditors (Ho & Kang, 2013). Additionally, Jaggi et al. (2009) provide

evidence that the monitoring effectiveness of independent directors is compromised when family control exists.

I report the results in Panel D of Table 3.6. The sample is divided into *family-controlled* and *non-family-controlled firms*. It is found that the positive association between the proportion of external AC members and financial reporting quality is stronger for non-family-controlled firms. In such firms, external AC members seem to be provided with greater opportunities as an effective oversight tool over the firm's financial reporting process, thereby mitigating earnings management and improving financial reporting quality. The results suggest that family control weakens the favourable effects of external AC members on financial reporting quality. When family control is present, external AC members seem not to be able to pursue their monitoring agenda as effectively as their peers in non-family-controlled firms.

3.5.3 *External monitors*

Next, I seek to examine whether external monitors, which are supposed to be able to promote the implementation of good corporate governance practices, have a substantial role in explaining the relationship between the proportion of external AC members and financial reporting quality. Based on prior research, I address two types of external monitors in this analysis, namely institutional and foreign shareholders.

It has been widely suggested in the literature that institutional investors would promote better monitoring and corporate governance practices, hence alleviating the existing agency issues. Tihanyi et al. (2003) suggest that institutional investors tend to have greater incentives to monitor the firm's management, supported by their resources and expertise. Additionally, it is also found that institutional investors promote better corporate governance practices worldwide (Chung & Zhang, 2011). Other empirical studies have provided evidence that institutional

investors are associated with stronger voluntary disclosures (Karamanou & Vafeas, 2005) and higher earnings quality (Velury & Jenkins, 2006).

Drawing on such findings and insights, the presence of strong institutional ownership is expected to encourage external AC members to exert effective monitoring of financial reporting practices. Pucheta-Martínez and García-Meca (2014) suggest that institutional investors contribute to enhancing the monitoring effectiveness of the AC, leading to better financial reporting quality and a lower likelihood of receiving a qualified audit report.

I partition the sample into two subsamples, namely *firms that have institutional blockholders* and *those that do not*.³⁴ The results, as displayed in Panel E of Table 3.6, demonstrate that *External_AC_%* is of a higher magnitude for firms with institutional blockholders. Thus, the positive association between external AC members and financial reporting quality is more pronounced when there is institutional blockholder ownership. This implies that external AC members are likely to exercise effective monitoring in the presence of institutional blockholders. In other words, this seems to suggest that institutional blockholders promote better corporate governance practices and encourage external AC members to effectively execute their oversight functions, hence minimising earnings management and improving financial reporting quality.

A substantial proportion of the Indonesian listed firms are controlled by foreign-based entities or individuals. Foreign investors play an important role in emerging markets due to their contributions in terms of the supply of capital, the spillover of technology and managerial skills, and the improvement of market efficiency (Bekaert & Harvey, 2000). Further, prior

³⁴ Listed companies on the IDX are only required to disclose their shareholders that hold at least 5 percent of outstanding shares. Hence, such a disclosure requirement does not enable me to identify all institutional shareholders that own a firm's shares. Therefore, I only address institutional shareholders with share ownership of 5 percent or larger. This is similar to Knyazeva et al. (2013), which also use the proportion of institutional blockholders' shareholdings to proxy for institutional ownership.

studies also provide evidence that foreign ownership promotes better governance practices, such as emphasis on the appointment of outside directors (Min & Bowman, 2015), enhancing information disclosure (Barako et al., 2006), and restraining earnings management (Kim et al., 2016).

Whether the monitoring role of external AC members is enhanced or diminished, when foreign control is present, is an interesting issue to explore. Investigating the monitoring effectiveness of the board of directors, Desender et al. (2016) suggest that board monitoring is more effective when foreign ownership is higher. Additionally, Ahmed and Iwasaki (2021) find that foreign shareholders improve monitoring of the firm's management.

Two subsamples are formed: *foreign-controlled* and *non-foreign-controlled firms*. The results are provided in Panel F of Table 3.6. *External_AC_%* is found to be more positively associated with financial reporting quality in foreign-controlled firms. This implies that, in the presence of foreign control, external AC members enjoy greater opportunities to exercise their scrutiny on the firm's financial reporting practices, hence aggressive earnings management could be mitigated. Such an advantage seems to be less prevalent in non-foreign-controlled firms, which are mostly family-controlled. In such firms, the influence from the controlling shareholder or managers might be more dominant, leading to less effective monitoring by external AC members.

3.5.4 *Government influence*

Over the past two decades, an increasing number of government-controlled firms (i.e., national state-owned enterprises (SOEs), local SOEs, and their subsidiaries) have been made publicly listed on the Indonesian equity market. Whether such firms really promote better corporate governance practices and financial reporting quality is another interesting question. On the one hand, listed SOEs have usually undergone a long process of corporatisation, sometimes going

through a major overhaul and transformation of their business operations. As argued by Schipani and Liu (2002), sound corporate governance is a prerequisite for the success of corporatisation reforms. Moreover, such firms are now subject to more stringent corporate governance regulations for listed companies, which make them likely to have better corporate governance quality than their unlisted counterparts. Addressing government ownership in Chinese SOEs, Liu et al. (2015) find that government control enhances the monitoring effectiveness of independent board members.

On the other hand, since the majority of their shares are in the hands of the controlling shareholder (i.e., central or local governments), such firms are still prone to the Type II agency problems. This is particularly prevalent in a weak institutional environment, where the controlling shareholder may still pursue benefits from its informational advantage, amplified by less emphasis on transparency and accountability (Carney et al., 2020). Moreover, there is evidence that listed SOEs are likely to engage in earnings management (Chen et al., 2008). Hence, in the context of external AC members in listed SOEs, they might face limited opportunities to exercise effective scrutiny on the financial reporting process.

To test these competing propositions, I set up two subsamples, namely *government-controlled* and *non-government-controlled companies*. Panel G of Table 3.6 presents the results. I find that the coefficients of *External_AC_%* are of higher magnitude and significance for the *non-government-controlled* subsample. Thus, the positive association between the proportion of external AC members and financial reporting quality is more pronounced when government control is not present, indicating that external AC members could more effectively exercise scrutiny on financial reporting practices without considerable pressure from either management or the controlling shareholder. In contrast, external AC members in listed SOEs seem to gain

fewer chances to be able to exert effective monitoring and challenge the firm's management in the financial reporting process.

To examine the role of government influence, I also address another attribute in addition to government control, namely government connections. Government influence might come not only in the form of government ownership but also in the presence of government-connected individuals in the firm's key positions. The sample is divided into two subsamples, namely *government-connected* and *non-government-connected firms*.³⁵ The results are provided in Panel H of Table 3.6.

It could be seen that the number of government-connected firms is larger than government-controlled firms, indicating that government senior officials, either active or retired, are holding board seats in SOEs and non-SOEs alike. The results are relatively similar to the subsampling based on the presence of government control. The coefficients of *External_AC_%* show a higher magnitude in the *non-government-connected* subsample. As such, the positive association between the proportion of external AC members and financial reporting quality is more prominent when government connections are not present, indicating that government connections diminish the positive effects of external AC members on financial reporting quality.

3.5.5 *External auditor quality*

External audits appear to be an external monitoring tool that could help ensure the integrity of financial statements and reduce information asymmetry (Imhoff, 2003; Jensen & Meckling,

³⁵ I identify whether a firm has government connections by looking at the profile of its board members as disclosed in the annual report. A firm is considered government-connected when at least one of its board members are active or retired senior officials of the Indonesian government, either in the national- or local-level.

1976). Providing independent verification of the firm's financial statements, external audit services should be delivered with sufficient quality. Audit quality indicates the ability of the external auditor to detect material misstatements in the firm's financial information (DeAngelo, 1981). Prior studies have suggested that higher-quality external auditors are likely to have a corporate governance or monitoring role, especially in weaker institutional environments (Choi & Wong, 2007; Fan & Wong, 2005; Verriest, 2014).

As widely used in the extant literature, I use Big-4 audit firms to indicate higher-quality auditors. Many studies have revealed that audit firm size is positively associated with financial reporting credibility (DeAngelo, 1981; Eshleman & Guo, 2014; Francis & Yu, 2009; Khurana & Raman, 2004). The results are presented in Panel I of Table 3.6, where the sample is split into *Big-4-audited* and *non-Big-4-audited firms*.

Interestingly, it is found that the positive association between the proportion of external AC members and financial reporting quality is more pronounced in firms audited by non-Big-4 audit firms. This implies that in firms with a Big-4 auditor, external audits seem to become a substitute for the monitoring role of external AC members. In such a situation, the oversight function of external AC members might not materialise. Otherwise, when a Big-4 auditor is not present, the role of external AC members in exercising their oversight functions becomes stronger, leading to their increased effectiveness in promoting better financial reporting quality.

3.5.6 *Financial distress*

Another firm-level attribute that I examine is the magnitude of financial distress. Firms with higher financial distress are considered high-risk and are closer to bankruptcy. There are empirical findings from prior studies that such firms are likely to engage more in accruals-based earnings management (Jacoby et al., 2016; Li et al., 2020). Further, Carcello and Neal

(2003) document that financial distress significantly explain the effects of AC independence on the going-concern disclosure.

The sample firms are thus partitioned into two subsamples, namely *firms with lower financial distress* and *firms with higher financial distress*. Firms are considered in lower financial distress if their Altman's Z-score is above the median, and in higher financial distress if their Altman's Z-score is equal to or below the median.³⁶

The results are provided in Panel J of Table 3.6. It is found that the positive association between external AC members and financial reporting quality is stronger for firms *with higher financial distress*. This implies that when the firm's financial condition is considered risky, external AC members tend to exercise more effective monitoring functions, hence enhancing the quality of financial statements. In contrast, when the firm's financial condition is stable, the monitoring role of external AC members does not materialise, thus diminishing the advantageous impacts of external AC members on financial reporting quality.

[Insert Table 3.6 about here]

³⁶ The Altman's Z-score, which measures the chances of bankruptcy (Altman, 1993), is computed using the following formula:

$$Z = 1.2 (WC) + 1.4 (Ret_earn) + 3.3 (EBIT) + 0.6 (MVE/TL) + 1.0 (Sales)$$

where Z is the Altman's Z-score; WC is working capital divided by total assets; Ret_earn is retained earnings divided by total assets; $EBIT$ is earnings before interest and taxes divided by total assets; MVE/TL is the market value of equity divided by total liabilities; and $Sales$ is sales revenue divided by total assets. The lower the Z-score, the higher the probability of going bankrupt.

3.6 Sensitivity and further analyses

3.6.1 Sensitivity analysis

Next, I conduct several sensitivity analyses to ensure the robustness of my baseline results. *Firstly*, I employ alternative measures of discretionary accruals. Panel A of Table 3.7 reports the results. Instead of using the absolute value of discretionary accruals, I use the actual (i.e., signed) value of discretionary accruals in this analysis. Additionally, I put emphasis on positive discretionary accruals as firms are inclined to overstate, rather than understate, their earnings (Becker et al., 1998).

The dependent variable in Columns (1) and (2) is the actual value of discretionary accruals (based on the modified Jones model and the performance-adjusted modified Jones model, respectively), set to zero if the actual value of discretionary accruals is negative. Meanwhile, the dependent variable in Columns (3) and (4) is dichotomous, which equals to 1 if the actual value of discretionary accruals (based on the modified Jones model and the performance-adjusted modified Jones model, respectively) is larger than 2 percent of total assets and 0 otherwise. I re-run the regression model in Equation (3) using the new dependent variables. In all columns, the coefficients of *External_AC_%* are negative and significant. Hence, these results are consistent with the finding of the baseline regressions that a stronger presence of external AC members confers benefits to financial reporting quality.

Secondly, as reported in Panel B of Table 3.7, I use alternative measures of the representation of external AC members. In Columns (1) and (2), I replace the *proportion* of external AC members with the *number* of external AC members (*External_AC_#*). *External_AC_#* is significant in both Columns (1) and (2) at the 1 and 5 percent levels, respectively. This again supports the conjecture that a stronger presence of externally-appointed members on the AC would contribute to enhancing the committee's oversight efficacy and thus improving financial

reporting quality. A larger number of external AC members seem to represent a wider pool of expertise and experience, thereby enhancing monitoring effectiveness (Van den Berghe & Levrau, 2004).

Further, in Columns (3) and (4), I use *ExternalAC_Dum50* as the independent variable of interest. This is an indicator variable, which equals to 1 if the proportion of external AC members is larger than 50 percent and 0 otherwise. Meanwhile in Columns (5) and (6), the main independent variable is *ExternalAC_Dum67*, which equals to 1 if the proportion of external AC members is larger than 66.67 percent and 0 otherwise. The coefficients of *ExternalAC_Dum50* and *ExternalAC_Dum67* are all negative and significant. These results once again support the notion that the monitoring effectiveness of external AC members is likely to improve when their representation on the AC is stronger.

Thirdly, I again estimate the baseline regression model, but now observations from the period of the global financial crisis (i.e., the financial years 2007 and 2008) are excluded from the sample. During the global crisis, which also hit the Indonesian economy and financial markets, firms are likely to demonstrate different patterns and behaviour in terms of performance and financial reporting, hence potentially bringing about noisy impacts on the baseline analysis. The results are displayed in Panel C of Table 3.7. Consistent with the baseline results, the coefficients of *External_AC_%* in both columns are negative and significant. Hence, the baseline results are robust even after ruling out the potential impacts of economic downturns due to the global financial crisis.

[Insert Table 3.7 about here]

3.6.2 *External AC members and audit quality*

In the main analysis, my focus is on the effects of the proportion of external AC members on monitoring effectiveness, as proxied by financial reporting quality. I further expand the analysis by examining the association between external AC members and audit quality. One of the AC's duties is overseeing the hiring of the firm's external auditor. The AC liaises with the external auditor and discusses such matters as the audit scope and audit planning. Given such responsibilities, the AC might have a significant impact on audit quality.

Audit fees appear to be a widely used proxy in the literature to measure audit quality. It could be argued that when the auditor charges higher audit fees, its audit coverage and scope would be more expansive, thereby enhancing audit quality. An effective AC is likely to demand that greater audit effort be carried out by the external auditor, resulting in higher audit fees. Another possible explanation is that the auditor charges higher audit fees because it assesses the firm as a high-risk one, thereby greater audit effort is needed (Carcello et al., 2011). Prior empirical studies have provided evidence of the positive association between AC quality attributes (including independence and expertise) and audit fees, such as Abbott et al. (2003) and Ghafran and O'Sullivan (2017).

However, the relationships among corporate governance elements could sometimes be complex (Carcello et al., 2011). There is a notion that external audits as a monitoring tool might be substituted by other internal or external mechanisms. As such, in the presence of other effective control tools, demand for additional assurance from the external auditor might diminish, resulting in lower audit effort and audit fees. An alternative explanation is that when there is a strong internal monitoring mechanism, auditors determine the firm as low risk, leading to lower audit effort and audit fees (Carcello et al., 2011).

Several studies have provided empirical evidence supporting such a notion. For example, Boo and Sharma (2008) examine whether stringent regulatory oversight substitutes the external audit as a monitoring tool and find that board or AC independence and audit fees are negatively associated in regulated firms compared to their non-regulated peers. Additionally, there is also evidence of the negative association between AC expertise and audit fees (Krishnan & Visvanathan, 2009).

Using the setting of Indonesia, where AC composition requirements are remarkably unique, whether external AC members are associated with audit quality is an interesting empirical question. I perform a further test to address the association between the proportion of external AC members and audit fees. The results are presented in Table 3.8. The dependent variable is the natural logarithm of audit fees paid by the firm (*Audit_fees*). It is important to note that the disclosure of audit fees by the Indonesian listed firms is not particularly strong. A significant portion of my sample firms did not disclose audit fees in their annual reports. Out of 4,646 firm-year observations in my baseline sample, there are only 1,460 observations usable for this analysis.

The coefficient of *External_AC_%* is found to be negative and significant, albeit marginally at the 10 percent level, suggesting that there is a negative relation between the proportion of external AC members and audit fees. This result implies that when the presence of external AC members is stronger, they can act as an effective monitoring tool, thereby ensuring the integrity of financial statements and demanding less effort from the external auditor. From the perspective of the supply side, the auditor might determine firms with a stronger representation of external AC members as low-risk firms, leading to lower audit fees. As such, this supports the notion that there are substitution roles among corporate governance elements. Demands for

wide-coverage audits no longer persist when an effective oversight function has been exercised by internal monitoring mechanisms, including external AC members.

[Insert Table 3.8 about here]

3.6.3 *External AC members and real earnings management*

In the main analysis, I employ accruals-based earnings management (*AbsDA_MJM* and *AbsDA_PA-MJM*) as a measure of financial reporting quality. In the existing literature, researchers have increasingly paid attention to real earnings management, as a proxy for earnings quality, and examined whether it is significantly influenced by the firm's governance structure. As defined by Roychowdhury (2006), real earnings management is "management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain earnings thresholds" (p. 336). Sultana et al. (2020) stress that real earnings management is conducted based on real activities rather than accounting policies, hence it tends to be overlooked by the auditor's scrutiny.

Given the above circumstances, the AC as an internal monitoring mechanism should be able to effectively curtail the magnitude of real earnings management (Laux & Laux, 2009). The existing empirical research has provided evidence of the association between board or AC characteristics and real earnings management. For instance, Cheng et al. (2016) reveal that board independence is effective in constraining real earnings management, especially after the passage of the Sarbanes-Oxley Act of 2002. A similar finding is revealed by Osma (2008) using a sample of U.K. firms.

It would be interesting to examine whether external AC members have the same effects on both measures of earnings management. Hence, I further investigate the association between the proportion of external AC members and real earnings management. I adopt the real earnings

management models developed by Roychowdhury (2006) in this analysis. The abnormal levels of cashflows from operations, production cost, and discretionary expenses are used as proxy measures of real earnings management. I estimate the following cross-sectional regressions to compute the *normal* levels of cashflows from operations, production cost, and discretionary expenses for each industry and year:

$$\frac{CFO_{i,t}}{Assets_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{Assets_{i,t-1}} \right) + \alpha_2 \left(\frac{Sales_{i,t}}{Assets_{i,t-1}} \right) + \alpha_3 \left(\frac{\Delta Sales_{i,t}}{Assets_{i,t-1}} \right) + \varepsilon_{i,t} \quad (6)$$

$$\frac{ProdCost_{i,t}}{Assets_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{Assets_{i,t-1}} \right) + \alpha_2 \left(\frac{Sales_{i,t}}{Assets_{i,t-1}} \right) + \alpha_3 \left(\frac{\Delta Sales_{i,t}}{Assets_{i,t-1}} \right) + \alpha_4 \left(\frac{\Delta Sales_{i,t-1}}{Assets_{i,t-1}} \right) + \varepsilon_{i,t} \quad (7)$$

$$\frac{DiscExp_{i,t}}{Assets_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{Assets_{i,t-1}} \right) + \alpha_2 \left(\frac{Sales_{i,t}}{Assets_{i,t-1}} \right) + \varepsilon_{i,t} \quad (8)$$

where $CFO_{i,t}$ is cashflows from operations in year t ; $ProdCost_{i,t}$ is production cost, computed as the sum of cost of goods sold and the change in inventory, in year t ; $DiscExp_{i,t}$ is discretionary expenses, computed as the sum of advertising expenses, research and development expenses, and selling, general, and administrative expenses, in year t ; $Assets_{i,t-1}$ is total assets in year $t-1$; $Sales_{i,t}$ is sales revenue in year t ; $\Delta Sales_{i,t}$ is the change in sales revenue from year $t-1$ to year t ; and $\Delta Sales_{i,t-1}$ is the change in sales revenue from year $t-2$ to year $t-1$. The abnormal levels of cashflows from operations, production cost, and discretionary expenses are obtained from residuals after estimating the models of Equations (6), (7), and (8), respectively. As suggested by Cohen et al. (2008), firms that engage in income-increasing real earnings management are likely to have abnormally low levels of cashflows from operations, abnormally high levels of production cost, or abnormally low discretionary expenses.

I re-run regressions in the baseline analysis and replace the dependent variables with the three measures of real earnings management. The results are reported in Table 3.9. In all three columns, *External_AC_%* is found to be insignificant in explaining the indicators of real

activities manipulation. This seems to suggest that external AC members appear to be an effective monitoring tool when dealing with accruals-based earnings management, which is accounting policies-based rather than real activities-based. Exercising their monitoring function based on their expertise and skills, external AC members seem to be more concerned about the firm's choice of accounting policies and principles.

[Insert Table 3.9 about here]

3.7 Additional analysis: The roles of political and military connections

In this additional analysis, I examine the influences of connections with “powerful” figures maintained by companies on the association between external AC members and financial reporting quality. Specifically, I investigate the roles of both political and military connections among the Indonesian listed firms.

Companies might pursue their business interests by, among others, building networks and close connections with prominent figures in politics. Faccio (2006) suggest that political connections tend to be more prevalent in markets with weaker institutional environments and legal systems. In the context of Indonesia, it has been documented that the prevalence of political connections among the Indonesian listed firms is relatively high (Fisman, 2001; Habib et al., 2017). Additionally, in terms of military connections, the Indonesian military is believed to have a strong influence in both political and economic affairs. The Indonesian listed firms may choose to build close connections with senior military figures in the pursuit of their business interests (Harymawan, 2020).

On the one hand, there are various economic benefits that could be gained by firms from such political connections, such as access to lenders (Boubakri et al., 2012; Faccio, 2006), lower

cost of capital (Houston et al., 2014), government contracts, and favourable regulations (Goldman et al., 2009). Other studies have documented that firms also build connections with prominent figures from military. There are findings that military connections are positively associated with conservative investment policies and ethical behaviour (Benmelech & Frydman, 2014), government contracts, and access to lenders (Lowry, 1996; Mietzner & Misol, 2012).

On the other hand, being connected with political or military figures does not come without costs. The pursuit of connections may lead to the expropriation of the firm's resources at the expense of minority shareholders. It has been documented that firms with political connections tend to undertake overinvestments (Su et al., 2013), demonstrate higher agency costs (Khan et al., 2016), face a lower level of scrutiny (Faccio, 2006; Kroszner & Stratmann, 1998), pursue tax avoidance (Kim & Zhang, 2016), and engage in earnings management (Braam et al., 2015; Chaney et al., 2011; Li et al., 2016; Wang et al., 2018). Other studies demonstrate that firms with military connections tend to hire lower-quality auditors (Harymawan, 2020) and engage in earnings management (Lai et al., 2021).

Furthermore, as documented in prior studies, the presence of political and military connections could affect the monitoring effectiveness of certain corporate governance mechanisms. For example, addressing the context of an emerging market, Bliss et al. (2011) suggest that the monitoring role of independent AC members is compromised when political connections exist. They find that there is a positive association between AC independence and audit quality, and such an association is weaker for politically-connected firms. Similarly, Chen et al. (2016) document that the positive association between analyst coverage—one of the external governance mechanisms—and financial reporting quality is stronger when there are no political connections.

The results of my analysis are reported in Panels A and B of Table 3.10. Observations are divided into two subsamples based on the presence of political and military connections.³⁷ It is found that a stronger association between external AC members and financial reporting quality is present in firms *without* political or military connections. This indicates that external AC members appear to be an effective oversight tool when there are no such connections, which could potentially exert influence on their monitoring role. Thus, such external AC members are more likely to be able to detect earnings management and improve financial reporting quality. Meanwhile, in politically- or military-connected firms, it seems that a greater influence from such powerful connections hinders external AC members from effectively performing their duties, resulting in insignificant effects on financial reporting quality.

[Insert Table 3.10 about here]

3.8 Conclusion

As a board committee, the AC is expected to become an effective internal corporate governance mechanism to ensure the integrity of financial statements. Over the past two decades, it has increasingly become one of the key components given emphasis in various corporate governance reforms worldwide. While it is very commonly found in many jurisdictions

³⁷ In identifying whether a firm is politically connected, my approach is similar to previous Indonesian studies that examine political connections among the country's listed firms, such as Harymawan and Nowland (2016), Habib et al. (2017), Arifin et al. (2020), and Joni et al. (2020). From each board member, I search information on his or her political activities using various sources such as publicly-available government documents, government agency websites, and the Internet search engine. A firm is considered politically connected when at least one of its board members has political experience or backgrounds, which include current or former ministers, deputy ministers, national parliament members, local parliament members, heads of local governments (governors, mayors, or regents), senior officials of political parties, and those related to such figures. While in identifying the military connection of a firm, I use an approach similar to Harymawan (2020). A firm is considered military connected when at least one of its board members has military experience or backgrounds, which include current or former officials in the Indonesian army, navy, air force, and police. The percentages of politically- and military-connected firms in my sample are 21 percent and 17 percent, respectively.

globally that the AC is comprised exclusively of board members, Indonesia's AC regime is remarkably unique, influenced by the country's fragile institutional environment as well as its nature of reforms post-Asian financial crisis. The applicable AC regulation in Indonesia requires that the AC should consist of both independent board members and externally-appointed (i.e., non-board) members.

In this chapter, I exploit such a distinctive requirement by examining the effects of external AC members on financial reporting quality. I employ a relatively large, hand-collected corporate governance data set comprising 4,646 firm-year observations across the period 2004-2019. I find that there is a negative association between the proportion of external AC members and the absolute values of discretionary accruals, suggesting that firms with a stronger presence of external AC members engage less in earnings management. This implies that such external AC members are likely to become an effective monitoring tool of the financial reporting process, resulting in better financial reporting quality.

As the baseline OLS results could be prone to endogeneity problems, I use two identification methods, namely the difference-in-differences and instrumental variable approaches. *First*, in the difference-in-differences analysis, a quasi-natural experiment is employed. I choose the passage of an AC regulation issued in 2012, which allowed listed firms to have an AC dominated by either independent SB members or external members, as an exogenous event. I find that firms choosing to reduce the proportion of their external AC members exhibit lower financial reporting quality following the implementation of the 2012 regulation. *Second*, employing the instrumental variable approach in the framework of the 2SLS regression, I find that the positive association between the proportion of external AC members and financial reporting quality persists. Hence, my results are robust even after addressing such endogeneity concerns.

Further in the cross-sectional analysis, I examine the roles of certain firm-level attributes in explaining the relation between external AC members and financial reporting quality. I find that the accounting expertise and tenure of external AC members enhance their effectiveness in overseeing the firm's financial reporting process, confirming the beneficial roles of the two attributes in promoting better financial reporting quality. With regard to agency issues, the positive association between external AC members and financial reporting quality is more pronounced in firms with less ownership concentration and family control, indicating that high ownership concentration and family control impede the favourable monitoring effects of external AC members. The cross-sectional analyses also reveal that the positive association between external AC members and financial reporting quality is more pronounced in firms with stronger external monitors (i.e., institutional blockholders and foreign control), lesser government influence, lower external auditor quality, and higher financial distress.

I expand the main analysis by examining whether external AC members have a significant effect on audit fees, which are widely used in the literature as a measure of audit quality. I provide evidence that the association between the proportion of external AC members and audit fees is negative, albeit marginally significant. This finding suggests that a stronger presence of external AC members becomes a substitute for external audits as a monitoring tool, reducing demands for additional audit scope and effort and thus lowering audit fees. Finally, the effect of external AC members on real earnings management is also investigated. Using three measures of real earnings management, I find that the effects are all insignificant. This indicates that external AC members are more focused on the firm's choice of accounting policies and principles, making them a less effective oversight tool in curtailing real earnings management.

This study extends the existing AC literature and provides insights on the role of AC composition in enhancing financial reporting quality. It is important to note that all prior

empirical studies are conducted using the settings where the AC shall be comprised entirely of board members, which is not the case in Indonesia. Hence, I offer the first evidence of the monitoring efficacy of AC members who are outsiders (i.e., not board members) in a jurisdictional setting that mandates the AC to invite such outsiders to serve on the committee. Nevertheless, this study is focused on the effectiveness of their oversight function over the financial reporting process. Hence, their monitoring roles related to other aspects (such as compliance with applicable regulations, engagement with the external auditor, relations with the boardrooms, and relations with other monitoring elements) become interesting avenues to be explored further. With regard to the job market, future studies could consider examining the career prospects and employment turnover of external AC members.

Importantly, the results of this study also bring about practical implications, which is believed to be of interest for the Indonesian regulator. This is particularly true when the mandate to invite externally-appointed members to join the AC has come into question since over a decade ago. In 2010, The World Bank recommended that the majority of AC members should be independent board members, and outside experts (i.e., externally-appointed individuals) should only serve in an advisory role. Partially taking such a consideration into account, the regulator passed the 2012 AC regulation. Both independent board members and external members are still required to be present on the AC, but the minimum numbers from each side were no longer determined by the new regulation.

On the one hand, given the SB's relatively limited capacity in overseeing the firm's financial reporting practices, it seems that the presence of external AC members is still needed to assist the board. It has been acknowledged that SB members of the Indonesian listed firms frequently come from diverse backgrounds, including the members of the controlling family, politicians, and retired military officers, with no sufficient knowledge and expertise on financial reporting

and auditing. Additionally, there were also scepticisms among market participants that SB members could effectively oversee the financial reporting process without the assistance of outside experts. As such, maintaining market confidence would be challenging if outside members are absent on the AC. This chapter confirms the notion on the monitoring effectiveness of external AC members, providing evidence that a stronger presence of externally-appointed members on the AC confers benefits to financial reporting quality.

On the other hand, The World Bank has provided recommendations to the Indonesian regulator that requirements for AC composition should be brought closer to the internationally common practice. Board committees, which are meant to assist the SB in advising and monitoring the executives, should ideally be comprised of board members. In such a case, SB members—including independent ones—are expected to play a leading role and bear full responsibility for decisions made by the board. They could still consult and seek advice to outside experts, but responsibility for such decisions should remain being borne by the board itself.

If the country's AC composition mandate is to be made in line with the internationally common practice (i.e., all AC members should be from the board), a number of issues relating to the specific institutional environment need to be taken into account. It seems to be challenging to introduce significant changes to the existing corporate governance regulations. For example, if an AC being comprised solely of SB members is to be made mandatory, then SB members serving on the committee would need to be required to possess a certain extent of accounting and financial expertise. The regulator seems to avoid immediately imposing "tougher" requirements as it could be costly especially for smaller and lower-profile firms.

Given the low-speed nature of the Indonesian corporate governance reforms, the existing mandate on AC composition might remain in place for the foreseeable future. The country's capital market regulator seems to need some time to respond to the recommendation provided

by The World Bank. Before an international practice-based regulation could be made into effect at a particular point in the future, external AC members could be expected to fill the niche by effectively assisting the board and exercising oversight functions, thereby ensuring that financial statements are delivered with a highest possible quality.

Furthermore, my empirical results also provide implications for the regulator with regard to its scrutiny on the financial reporting process of listed firms. It seems that the regulator needs to consider paying more attention to firms with a weaker presence of external AC members and encourage improvements in monitoring functions conducted by such external members. Further, the regulator could more carefully ensure that external AC members appointed by listed firms possess a sufficient level of expertise, particularly in the areas of financial reporting and auditing, which would improve their oversight effectiveness over the firm's financial reporting process.

Table 3.1
Sample selection

Panel A: Sample construction process

Initial firm-year observations (all companies listed on the Indonesia Stock Exchange across the period 2004-2019)	7,407
<i>Less deletions:</i>	
Observations from the financial sector	(1,220)
Observations with missing corporate governance data	(750)
Observations with missing financial data	(791)
<i>Usable firm-year observations</i>	4,646

Panel B: Sample distribution by industry

<i>Industry</i>	<i>Obs.</i>	<i>%</i>
Agriculture	203	4.37
Basic industry and chemicals	695	14.96
Consumer goods	454	9.77
Infrastructure, utilities, and transportation	512	11.02
Mining	379	8.16
Miscellaneous industry	487	10.48
Property, real estate, and building construction	668	14.38
Trade and services	1,248	26.86
<i>Sample</i>	4,646	100.00

Table 3.2
Summary statistics

	Obs.	Mean	Standard Deviation	Minimum	Median	Maximum
<i>AbsDA_MJM</i>	4,646	0.085	0.095	0.002	0.055	0.482
<i>AbsDA_PA-MJM</i>	4,646	0.085	0.099	0.002	0.054	0.508
<i>External_AC_%</i>	4,646	0.633	0.106	0.000	0.667	1.000
<i>AC_size</i> (number)	4,646	3.076	0.429	2.000	3.000	5.000
<i>Board_indep</i>	4,646	0.403	0.104	0.200	0.375	0.667
<i>Largest_SH</i>	4,646	0.502	0.218	0.120	0.510	0.928
<i>Family</i>	4,646	0.570	0.495	0.000	1.000	1.000
<i>Big4</i>	4,646	0.380	0.485	0.000	0.000	1.000
<i>Firm_size</i>	4,646	28.319	1.688	24.694	28.356	31.735
<i>Leverage</i>	4,646	0.263	0.219	0.020	0.236	0.937
<i>ROA</i>	4,646	0.054	0.088	-0.199	0.049	0.327
<i>MTB</i>	4,646	2.091	2.728	-0.805	1.167	14.666
<i>Sales_growth</i>	4,646	0.142	0.384	-0.600	0.093	1.774
<i>Sales_stdev</i>	4,646	0.121	0.143	0.005	0.071	0.708
<i>Firm_age</i> (years)	4,646	30.490	14.617	7.000	29.000	80.000
<i>Segment</i> (number)	4,646	2.809	1.342	1.000	3.000	6.000

This table presents the summary statistics of the variables used in the analysis. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions.

Table 3.3

External AC members and financial reporting quality: Baseline regression

	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>
	(1)	(2)
<i>External_AC_%</i>	-0.038** (-2.365)	-0.035** (-2.026)
<i>AC_size</i>	-0.005 (-0.366)	-0.008 (-0.506)
<i>Board_indep</i>	0.002 (0.111)	0.011 (0.820)
<i>Largest_SH</i>	-0.000 (-0.228)	-0.000 (-0.267)
<i>Family</i>	-0.002 (-0.457)	-0.006 (-1.140)
<i>Big4</i>	0.001 (0.189)	0.004 (0.483)
<i>Firm_size</i>	-0.001 (-0.230)	-0.002 (-0.436)
<i>Leverage</i>	0.000** (2.352)	0.000 (1.609)
<i>ROA</i>	0.000 (0.187)	0.001 (1.383)
<i>MTB</i>	0.001 (0.825)	0.000 (0.517)
<i>Sales_growth</i>	0.008* (1.771)	0.006 (1.164)
<i>Sales_stdev</i>	0.071*** (3.628)	0.072*** (3.570)
<i>Firm_age</i>	-0.009 (-1.349)	-0.004 (-0.692)
<i>Segment</i>	0.002 (0.509)	0.006 (1.381)
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	4,646	4,646
Adjusted R-squared	0.077	0.094

This table presents the results of the OLS regressions. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 3.4

External AC members and financial reporting quality: Difference-in-differences approach

Panel A: Results of the difference-in-differences approach

	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>
	(1)	(2)
<i>Treatment</i> × <i>Post</i>	0.027** (2.020)	0.047*** (2.643)
<i>AC_size</i>	-0.010 (-0.257)	0.002 (0.061)
<i>Board_indep</i>	0.008 (0.318)	0.045 (1.527)
<i>Largest_SH</i>	0.000 (0.381)	0.000 (0.566)
<i>Family</i>	-0.001 (-0.050)	-0.001 (-0.148)
<i>Big4</i>	0.003 (0.175)	0.012 (0.611)
<i>Firm_size</i>	-0.001 (-0.083)	-0.004 (-0.492)
<i>Leverage</i>	0.001*** (2.850)	0.001*** (2.906)
<i>ROA</i>	0.001 (1.476)	0.001** (2.100)
<i>MTB</i>	0.001 (0.742)	-0.000 (-0.147)
<i>Sales_growth</i>	-0.004 (-0.451)	-0.007 (-0.814)
<i>Sales_stdev</i>	0.069** (2.466)	0.083** (2.518)
<i>Firm_age</i>	-0.015 (-1.176)	-0.012 (-0.933)
<i>Segment</i>	0.003 (0.398)	0.010 (1.155)
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	2,411	2,411
Adjusted R-squared	0.090	0.135

This table presents the results of the difference-in-differences approach, where the exogenous shock is the passage of a new AC regulation in the end of 2012. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Tests of the parallel trend assumption

	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>
	(1)	(2)
<i>Year2009</i> × <i>Treatment</i>	0.002 (0.088)	-0.000 (-0.003)
<i>Year2010</i> × <i>Treatment</i>	-0.012 (-0.696)	-0.007 (-0.398)
<i>Year2011</i> × <i>Treatment</i>	-0.033 (-1.614)	-0.033 (-1.464)
<i>Year2012</i> × <i>Treatment</i>	0.004 (0.210)	-0.005 (-0.226)
<i>Year2013</i> × <i>Treatment</i>	-0.001 (-0.046)	0.078* (1.738)
<i>Year2014</i> × <i>Treatment</i>	-0.004 (-0.198)	-0.006 (-0.260)
<i>Year2015</i> × <i>Treatment</i>	0.025 (0.906)	0.023 (0.834)
<i>Year2016</i> × <i>Treatment</i>	0.070** (2.477)	0.076*** (2.832)
<i>AC_size</i>	-0.008 (-0.209)	0.002 (0.062)
<i>Board_indep</i>	0.009 (0.356)	0.045 (1.527)
<i>Largest_SH</i>	0.000 (0.462)	0.000 (0.539)
<i>Family</i>	-0.000 (-0.036)	-0.002 (-0.193)
<i>Big4</i>	0.003 (0.188)	0.012 (0.648)
<i>Firm_size</i>	-0.001 (-0.070)	-0.004 (-0.499)
<i>Leverage</i>	0.001*** (2.814)	0.001*** (2.938)
<i>ROA</i>	0.001 (1.409)	0.001** (2.090)
<i>MTB</i>	0.001 (0.739)	-0.000 (-0.156)
<i>Sales_growth</i>	-0.003 (-0.436)	-0.006 (-0.693)
<i>Sales_stdev</i>	0.070** (2.470)	0.085** (2.485)
<i>Firm_age</i>	-0.014 (-1.106)	-0.012 (-0.936)
<i>Segment</i>	0.003 (0.403)	0.009 (1.096)
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	2,411	2,411
Adjusted R-squared	0.094	0.139

This table presents the results of the tests of parallel trend assumption. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 3.5

External AC members and financial reporting quality: Instrumental variable approach

Panel A: Results of the instrumental variable approach

	First stage		Second stage	
	<i>External_AC_%</i>	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>	
	(1)	(2)	(3)	
<i>Industry_mean, t-1</i>	0.454*** (3.110)			
<i>External_AC_%</i>		-0.559** (-2.281)	-0.477* (-1.928)	
<i>AC_size</i>	0.103** (2.218)	0.046* (1.660)	0.036 (1.276)	
<i>Board_indep</i>	-0.090*** (-4.406)	-0.046* (-1.665)	-0.029 (-1.044)	
<i>Largest_SH</i>	-0.000 (-0.165)	-0.000 (-0.639)	-0.000 (-0.469)	
<i>Family</i>	0.010* (1.671)	0.004 (0.579)	-0.001 (-0.110)	
<i>Big4</i>	-0.007 (-0.844)	-0.001 (-0.080)	0.002 (0.268)	
<i>Firm_size</i>	0.007 (1.543)	0.003 (0.683)	0.002 (0.397)	
<i>Leverage</i>	-0.000 (-0.598)	0.000** (2.573)	0.000* (1.671)	
<i>ROA</i>	0.000 (1.105)	0.000 (1.346)	0.001*** (2.991)	
<i>MTB</i>	0.001 (1.412)	0.001 (1.452)	0.001 (1.162)	
<i>Sales_growth</i>	-0.002 (-0.478)	0.006 (1.357)	0.004 (0.961)	
<i>Sales_stdev</i>	-0.031** (-2.150)	0.054*** (3.425)	0.057*** (3.624)	
<i>Firm_age</i>	-0.002 (-0.248)	-0.009 (-1.037)	-0.005 (-0.569)	
<i>Segment</i>	0.005 (1.009)	0.005 (1.076)	0.009* (1.771)	
Firm fixed effects	Yes	Yes	Yes	
Year fixed effects	Yes	Yes	Yes	
Observations	4,563	4,541	4,541	
Adjusted R-squared	0.059	0.077	0.094	

This table presents the results of the instrumental variable approach, with the industry-average proportion of external AC members from the previous year ($t-1$) as the instrument. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and t -statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Tests of endogeneity and weak instruments

	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>
Endogeneity tests		
Durbin (score) chi-squared	6.738	3.854
<i>p</i> -value	(0.009)	(0.050)
Wu-Hausman <i>F</i> -statistic	6.704	3.831
<i>p</i> -value	(0.010)	(0.050)
Instrument tests		
Cragg-Donald Wald <i>F</i> -statistic	68.277	68.277
<i>p</i> -value	(0.000)	(0.000)
Stock-Yogo test critical value	16.380	16.380
Montiel-Pflueger effective <i>F</i> -statistic	68.277	68.277
Critical value	37.418	37.418
Under-identification test		
Kleibergen-Paap rk LM statistic	58.333	58.333
<i>p</i> -value	(0.000)	(0.000)

Table 3.6
Cross-sectional analysis

Panel A: Higher versus lower accounting expertise of external AC members

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Higher accounting expertise</i>	<i>Lower accounting expertise</i>	<i>Higher accounting expertise</i>	<i>Lower accounting expertise</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.114*** (-3.032)	-0.041** (-2.033)	-0.103** (-2.438)	-0.036* (-1.710)
<i>AC_size</i>	0.004 (0.156)	-0.003 (-0.166)	0.009 (0.321)	-0.002 (-0.127)
<i>Board_indep</i>	-0.008 (-0.253)	-0.002 (-0.117)	0.017 (0.569)	0.003 (0.160)
<i>Largest_SH</i>	-0.000 (-0.416)	0.000 (0.513)	0.000 (0.028)	0.000 (0.162)
<i>Family</i>	-0.004 (-0.327)	0.004 (0.566)	-0.005 (-0.542)	-0.002 (-0.334)
<i>Big4</i>	0.014 (1.338)	0.004 (0.461)	0.008 (0.724)	0.006 (0.618)
<i>Firm_size</i>	-0.006 (-0.568)	0.002 (0.410)	-0.005 (-0.472)	0.001 (0.298)
<i>Leverage</i>	0.001** (2.071)	0.000* (1.705)	0.000 (1.026)	0.000 (0.927)
<i>ROA</i>	0.000 (0.457)	0.000 (0.171)	0.001 (1.051)	0.000 (0.926)
<i>MTB</i>	-0.000 (-0.187)	0.001 (1.096)	-0.001 (-0.208)	0.001 (0.752)
<i>Sales_growth</i>	0.011 (1.278)	0.009 (1.585)	0.007 (0.748)	0.007 (1.127)
<i>Sales_stdev</i>	-0.008 (-0.210)	0.098*** (4.221)	-0.025 (-0.631)	0.099*** (4.006)
<i>Firm_age</i>	-0.0107 (-0.917)	-0.005 (-0.615)	-0.006 (-0.457)	0.001 (0.104)
<i>Segment</i>	-0.006 (-0.679)	0.006 (1.052)	-0.006 (-0.646)	0.010* (1.835)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,339	3,285	1,339	3,285
Adjusted R-squared	0.088	0.080	0.076	0.107
Chow test	Higher vs. lower		Higher vs. lower	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	3.22**		2.00	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the accounting expertise of external AC members. An observation is deemed having a higher level of accounting expertise when the proportion of external AC members with accounting expertise is above the median. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Longer versus shorter tenure of external AC members

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Longer tenure</i>	<i>Shorter tenure</i>	<i>Longer tenure</i>	<i>Shorter tenure</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.130*** (-2.879)	-0.014 (-0.469)	-0.113** (-2.473)	-0.015 (-0.511)
<i>AC_size</i>	0.017 (0.619)	0.014 (0.802)	0.016 (0.524)	0.007 (0.381)
<i>Board_indep</i>	-0.020 (-0.862)	0.015 (0.553)	0.0141 (0.454)	0.0226 (0.878)
<i>Largest_SH</i>	-0.000 (-0.208)	-0.000 (-0.025)	0.000 (0.624)	-0.000 (-0.570)
<i>Family</i>	-0.008 (-0.702)	-0.005 (-0.507)	-0.020* (-1.770)	-0.007 (-0.697)
<i>Big4</i>	0.026** (2.190)	-0.012 (-0.838)	0.025* (1.855)	-0.013 (-0.802)
<i>Firm_size</i>	-0.012* (-1.880)	0.006 (0.685)	-0.011 (-1.409)	0.003 (0.312)
<i>Leverage</i>	0.006* (1.928)	-0.000 (-0.054)	0.001 (1.608)	-0.000 (-0.136)
<i>ROA</i>	0.001 (1.128)	-0.000 (-0.533)	0.001* (1.693)	0.000 (0.478)
<i>MTB</i>	0.002 (0.871)	0.000 (0.186)	0.000 (0.224)	0.002 (1.022)
<i>Sales_growth</i>	-0.002 (-0.226)	0.004 (0.484)	-0.014* (-1.739)	0.007 (0.736)
<i>Sales_stdev</i>	0.039 (1.140)	0.048 (1.207)	0.021 (0.581)	0.0483 (1.155)
<i>Firm_age</i>	-0.015 (-1.032)	0.000 (0.014)	-0.036** (-2.153)	0.005 (0.385)
<i>Segment</i>	0.009 (1.176)	-0.001 (-0.083)	0.009 (1.128)	0.006 (0.637)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,418	1,787	1,418	1,787
Adjusted R-squared	0.097	0.108	0.092	0.136
Chow test	Longer vs. shorter		Longer vs. shorter	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	2.76*		2.75*	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the average tenure of external AC members. An observation is deemed having a longer tenure when the average tenure of external AC members is above the median. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel C: Higher versus lower ownership concentration

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Higher ownership concentration</i>	<i>Lower ownership concentration</i>	<i>Higher ownership concentration</i>	<i>Lower ownership concentration</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.013 (-0.751)	-0.080*** (-2.887)	-0.019 (-0.962)	-0.064** (-2.239)
<i>AC_size</i>	0.017 (1.212)	-0.013 (-0.528)	0.013 (0.933)	-0.019 (-0.651)
<i>Board_indep</i>	0.002 (0.087)	-0.008 (-0.373)	-0.002 (-0.074)	0.018 (0.901)
<i>Family</i>	-0.009 (-0.634)	0.003 (0.429)	-0.008 (-0.629)	-0.001 (-0.145)
<i>Big4</i>	-0.008 (-0.751)	0.001 (0.080)	-0.003 (-0.269)	0.003 (0.176)
<i>Firm_size</i>	0.006 (0.922)	-0.003 (-0.445)	0.003 (0.462)	-0.002 (-0.381)
<i>Leverage</i>	0.001*** (2.894)	-0.000 (-0.094)	0.001*** (2.797)	-0.000 (-0.795)
<i>ROA</i>	0.001 (1.027)	-0.000 (-0.303)	0.001* (1.786)	0.000 (0.425)
<i>MTB</i>	0.001 (1.015)	-0.000 (-0.344)	0.001 (0.586)	-0.001 (-0.597)
<i>Sales_growth</i>	0.003 (0.394)	0.008 (1.309)	-0.002 (-0.273)	0.008 (1.096)
<i>Sales_stdev</i>	0.042 (1.435)	0.070*** (2.723)	0.028 (0.976)	0.083*** (3.091)
<i>Firm_age</i>	-0.021** (-2.186)	-0.005 (-0.580)	-0.016 (-1.614)	-0.001 (-0.100)
<i>Segment</i>	-0.008 (-1.205)	0.009 (1.515)	-0.005 (-0.751)	0.013** (1.979)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	2,269	2,377	2,269	2,377
Adjusted R-squared	0.087	0.073	0.092	0.100
Chow test	Higher vs. lower		Higher vs. lower	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	7.57***		6.54***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the extent of ownership concentration. An observation is deemed having a higher ownership concentration when the proportion of shares held by the largest shareholder is above the median. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel D: Family-controlled firms versus non-family-controlled firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Family-controlled firms</i>	<i>Non-family-controlled firms</i>	<i>Family-controlled firms</i>	<i>Non-family-controlled firms</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.031 (-1.514)	-0.053** (-2.135)	-0.030 (-1.422)	-0.053** (-2.007)
<i>AC_size</i>	0.016 (0.685)	-0.008 (-0.504)	0.016 (0.695)	-0.015 (-0.838)
<i>Board_indep</i>	-0.004 (-0.189)	0.006 (0.285)	0.012 (0.599)	0.008 (0.397)
<i>Largest_SH</i>	0.000 (0.617)	0.000 (0.209)	0.0002 (0.931)	-0.000 (-0.239)
<i>Big4</i>	-0.001 (-0.126)	0.002 (0.210)	-0.001 (-0.054)	0.009 (0.672)
<i>Firm_size</i>	0.003 (0.399)	-0.005 (-0.769)	0.003 (0.451)	-0.004 (-0.684)
<i>Leverage</i>	0.000 (1.618)	0.000** (2.050)	0.000 (0.917)	0.000 (1.629)
<i>ROA</i>	-0.000 (-0.326)	0.001 (1.162)	0.000 (0.523)	0.001* (1.883)
<i>MTB</i>	0.002 (1.594)	-0.001 (-0.418)	0.001 (0.883)	-0.000 (-0.303)
<i>Sales_growth</i>	0.012* (1.835)	0.005 (0.606)	0.009 (1.427)	0.003 (0.364)
<i>Sales_stdev</i>	0.059** (2.310)	0.064** (2.322)	0.061** (2.258)	0.059** (2.142)
<i>Firm_age</i>	-0.010 (-1.170)	-0.015* (-1.666)	-0.007 (-0.794)	-0.009 (-0.941)
<i>Segment</i>	-0.006 (-1.022)	0.008 (1.152)	-0.00 (-0.540)	0.012 (1.589)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	2,645	2,001	2,645	2,001
Adjusted R-squared	0.088	0.062	0.100	0.083
Chow test	Family vs. non-family		Family vs. non-family	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	5.50***		6.64***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of family control. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel E: Presence versus non-presence of institutional blockholders

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>With institutional blockholders</i>	<i>Without institutional blockholders</i>	<i>With institutional blockholders</i>	<i>Without institutional blockholders</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.059** (-2.139)	-0.017 (-0.741)	-0.050* (-1.946)	-0.018 (-0.788)
<i>AC_size</i>	0.013 (0.475)	-0.013 (-0.640)	0.016 (0.537)	-0.018 (-0.892)
<i>Board_indep</i>	-0.001 (-0.042)	0.023 (1.290)	0.011 (0.505)	0.031 (1.629)
<i>Largest_SH</i>	-0.000 (-0.991)	-0.000 (-0.040)	-0.000 (-1.144)	-0.000 (-0.229)
<i>Family</i>	-0.002 (-0.217)	0.003 (0.368)	-0.006 (-0.611)	0.000 (0.033)
<i>Big4</i>	-0.002 (-0.158)	0.000 (0.015)	0.007 (0.435)	0.003 (0.344)
<i>Firm_size</i>	-0.010 (-1.645)	0.005 (1.120)	-0.009 (-1.497)	0.003 (0.675)
<i>Leverage</i>	0.000 (1.549)	0.000 (1.415)	0.000 (1.087)	0.000 (0.849)
<i>ROA</i>	0.001 (1.086)	-0.000 (-0.305)	0.001* (1.790)	0.000 (0.684)
<i>MTB</i>	0.000 (0.269)	0.000 (0.223)	-0.001 (-1.043)	0.001 (0.623)
<i>Sales_growth</i>	0.001 (0.158)	0.012* (1.904)	0.001 (0.171)	0.008 (1.227)
<i>Sales_stdev</i>	0.068** (2.009)	0.066** (2.481)	0.064* (1.836)	0.067** (2.433)
<i>Firm_age</i>	-0.013 (-1.122)	-0.010 (-1.349)	-0.002 (-0.174)	-0.009 (-1.133)
<i>Segment</i>	0.011 (1.168)	-0.003 (-0.506)	0.014 (1.469)	-0.001 (-0.205)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,613	3,019	1,613	3,019
Adjusted R-squared	0.066	0.086	0.081	0.102
Chow test	Presence vs. non-presence		Presence vs. non-presence	
<i>External_AC_%</i>	(1) vs. (2) 2.50*		(3) vs. (4) 3.05**	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of institutional blockholders (i.e., institutional shareholders that own a minimum of 5 percent of the firm's outstanding shares). Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel F: Foreign-controlled firms versus non-foreign-controlled firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Foreign-controlled firms</i>	<i>Non-foreign-controlled firms</i>	<i>Foreign-controlled firms</i>	<i>Non-foreign-controlled firms</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.097*** (-2.921)	-0.027 (-1.598)	-0.078** (-2.178)	-0.030* (-1.741)
<i>AC_size</i>	-0.031 (-1.076)	0.006 (0.368)	-0.020 (-0.671)	0.002 (0.114)
<i>Board_indep</i>	0.041 (1.560)	-0.015 (-0.921)	0.035 (1.203)	-0.003 (-0.205)
<i>Largest_SH</i>	0.000 (0.373)	0.000 (0.007)	-0.000 (-0.192)	0.000 (0.461)
<i>Family</i>		-0.007 (-0.812)		-0.012 (-1.604)
<i>Big4</i>	-0.007 (-0.343)	0.001 (0.076)	0.005 (0.211)	0.002 (0.298)
<i>Firm_size</i>	0.002 (0.221)	-0.001 (-0.206)	-0.001 (-0.121)	-0.000 (-0.0438)
<i>Leverage</i>	0.000 (1.451)	0.000 (1.559)	0.000* (1.719)	0.000 (0.452)
<i>ROA</i>	0.001 (0.559)	-0.000 (-0.325)	0.001 (1.431)	0.000 (0.513)
<i>MTB</i>	0.001 (0.471)	0.001 (0.850)	-0.000 (-0.186)	0.001 (0.890)
<i>Sales_growth</i>	0.003 (0.262)	0.011** (2.090)	0.003 (0.258)	0.007 (1.455)
<i>Sales_stdev</i>	0.047 (1.317)	0.074*** (3.316)	0.041 (1.128)	0.076*** (3.232)
<i>Firm_age</i>	-0.029 (-1.546)	-0.006 (-0.010)	-0.022 (-1.167)	-0.002 (-0.239)
<i>Segment</i>	0.012 (1.449)	-0.003 (-0.523)	0.014 (1.464)	0.002 (0.282)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,319	3,327	1,319	3,327
Adjusted R-squared	0.070	0.078	0.090	0.094
Chow test	Foreign vs. non-foreign		Foreign vs. non-foreign	
<i>External_AC_%</i>	(1) vs. (2) 9.24***		(3) vs. (4) 10.88***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of foreign control. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel G: Government-controlled firms versus non-government-controlled firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Government-controlled firms</i>	<i>Non-government-controlled firms</i>	<i>Government-controlled firms</i>	<i>Non-government-controlled firms</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	0.026 (0.634)	-0.044** (-2.574)	-0.031 (-0.647)	-0.039** (-2.100)
<i>AC_size</i>	0.000 (0.002)	-0.008 (-0.516)	-0.008 (-0.333)	-0.010 (-0.526)
<i>Board_indep</i>	0.005 (0.107)	0.003 (0.212)	-0.0101 (-0.174)	0.013 (0.949)
<i>Largest_SH</i>	0.000 (0.188)	-0.000 (-0.205)	0.001 (0.393)	-0.000 (-0.232)
<i>Family</i>		-0.003 (-0.468)		-0.006 (-1.119)
<i>Big4</i>	0.002 (0.084)	0.002 (0.187)	0.001 (0.034)	0.004 (0.491)
<i>Firm_size</i>	0.014 (0.965)	-0.002 (-0.401)	0.002 (0.122)	-0.002 (-0.618)
<i>Leverage</i>	0.002*** (3.849)	0.000** (2.178)	0.002*** (3.580)	0.000 (1.410)
<i>ROA</i>	0.002* (1.882)	0.000 (0.095)	0.003*** (3.797)	0.001 (1.240)
<i>MTB</i>	-0.001 (-0.518)	0.001 (0.636)	-0.001 (-0.695)	0.000 (0.286)
<i>Sales_growth</i>	0.017 (0.651)	0.008* (1.703)	0.008 (0.272)	0.006 (1.114)
<i>Sales_stdev</i>	0.139 (1.583)	0.068*** (3.458)	0.156 (1.406)	0.070*** (3.387)
<i>Firm_age</i>	-0.012 (-0.722)	-0.009 (-1.254)	-0.008 (-0.407)	-0.005 (-0.666)
<i>Segment</i>	-0.008 (-0.619)	0.003 (0.616)	-0.000 (-0.013)	0.007 (1.356)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	243	4,403	243	4,403
Adjusted R-squared	0.128	0.077	0.086	0.096
Chow test	Government vs. non-government		Government vs. non-government	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	6.90***		7.36***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of the Indonesian government's control. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel H: Government-connected firms versus non-government-connected firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Government-connected firms</i>	<i>Non-government-connected firms</i>	<i>Government-connected firms</i>	<i>Non-government-connected firms</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.019 (-0.837)	-0.046** (-1.981)	-0.029 (-1.174)	-0.033 (-1.331)
<i>AC_size</i>	0.019 (1.081)	-0.017 (-0.901)	0.008 (0.494)	-0.014 (-0.644)
<i>Board_indep</i>	-0.001 (-0.046)	0.006 (0.365)	0.019 (0.682)	0.017 (0.939)
<i>Largest_SH</i>	-0.000 (-0.247)	0.000 (0.257)	-0.000 (-0.981)	0.000 (0.080)
<i>Family</i>	0.000 (0.011)	-0.005 (-0.767)	0.009 (0.773)	-0.010 (-1.571)
<i>Big4</i>	0.003 (0.157)	0.005 (0.601)	0.011 (0.660)	0.006 (0.647)
<i>Firm_size</i>	0.016* (1.866)	-0.007 (-1.601)	0.014 (1.454)	-0.007* (-1.727)
<i>Leverage</i>	-0.000 (-0.445)	0.000** (2.161)	-0.000 (-0.450)	0.000 (1.488)
<i>ROA</i>	0.000 (0.112)	0.000 (0.373)	0.001 (0.962)	0.001 (1.217)
<i>MTB</i>	0.003** (2.445)	0.001 (0.521)	0.003** (2.400)	-0.001 (-0.476)
<i>Sales_growth</i>	0.009 (0.769)	0.007 (1.320)	0.002 (0.242)	0.006 (0.988)
<i>Sales_stdev</i>	0.045 (1.045)	0.071*** (3.038)	0.045 (0.961)	0.072*** (2.918)
<i>Firm_age</i>	0.003 (0.240)	-0.011 (-1.179)	0.004 (0.366)	-0.007 (-0.770)
<i>Segment</i>	0.001 (0.078)	0.002 (0.437)	0.006 (0.738)	0.006 (1.138)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,325	3,319	1,325	3,319
Adjusted R-squared	0.089	0.074	0.097	0.093
Chow test	GC vs. non-GC		GC vs. non-GC	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	7.99***		6.64***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of government connections. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel I: Big-4-audited firms versus non-Big-4-audited firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Big-4-audited</i>	<i>Non-Big-4-audited</i>	<i>Big-4-audited</i>	<i>Non-Big-4-audited</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.03 (-1.437)	-0.044* (-1.887)	-0.022 (-0.903)	-0.049** (-2.151)
<i>AC_size</i>	0.012 (0.771)	-0.011 (-0.556)	0.007 (0.421)	-0.005 (-0.242)
<i>Board_indep</i>	0.019 (1.022)	-0.007 (-0.359)	0.024 (1.086)	0.008 (0.389)
<i>Largest_SH</i>	-0.000 (-1.177)	0.000 (0.880)	-0.000 (-1.464)	0.000 (0.968)
<i>Family</i>	0.010 (1.292)	-0.008 (-1.103)	0.001 (0.075)	-0.009 (-1.380)
<i>Firm_size</i>	-0.003 (-0.504)	0.001 (0.164)	-0.009 (-1.276)	0.001 (0.319)
<i>Leverage</i>	0.000* (1.653)	0.000 (0.912)	0.000 (0.938)	0.000 (0.404)
<i>ROA</i>	0.001* (1.812)	-0.001 (-0.904)	0.001** (2.000)	0.000 (0.343)
<i>MTB</i>	-0.001 (-0.517)	0.000 (0.434)	0.000 (0.034)	-0.000 (-0.054)
<i>Sales_growth</i>	0.006 (0.606)	0.008 (1.548)	0.008 (0.610)	0.005 (0.930)
<i>Sales_stdev</i>	0.049 (1.527)	0.073*** (2.864)	0.039 (1.161)	0.078*** (3.045)
<i>Firm_age</i>	-0.022** (-2.308)	-0.001 (-0.149)	-0.021** (-2.249)	0.002 (0.244)
<i>Segment</i>	0.007 (1.135)	0.001 (0.167)	0.013* (1.912)	0.004 (0.603)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,763	2,883	1,763	2,883
Adjusted R-squared	0.071	0.087	0.095	0.100
Chow test	Big-4 vs. non-Big-4		Big-4 vs. non-Big-4	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	9.32***		5.41***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the external auditor (Big-4 versus non-Big-4 audit firms). Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel J: Lower vs higher financial distress

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Lower financial distress</i>	<i>Higher financial distress</i>	<i>Lower financial distress</i>	<i>Higher financial distress</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.026 (-0.829)	-0.048* (-1.963)	-0.036 (-1.166)	-0.051* (-1.872)
<i>AC_size</i>	0.027 (1.397)	-0.007 (-0.351)	0.022 (1.060)	-0.017 (-0.735)
<i>Board_indep</i>	0.004 (0.174)	-0.014 (-0.619)	0.012 (0.573)	-0.012 (-0.490)
<i>Largest_SH</i>	0.000 (0.985)	-0.000 (-1.191)	0.000 (0.736)	-0.000 (-1.163)
<i>Family</i>	-0.003 (-0.319)	0.005 (0.525)	-0.007 (-0.736)	0.001 (0.078)
<i>Big4</i>	-0.009 (-0.510)	0.006 (0.649)	-0.008 (-0.486)	0.016 (1.436)
<i>Firm_size</i>	0.015** (2.488)	-0.011 (-1.524)	0.012* (1.842)	-0.007 (-1.073)
<i>Leverage</i>	-0.000 (-1.036)	0.001** (2.459)	-0.000 (-0.783)	0.000 (1.517)
<i>ROA</i>	0.002*** (2.741)	-0.002*** (-2.828)	0.002*** (2.930)	-0.001* (-1.950)
<i>MTB</i>	0.001 (1.208)	-0.001 (-0.803)	0.002 (1.461)	-0.002 (-1.257)
<i>Sales_growth</i>	0.004 (0.426)	0.015*** (2.637)	-0.004 (-0.489)	0.012* (1.881)
<i>Sales_stdev</i>	0.090*** (2.896)	0.050 (1.642)	0.077** (2.420)	0.058 (1.621)
<i>Firm_age</i>	-0.024** (-2.466)	-0.002 (-0.192)	-0.013 (-1.244)	-0.007 (-0.768)
<i>Segment</i>	-0.002 (-0.281)	-0.003 (-0.412)	0.007 (1.077)	-0.004 (-0.443)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,939	1,953	1,939	1,953
Adjusted R-squared	0.120	0.098	0.136	0.094
Chow test	Lower vs. higher		Lower vs. higher	
<i>External_AC_%</i>	(1) vs. (2) 2.19		(3) vs. (4) 2.86*	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the degree of financial distress. An observation is considered having lower financial distress when its Altman's Z-score is above the median. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 3.7
Sensitivity analysis

Panel A: Using alternative measures of discretionary accruals

	<i>DA_MJM</i>	<i>DA_PA-MJM</i>	<i>DA_MJM</i>	<i>DA_PA-MJM</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.027** (-2.046)	-0.026* (-1.917)	-0.982** (-2.214)	-0.941** (-2.172)
<i>AC_size</i>	0.012 (1.260)	0.011 (1.108)	0.211 (0.614)	0.118 (0.347)
<i>Board_indep</i>	-0.011 (-1.111)	-0.014 (-1.212)	-0.718** (-1.989)	-0.823** (-2.294)
<i>Largest_SH</i>	-0.000 (-1.003)	-0.000 (-0.734)	-0.002 (-0.604)	-0.004 (-1.186)
<i>Family</i>	-0.001 (-0.356)	-0.003 (-0.619)	0.073 (0.549)	0.057 (0.442)
<i>Big4</i>	0.001 (0.128)	0.000 (0.083)	-0.236 (-1.341)	-0.264 (-1.549)
<i>Firm_size</i>	0.004 (1.414)	0.001 (0.456)	0.132* (1.739)	0.010 (0.137)
<i>Leverage</i>	0.000*** (2.727)	0.000*** (3.180)	0.004 (1.285)	0.005** (2.069)
<i>ROA</i>	0.003*** (10.180)	0.003*** (9.519)	0.079*** (12.010)	0.070*** (11.250)
<i>MTB</i>	0.001 (1.216)	0.001 (1.105)	0.013 (0.668)	0.004 (0.201)
<i>Sales_growth</i>	0.003 (0.803)	0.006 (1.557)	-0.083 (-0.890)	-0.024 (-0.265)
<i>Sales_stdev</i>	0.036** (2.581)	0.036** (2.475)	0.136 (0.418)	-0.125 (-0.389)
<i>Firm_age</i>	-0.014*** (-2.959)	-0.013** (-2.487)	-0.362 (-1.640)	-0.434** (-1.984)
<i>Segment</i>	-0.003 (-0.910)	-0.001 (-0.372)	-0.001 (-0.008)	0.031 (0.297)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	4,646	4,646	4,646	4,646
Adjusted / Pseudo R-squared	0.098	0.093	0.056	0.049

This table presents the results of the OLS regressions using alternative measures of discretionary accruals. The dependent variable in Columns (1) and (2) is the actual value of discretionary accruals (based on the modified Jones model and the performance-adjusted modified Jones model, respectively), set to zero if the actual value of discretionary accruals is negative. The dependent variable in Columns (3) and (4) is dichotomous, which equals to 1 if the actual value of discretionary accruals is larger than 2 percent of total assets and 0 otherwise. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Using alternative measures of the representation of external AC members

	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>External_AC_#</i>	-0.024*** (-2.774)	-0.020** (-2.361)				
<i>ExternalAC_Dum50</i>			-0.012*** (-2.704)	-0.010** (-2.068)		
<i>ExternalAC_Dum67</i>					-0.012*** (-2.683)	-0.010** (-2.051)
<i>AC_size</i>	0.017 (1.039)	0.015 (0.896)	-0.006 (-0.415)	-0.009 (-0.563)	-0.008 (-0.571)	-0.011 (-0.668)
<i>Board_indep</i>	0.000 (0.028)	0.010 (0.715)	0.002 (0.141)	0.012 (0.874)	0.002 (0.124)	0.012 (0.858)
<i>Largest_SH</i>	-0.000 (-0.183)	-0.000 (-0.171)	-0.000 (-0.278)	-0.000 (-0.309)	-0.000 (-0.274)	-0.000 (-0.306)
<i>Family</i>	-0.003 (-0.480)	-0.006 (-1.269)	-0.002 (-0.431)	-0.006 (-1.094)	-0.002 (-0.441)	-0.006 (-1.102)
<i>Big4</i>	0.003 (0.423)	0.006 (0.760)	0.001 (0.197)	0.004 (0.492)	0.001 (0.194)	0.004 (0.490)
<i>Firm_size</i>	-0.001 (-0.294)	-0.002 (-0.439)	-0.001 (-0.250)	-0.002 (-0.460)	-0.001 (-0.270)	-0.002 (-0.477)
<i>Leverage</i>	0.000** (2.420)	0.000 (1.563)	0.000** (2.353)	0.000 (1.606)	0.000** (2.359)	0.000 (1.610)
<i>ROA</i>	0.000 (0.292)	0.001 (1.457)	0.000 (0.184)	0.001 (1.376)	0.000 (0.188)	0.001 (1.379)
<i>MTB</i>	0.001 (0.805)	0.000 (0.530)	0.001 (0.817)	0.000 (0.499)	0.001 (0.849)	0.000 (0.524)
<i>Sales_growth</i>	0.008* (1.780)	0.006 (1.170)	0.008* (1.794)	0.006 (1.178)	0.008* (1.805)	0.006 (1.186)
<i>Sales_stdev</i>	0.071*** (3.682)	0.073*** (3.628)	0.071*** (3.620)	0.072*** (3.569)	0.071*** (3.625)	0.072*** (3.573)
<i>Firm_age</i>	-0.008 (-1.321)	-0.004 (-0.636)	-0.009 (-1.384)	-0.005 (-0.715)	-0.009 (-1.330)	-0.004 (-0.673)
<i>Segment</i>	0.002 (0.444)	0.006 (1.328)	0.002 (0.504)	0.006 (1.374)	0.002 (0.506)	0.006 (1.375)
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,646	4,646	4,646	4,646	4,646	4,646
Adjusted R-squared	0.077	0.095	0.077	0.094	0.077	0.094

This table presents the results of the OLS regressions using alternative measures of the representation of external AC members. *External_AC_#* is the number of external AC members. *ExternalAC_Dum50* is dichotomous, which equals to 1 if the proportion of external AC members is larger than 50 percent and 0 otherwise. *ExternalAC_Dum67* is dichotomous, which equals to 1 if the proportion of external AC members is larger than 66.67 percent and 0 otherwise. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel C: Excluding the period of the global financial crisis

	<i>AbsDA_MJM</i>	<i>AbsDA_PA-MJM</i>
	(1)	(2)
<i>External_AC_%</i>	-0.037** (-2.021)	-0.038* (-1.959)
<i>AC_size</i>	-0.003 (-0.157)	-0.003 (-0.167)
<i>Board_indep</i>	0.002 (0.100)	0.009 (0.591)
<i>Largest_SH</i>	0.000 (0.338)	0.000 (0.216)
<i>Family</i>	-0.002 (-0.405)	-0.005 (-0.829)
<i>Big4</i>	0.005 (0.583)	0.008 (0.959)
<i>Firm_size</i>	-0.002 (-0.345)	-0.003 (-0.650)
<i>Leverage</i>	0.000** (2.210)	0.000* (1.798)
<i>ROA</i>	0.000 (0.287)	0.001* (1.845)
<i>MTB</i>	0.000 (0.533)	0.000 (0.382)
<i>Sales_growth</i>	0.006 (1.101)	0.003 (0.566)
<i>Sales_stdev</i>	0.066*** (3.210)	0.069*** (3.111)
<i>Firm_age</i>	-0.010 (-1.508)	-0.007 (-1.124)
<i>Segment</i>	0.002 (0.421)	0.007 (1.320)
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	4,194	4,194
Adjusted R-squared	0.077	0.103

This table presents the results of the OLS regressions, excluding the period of the global financial crisis (i.e., the financial years 2007 and 2008). Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 3.8
External AC members and audit fees

	<i>Audit_fees</i>
	(1)
<i>External_AC_%</i>	-0.505* (-1.674)
<i>AC_size</i>	-0.246 (-1.505)
<i>Board_indep</i>	0.168 (0.967)
<i>Largest_SH</i>	0.001 (0.752)
<i>Family</i>	-0.045 (-0.879)
<i>Big4</i>	0.567*** (4.500)
<i>Firm_size</i>	0.138* (1.964)
<i>Leverage</i>	0.001 (1.418)
<i>ROA</i>	0.000 (0.088)
<i>Firm_age</i>	-0.235** (-2.208)
<i>Segment</i>	-0.016 (-0.338)
Firm fixed effects	Yes
Year fixed effects	Yes
Observations	1,460
Adjusted R-squared	0.188

This table presents the results of the OLS regression, using the natural logarithm of audit fees as the dependent variable. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 3.9
External AC members and real earnings management

	<i>Abn_CFO</i>	<i>Abn_ProdCost</i>	<i>Abn_DiscExp</i>
	(1)	(2)	(3)
<i>External_AC_%</i>	0.012 (0.598)	0.019 (0.830)	-0.003 (-0.176)
<i>AC_size</i>	0.003 (0.205)	-0.008 (-0.377)	-0.004 (-0.346)
<i>Board_indep</i>	0.055*** (3.794)	-0.039 (-1.636)	-0.009 (-0.891)
<i>Largest_SH</i>	0.000 (0.355)	0.000 (0.082)	-0.000 (-1.289)
<i>Family</i>	0.003 (0.497)	-0.002 (-0.229)	0.000 (0.028)
<i>Big4</i>	0.002 (0.193)	0.006 (0.562)	0.002 (0.305)
<i>Firm_size</i>	-0.009** (-2.100)	0.011* (1.696)	-0.012** (-2.126)
<i>Leverage</i>	-0.001*** (-3.042)	-0.000 (-1.245)	0.000 (1.401)
<i>ROA</i>	0.002*** (5.568)	-0.003*** (-6.350)	-0.001*** (-4.178)
<i>MTB</i>	0.001 (1.047)	-0.003** (-1.980)	-0.000 (-0.035)
<i>Sales_growth</i>	-0.007 (-1.373)	-0.005 (-0.665)	0.009** (2.201)
<i>Sales_stdev</i>	-0.016 (-0.726)	-0.028 (-1.100)	0.030 (1.487)
<i>Firm_age</i>	0.010 (0.999)	-0.013 (-0.897)	0.001 (0.174)
<i>Segment</i>	0.013*** (2.777)	-0.008 (-1.265)	-0.003 (-0.646)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	4,646	4,048	4,504
Adjusted R-squared	0.046	0.051	0.039

This table presents the results of the OLS regressions, using measures of real earnings management as the dependent variables. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 3.10

Additional analysis: The roles of political and military connections

Panel A: Politically-connected firms versus non-politically-connected firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Politically-connected firms</i>	<i>Non-politically-connected firms</i>	<i>Politically-connected firms</i>	<i>Non-politically-connected firms</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	0.004 (0.107)	-0.041** (-2.266)	-0.015 (-0.392)	-0.037* (-1.819)
<i>AC_size</i>	0.008 (0.285)	-0.006 (-0.359)	0.000 (0.010)	-0.006 (-0.343)
<i>Board_indep</i>	0.024 (0.918)	-0.006 (-0.412)	0.071** (2.400)	-0.004 (-0.265)
<i>Largest_SH</i>	0.000 (0.169)	0.000 (0.374)	0.000 (0.222)	0.000 (0.564)
<i>Family</i>	-0.006 (-0.486)	-0.005 (-0.745)	0.003 (0.251)	-0.011* (-1.711)
<i>Big4</i>	-0.007 (-0.410)	0.007 (0.806)	0.011 (0.631)	0.007 (0.877)
<i>Firm_size</i>	-0.005 (-0.459)	-0.004 (-0.875)	-0.004 (-0.352)	-0.004 (-1.076)
<i>Leverage</i>	0.000 (0.655)	0.000*** (2.625)	0.000 (0.424)	0.000** (2.101)
<i>ROA</i>	0.001 (1.602)	0.000 (0.207)	0.002*** (2.777)	0.000 (0.975)
<i>MTB</i>	0.001 (0.671)	0.000 (0.464)	0.002 (0.999)	0.000 (0.076)
<i>Sales_growth</i>	0.019 (1.272)	0.005 (1.011)	0.022 (1.445)	0.002 (0.320)
<i>Sales_stdev</i>	-0.036 (-0.802)	0.084*** (3.790)	-0.030 (-0.582)	0.083*** (3.647)
<i>Firm_age</i>	-0.026* (-1.755)	-0.001 (-0.979)	-0.020 (-1.485)	-0.005 (-0.602)
<i>Segment</i>	0.011 (1.217)	0.002 (0.339)	0.020** (2.227)	0.004 (0.865)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	974	3,670	974	3,670
Adjusted R-squared	0.105	0.075	0.145	0.088
Chow test	PC vs. non-PC		PC vs. non-PC	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	1.06		0.64	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of political connections. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Military-connected firms versus non-military-connected firms

	<i>AbsDA_MJM</i>		<i>AbsDA_PA-MJM</i>	
	<i>Military-connected firms</i>	<i>Non-military-connected firms</i>	<i>Military-connected firms</i>	<i>Non-military-connected firms</i>
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	0.0045 (0.108)	-0.044** (-2.415)	0.004 (0.105)	-0.044** (-2.105)
<i>AC_size</i>	-0.005 (-0.211)	-0.004 (-0.252)	-0.030 (-1.274)	-0.004 (-0.226)
<i>Board_indep</i>	-0.004 (-0.125)	0.002 (0.110)	0.025 (0.584)	0.007 (0.427)
<i>Largest_SH</i>	-0.000 (-0.278)	0.000 (0.279)	-0.000 (-0.621)	0.000 (0.260)
<i>Family</i>	-0.016 (-1.220)	-0.001 (-0.113)	-0.007 (-0.494)	-0.006 (-1.090)
<i>Big4</i>	-0.002 (-0.110)	-0.001 (-0.087)	0.007 (0.331)	-0.001 (-0.129)
<i>Firm_size</i>	0.001 (0.149)	-0.001 (-0.251)	0.005 (0.545)	-0.002 (-0.489)
<i>Leverage</i>	0.000 (0.813)	0.000** (2.074)	0.000 (0.020)	0.000 (1.523)
<i>ROA</i>	0.000 (0.377)	0.000 (0.191)	0.001* (1.958)	0.001 (0.954)
<i>MTB</i>	0.001 (0.867)	0.001 (0.601)	0.001 (0.745)	0.000 (0.284)
<i>Sales_growth</i>	0.004 (0.361)	0.008* (1.672)	0.007 (0.599)	0.005 (0.909)
<i>Sales_stdev</i>	0.077 (1.647)	0.069*** (3.142)	0.065 (1.277)	0.072*** (3.185)
<i>Firm_age</i>	0.023 (1.502)	-0.010 (-1.426)	0.023* (1.799)	-0.006 (-0.846)
<i>Segment</i>	0.008 (0.670)	0.001 (0.235)	0.022 (1.577)	0.004 (0.794)
Firm fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	773	3,871	773	3,871
Adjusted R-squared	0.149	0.061	0.197	0.073
Chow test	MC vs. non-MC		MC vs. non-MC	
<i>External_AC_%</i>	(1) vs. (2)		(3) vs. (4)	
	0.93		2.02	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of military connections. Definitions of the variables are provided in Appendix 3.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Appendix 3.A

Definitions of variables

Variable	Definition
Dependent variables	
<i>AbsDA_MJM</i>	The absolute value of discretionary accruals based on the modified Jones model as developed by Dechow et al. (1995)
<i>AbsDA_PA-MJM</i>	The absolute value of discretionary accruals based on the performance-adjusted modified Jones model as developed by Kothari et al. (2005)
<i>External_AC_%</i>	The number of external AC members divided by the total number of AC members
<i>Audit_fees</i>	The natural logarithm of audit fees paid by the firm
<i>Abn_CFO</i>	Abnormal cashflows from operations as developed by Roychowdhury (2006)
<i>Abn_ProdCost</i>	Abnormal production cost as developed by Roychowdhury (2006)
<i>Abn_DiscExp</i>	Abnormal discretionary expenses as developed by Roychowdhury (2006)
Independent variables	
<i>External_AC_%</i>	The number of external AC members divided by the total number of AC members
<i>Treatment</i>	An indicator variable, coded 1 if the firm reduced its proportion of external AC members, and 0 otherwise
<i>Post</i>	An indicator variable, coded 1 for firm-year observations in 2013 onwards and 0 otherwise
<i>Industry_mean, t-1</i>	The average proportion of external AC members in the firm's industry sector from the previous year
<i>External_AC_#</i>	The number of external AC members
<i>ExternalAC_Dum50</i>	An indicator variable, coded 1 if the proportion of external AC members is larger than 50 percent and 0 otherwise
<i>ExternalAC_Dum67</i>	An indicator variable, coded 1 if the proportion of external AC members is larger than 66.67 percent and 0 otherwise
<i>AC_size</i>	The natural logarithm of the total number of AC members
<i>Board_indep</i>	The number of independent supervisory board (SB) members divided by the total number of SB members
<i>Largest_SH</i>	The proportion of shares owned by the largest shareholder
<i>Family</i>	An indicator variable, coded 1 if the firm is family-controlled and 0 otherwise
<i>Big4</i>	An indicator variable, coded 1 if the firm is audited by a Big-4 audit firm and 0 otherwise
<i>Firm_size</i>	The natural logarithm of total assets
<i>Leverage</i>	The ratio of total liabilities to total assets
<i>ROA</i>	Net income before extraordinary items and discontinued operations divided by total assets
<i>MTB</i>	The market value of equity divided by the book value of equity
<i>Sales_growth</i>	The growth of sales revenue compared to the previous year
<i>Sales_stddev</i>	The standard deviation of the sales revenue-to-assets ratio over the past three years (t , $t-1$, and $t-2$)
<i>Firm_age</i>	The natural logarithm of firm age since the incorporation year
<i>Segment</i>	The natural logarithm of the number of business segments

Chapter 4

External audit committee members and tax avoidance

“The avoidance of taxes is the only intellectual pursuit that carries any reward.”

(John Maynard Keynes, 1883-1946)

4.1 Introduction

As one of the board committees, the audit committee (AC) assists the board of directors in overseeing the financial reporting process, covering areas from the implementation of financial accounting standards to the effectiveness of internal controls. Given the independence and expertise of its members, the committee is expected to help enhance the credibility of financial statements prepared by the firm’s management. Because of the important roles it plays as an internal monitoring tool within a firm, the AC has become one of the corporate governance components that receive considerable attention in corporate governance reforms globally during the past two decades.

Even though the core duties of the AC are mainly in the area of the financial reporting process, the scope of the committee’s oversight has recently expanded to include other related areas such as tax planning, risk management, ethics and compliance, and information technology (Deloitte, 2018; Hsu et al., 2018; KPMG, 2017). It has become increasingly crucial for the AC to ensure that the company is aware of its tax-related risks and complies with applicable tax laws and regulations. As highlighted by Robinson et al. (2012), the AC should be concerned about reputational risks faced by directors—including the committee’s members—and managers when the firm engages in aggressive tax planning behaviour.

In the academic literature, researchers have increasingly investigated the association between corporate governance and tax avoidance, providing empirical evidence whether particular corporate governance mechanisms augment or limit tax avoidance practices. For example, it

has been revealed in the existing literature that a higher likelihood of tax avoidance is associated with lower board independence (Armstrong et al., 2015), lower institutional ownership (Khurana & Moser, 2013), and being audited by non-Big-4 auditors (Klassen et al., 2016). Meanwhile, other studies put emphasis on the roles of other related factors. For instance, it has been suggested that there is a higher likelihood of tax avoidance among firms that have political connections (Kim & Zhang, 2016), greater ownership concentration (Khan et al., 2017), and lesser corporate social responsibility disclosure (Lanis & Richardson, 2012).

Despite the increasing role of the AC in firms' tax planning, how AC attributes could impact tax avoidance has so far only received limited attention in the literature. Robinson et al. (2012) finds that AC members' accounting expertise is positively associated with tax avoidance, suggesting that the AC tends to serve as an advisor to the board of directors in maximising shareholder wealth through risky tax planning, rather than as a monitor to reduce the likelihood of tax avoidance. Hsu et al. (2018) provide similar evidence, but only in firms with a defender (high risk aversion) strategy. Other studies have also addressed the impacts of AC attributes on tax avoidance even though the AC is not their main focus. For example, Richardson et al. (2013) find that firms with more independent ACs are less likely to be tax avoidant. Additionally, results provided by Wen et al. (2020) indicate that AC members with foreign experience have a significant impact on limiting the firm's tax avoidance.

It is important to note that such existing studies are all conducted in the context of jurisdictional settings where the AC is comprised entirely of board members. In many jurisdictions around the world, all AC members are appointed from those holding seats on the board of directors. Interestingly, this is not the case in Indonesia. The country's AC regime adopts a unique feature that is remarkably different from that in other jurisdictions. Indonesia's listed companies are required to establish an AC that is comprised of both independent board members and

externally-appointed, independent members. In other words, a part of the AC is *not* board members.

Given such a unique AC composition requirement, I investigate whether those external AC members could impact tax avoidance. On the one hand, it is assumed that external AC members are appointed by the SB because of their positive qualities, such as expertise and experience. Such external AC members might utilise their expertise to serve *advising* roles, where they provide management with expert counsel to maximise shareholder wealth, including through aggressive tax planning. Hence, they might be inclined to facilitate tax avoidance activities. Such an advising role could be augmented by the dynamics of firms' connections with external parties (e.g., prior studies have indicated that politically-connected firms tend to be more tax aggressive), providing even greater opportunities for external AC members to effectively impart advice on tax avoidance. Furthermore, such external AC members might lack "real" independence, leading them to support executives' endeavour to pursue an aggressive tax planning agenda.

On the other hand, as these external AC members are appointed from outside the firm, their independence might be more assured. As such, they might better serve *monitoring* roles, thereby mitigating information asymmetry and reducing the possibility of tax avoidance. This is in line with what has been stipulated in Indonesia's AC regulation that one of the duties of the AC is to review the firm's compliance with applicable laws and regulations relating to the firm's business operations.³⁸ Given such independence, the external AC members might make the most of their expertise or experience in overseeing the firm's management, hence lowering the likelihood of tax avoidance.

³⁸ Article 10 of the Indonesia Financial Services Authority (OJK) Regulation Number 55/POJK.04/2015 concerning the Formation and Work Guidelines of the Audit Committee.

The objective of this chapter is to examine whether and how external AC members bring about significant impacts on tax avoidance. As previously mentioned, a number of studies, albeit scarce in the literature, have put attention on the association between AC attributes and tax avoidance, but they are conducted in jurisdictions where the AC is composed entirely of board members. Hence, given that Indonesia adopts such a unique AC composition requirement, it is unknown whether such “outsiders” on the AC will have a significant effect on the likelihood of tax avoidance.

Indonesia is of interest in this study due to several distinctive characteristics of its economic and financial landscape, in addition to its unique AC composition requirement. *First*, Indonesia is among jurisdictions in the world that adopt a two-tier board system. Under the system, a limited-liability company is required to establish two boards in their organisational structure, namely the *Board of Commissioners* (supervisory board—SB) and the *Board of Directors* (management board—MB). Such a dual board structure provides an interesting setting as the supervision and executive functions are clearly separated. The AC is composed of independent SB members and external members, where one of the independent SB members becomes the chairperson of the committee. With regard to the firm’s tax planning, while the assumedly higher independence of the AC—due to the appointment of external members—potentially adds value to the SB’s monitoring function, the AC might also effectively serve advising roles due to the incremental expertise of such external members.³⁹

Second, as documented by Claessens et al. (2000), two features commonly found among the Indonesian listed firms are a high level of ownership concentration and the presence of family

³⁹ Even though there are other jurisdictions that also adopt a two-tier board system in their corporation laws, Indonesia’s AC composition requirement is still unique. In other two-board jurisdictions, the AC is comprised entirely of board members. For example, in Germany, the ACs of listed companies shall be composed of SB members, where the chairman of the AC must be an independent SB member. Meanwhile, in the Netherlands, when a company’s SB has more than four members, the company is mandated to establish an AC with all members appointed from the SB.

control. In firms with concentrated ownership and family control, agency issues between the controlling shareholder and minority shareholders are likely to occur. Such problems could be amplified by the country's relatively weak institutional environment, characterised by lower levels of minority shareholder protection and corporate transparency (Claessens et al., 2002). Corporate governance mechanisms utilised by listed companies might add value to the monitoring function. However, given such a weaker institutional environment, particular corporate governance mechanisms might not be able to serve as an effective oversight tool.

Third, as a developing economy, Indonesia still faces notable challenges in terms of its taxation ecosystem. On the one hand, due to the weaker institutional environment, firms might be exposed to wider opportunities to pursue aggressive tax planning. On the other hand, enforcement actions from the tax authority might be limited (United Nations Conference on Trade and Development [UNCTAD], 2015). During the past decade, there have been various reforms carried out by the Indonesian government in its ongoing efforts to boost the country's tax revenue, among others through improvements in the enforcement and surveillance capacity of the tax authority. Hence, it would be interesting to gain some insights on whether corporate governance mechanisms employed by the Indonesian listed companies have been effective to encourage compliance with applicable tax laws and regulations.

Employing a sample of listed firms on the Indonesia Stock Exchange (IDX) across the period 2004-2019, this chapter provides empirical evidence that a stronger presence of external AC members is significantly associated with higher tax avoidance. This finding suggests that such external AC members tend to serve advising roles more effectively (i.e., as an advisor to the firm in its effort to maximise shareholder wealth through aggressive tax planning) rather than to serve as a functional monitoring mechanism. The result is consistent even after addressing endogeneity issues and employing different proxy measures of tax avoidance. I expand the

analysis by investigating the possible channels through which external AC members positively influence corporate tax avoidance. I demonstrate that external AC members' accounting expertise, firms' governmental or political connections, and external AC members' lack of independence appear to be significant channels behind such a positive association.

Further, from cross-sectional analyses, I show that the positive link between external AC members and tax avoidance is more pronounced in firms with poorer corporate governance mechanisms (i.e., lower board independence and lesser foreign institutional ownership) and lower-quality external auditors. Additionally, I also demonstrate that such an association is stronger for firms with lower levels of ownership concentration and family control.

This chapter contributes to the literature in several ways. *First*, this study adds to the literature examining the role of the AC in corporate tax planning. While the monitoring effectiveness of the AC in terms of its "traditional" core duties related to the financial reporting process has been extensively examined (Badolato et al., 2014; Bédard et al., 2004; Klein, 2002; Tanyi & Smith, 2015; Xie et al., 2003), the committee's role in corporate tax planning has only received limited attention in the literature. Moreover, the rare literature addressing the relation between the AC and tax aggressiveness (Deslandes et al., 2020; Hsu et al., 2018; Robinson et al., 2012) is all conducted based on markets where the AC is composed entirely of board members. This chapter puts emphasis on the role of AC members in tax planning based on a setting where the AC composition requirement is starkly different from that in many other jurisdictions. Thus, I provide the first empirical evidence of the impacts of external AC members on tax avoidance.

Second, this chapter extends the tax avoidance literature investigating the roles of external agents in the firm's tax planning. A range of empirical studies have addressed the roles of external auditors as well as tax consultants in tax planning, such as those conducted by Omer et al. (2006), McGuire et al. (2012), Klassen et al. (2016), and Chyz et al. (2021). However, to

date there is no evidence of the influence of external AC members on tax avoidance. This chapter fills such a gap and provides novel evidence that external AC members more effectively serve advising roles, rather than monitoring ones, when it comes to tax planning.

Third, the present study adds to the limited literature examining the effectiveness of the monitoring function conducted by board committees in a two-tier board system. Based on the context of jurisdictional settings adopting a dual board structure, prior studies have examined whether board committees play a significant role in enhancing the SB's monitoring function (He et al., 2017; Lo et al., 2010; Nipper, 2021). However, it is important to note that such studies mainly emphasise financial reporting quality as a proxy for the outcomes of monitoring effectiveness. This study extends such a strand of literature by putting emphasis on the monitoring effectiveness of the AC, specifically of its externally-appointed members, in terms of corporate tax planning.

The remainder of this chapter is structured in the following manner. Section 4.2 reviews the existing literature and formulates the research hypothesis. This is followed by Section 4.3, which describes the data and variable measurements. The main empirical results are presented and discussed in Section 4.4. Next, Section 4.5 presents the results of analyses on channels through which external AC members influence tax avoidance, followed by Section 4.6 that presents the results of cross-sectional analyses. The results of robustness checks and sensitivity analyses are provided in Section 4.7. Finally, Section 4.8 concludes the chapter.

4.2 Literature review and hypothesis development

4.2.1 *Tax avoidance and the role of corporate governance*

While taxation appears to be one of the most significant sources of fiscal revenue for the government, it becomes an important cost for businesses (Wang et al., 2019). Further, Desai et al. (2007) even suggest that, due to tax claims to corporate cashflows, the government is considered “*de facto* the largest minority shareholder” of corporations. Thus, given financial burdens caused by tax expenses on their cashflows, firms might engage in tax avoidance practices through either legal tax planning (i.e., within the limits permitted by applicable tax laws and regulations) or illegal tax evasion (i.e., violations of tax laws and regulations). However, as suggested by Wang et al. (2019), using publicly-available data, tax planning and tax evasion generally could not be clearly distinguished. Hence, following Dyreng et al. (2008), this chapter defines tax avoidance as all transactions to minimise businesses’ tax obligations.

On the one hand, firms may engage in aggressive tax planning in their efforts to maximise firm value or shareholder wealth (Shackelford & Shevlin, 2001). As suggested by Desai and Dharmapala (2006), in line with the increasing complexity of firms’ business operations, aggressive tax planning has also become increasingly sophisticated over time. On the other hand, firms might also refrain from engaging in tax avoidance because such aggressive tax planning behaviour could expose them to reputational risks, particularly if their tax avoidance activities are discovered by the tax authority (Gallemore et al., 2014). Additionally, there is little tolerance from the general public when overwhelming tax avoidance is discovered (Desai & Dharmapala, 2006). Such reputational costs are also borne by directors and managers, which could face dire consequences in terms of their career prospects in the job market.

Given the increasing prevalence and sophistication of tax avoidance (Armstrong et al., 2012; Wang et al., 2019), such a subject has attracted ever-growing attention from authorities

worldwide as well as various multilateral organisations. A wide range of policy reforms have also been introduced and implemented, particularly during the past two decades, as part of ongoing collective efforts to intensify the international fight against tax avoidance activities. For example, as outlined in the Base Erosion and Profit Shifting (BEPS) project, the Group of Twenty (G20) and the Organisation for Economic Co-operation and Development (OECD) have encouraged relevant authorities around the world to carry out global actions to combat tax avoidance. Further, the United Nations has also issued the Addis Ababa Action Agenda, which emphasises the urgency of international cooperation to curb tax evasion and tax avoidance.

In line with the growing attention in the real world, the area of tax avoidance has also been growing in the academic literature. There has been an extensive range of empirical research investigating the determinants of tax avoidance. Earlier studies in this stream of literature address the roles of firm-level attributes, such as firm size, leverage, multinational operation, and other financial variables (Manzon & Plesko, 2002; Rego, 2003). Meanwhile, more recent studies have addressed various complex factors, either internal or external, that affect corporate tax avoidance. Some of the factors that have been investigated by researchers include corporate governance, financial market, corporate social responsibility, tax avoidance strategy, and enforcement actions imposed by the tax authority.

With regard to the roles of corporate governance, much research puts a focus on the presence of agency problems, where managers might pursue benefits that are not in the best interests of shareholders. Drawing upon the tax-avoidance agency theory, Desai and Dharmapala (2006) argue that firms' managers engage in complex tax avoidance strategies so that they could hide resources not only from the tax authority, but also from shareholders. Even though tax avoidance increases the firm's cash, such a practice might not turn out as a favourable strategy

as managers have opportunities to expropriate such resources at the expense of shareholders. This would thereby exacerbate information asymmetry and increase agency costs. Correspondingly, corporate governance mechanisms might play an effective monitoring role, hence mitigating such agency problems.

A number of corporate governance mechanisms have been addressed by scholars, even though empirical evidence provided is mixed. It has been documented that board independence is negatively associated with tax avoidance (Armstrong et al., 2015; Lanis & Richardson, 2011). In addition, Khurana and Moser (2013) find that long-term institutional shareholders are likely to discourage tax avoidance and promote greater transparency. These findings are consistent with the notion that stronger corporate governance practices, as represented by higher levels of board independence and institutional ownership, would effectively constrain tax avoidance. However, other mechanisms might not be as effective to limit such tax avoidance. Gallemore and Labro (2015) and Bauer (2016) find that there is a positive association between internal control quality and tax avoidance. Additionally, in contrary to Khurana and Moser's (2013) findings, Khan et al. (2017) provide more recent evidence that increased institutional ownership leads to higher tax avoidance.

Researchers have also investigated the relation between external mechanisms and tax avoidance. Empirical research in this strand of literature addresses the roles of external agents, including external auditors and tax consultants. For example, McGuire et al. (2012) find that the tax and audit expertise of the external auditor is positively associated with tax avoidance. They also find that firms purchasing tax consulting services from their external auditors tend to engage more in tax avoidance activities. A similar finding has also been provided by Chyz et al. (2021). However, as suggested by Klassen et al. (2016), firms that prepare their own tax

returns are likely to engage more in aggressive tax planning, but those purchasing tax consulting services from Big-4 firms tend to engage less.

Prior studies have also examined the effects of ownership structure and corporate control on tax avoidance. Badertscher et al. (2013) find that firms with greater ownership concentration engage less in tax avoidance, while a contrasting result has been suggested by Khan et al. (2017). Addressing the presence of family control, Chen et al. (2010) suggest that family-controlled are less likely to be tax avoidant compared to their non-family-controlled counterparts. When the government appears to be the controlling shareholder, Li et al. (2017) reveal that state-owned, listed companies demonstrate a greater likelihood to pursue aggressive tax planning.

The attributes of directors and their effects on corporate tax avoidance have also attracted attention in the existing literature. For example, Armstrong et al. (2015) find that directors' financial expertise has a positive (negative) association with tax avoidance for low (high) levels of tax avoidance activities. Examining directors' foreign education and professional experience, Wen et al. (2020) present evidence that there is a negative association between such foreign experience and tax avoidance.

4.2.2 The AC and tax avoidance

As outlined in various corporate governance reforms globally, especially during the past two decades, the audit committee (AC) has gained prominence as one of the key elements of effective corporate governance. The AC is responsible for assisting the board of directors in the oversight of the financial reporting process, thereby assuring the integrity of financial statements issued by the firm. The traditional functions of the AC usually include reviewing financial reporting issues, monitoring the effectiveness of internal controls, and overseeing the hiring of the firm's external auditor. For the committee to be able to discharge its mandates

independently, AC regulations around the world generally require that the majority of or all AC members must be independent directors.

In line with the rapid development and sophistication of business operations, the functions of the AC have also rapidly expanded beyond its traditional duties. Recently, the scope of the committee's oversight has also touched a number of related areas, including tax planning (Deloitte, 2018; Hsu et al., 2018; KPMG, 2017). As part of its crucial duties to support the board of directors, the AC increasingly plays a pivotal role in ensuring that the firm is aware of its tax-related risks and pursues a suitable tax planning agenda.

While the AC plays an increasingly important role in the firm's tax planning, such an issue has received limited attention in the literature. Empirical research examining the association between the AC and tax avoidance is still scarce in the literature. Among the few studies putting emphasis on the AC-tax avoidance nexus are Robinson et al. (2012), Hsu et al. (2018), and Deslandes et al. (2020). Other studies address the impacts of AC attributes on tax avoidance as a minor part of their investigations, such as Richardson et al. (2013) and Wen et al. (2020).

In explaining the impacts of AC attributes on tax avoidance, prior studies draw upon theory highlighted among others by Adams and Ferreira (2007), which suggest that the board of directors has a dual role as an *advisor* to and a *monitor* of management. On the one hand, serving an advising role, directors are expected to provide expert consultation to help managers achieve optimal outcomes. On the other hand, directors also serve a monitoring role, where they scrutinise management and inhibit managers' behaviour that poses significant risks to the company. As suggested by Adams and Ferreira (2007), managers might opt not to disclose information to directors to avoid increased scrutiny. Meanwhile, directors could adopt a "friendly" behaviour towards management (i.e., lowering the intensity of their monitoring) in order to encourage managers to disclose more information.

Such advising and monitoring roles of directors could be complementary, where directors could benefit from information provided by managers during the consultation process to make better assessments and scrutiny. However, both roles might also be conflicting each other. A number of empirical studies seek to provide evidence on potential conflicts between the two different roles. For example, Faleye et al. (2011) find that there is an improvement in monitoring quality when the majority of independent directors hold seats on at least two of the three monitoring committees. However, such an improvement comes at the expense of advising quality as firms suffer from poor strategic outcomes in terms of acquisition performance and corporate innovation. Inversely, Güner et al. (2008) suggest that when commercial bankers join boards, there are favourable impacts of their expert advice on several strategic outcomes, but such high advising quality is not necessarily in the best interests of shareholders.

With respect to the role of the AC in explaining variations in tax avoidance, such a dual role applies as well to directors holding seats on the AC (Robinson et al., 2012). On the one hand, AC members might better serve advising roles. It provides the firm's management with expert counsel to achieve effective tax planning and adopt tax-related strategies that maximise shareholder wealth. Such a role could then lead to facilitating tax avoidance. On the other hand, the traditional function of the AC mainly concerns the oversight of the financial reporting process. The AC also reviews the firm's compliance with applicable laws and regulations. Consequently, AC members are faced with demands for mitigating agency issues, as well as promoting greater transparency and compliance. Hence, the AC might better serve monitoring roles in terms of tax planning. They would ensure that the firm has complied with tax regulations, thereby minimising the likelihood of tax avoidance.

The limited literature investigating the relation between the AC and tax avoidance has considered a number of the committee's attributes, particularly independence and expertise. In

terms of AC independence, some jurisdictions have required all AC members to be independent directors, while some others only require the majority of AC members to be independent directors. Based on a sample of Australian firms, Richardson et al. (2013) find that firms with greater AC independence are less likely to be tax avoidant. Deslandes et al. (2020), examining the Canadian market, provide no evidence of a significant association between AC independence and tax avoidance.

Robinson et al. (2012) is the first study to investigate the impacts of AC expertise on tax avoidance. Their results suggest that the accounting expertise of AC members is positively associated with tax avoidance, consistent with the advising role hypothesis. However, they also find that firms with higher accounting expertise on their ACs are less likely to adopt risky tax planning strategies, thereby supporting the monitoring role hypothesis. A more recent study by Hsu et al. (2018) also addresses the firm's business strategy in their analysis. They provide evidence that AC members with financial expertise tend to encourage tax avoidance, but only in firms with a defender (high risk aversion) strategy. While in firms with a prospector (risk seeking) strategy, such AC members are likely to constrain tax avoidance. Additionally, Deslandes et al. (2020) demonstrate a negative association between AC financial expertise and tax avoidance.

Another AC attribute that has been addressed by researchers is AC members' experience. Wen et al. (2020) examine the impacts of directors' foreign experience on tax avoidance. They find that directors with foreign experience play a significant role in limiting tax avoidance, and such an association is more pronounced when such directors serve on the AC. Further, Deslandes et al. (2020) reveal that AC members' tenure is negatively related to the extent of tax avoidance.

4.2.3 *Institutional background*

Reviewing the scarce studies in this stream of literature, it is important to note that such studies are conducted using the context of jurisdictions where the AC is composed solely of board members. However, such an AC composition is not the case in Indonesia. The country's AC regime adopts a different composition requirement that is not found in any other jurisdictions. It is mandated by the applicable AC regulation that the AC is to be chaired by an independent SB member. Distinctively, based on a regulation made effective in 2013, at least one of the AC members shall be an externally-appointed, independent individual. Prior to 2013, the AC was mandated to be comprised of at least three members, where at least one member is an independent SB member and at least two members are externally-appointed members.

Such a unique AC mandate dates back to the early 2000s, when the Indonesian corporate governance landscape was in its infant stage of development. There was a widely-held assumption that the SBs of the Indonesian listed firms, which are supposed to monitor the executives, generally did not have sufficient competency to effectively implement their functions in overseeing the financial reporting process (Daniel, 2003). This was because many SB members came from various backgrounds (e.g., the members of the founding family, politicians, and retired military generals) and might not be able to contribute substantially to such a monitoring function. Hence, it was then considered important for SBs to be assisted by an AC with external, independent individuals serving on it. Such a consideration was stipulated for the first time through a stock exchange listing rule issued in 2001, and then through a series of regulations issued by the capital market regulator in 2003, 2004, 2012, and 2015.

With regard to tax avoidance activities, such a unique AC composition requirement then leads to a question: *Do external AC members have a significant impact on the firm's tax avoidance?* It is still unknown whether and how such external AC members affect avoidance. So far there

is no evidence in the existing literature whether they more effectively serve advising or monitoring roles. This is unsurprising as, to the best of my knowledge, Indonesia is the only jurisdiction in the world that mandates the ACs of listed companies to appoint externally-appointed, independent members.

4.2.4 Hypothesis development

Tax avoidance provides a unique setting to examine the advising and monitoring roles of external AC members, particularly because such an area seems to be relatively new for the AC and is beyond the traditional scope of its responsibilities in overseeing the financial reporting process. In developing the hypothesis, I would highlight two possibilities of how external AC members could affect tax avoidance, drawing insights from the existing theory and empirical evidence in the literature.

On the one hand, external AC members might facilitate aggressive tax planning. This is consistent with the advising function, particularly considering the assumption that external AC members are invited to sit on the AC due to their positive qualities such as expertise and experience. Further, such advising roles are possibly augmented by other factors related to the dynamics of the firm's environment (e.g., connections with external parties, including politicians) and of the external AC members themselves (e.g., their lack of independence from the firm's executives).

To support executives' endeavour to maximise returns for shareholders, external AC members could play a substantial advising role. Their expertise would enable them to advise management on how to best execute tax planning, thereby optimising the firm's cashflows and increasing shareholder wealth. A range of studies have provided empirical evidence that the presence of experts on boards of directors brings about significant influences on boards' decision making. For example, examining a sample of large U.S. companies, Güner et al.

(2008) find that the presence of commercial bankers in the boardroom is significantly associated with an increase in external funding and a decrease in investment-cashflows sensitivity.

Further, Ettredge et al. (2021) reveal that the accounting expertise of executive board members (i.e., chief executive officers and chief financial officers) leads to a decrease in information asymmetry during the initial public offering (IPO) process, thereby reducing IPO underpricing. Addressing industry expertise on boards of directors, Wang et al. (2015) provide evidence that a greater presence of industry-expert directors is positively associated with CEO turnover-performance sensitivity as well as acquirer returns from diversifying acquisitions. In addition, Faleye et al. (2017) suggest that board industry expertise encourages value-enhancing research and development spending. In another study, Dass et al. (2014) find that directors with industry expertise enhance firm performance and help firms deal with industry shocks, particularly when there is a severe information asymmetry.⁴⁰

From the rare literature addressing AC attributes and tax avoidance, researchers have documented evidence of the association between AC expertise and tax avoidance, even though such studies are conducted using the context of jurisdictions where the AC is comprised exclusively of board members. Robinson et al. (2012) and Hsu et al. (2018) have documented that AC financial expertise is positively associated with the extent of tax avoidance, but Hsu et

⁴⁰ There is also such evidence from empirical research outside the accounting and finance disciplines. For example, Oehmichen et al. (2016) suggest that industry experts in the boardrooms are more likely to encourage strategic change, though depending on institutional quality, across countries. They suggest that greater industry expertise is needed by weaker institutions as they require an alternative instrument of strategic advice. Similarly, Lungeanu and Zajac (2019) and Zhu et al. (2020) demonstrate that directors with deeper and broader prior experience exert greater influences on strategic change. Addressing the presence of human resource experts on boards of directors, Mullins (2018) document that firms with human resource practitioners in the boardroom are more likely to engage in diversity management.

al. (2018) further suggest that such a positive association is only found in firms with a defender (risk aversion) business strategy.

As external AC members represent one of the external agents, there has been evidence of how the expertise of external agents could exert substantial influences on the firm's strategic outcomes, including tax planning. McGuire et al. (2012) show that the tax and audit expertise of the firm's external auditor or tax consultant has a positive association with tax avoidance. In their more recent study, Chyz et al. (2021) suggest that when firms pay their auditors for tax consulting services, firms whose auditor has greater tax expertise are more likely to engage in aggressive tax planning.⁴¹

The advising role of external AC members in tax planning could be even more effective when political connections are present in the boardroom. Prior studies have suggested that politically-connected companies are likely to be more tax aggressive than their non-connected counterparts (Faccio, 2010; Kim and Zhang, 2016; Li et al., 2017). In emerging markets—including Indonesia—that have weaker institutional environments and legal systems, political connections among listed companies are more prevalent (Faccio, 2006). Firms might opt to maintain connections with politicians in order to extract potential economic benefits that come with such connections. These politically-connected firms, in their efforts to pursue aggressive tax planning, possibly provide external AC members with greater opportunities and freedom to advise management on such an agenda. In other words, external AC members play an effective advising role to achieve the firms' tax objectives, making the most of the privilege

⁴¹ From other streams of literature, researchers have documented empirical evidence of the impacts of strategic advice provided by such external agents. For instance, Krause et al. (2013) provide evidence that the presence of externally-sourced chief operating officers (COOs) or presidents in the boardrooms positively affects firm performance when the firm's operational efficiency demonstrates a decreasing trend. Hoppmann et al. (2018) investigate the role of external change agents and find that firms hiring external consultants are more likely to seize sustainable investment opportunities. Likewise, Foss et al. (2013) reveal that the utilisation of external knowledge sources leads to greater opportunity exploitation.

that comes from such political connections. Bliss et al. (2011) have documented that the monitoring effectiveness of the AC is compromised when political connections exist.

Furthermore, the conjecture that external AC members facilitate tax avoidance could also be supported by the assumption that they might lack real independence from boards or management, making them simply a “rubber stamp” for management’s behaviour—including in the area of tax planning. This would lead to an ineffective monitoring role. As suggested by Wu and Dong (2021), independent directors could even facilitate rent-seeking activities, particularly when the institutional environment is weaker and board political connections are present. Another reason for such a lack of real independence is possible allegiance of external AC members to management. Coles et al. (2014), using board co-option (i.e., the proportion of directors being appointed after the CEO took office) to evaluate monitoring effectiveness, demonstrate that monitoring quality declines when board co-option increases.

Drawing on the abovementioned insights, a stronger presence of external members on the AC could arguably facilitate aggressive tax planning. Their assumedly greater expertise, as well as their potential lack of independence and their firms’ political connections, might lead them to provide boards and management with effective advice on how to best pursue such aggressive tax planning, thereby increasing returns for shareholders. This could be amplified by Indonesia’s relatively weaker institutional environment, which enables firms to pursue their aggressive tax planning agenda, making benefit from the lack of enforcement actions from the tax authority (UNCTAD, 2015).

On the other hand, external AC members might limit aggressive tax planning. This conjecture is consistent with the monitoring function, where external AC members are expected to exercise effective oversight over the firm’s management, thereby reducing agency issues and information asymmetry. This is particularly important since, as stipulated in Indonesia’s AC

regulation, one of the duties of the AC is to review the firm's compliance with applicable laws and regulations. Consequently, effective monitoring from external AC members should be able to reduce the likelihood of tax avoidance.

External AC members might be able to serve a monitoring role due to its perceived independence. Because they are externally appointed and not affiliated with the company, their independence is presumably more assured. Such independence would lead them to act as an effective monitoring tool, ensuring the firm's compliance with tax regulations and curbing tax avoidance. From the AC literature, Richardson et al. (2013) provide evidence that firms with greater AC independence tend to have lower tax avoidance. A number of studies also demonstrate the positive association between AC independence and monitoring effectiveness, generally proxied by financial reporting quality, such as Peasnell et al. (2001), Klein (2002), Xie et al. (2003), Abbott et al. (2004), Bédard et al. (2004), and Vafeas (2005).

Provided such independence, external AC members then utilise their expertise or experience to effectively oversee the firm's tax planning and curtail aggressive tax planning. Several studies have provided evidence of the negative association between AC expertise and tax avoidance. Robinson et al. (2012) demonstrate that firms with a higher level of accounting expertise on the AC are less likely to engage in risky tax planning strategies. Further, Hsu et al. (2018) find that financial experts on the AC help curtail aggressive tax planning, but only in firms with a prospector (risk seeking) business strategy. Meanwhile, prior studies have also indicated that AC members' financial expertise contributes to enhancing monitoring effectiveness as proxied by financial reporting quality, such as Xie et al. (2003), Abbott et al. (2004), Bédard et al. (2004), Farber (2005), and Tanyi and Smith (2015).

As external AC members represent external agents serving on the committee, there is some evidence of the role of external agents' expertise in enhancing monitoring of the firm's

management. For example, addressing the industry expertise of the external auditor, Balsam et al. (2003) show that firms audited by industry-specialist auditors demonstrate a lower level of earnings management. Additionally, Reichelt and Wang (2010) find that the clients of national- and city-level industry-specialist auditors also demonstrate significantly lower discretionary accruals than their non-specialist-audited counterparts. Meanwhile, Kubr (2002) identify a series of roles of the management consulting industry, including as a fact finder and an advocate, where management consultants provide their clients with an expert monitoring function to overcome the clients' problems.

The proposition that external AC members would help scale back on tax avoidance practices could also be supported by the notion that they are concerned with their professional reputation. Such a concern would lead them to maintain their credibility and provide objective views in their oversight functions (Walton, 2012). Srinivasan (2005) investigates the consequences of accounting failures for independent directors, including AC members. He finds that independent directors and AC members experience penalties from the job market for such failures, namely a higher likelihood of turnover and a lower prospect for future directorship positions. As external AC members represent outsiders and put concerns on their professional reputation in the labour market, they might choose to limit the firm's tax avoidance and ensure that the firm is complying with applicable tax regulations.

Drawing upon these insights and empirical findings, it could be argued as well that a stronger representation of external members on the AC would curtail aggressive tax planning. Such external AC members might stick firmly to their oversight functions, effectively monitoring management and refraining from encouraging tax avoidance activities.

Given the conflicting arguments as outlined above, the hypothesis is formulated in the null form:

H1: The proportion of external AC members is not significantly associated with tax avoidance.

4.3 Data and variable measurements

4.3.1 Sample selection

For this empirical archival research, I use two groups of data sources. *First*, I hand-collect data on corporate governance and several firm-level characteristics from the annual reports of listed firms on the Indonesia Stock Exchange (IDX), which are downloadable from the directory of The Indonesia Capital Market Institute (TICMI). *Second*, I retrieve financial data from the Worldscope database, supplemented by the annual reports and financial statements of sample firms. I then merge data from the two different sources.

The initial sample of this study comprises all firms listed on the IDX, previously the Jakarta Stock Exchange (JSX), across the period 2004-2019. There are totally 7,407 firm-year observations in the initial sample. Next, I eliminate financial firms (e.g., banks, insurance companies, securities companies, and financing companies) from the sample because they are subject to specific regulatory requirements, including in terms of the AC and taxation. Like prior studies, I further exclude observations with negative pre-tax income (i.e., loss-making firms) as well as those with negative current tax expense, which lead to negative effective tax rates ($ETR < 0$). As suggested by Zimmerman (1983) and Dyreng et al. (2017), among others, negative ETRs are difficult to interpret and, hence, usually excluded from the sample. I also

delete those with excessive tax rates ($ETR > 1$) because they will likely induce issues with model estimation (Henry & Sansing, 2018).⁴²

After eliminating observations with missing data required for analysis, I end up with 2,293 usable firm-year observations. When using the three-year ETR, the figure slightly decreases to 2,139 firm-year observations. To overcome the effects of observations with extreme values, I winsorise all continuous variables at the 1st and 99th percentiles. Panel A of Table 4.1 presents the details of the sample construction process.

The distribution of the final sample based on industry sectors is provided in Panel B of Table 4.1. It could be seen that the trade and services sector accounts for the largest fraction of the sample (26.5 percent), while the smallest proportions are found for the agriculture and mining sectors, which constitute 4.5 percent and 7.6 percent, respectively, of the final sample.

[Insert Table 4.1 about here]

4.3.2 *Measurement of tax avoidance*

In the tax avoidance literature, researchers have employed a wide array of measures to proxy for tax avoidance, including short-run ETRs, long-run ETRs, and the book-tax gap. Prior studies generally employ multiple proxy measures of tax avoidance, instead of relying on one proxy, because each proxy is subject to particular limitations.

In this study, I use one of the most extensively used measures in the tax avoidance literature, namely the short-run or one-year cash ETR (*CashETR1*), as the first proxy for tax avoidance.

⁴² Henry and Sansing (2018) review 23 tax avoidance papers published in five leading accounting journals (*The Accounting Review*, *Journal of Accounting Research*, *Journal of Accounting and Economics*, *Contemporary Accounting Research*, and *Review of Accounting Studies*) across 2013-2016 and find that 14 of those papers reset ETRs to fall between 0 and 1. A similar step is also conducted by earlier studies, such as Dyreng et al. (2008), Chen et al. (2010), Hoopes et al. (2012), and Lisowsky et al. (2013).

CashETR1 is defined as cash income taxes paid divided by pre-tax accounting income from the current year (Dyreng et al., 2008). As suggested by Hsu et al. (2018), *CashETR1* indicates the extent to which the firm executes effective tax planning and minimises cash income taxes paid, either through deferring the payment of cash taxes to later periods or even completely avoiding paying such taxes. Lower values of *CashETR1* indicate higher tax avoidance. In other words, a firm is deemed more tax avoidant when its *CashETR1* is lower.

However, it is important to note that using the short-run ETR might not fully capture the extent of tax avoidance as it is only focused on the current year. Dyreng et al. (2008) stress that annual cash ETRs are not reliable measures of long-run tax avoidance, amplified by their asymmetric persistence. Further, short-run ETRs are unable to address short-run shocks to cash taxes paid or pre-tax income (Dyreng et al., 2008). As such, it is considered important to also employ longer-run ETRs. For the purpose of this study, I use three-year cash ETRs (*CashETR3*) as the second proxy measure of tax avoidance. This measure has also been used in a number of empirical studies, such as Hoopes et al. (2012) and Brown and Drake (2014). *CashETR3* is defined as the three-year sum (from year $t-2$ to year t) of cash income taxes paid divided by the three-year sum of pre-tax accounting income. Similar to *CashETR1*, lower values of *CashETR3* represent a higher likelihood of tax avoidance.

Using both annual (i.e., one-year) and longer-run (i.e., three-year) cash ETRs in the main analysis, I am aware that there are other proxy measures of tax avoidance employed in the existing literature. Hence, to ensure the robustness of my empirical results, I would also utilise other measures in the sensitivity analysis.

4.3.3 Measurement of external AC members

The independent variable of interest is the proportion of external AC members (*External_AC_%*), defined as the number of external AC members divided by the total number

of AC members. It is hypothesised, in the null form, that the proportion of external AC members is not significantly related to tax avoidance. Using both *CashETR1* and *CashETR3* as the dependent variables, if the proportion of external AC members is positively associated with tax avoidance, the coefficient of *External_AC_%* would be negative and statistically significant. On the contrary, if the proportion of external AC members is negatively associated with tax avoidance, the coefficient of *External_AC_%* would be positive and statistically significant.

4.3.4 Control variables

Following the extant literature, I consider a number of control variables that might impact the extent of tax avoidance. I classify such control variables into four groups, namely corporate governance structure, corporate ownership, fundamental characteristics, and other financial characteristics.

Corporate governance structure. The first corporate governance indicator that I incorporate as a control variable is the size of the AC (*AC_size*). It is believed that larger AC size would accommodate a wider pool of expertise and experience (Vafeas, 2005; Van den Berghe & Levrau, 2004), hence enhancing the committee's capacity in serving its roles. Hsu et al. (2018) and Deslandes et al. (2020) find that AC size is negatively associated with tax avoidance, indicating that ACs with larger size are likely to effectively serve monitoring roles and, hence, curtail aggressive tax planning.

Another corporate governance indicator that I consider is the independence of the boardroom. SB independence (*SB_indep*) is computed as the number of independent SB members divided by the total number of SB members. While more independent boards might be expected to exert more effective monitoring and curb aggressive tax planning, the existing evidence in the literature is mixed. Lanis and Richardson (2011) and Armstrong et al. (2015) reveal that a

higher proportion of outside directors is likely to limit tax avoidance. In contrast, other studies provide evidence that the proportion of independent directors is positively associated with tax avoidance (Hsu et al., 2018; McClure et al., 2018), indicating that independent directors are not effective monitors in terms of constraining tax avoidance.

Corporate ownership. I address the roles of two features that are prevalent among the Indonesian listed companies, namely ownership concentration and family control. Ownership concentration (*Largest_SH*) is operationalised as the proportion of common shares held by the largest shareholder, while family control (*Family*) is a dichotomous variable, which equals to 1 if the firm is family-controlled and 0 otherwise.⁴³ In terms of ownership concentration, Khan et al. (2017) document that ownership concentration increases tax avoidance. Contrarily, Baderstcher et al. (2013) and Richardson et al. (2016) suggest that firms with greater ownership concentration tend to engage less in aggressive tax planning. With regard to family control, Chen et al. (2010) document that family-controlled firms tend to be less tax aggressive compared to their non-family-controlled counterparts. However, Kovermann and Wendt (2019) suggest that family-controlled firms are more likely to be tax avoidant.

Fundamental characteristics. I include a series of corporate fundamental attributes, which might affect tax avoidance, as control variables in my analysis. I control for firm size (*Firm_size*), computed as the natural logarithm of total assets. A number of studies have documented that larger firms are less likely to be tax aggressive, such as Rego (2003) and

⁴³ To obtain information on corporate ownership and control, I mainly use the firm's annual reports, complemented by such supporting sources as notes to the financial statements, the firm's websites, and the Internet search engine. Following Faccio and Lang (2002) and Setia-Atmaja et al. (2009), I define the controlling shareholder as the largest shareholder that holds a minimum of 20 percent of the firm's shares. Further, from information on ownership structure, a firm is considered a family-controlled one if its controlling shareholder is an Indonesian individual or family. Following Lin et al. (2012), if the controlling shareholder of a listed firm is a privately-held, unlisted company or another listed company, I trace its control chain until I am able to identify the ultimate controlling shareholder. If a firm's ultimate controlling shareholder is found to be an Indonesian individual or family, the firm is considered family-controlled.

McGuire et al. (2012), while other studies find that larger firms are more tax aggressive than their smaller counterparts (Hsu et al., 2018; Lisowsky, 2010; Robinson et al., 2012). Prior studies also demonstrate that firms with higher levels of leverage and financial distress are more likely to be tax aggressive (Hsu et al., 2018; McGuire et al., 2012; Richardson et al., 2015). Such findings suggest that financial difficulties encourage firms to behave more aggressively and take risky options as the cost of capital increases. Hence, I also control for financial leverage (*Leverage*), computed as total liabilities divided by total equity; and financial distress (*AltmanZ*), defined as the Altman's Z-score based on Altman (1993).⁴⁴

Next, I also control for sales growth (*Sales_growth*), computed as the growth of sales revenue compared to the prior year. Edwards et al. (2012) suggest that firms with higher sales growth would enjoy additional benefits from aggressive tax planning, leading them to avoid taxes. This notion is confirmed by Kanagaretnam et al. (2016) in their empirical study. Further, it has also been suggested that greater incentives to pursue a tax avoidance agenda are found among firms with higher profitability and growth opportunities (Hsu et al., 2018; Kanagaretnam et al., 2016; McGuire et al., 2012; Robinson et al., 2012). Therefore, I control for return on assets (*ROA*), defined as net income divided by total assets; and the market-to-book ratio (*MTB*), measured as the market value of equity divided by the book value of equity.

Another fundamental attribute that has been addressed in prior research is cash holdings (*Cash_holdings*), measured as cash and cash equivalents divided by total assets. Firms with

⁴⁴ The Altman's Z-score, which is widely used to measure the chances of bankruptcy (Altman, 1993), is calculated based on this formula:

$$Z = 1.2 (WC) + 1.4 (Ret_earn) + 3.3 (EBIT) + 0.6 (MVE/TL) + 1.0 (Sales)$$

where *Z* is the Altman's Z-score; *WC* is working capital divided by total assets; *Ret_earn* is retained earnings divided by total assets; *EBIT* is earnings before interest and taxes divided by total assets; *MVE/TL* is the market value of equity divided by total liabilities; and *Sales* is sales revenue divided by total assets. The lower the Z-score, the higher the probability of going bankrupt.

larger cash holdings are found to have greater incentives to avoid tax in order to pursue other corporate agendas (Kim & Zhang, 2016; McGuire et al., 2012). Additionally, it is also suggested that corporate tax avoidance could be influenced by the firm's property, plant, and equipment (PPE). Firms with a greater proportion of PPE in their asset portfolio are found to be more motivated to pursue aggressive tax planning (Kim & Zhang, 2016; Wen et al., 2020). As such, I control for *PPE*, defined as the ratio of PPE to total assets.

Other financial characteristics. Like previous studies, I include earnings management as one of the control variables in my empirical analysis. Several studies have provided evidence that there is a positive association between earnings management and tax avoidance (Kanagaretnam et al., 2016; Kim & Zhang, 2016; Wen et al., 2020), suggesting that firms with more aggressive earnings management and, hence, poorer financial reporting quality are more likely to pursue tax avoidance activities as well. To measure earnings management, I use the absolute value of discretionary accruals based on the performance-adjusted modified Jones model (*AbsDA_PA-MJM*) as suggested by Kothari et al. (2005).

4.3.5 Summary statistics

Table 4.2 reports summary statistics for the dependent and independent variables used in my analysis. The mean and median values of *CashETR1* are 29.3 percent and 26 percent, respectively. Meanwhile for *CashETR3*, the mean and median values are 27.4 percent and 25.4 percent, respectively. While the figures are slightly higher than the current statutory corporate income tax rate,⁴⁵ there are notable variations across companies. The minimum and maximum

⁴⁵ The statutory corporate income tax rate generally applicable in Indonesia is 25 percent (for the financial years 2010-2019) and 28 percent (for the financial year 2009). However, there are some exceptions for particular companies, such as for listed firms with the proportion of publicly-held shares of at least 40 percent, where they enjoy the discounted income tax rate of 5 percent. Meanwhile for the financial years 2004-2008, there were three different rates of corporate income taxes, namely 10 percent for the first layer of earnings (up to IDR 50 million), 15 percent for the second layer of earnings (IDR 50-100 million), and 30 percent for the third layer of earnings (more than IDR 100 million).

values are 5 percent and 86 percent, respectively, for *CashETR1*; and 2 percent and 86 percent, respectively, for *CashETR3*.

With regard to AC-related variables, the mean values of *External_AC_%* and *AC_size* are 63.2 percent and 3.1 members, respectively. Meanwhile, the median values of the two variables are 66.7 percent and three members, respectively. This suggests that the Indonesian listed firms mostly establish an AC with a majority of externally-appointed members. In terms of SB independence, the mean and median values of *Board_indep* are 40.1 and 33.3 percent, respectively. This indicates that the Indonesian listed firms have generally been in compliance with the applicable regulation, which requires that a minimum of 30 percent of SB members shall be independent.

The descriptive statistics echoes previous studies suggesting the prevalence of high ownership concentration and family control among the Indonesian listed firms (Claessens et al., 2000). The mean and median values of *Largest_SH* are 50.8 and 51 percent, respectively, indicating that the largest shareholder tends to retain effective control in most firms. Further, families are still the most common controlling shareholder among the Indonesian listed firms. As shown in the mean value of *Family*, 58.8 percent of observations in the sample are family-controlled.

In terms of fundamental characteristics, the sample firms have a debt-to-equity ratio of 111.4 percent and an Altman's Z-score of 4.5, on average. As I eliminate those reporting negative pre-tax accounting income, the sample firms' profitability (*ROA*) is relatively high, with the mean and median values of 9.1 percent and 7.3 percent, respectively. Further, *Cash_holdings* and *PPE* of the sample firms are relatively high at 7.5 percent and 40.8 percent, respectively, on average. Finally, the mean and median figures of discretionary accruals (*AbsDA_PA-MJM*) are lower than those reported in Chapter 3, with a mean of 7.8 percent of total assets and a

median of 5.1 percent of total assets, which could partly be explained by the exclusion of loss-making firms in the sample selection process.

[Insert Table 4.2 about here]

4.4 Main results

4.4.1 Baseline results

I conduct a multivariate analysis to test the hypothesis on the association between the proportion of external AC members and tax avoidance. I estimate the following econometric model:

$$TaxAvoid = \beta_0 + \beta_1 External_AC_ \%_{i,t} + \gamma X_{i,t} + Industry\ FE + Year\ FE + \varepsilon_{i,t} \quad (1)$$

TaxAvoid is tax avoidance, measured using one-year cash ETRs (*CashETR1*) and three-year cash ETRs (*CashETR3*). *External_AC_%* is the number of external AC members divided by the total number of AC members. *X* represents control variables, namely the natural logarithm of AC size (*AC_size*), SB independence (*Board_indep*), the proportion of shares owned by the largest shareholder (*Largest_SH*), the presence of family control (*Family*), the natural logarithm of total assets (*Firm_size*), the Altman's Z-score (*AltmanZ*), the debt-to-equity ratio (*Leverage*), sales growth (*Sales_growth*), return on assets (*ROA*), the market-to-book ratio (*MTB*), cash holdings (*Cash_holdings*), the PPE-to-asset ratio (*PPE*), and the absolute value of discretionary accruals based on the performance-adjusted modified Jones model (*AbsDA_PAMJM*). Additionally, I control for both industry and year fixed effects in the regression

models.⁴⁶ To minimise the effects of outliers, I winsorise all continuous variables at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level.

Table 4.3 presents the results of the OLS regression analysis based on Equation (1). In both Columns (1) and (2), the coefficients of *External_AC_%* are found to be negative and significant at the 5 percent level, suggesting that the proportion of external AC members is negatively associated with both one-year and three-year cash ETRs. Hence, my results provide evidence that the proportion of external AC members has a positive effect on the extent of tax avoidance. In other words, the finding from the baseline regressions implies that external AC members are likely to facilitate aggressive tax planning.

Moreover, the effect of the representation of external AC members on tax avoidance is economically significant. Using *CashETR1* as the dependent variable in Column (1), the coefficient of *External_AC_%* is -0.093 , indicating that a one standard deviation increase in *External_AC_%* would lead to a decrease in *CashETR1* of 0.99 percent ($-0.093 \times 0.106 = -0.0099$). Further, when *CashETR3* is employed as the dependent variable as reported in Column (2), a one standard deviation increase in *External_AC_%* corresponds to a decrease in *CashETR3* of 1.45 percent ($-0.137 \times 0.106 = -0.0145$).

My result therefore supports the notion that, in terms of tax planning, external AC members effectively serve an advising role. They might be good monitors with regard to the oversight of the financial reporting process, resulting in better financial reporting quality, as has been

⁴⁶ While some studies in the tax avoidance literature employ firm fixed effects in their empirical analyses, other empirical studies (e.g., Hsu et al., 2018; Wen et al., 2020; Al-Hadi et al., 2022) do not adopt such an approach. In this study, I do not include firm fixed effects in my analysis. Additionally, there is an argument from Whited et al. (2022) that the use of firm fixed effects might cause certain complications. Importantly, issues arising from the omitted variable bias have already been addressed by using the Impact Threshold for a Confounding Variable (ITCV) and observing coefficient robustness to unobservable variables (see Subsection 4.7.1).

documented in Chapter 3. However, that is not the case when it comes to corporate tax planning, which is not among the traditional core duties of the AC. Such external AC members seem to be more concerned about maximising shareholder wealth, leading them to provide boards and managers with valuable advice on tax planning to achieve such a purpose. As such, the baseline finding is consistent with the advising hypothesis, which has also been suggested by several prior studies, such as Robinson et al. (2012) and Hsu et al. (2018).

It is generally assumed that external AC members are invited to serve on the committee due to their particular positive qualities, such as expertise and experience. Such positive attributes would then contribute to their advanced capacity in imparting advice to boards and managers. A stronger presence of external members on the AC means a wider pool of expertise and experience, resulting in effective tax-related expert counsel. Such “externally-sourced” expertise might not be able to be accumulated internally within the firm as those external AC members might have greater exposures to various developments outside the firm. Such an advantage would in turn be beneficial for firms in pursuing tax planning that maximises after-tax returns to shareholders. Additionally, such an incentive to execute an aggressive tax planning agenda might be amplified by Indonesia’s relatively weak taxation enforcement.

Furthermore, it might come into question that such external AC members, being externally appointed and independent, are not able to exert effective monitoring in terms of curtailing tax avoidance. Being appointed by the SB, they might lack real independence from either boards or management, hindering them from posing significant challenges on managers’ aggressive tax planning agenda. They might be able to conduct effective oversight over the financial reporting process, which is the core responsibility of the AC, but not over tax planning. Such a case might be more exacerbated when the CEO plays an important role in the appointment

of such external AC members. As Coles et al. (2014) suggest, a greater degree of board co-option negatively affects monitoring effectiveness.

Looking beyond *External_AC_%* as the independent variable of interest, a number of control variables are found to have significant effects on tax avoidance. There are positive and significant associations between *Leverage* and both measures of cash ETRs, suggesting that firms with higher leverage are less likely to be tax avoidant. This is contrary to prior studies providing evidence that higher leverage leads to greater tax avoidance (Hsu et al., 2018; McGuire et al., 2012; Richardson et al., 2015). Further, the coefficients of *ROA* are negative and highly significant in both columns, implying that more profitable firms tend to engage more in tax avoidance, enabling them to maximise shareholder returns and pursue other business opportunities. The coefficient of *Sales_growth* is negative and significant in Column (1), indicating that firms with higher sales growth are more likely to be tax avoidant. Such aggressive tax planning seems to enable them to gain the high-growth momentum and achieve higher after-tax returns. Finally, the coefficients of *MTB* are negative and significant in both columns, suggesting that firms with a higher market-to-book ratio are more likely to engage in aggressive tax planning.

Other variables, however, are found to be insignificant in explaining variations in tax avoidance. For example, the coefficients of *Board_indep* are not significant, implying that independent SB members do not play an important role in corporate tax planning. *Largest_SH* and *Family* also do not demonstrate significant impacts, indicating that firms with greater ownership concentration, as well as family-controlled firms, do not necessarily pursue more aggressive tax planning compared to their peers. Finally, variations in tax avoidance are not significantly explained by firm size, bankruptcy risk (as measured by the Altman's Z-score), cash holdings, and the PPE-to-asset ratio.

[Insert Table 4.3 about here]

4.4.2 Addressing endogeneity concerns

The more recent literature has suggested that corporate governance structure, such as size and composition of the boardroom or board committees, may be endogenously determined. As such, if AC structure is also endogenously determined, the traditional cross-sectional empirical examinations on the relation between AC composition and certain economic outcomes could suffer from endogeneity problems (Kim & Klein, 2017). Hence, such issues need to be taken into account and properly dealt with using appropriate estimation techniques. One of the techniques commonly used in the corporate governance literature is the two-stage least squares (2SLS) or instrumental variable (IV) approach.

A series of empirical studies investigating the association between AC attributes and particular economic outcomes—including tax avoidance—have also used such a technique (Bruynseels & Cardinaels, 2014; Hsu et al., 2018; Krishnan et al., 2011; Tanyi & Smith, 2015; Wang et al., 2015). Similarly, in this chapter, I also consider the possibility that *External_AC_%* is endogenous in the regression models.⁴⁷ Utilising the IV or 2SLS approach, suitable instruments—variables that are significantly associated with the proportion of external AC members but not directly related to tax avoidance—are required.

⁴⁷ In Chapter 3, investigating the association between external AC members and financial reporting quality, I use both the difference-in-differences and IV approaches to address endogeneity concerns. Meanwhile in this chapter, I choose to use the IV approach only. I use different approaches in the two chapters because these two chapters have different focuses. Chapter 3 examines the impacts of external AC members on financial reporting quality, which is related to the traditional core duties of the committee. Therefore, I expect that the 2012 AC regulation—which is used as the exogenous shock in the difference-in-differences analysis—would bring about direct impacts on the monitoring of the financial reporting process. Meanwhile, the present chapter is focused on another economic outcome, namely corporate tax planning, which is not among the core functions of the committee. Based on this consideration, I do not expect that the 2012 AC regulation would impact the advising or monitoring roles of the committee in terms of tax planning.

I select two instruments, representing local circumstances faced by firms, in this analysis. The first is the number of listed firms headquartered in the same province as a firm's headquarter from the previous year (*Listed_firm_prov, t-1*). It is believed that changes in the number of listed firms headquartered in the same province are outside a firm's control, hence they are likely to be exogenous. The number of listed of firms located in the same province is conjectured to affect the local demands for potential talents (i.e., external AC members), thereby impacting a firm's decision in determining its AC composition. Knyazeva et al. (2013) find that the local director pool (proxied by the number of listed, nonfinancial firms headquartered within certain proximity from a firm's headquarter) is a significant determinant of the proportion of independent directors in the boardroom. Addressing the expertise of independent directors serving on the AC, Tanyi and Smith (2015) provide similar evidence.

The second instrument is the number of professional workers with a Bachelor's degree or higher in the same province as a firm's headquarter, matched with the number of listed firms in that province, from the previous year (*Prof_workers_prov, t-1*). I obtain the data from public documents published by Statistics Indonesia. Changes in the number of well-educated professionals in the same local area should also be beyond a firm's control, thereby confirming their exogenous nature. It is believed that the number of well-educated professionals in the same province would impact the local supply of talents, including external AC members, which in turn could affect how listed firms in that province determine their AC composition. As argued by Masulis et al. (2022), local availability of prospective talents would impact firms' decisions in terms of board composition and expertise.

The models estimated for the first-stage regressions are:

$$External_AC_%_{i,t} = \beta_0 + \beta_1 Listed_firms_prov_{i,t-1} + \gamma X_{i,t} + Industry\ FE + Year\ FE + \varepsilon_{i,t} \quad (2)$$

$$External_AC_%_{i,t} = \beta_0 + \beta_1 Prof_workers_prov_{i,t-1} + \gamma X_{i,t} + Industry\ FE + Year\ FE + \varepsilon_{i,t} \quad (3)$$

where $Listed_firms_prov_{i,t-1}$ is the natural logarithm of the number of listed firms located in the same province as a firm's headquarter from year $t-1$; $Prof_workers_prov_{i,t-1}$ is the natural logarithm of the number of professional workers with a Bachelor's degree or higher in the same province as a firm's headquarter, divided by the number of listed firms in that province, from year $t-1$; and X is a set of control variables that are also used in the baseline regression analysis. Industry and year fixed effects are included in the models. It is important to note that I have to include the two instruments in two different models because $Listed_firms_prov_{i,t-1}$ and $Prof_workers_prov_{i,t-1}$ are highly correlated (with a correlation coefficient of -0.92), leading to a multicollinearity problem if the two variables are both included in the same model.

The results of the IV analysis are displayed in Table 4.4. Panel A reports the results employing $Listed_firms_prov_{i,t-1}$ as the instrument. The result of the first-stage regression, reported in Column (1), demonstrates that the proportion of external AC members is negatively associated with the number of listed firms in the same province, with a significance level of 5 percent. This suggests that when there are a larger number of fellow listed firms in a particular province, the availability of experienced, highly-skilled external AC members might be more limited as they are highly sought after by those firms. As such, firms in that province tend to employ an AC with a lower representation of externally-appointed members. Columns (2) and (3) present the results of the second-stage regressions. In both columns, the coefficients of $External_AC_%$ are negative and significant at the 5 percent level, consistent with the baseline results previously reported. Tax avoidance increases as the representation of external members on the AC increases.

Panel B of Table 4.4 shows the results of the IV analysis using the number of well-educated professional workers in the same province as a firm's headquarter, matched with the number of listed firms in that province, as the instrument. In Column (1), reporting the result of the

first-stage regression, the coefficient of *Prof_workers_prov_{i,t-1}* is positive and significant at the 5 percent level. This implies that when the availability of local potential talents (i.e., professionals with a Bachelor's degree or higher) increases, firms are likely to establish an AC with a higher proportion of external members. As could be seen in Columns (2) and (3), which estimate the second-stage regressions, the coefficients of *External_AC_%* are negative and significant, though marginally significant at the 10 percent level when using *CashETR3* as the dependent variable. These results are once again consistent with the baseline finding that external AC members are likely to facilitate aggressive tax planning.

To ensure that the instruments used in the 2SLS regressions are strong and valid, I perform several tests. The results are reported in Panel C of Table 4.4. Firstly, based on Hausman (1978), I conduct the Durbin-Wu-Hausman test to identify whether endogeneity issues affect my models. Employing the number of listed firms in the same province as a firm's headquarter (*Listed_firms_prov, t-1*) as the instrument, the test statistics are all significant (p -value < 0.01). Such results continue to hold when using the number of professional workers with a Bachelor's degree or higher in the same province (*Prof_workers_prov, t-1*) as the instrument (p -value < 0.01). These results indicate that endogeneity appears to be a concern in my models. Therefore, the results of the IV approach are considered more efficient and consistent than those of the OLS analysis.

Secondly, I perform tests to evaluate the strength of the two instruments. I first conduct weakness identification tests based on Cragg and Donald (1993). From such tests, the Cragg-Donald Wald F -statistic values range between 9.8 and 10.8, where all are significant at the 5 percent level. Next, I conduct tests for weak instruments based on Stock and Yogo (2004). Such tests result in critical values for the documented Cragg-Donald test statistics. It is

demonstrated that the critical values are below the Cragg-Donald Wald F -statistics, suggesting that both instruments employed in the above IV analysis are strong.

Finally, as suggested Kleibergen and Paap (2006), I perform an under-identification test to further determine whether the models are appropriately identified and whether the instruments are sufficiently relevant (i.e., correlated with the endogenous variable). I obtain the Kleibergen-Paap rk LM statistic values ranging between 13.35 and 16.11 (p -value < 0.01), suggesting that the models are appropriately identified and that the instruments are relevant. Therefore, the results of these tests suggest that both instruments employed in the IV analysis are strong and that the models are robust to the potential weak instrument bias.

Overall, the findings from the IV analysis confirm that the baseline results continue to hold even after addressing potential endogeneity issues. Additionally, the results from the IV approach indicate that there are causal effects of the proportion of external AC members on the likelihood of tax avoidance.

[Insert Table 4.4 about here]

4.5 Channels through which external AC members affect tax avoidance

While it has been empirically documented in the main analysis that external AC members are likely to facilitate tax avoidance, one further question might arise: *What are the channels used by those external AC members to pursue such tax avoidance?* In this section, I attempt to address the roles of three possible channels, namely accounting expertise, corporate political connections, and a lack of independence, in explaining the positive association between external AC members and tax avoidance.

I conduct such tests by partitioning the sample into two groups based on particular attributes related to accounting expertise, corporate political connections, and co-option. Nevertheless, in this analysis, I opt to be focused on *CashETR3* as the dependent variable. This is because a longer-run ETR appears to be a more stable proxy for tax avoidance, as it can smooth short-term shocks to either cash taxes paid or pre-tax accounting income (Dyreng et al., 2008). Additionally, Hoopes et al. (2012) argue that tax enforcements bear costs for firms not only in the forms of tax penalties in one year, but also in all related years. Thus, the three-year cash ETR is considered more representative to measure the extent of tax avoidance.

4.5.1 Accounting expertise of external AC members

The first channel that I would examine here is external AC members' accounting expertise. It is likely that external AC members are invited to serve on the AC due to their expertise, so that they could effectively assist the SB particularly in monitoring the financial reporting process. AC members might come from various streams of expertise, such as accounting (Hsu et al., 2018; Robinson et al., 2012), finance (Badolato et al., 2014; Hsu et al., 2018), law (Krishnan et al., 2011), specific industry (Cohen et al., 2014; Wang et al., 2015), and information technology (Ashraf et al., 2020).

Examining the impact of external AC members on tax avoidance, I am focused on the accounting expertise of external AC members. As argued by Robinson et al. (2012), AC members with accounting expertise are considered more capable of implementing and evaluating accounting practices for aggressive tax planning. As such, when external members with accounting expertise have a stronger presence on the AC, they would more effectively impart advice to management to pursue the aggressive tax planning agenda. Prior empirical research demonstrates that AC members' accounting expertise is positively associated with tax avoidance (Hsu et al., 2018; Robinson et al., 2012).

To examine whether accounting expertise facilitates aggressive tax planning by external AC members, the sample is partitioned into two subsamples, namely *firms with higher accounting expertise* (if the proportion of external AC members with accounting expertise is above the median) and *those with lower accounting expertise* (if the proportion of external AC members with accounting expertise is equal to or below the median). Panel A of Table 4.5 presents the results.

I find that the coefficient of *External_AC_%* is of higher magnitude and significance for the subsample with higher accounting expertise. This indicates that the positive link between the proportion of external AC members and tax avoidance is more pronounced in firms with a stronger presence of accounting experts among their external AC members. Consistent with the abovementioned expectation, external AC members with accounting expertise would be capable of providing effective advice to boards and managers on the implementation of aggressive tax planning. In other words, such expertise and skills equip them with necessary capacity to serve their advising roles.

Next, still examining the role of accounting expertise, I divide the sample into two subsamples, namely *firms that have accounting academics as external AC members* and *firms that do not*. There are 323 observations in my sample (15.2 percent of total observations with available data) with at least one of their external AC members appointed from accounting academics (i.e., those with an academic position in the discipline of accounting at a higher education institution as the full-time or main occupation).

It is acknowledged that academics are more exposed to the latest developments in their respective disciplines, thereby enhancing their capacity to provide the corporate world with high-quality expert counsel. Joining the boardroom, academic directors could be advantageous for firms by providing external knowledge spillover (Audretsch & Lehmann, 2006) as well as

an additional source of expertise (White et al., 2014). Further, academic directors could be expected to introduce new ideas to the board of directors (Anderson et al., 2011). Empirical studies have presented evidence that academic directors are associated with greater acquisition performance and a higher number of patents and citations (Francis et al., 2015), greater value relevance of reported earnings (Huang et al., 2016), and lesser abnormal investment (Khan et al., 2022).

Panel B of Table 4.5 reports the results considering the presence of accounting academics as external AC members. It is found that the coefficient of *External_AC_%* has a higher magnitude, as well as a significance level of 5 percent, for the subsample with the presence of accounting academics as external AC members. This implies that the positive association between external AC members and tax avoidance is more pronounced in firms that appoint external AC members from academia. Such a finding is consistent with that of prior studies suggesting that academic directors add value to the advising roles of boards of directors. In terms of tax planning, it seems that accounting academics that hold seats on ACs would be capable of advising managers on how to best execute tax planning, which in turn increases the possibility of tax avoidance.

4.5.2 Governmental and political connections

Firms might build and maintain connections with the government or political figures in order to pursue their business agenda and gain additional economic benefits, such as access to lenders (Boubakri et al., 2012; Faccio, 2006), lower cost of capital (Houston et al., 2014), government contracts and favourable regulations (Goldman et al., 2009), and lesser scrutiny (Faccio, 2006; Kroszner & Stratmann, 1998). In terms of tax avoidance, Kim and Zhang (2016) argue that politically-connected firms tend to be more tax aggressive due to several reasons, including a lower level of detection risks, better information access regarding changes in the taxation

regulatory landscape, a lower level of market pressure for transparency, and a higher level of risk-taking. Additionally, Li et al. (2017) show that state-owned, listed firms become significantly more tax aggressive following the introduction of the split-share structure reform in the Chinese market in 2005.

To assess whether the governmental and political connections play important roles in the association between the proportion of external AC members and tax avoidance, I split the sample using two approaches. First, I divide the sample into two groups, namely *government-controlled* and *non-government-controlled firms*. There are 138 observations (6 percent of the sample) that are government-controlled, which include publicly-listed state-owned enterprises (SOEs) and their subsidiaries. Second, the sample is partitioned into *politically-connected* and *non-politically-connected companies*.⁴⁸ Examining Indonesia's publicly-listed SOEs, Fisman (2001) suggests that political connections play a substantial role in the Indonesian economy.

Panel C of Table 4.5 displays the results of my analysis on the role of government control in explaining the association between external AC members and tax avoidance. It could be seen that the coefficient of *External_AC_%* demonstrates higher magnitude and significance for the government-controlled subgroup, suggesting that the positive effects of external AC members on tax avoidance are more pronounced in such companies. It seems that when government control is present, external AC members enjoy greater opportunities to provide the firm with effective tax planning advice, resulting in a greater extent of tax avoidance. This might be

⁴⁸ I use an approach similar to previous Indonesian studies, such as Harymawan and Nowland (2016), Habib et al. (2017), Arifin et al. (2020), and Joni et al. (2020), in identifying the political connectedness of a firm. I search information on the political activities of each board member by exploiting a range of publicly-available sources, including government documents, government agency websites, and the Internet search engine. A firm is categorised as a politically-connected firm if at least one of its board members has political experience or backgrounds. Such experience or backgrounds include current or former ministers, deputy ministers, national parliament members, local parliament members, heads of local governments (governors, mayors, or regents), senior officials of political parties, and those related to such political figures. Observations with political connections account for 21 percent of the sample.

amplified by some advantages already enjoyed by government-controlled companies, including lower detection risks and lower pressure for transparency. In other words, governmental connections strengthen the positive effects of external AC members on tax avoidance.

In terms of the role of political connections, there are 457 observations in my sample (21 percent) that are considered politically-connected. The results, as reported in Panel D of Table 4.5, are quite similar to those presented in Panel C. The effects of external AC members demonstrate higher levels of magnitude and significance for the subsample of politically-connected firms. This suggests that in politically-connected firms, external AC members are likely to enjoy greater freedom to impart expert advice on the implementation of aggressive tax planning. At the same time, they might also make the most of advantages obtained from political connections established by such firms.

Hence, the results presented in both Panels C and D indicate that the governmental and political connections appear to become another important channel used by external AC members in exerting influences on tax avoidance. When such connections exist, external AC members are likely to pursue opportunities to effectively impart advice on aggressive tax planning, without needing to be necessarily concerned about detection risks from such tax-avoidant behaviour.

4.5.3 Co-option of external AC members

In addition to the roles of external AC members' accounting expertise and firms' governmental and political connections, I also look into the real independence of external AC members. I use co-option to determine their degree of independence from the firm's executives. Coles et al. (2014) define board co-option as the proportion of board members who were appointed after the current CEO took office. Co-option indicates allegiance to the CEO due to the CEO's involvement in the appointment of directors, leading to a lack of independence and ineffective

monitoring (Coles et al., 2014). Following their study, I consider an external AC member co-opted if he or she was appointed by the firm after the incumbent CEO assumed office.

Prior studies have suggested that co-option negatively impacts monitoring effectiveness. For example, Coles et al. (2014) reveal that board co-option leads to a decrease in turnover-performance sensitivity. Co-opted boards are also found to engage less in decision-making process, enabling the CEO and management to have their strategic decisions unchallenged (Baghdadi et al., 2020). Additionally, Dikolli et al. (2021) reveal that CFO co-option is positively related to a CEO pay premium, particularly during the early years of the CEO's tenure with the firm. Specifically addressing tax avoidance in European firms, Campa et al. (2022) provide evidence that co-opted CFOs tend to engage in aggressive tax planning.

I split the sample into two subsamples to indicate the degree of external AC members' co-option, namely *firms with full co-option* of external AC members (i.e., *all* external AC members were appointed after the incumbent CEO assumed office) and *firms with partial or no co-option* of external AC members. Panel E of Table 4.5 displays the results of this analysis.

It is found that the coefficient of *External_AC_%* exhibits a higher magnitude, statistically significant at the 5 percent level, for the subsample with full co-option of external AC members. In a situation where external AC members are fully co-opted, they seem to show greater allegiance to the CEO by pursuing tax-avoidant behaviour. Such a lack of real independence leads them to support the firm's tax planning agenda and provide management with expert counsel on aggressive tax planning. This seems not to be the case when external AC members are only partially co-opted or not co-opted at all. As such, the co-option (i.e., the lack of independence) of external AC members is found to only augment the positive effects of external AC members on tax avoidance.

[Insert Table 4.5 about here]

4.6 Cross-sectional analysis

Next, I conduct a series of cross-sectional analyses to investigate the roles of particular firm-level attributes in explaining the association between the proportion of external AC members and tax avoidance. I would be focused on three groups of attributes, namely corporate governance mechanisms, external auditor quality, and the presence of Type II agency problems.

4.6.1 *Corporate governance mechanisms*

In this analysis, I would address the roles of corporate governance mechanisms that might influence the monitoring effectiveness of external AC members. Two mechanisms examined here are board independence and foreign institutional shareholdings, which represent the internal and external governance mechanisms, respectively. When there are strong monitoring functions from such governance mechanisms, I expect that the positive effects of external AC members on tax avoidance could be effectively mitigated.

The first mechanism addressed here is SB independence. Prior empirical studies suggest that independent board members are more likely to curtail tax avoidance, supporting the notion that they effectively serve monitoring roles in terms of tax planning (Armstrong et al., 2015; Lanis & Richardson, 2011), even though there are other studies revealing the opposite results. While the results of my baseline regression analysis—as reported in Table 4.3—indicate that SB independence is not significantly associated with tax avoidance, the role of independent SB members might vary when considering the effects of external AC members.

I partition the sample into two subsamples, namely *firms with higher board independence* and *firms with lower board independence*. An observation is considered having a higher level of

board independence when the proportion of independent SB members is above the median (33.3 percent). The results are shown in Panel A of Table 4.6. The magnitude and significance of the coefficient of *External_AC_%* are higher for the subsample with lower board independence, suggesting that the positive link between external AC members and tax avoidance is more pronounced in firms with a lower degree of SB independence. In such firms, external AC members seem to be provided with greater freedom to impart advice on aggressive tax planning, without being effectively monitored and challenged by independent SB members.

Hence, the result suggests that a higher level of SB independence weakens the positive association between the proportion of external AC members and tax avoidance. In other words, while external AC members tend to more effectively serve advising roles in terms of tax planning, independent SB members could be expected to challenge the aggressive tax planning agenda pursued by the external AC members.

Secondly, I assess the role of foreign institutional ownership. It has been suggested that institutional investors have greater incentives to oversee the firm's management, where such incentives are supported by their resources and expertise (Tihanyi et al., 2003). Prior empirical studies reveal that institutional investors promote better corporate governance practices (Chung & Zhang, 2011), encourage greater disclosures (Karamanou & Vafeas, 2005), and facilitate more conservative financial reporting (Ramalingegowda & Yu, 2012). In terms of tax planning, Khurana and Moser (2013) and Ying et al. (2017) suggest that institutional ownership is negatively associated with tax avoidance.

Moreover, addressing cross-border portfolio investment, Aggarwal et al. (2011) find that international institutional investment positively affects the quality of firm-level governance. They also reveal that foreign institutional investors play an important role in promoting corporate governance improvements, particularly in markets with weaker shareholder

protection. Additionally, Bena et al. (2017) demonstrate that foreign institutional investors promote long-term investment and encourage improvements in innovation output, thereby strengthening the monitoring of entrenched insiders.

I then divide the sample into two subsamples, namely *firms that have foreign institutional blockholders* and *firms that do not*.⁴⁹ The results are presented in Panel B of Table 4.6. The coefficient of *External_AC_%* shows a higher magnitude, negative and statistically significant at the 1 percent level, for the subsample representing observations without foreign institutional blockholders. This indicates that external AC members in such firms are likely to have greater opportunities to provide managers with expert advice on corporate tax planning without being closely disciplined by foreign institutional investors.

As such, this analysis reveals that foreign institutional ownership diminishes the positive effects of external AC members on aggressive tax planning. While board independence appears to be an internal corporate governance mechanism that is capable of mitigating tax avoidance pursued by external AC members, foreign institutional shareholders seem to play an important role as an external monitor. They would serve an additional disciplinary function on the aggressive tax planning agenda.

Overall, these analyses provide some support to the notion that tax avoidance pursued by external AC members could be mitigated when sound corporate governance mechanisms (as indicated by greater SB independence and the presence of foreign institutional blockholders) are in place. As external AC members tend to effectively serve advising roles in corporate tax

⁴⁹ The Indonesian listed companies are only mandated to disclose shareholders that own at least 5 percent of their outstanding shares. This makes me unable to address all institutional shareholders that own a firm's shares. Therefore, in this analysis, I only address foreign institutional shareholders whose share ownership is 5 percent or larger. Investors with a substantial shareholding are likely to have stronger power and opportunities to influence the board's or management's decision-making process. Examining S&P 1500 companies, Knyazeva et al. (2013) also use a similar definition, i.e., using the proportion of institutional blockholders' shareholding as a proxy measure of institutional ownership.

planning, such governance mechanisms are expected to carry out the monitoring agenda, thereby challenging external AC members over such aggressive tax planning behaviour and reducing the likelihood of tax avoidance.

4.6.2 *External auditor quality*

I further examine the role of external auditor quality in explaining the association between external AC members and tax avoidance. The existing evidence in the literature demonstrates that external auditors could act as either an advisor or a monitor in terms of corporate tax planning. Supporting the notion that the external auditor plays an advising role, McGuire et al. (2012) find that firms purchasing tax consulting services from their external auditor are more likely to engage in tax avoidance when their external auditor has tax-specific industry expertise. Their finding suggests that there are still rooms for tax avoidance even when firms appoint an industry expert as their external auditor.

Meanwhile, addressing the role of auditor quality, Kanagaretnam et al. (2016) document that Big-4 and industry-expert audit firms are associated with a lower level of tax avoidance, suggesting that higher-quality auditors play a significant role as an external monitor to constrain tax avoidance. Additionally, Klassen et al. (2016) reveal that Big-4 tax preparers are associated with a lower level of tax avoidance when they also act as the external auditor. These findings seem to suggest that higher-quality external auditors are exposed to higher reputational concerns (Palmrose, 1988; Shu, 2000), so that they do not want to tarnish their reputation and opt to limit the possibility of tax avoidance.

I am going to look into two attributes of external auditor quality, namely auditor size (Big-*N*) and auditor industry expertise, and then make subsamplings based on such attributes. Firstly, the sample firms are grouped into two subsamples based on the size of their external auditor, namely *Big-4-audited firms* and *non-Big-4-audited firms*. The results are presented in Panel C

of Table 4.6. It could be seen that the coefficient of *External_AC_%* exhibits a higher magnitude, being significant at the 1 percent level, for the non-Big-4-audited subsample. As such, the positive effects of external AC members on tax avoidance are more enunciated in firms *not* audited by Big-4 audit firms. In other words, Big-4 audit firms impede the positive association between external AC members and tax avoidance.

As previously mentioned, external AC members tend to serve advising roles, providing managers with expert counsel to achieve the firm's tax objectives. However, when a firm is audited by a Big-4 auditor, such opportunities might have to be compromised as the auditor puts concerns on and constrains such an aggressive tax planning agenda.

Next, the sample is partitioned into two subgroups based on the external auditor's industry expertise, namely *firms that are audited by an industry-expert auditor* and *firms that are not*. Following prior studies (Knechel et al., 2007; Mayhew & Wilkins, 2003), a firm is considered being audited by an industry-expert auditor if the auditor has a market share of over 30 percent of all listed firms' sales in a given industry and year. The results, as reported in Panel D of Table 4.6, are quite similar to those of Panel C. The coefficient of *External_AC_%* demonstrates a higher magnitude, significant at the 5 percent level, for the non-industry-expert-audited subsample. Hence, industry-expert auditors weaken the positive impacts of external AC members on tax avoidance.

Overall, these results indicate that higher external auditor quality would mean more effective monitoring of the firm's tax planning activities. The baseline finding suggests that external AC members are inclined to pursue the firm's tax objectives by providing advice on how to best carry out aggressive tax planning. However, the effectiveness of such advising roles would diminish when a higher-quality external auditor is present.

4.6.3 Agency issues

Another firm-level attribute that I would like to examine here is the presence of agency issues, particularly Type II agency problems which are prevalent in firms with greater ownership concentration. I would address two common features of the Indonesian listed firms, namely high ownership concentration and family control. Specifically, I examine whether ownership concentration and family control strengthen or impede the impacts of external AC members on tax avoidance.

With regard to ownership concentration, Khan et al. (2017) demonstrate that firms with greater ownership concentration are likely to be more tax avoidant. In contrast, Baderstcher et al. (2013) and Richardson et al. (2016) suggest that ownership concentration is negatively linked to tax avoidance. Addressing the impact of family control, Chen et al. (2010) provide evidence that family-controlled firms are associated with a lower likelihood of tax avoidance. However, Kovermann and Wendt (2019) find that family firms are more tax avoidant than their non-family counterparts.

I firstly split the sample into two groups, namely *firms with higher ownership concentration* and *firms with lower ownership concentration*. An observation is considered as having higher ownership concentration when the proportion of shares owned by the largest shareholder is greater than or equal to 50 percent. The results, as reported in Panel E of Table 4.6, show that the coefficient of *External_AC_%* with a higher magnitude is found in the subsample with lower ownership concentration, statistically significant at the 5 percent level. Hence, this suggests that greater ownership concentration does not seem to amplify the positive association between external AC members and tax avoidance. As argued by Baderstcher et al. (2013), because tax avoidance is considered a risky activity with substantial consequences and costs on a firm, firms with greater ownership concentration—which tend to be risk averse as

suggested by Fama and Jensen (1983)—would have lower incentives to pursue a tax avoidance agenda. Such lower incentives in turn make external AC members not effectively advising on aggressive tax planning.

Examining the role of family control, the sample is again partitioned into two subgroups, namely *family-controlled* and *non-family-controlled firms*. Panel F of Table 4.6 displays the results. The coefficient of *External_AC_%* is found to have a higher magnitude for the non-family-controlled subsample. Similar to the results of the role of ownership concentration, this indicates that family control does not strengthen the positive effects of external AC members on tax avoidance. Family-controlled firms, being generally founded and managed by a particular family, seem to be concerned about possible penalties and reputational costs if they become the subject of the tax authority's scrutiny (Chen et al., 2010). Therefore, such companies might refrain from engaging in tax avoidance, thereby their external AC members less effectively serving advising roles in terms of tax planning.

Overall, when it comes to tax planning, firms with greater ownership concentration and family control might put more concerns on damages they have to bear if they are discovered to engage in tax avoidance. Such a concern seems to lead them to engage less in aggressive tax planning. As such, in those firms, external AC members are not provided with opportunities to advise on tax planning. The case is remarkably different in firms with more dispersed ownership as well as those not controlled by families, where external AC members seem to enjoy greater opportunities to provide management with expert advice on tax planning.

[Insert Table 4.6 about here]

4.7 Robustness checks and sensitivity analysis

4.7.1 Omitted variable analysis

I perform a series of robustness checks and sensitivity analyses to ensure the robustness of my baseline results. I first emphasise the omitted variable bias. I have attempted to reduce such concerns by including a variety of firm-level control variables, as well as industry and year fixed effects, in the baseline regression models. Nevertheless, other firm-level attributes, particularly those that are difficult to measure, could cause the issue of spurious correlations between external AC members and tax avoidance. This in turn would make the model estimation biased and invalidate the inferences (Xu et al., 2019). Hence, I seek to address such concerns by conducting an omitted variable analysis using two different approaches suggested by Frank (2000) and Oster (2019).

The first approach is the Impact Threshold for a Confounding Variable (ITCV) as developed by Frank (2000). Such an approach departs from a concern that an unobservable independent variable could invalidate the significant coefficient of an observable independent variable if it is significantly correlated with both dependent and independent variables. Thus, the ITCV denotes the impact needed to make the significant coefficient of an independent variable of interest remains significant. When the effect of an unobservable independent variable exceeds the ITCV, the significant coefficient of an observable independent variable would not be considered robust.

The results of the ITCV analysis are presented in Panel A of Table 4.7. The ITCV thresholds of *External_AC_%* are -0.0710 and -0.0920 using *CashETR1* and *CashETR3* as the dependent variables, respectively, as shown in Columns (1) and (4). Such threshold figures indicate the impact necessary to make the significant coefficient of *External_AC_%* remains significant. I definitely could not identify the potential impacts of any unobservable variables. Thus, I would

need to look at the impact of each observable independent variable and then compare it to the thresholds. Frank (2000) introduces partial and raw impact scores. The partial impact score represents the product of the correlations of external AC members and cash ETRs with the respective control variable, conditional on all other control variables. Meanwhile, the raw impact score, which is more conservative, denotes the product of the unconditional correlations of external AC members and cash ETRs with the respective control variable.

Next, I identify an observable confounding variable with the largest negative impact on the coefficient of *External_AC_%*. As shown in Column (2), based on the raw impact, *Sales_growth* has the largest negative impact of -0.0066 , but it is well below the threshold (-0.0710). It is unlikely that the impacts of any unobservable confounding variables would exceed -0.0710 , the impact needed to overturn the significant coefficient of *External_AC_%*. Based on the partial impact, as exhibited in Column (3), the largest negative impact could be seen for *Sales_growth* as well (-0.0049), also far below the threshold. Employing *CashETR3* as the dependent variable, as shown in Columns (5) and (6), the largest negative impacts are found for *Sales_growth* and *Largest_SH* based on the raw and partial impact scores, respectively. Again, the negative impacts of the two variables are well below the threshold (-0.0920).

Overall, the results of the ITCV analysis indicate that it is highly unlikely that the impacts of any unobservable variables would be large enough to invalidate the significant coefficient of *External_AC_%*. In other words, such evidence minimises concerns that the impacts of unobservable independent variables would affect the documented baseline results.

The second approach is by observing coefficient robustness to unobservable variables, as suggested by Altonji et al. (2005) and later refined by Oster (2019). This approach puts emphasis on comparing the coefficient of interest and the *R*-squared between regressions with

and without control variables to understand the sensitivity of such a coefficient. If a coefficient of interest remains stable as the R -squared increases, then the omitted variable bias should not be a concerning issue. Further, the approach also computes a parameter δ , which is the ratio of the impact of unobservable variables to the impact of observable variables necessary to make a coefficient of interest (β) zero. Oster (2019) suggests that impacts for which $\delta > 1$ or $\delta < -1$ could be deemed robust.

The results of analyses using the Oster's (2019) approach are reported in Panel B of Table 4.7. Using *CashETR1* as the dependent variable, adding control variables only slightly changes the coefficient of *External_AC_%* from -0.100 to -0.102 , while the R -squared increases from 0.003 to 0.137 . The corresponding δ is 3.445 , suggesting that the selection of unobservable variables should be more than three times as large as the selection of observable independent variables to diminish the significant coefficient of *External_AC_%* down to zero. As the value of δ is well beyond the threshold of one, it is unlikely that an omitted variable with such a degree of importance exists.

Further, when *CashETR3* is used as a proxy measure of tax avoidance, I also notice an insignificant change in the coefficient of *External_AC_%* after adding control variables, as shown in Columns (3) and (4). The coefficient increases from -0.145 to -0.165 , while the R -squared increases from 0.006 to 0.092 . The corresponding δ is -1.545 , where a negative sign of δ suggests that unobservable variables would have to be correlated to *External_AC_%* in the opposite direction of the observable control variables to *External_AC_%* in order to invalidate the results (Evans, 2019). While the magnitude of δ for *CashETR3* is lower than that for *CashETR1*, the figure is below the threshold of -1 ; indicating that it is unlikely that there is any omitted variable of that importance.

Overall, the above evidence implies that omitted variable concerns are unlikely to overturn the baseline results. The coefficient of the independent variable of interest (*External_AC_%*) remains negative and significant with sound robustness to unobservable variables. Moreover, the impacts and selection of unobservable variables are deemed unlikely to drive the empirical results.

4.7.2 *Alternative proxies for tax avoidance*

In the main analysis, the dependent variables are *CashETR1* and *CashETR3*, which are among the most commonly used measures in the existing literature. As there are a wide range of tax avoidance measures employed by scholars, I utilise alternative proxy measures to check the robustness of the baseline results. The results are reported in Panel C of Table 4.7.

The first alternative proxy measure is the cashflow ETR (*CashflowETR*), defined as income tax expense less the change in deferred income taxes, divided by net cashflows from operations. Such a proxy measure is used in such studies as Hoopes et al. (2012) and Dyreng et al. (2017). Similar to cash ETRs, a lower value of the cashflow ETR indicate a higher likelihood of tax avoidance. As shown in Column (1), the coefficient of *External_AC_%* is negative and significant, albeit marginally significant at the 10 percent level.

The next alternative proxy measure is the book-tax difference (*BTD*), which has also been commonly used in the literature (Desai & Dharmapala, 2006; Lennox et al., 2013; McGuire et al., 2012). *BTD* is defined as pre-tax accounting income less taxable income scaled by total assets, with taxable income computed as income tax expense divided by the statutory corporate income tax rate.⁵⁰ Hence, a firm with a higher value of *BTD* means that it is more tax avoidant.

⁵⁰ The statutory corporate income tax rate applicable in Indonesia is 25 percent (for the financial years 2010-2019) and 28 percent (for the financial year 2009), though some exceptions apply. For example, listed companies with a proportion of publicly-held shares of at least 40 percent could benefit from the discounted income tax rate of 5 percent. For the financial years 2004-2008, there were three different

As shown in Column (2), the coefficient of *External_AC_%* is found to be positive and significant at the 5 percent level, consistent with the baseline finding that the proportion of external AC members is positively linked to tax avoidance.

4.7.3 *Alternative proxies for the representation of external AC members*

Further, I perform another sensitivity analysis by employing alternative proxies for the independent variable of interest. The results are reported in Panel D of Table 4.7. Firstly, I replace the *proportion* of external AC members (*External_AC_%*) with the *number* of external AC members (*External_AC_#*). In both Columns (1) and (2), the coefficients of *External_AC_#* are found to be negative and significant at the 5 percent level, consistent with the baseline results.

Therefore, this supports the conjecture that a stronger representation of external members on the AC would contribute to enhancing the effectiveness of advising roles in tax planning, leading to a higher level of tax avoidance. In addition, a larger number of external AC members represent a wider pool of expertise and experience (Van den Berghe & Levrau, 2004), which in turn affects the capacity of those external AC members in providing managers with expert advice to achieve the firm's tax planning objectives.

Further, in Columns (3) and (4), I use *ExternalAC_Dum50* as the independent variable of interest. This is a dichotomous variable, equalling to 1 if the proportion of external AC members is larger than 50 percent and 0 otherwise. The coefficients of *ExternalAC_Dum50* in both Columns (3) and (4) are found to be negative and significant. Meanwhile in Columns (5) and (6), the main independent variable is *ExternalAC_Dum67*, which equals to 1 if the

rates of corporate income taxes, namely 10 percent for the first layer of earnings (up to IDR 50 million), 15 percent for the second layer of earnings (IDR 50-100 million), and 30 percent for the third layer of earnings (more than IDR 100 million).

proportion of external AC members is larger than 66.67 percent and 0 otherwise. While I do not obtain a significant result in Column (5), the coefficient of *ExternalAC_Dum67* is negative and marginally significant when using *CashETR3* as the dependent variable in Column (6). These results suggest that the advising role of external AC members in terms of tax planning is more effective when their representation on the AC is stronger.

4.7.4 *Excluding the period of the global financial crisis*

The financial years 2007 and 2008 represent the period of the global financial crisis, which also hit the Indonesian economy and financial markets. The crisis might bring about substantial impacts on firms' financial performance as well as tax-related practices, which might drive the baseline results. Hence, I re-estimate the baseline regression model in Equation (1), but now I exclude observations from the years 2007 and 2008. The results, as exhibited in Panel E of Table 4.7, remain consistent with those of the baseline regression analysis. In both Columns (1) and (2), the coefficients of *External_AC_%* are negative and significant at the 5 percent level. As such, the baseline results are robust even after considering the potential effects of the global financial crisis.

[Insert Table 4.7 about here]

4.8 Conclusion

The dynamics of corporate governance regulations in Indonesia is influenced by, among others, the country's remarkably distinctive institutional environment as well as the complexity of its reforms post-Asian financial crisis. These appear to be among the factors that explain why the AC composition requirement in the country is very different from that in many other jurisdictions globally. It has been mandated since over two decades ago that the ACs of the

Indonesian listed companies should be comprised of both independent SB members and externally-appointed (i.e., non-board) members. This chapter again exploits such a unique AC regime and investigates its impact on another economic outcome. Specifically, it attempts to investigate whether the representation of such external members on the AC has a significant effect on corporate tax practices.

In Chapter 3, it has been documented that a stronger presence of external AC members contributes to enhancing oversight effectiveness over the financial reporting process, thereby curtailing earnings management and improving financial reporting quality. In other words, when it comes to the traditional function of the AC, namely monitoring the financial reporting process, external AC members could be expected to effectively exercise their monitoring roles. As the scope of AC oversight has recently expanded to other areas, including tax planning and risks, the impact of such external AC members on tax avoidance becomes an avenue worth investigation. While the existing, yet rare, literature has addressed the association between AC attributes and tax avoidance, it is unknown whether external AC members in the Indonesian context would more effectively serve advising or monitoring roles when it comes to corporate tax planning.

I employ a hand-collected corporate governance data set covering 2,293 firm-year observations across the period 2004-2019. The results from the baseline analysis demonstrate that a stronger presence of external AC members is significantly associated with a greater extent of tax avoidance, indicated by lower values of the one-year and three-year cash ETRs. This finding suggests that such external AC members more effectively serve advising roles in terms of tax planning, thereby reducing the firm's tax burdens. While they exert an effective monitoring function of the financial reporting process, that is not the case when it comes to corporate tax planning. It seems that external AC members put more emphasis on maximising shareholder

wealth, leading them to provide the firm with expert counsel on tax planning to achieve such a purpose. To address endogeneity issues, I utilise the instrumental variable approach and find consistent results.

Next, I examine possible channels through which external AC members positively affect tax avoidance. *Firstly*, I look into the accounting expertise of external AC members and find that the positive link between external AC members and tax avoidance is more pronounced when they have a greater extent of accounting expertise. This implies that accounting expertise enables them to provide managers with effective expert advice on tax planning. *Secondly*, I examine the roles of the governmental and political connections as prior studies suggest that politically-connected firms are more likely to be tax avoidant. It is found that the positive association between external AC members and tax avoidance is more pronounced in government-controlled and politically-connected firms, indicating that such companies seem to provide their external AC members with greater opportunities to impart tax planning advice in order to pursue their tax-related endeavour. *Thirdly*, I look into the degree of real independence of external AC members, as indicated by their co-option. The result demonstrates that the external AC members-tax avoidance nexus is more pronounced when external AC members are fully co-opted. This implies that their lack of independence makes them unable to perform an effective monitoring function, instead leading them to more effectively serve advising roles.

Further in cross-sectional analyses, I assess the roles of a series of firm-level attributes in explaining the link between external AC members and tax avoidance. Looking into the roles of corporate governance mechanisms, the results suggest that the positive link between external AC members and tax avoidance is more prominent for firms with weaker corporate governance mechanisms, as indicated by lower SB independence and non-presence of foreign institutional

blockholders. This implies that the aggressive tax planning agenda pursued by external AC members could be mitigated when sound corporate governance mechanisms, which effectively act as monitoring tools, are in place.

Moreover, the positive effects of external AC members on tax avoidance are stronger for firms with lower external auditor quality. This suggests that higher-quality external auditors seem to act as an additional monitoring tool, hence diminishing such positive effects. Meanwhile, such a positive association between external AC members and tax avoidance is more likely to be present in firms with lower ownership concentration, as well as in non-family-controlled firms. This suggests that firms with greater ownership concentration and family-controlled firms—given the existing Type II agency issues attached to such ownership structure—are more concerned about the reputational damage and consequences of their tax planning behaviour, which makes them avoid paying too low taxes.

This chapter extends the existing, yet rare, literature addressing the roles of AC attributes in explaining the variations in tax avoidance activities. Prior studies are all conducted using the context of jurisdictions where the AC is comprised exclusively of board members, which is not the case in Indonesia. With respect to the roles of external agents, while previous research has examined the roles of external auditors and tax consultants, I offer the first evidence of the impacts of external agents serving on the AC on corporate tax planning. My expanded analysis also provides additional insights on the roles of certain factors (e.g., corporate governance mechanisms, accounting expertise, and corporate political connections) in enhancing or impeding the advising function of such external AC members in terms of tax planning.

Nevertheless, this chapter is mostly focused on the relation between the representation of external AC members and tax avoidance, as well as the roles of firm-level attributes in explaining such an association. There are many other avenues in this area that are interesting

to be explored further, such as other tax avoidance strategies adopted by external AC members, the legal expertise of external AC members, career consequences post-tax-related enforcements, and monitoring by the tax authority. Moreover, in terms of the advising roles of external AC members, there are also other areas worth investigation in line with the expanding scope of the AC's duties, including disclosure practices, risk management, information technology, and the ethical aspects of firms' business operations. Another limitation of this study is that it relies on financial statement data to construct proxy measures of tax avoidance. As suggested by Plesko (2003) and Hanlon and Heitzman (2010), the accuracy of such a construction method might be questioned. As such, the results of this study should be interpreted with caution.

The results of this study also provide some insights for policymakers. While a stronger representation of external AC members contributes to enhancing financial reporting quality, it leads to an effective advising role in terms of tax planning. Such external AC members seem to enjoy greater opportunities to pursue such a role when firms hiring them are politically-connected, when there are no strong monitoring mechanisms in place, and when the external auditor is of lower quality. While a greater extent of tax avoidance activities would support the firm's endeavour to increase shareholder wealth, it does not seem to be in the best interests of the government. In other words, higher tax avoidance appears to be an unintended consequence of a stronger representation of external AC members.

Hence, the capital market regulator might need to carefully review the costs and benefits of the stronger representation of external AC members in listed firms, thereby becoming a useful consideration in regulating and overseeing the listed firms. Firms with a stronger presence of external AC members might produce higher-quality financial statements, but the external members could not be expected to monitor the firm's compliance with applicable tax

regulations. In contrast, firms with a weaker presence of external AC members might be more compliant in terms of tax planning, but their financial statements tend to be of lower quality. Further, the empirical results of the present study could also be beneficial for the tax authority in detecting possible tax avoidance activities. Considering various firm-level attributes that are significantly associated with tax avoidance, including the proportion of external AC members, the results might assist the tax authority in identifying firms to focus on for the purpose of tax audits and enforcement.

Table 4.1
Sample selection

Panel A: Sample construction process

Initial firm-year observations (all companies listed on the Indonesia Stock Exchange across the period 2004-2019)	7,407
<i>Less deletions:</i>	
Observations from the financial sector	(1,220)
Observations with negative pre-tax income and ETR < 0	(1,953)
Observations with ETR > 1	(396)
Observations with missing data for analysis	(1,545)
<i>Usable firm-year observations (using the one-year cash ETR)</i>	2,293
Observations with missing three-year cash ETR	(154)
<i>Usable firm-year observations (using the three-year cash ETR)</i>	2,139

Panel B: Sample distribution by industry

<i>Industry</i>	<i>Obs.</i>	<i>%</i>
Agriculture	104	4.54
Basic industry and chemicals	334	14.57
Consumer goods	267	11.64
Infrastructure, utilities, and transportation	252	10.99
Mining	175	7.63
Miscellaneous industry	229	9.99
Property, real estate, and building construction	325	14.17
Trade and services	607	26.47
<i>Sample</i>	2,293	100.00

Table 4.2
Descriptive statistics

	Obs.	Mean	Standard deviation	Minimum	Median	Maximum
<i>CashETR1</i>	2,293	0.293	0.191	0.005	0.260	0.859
<i>CashETR3</i>	2,139	0.274	0.206	0.002	0.254	0.860
<i>External_AC_%</i>	2,293	0.632	0.106	0.000	0.667	1.000
<i>AC_size</i> (number)	2,293	3.109	0.502	2.000	3.000	5.000
<i>Board_indep</i>	2,293	0.401	0.119	0.222	0.333	0.667
<i>Largest_SH</i>	2,293	0.508	0.212	0.051	0.510	0.997
<i>Family</i>	2,293	0.588	0.492	0.000	1.000	0.000
<i>Firm_size</i>	2,293	28.705	1.623	25.285	28.715	32.066
<i>AltmanZ</i>	2,293	4.458	4.236	0.587	3.135	21.650
<i>Leverage</i>	2,293	1.114	1.033	0.069	0.830	5.234
<i>Sales_growth</i>	2,293	0.161	0.271	-0.322	0.114	1.254
<i>ROA</i>	2,293	0.091	0.073	0.007	0.073	0.387
<i>MTB</i>	2,293	2.313	2.508	0.226	1.467	13.725
<i>Cash_holdings</i>	2,293	0.075	0.082	0.003	0.046	0.393
<i>PPE</i>	2,293	0.408	0.279	0.011	0.367	0.971
<i>AbsDA_PA-MJM</i>	2,293	0.078	0.090	0.002	0.051	0.475

This table presents the summary statistics of the variables used in the analysis. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions.

Table 4.3
External AC members and tax avoidance: Baseline regression

	<i>CashETR1</i>	<i>CashETR3</i>
	(1)	(2)
<i>External_AC_%</i>	-0.093** (-2.169)	-0.137** (-2.293)
<i>AC_size</i>	0.013 (0.322)	0.050 (1.124)
<i>Board_indep</i>	-0.020 (-0.556)	-0.019 (-0.448)
<i>Largest_SH</i>	0.000 (1.641)	0.000 (0.784)
<i>Family</i>	-0.013 (-1.270)	0.008 (0.522)
<i>Firm_size</i>	-0.004 (-0.907)	-0.003 (-0.556)
<i>AltmanZ</i>	0.000 (0.059)	0.000 (0.241)
<i>Leverage</i>	0.000** (2.113)	0.000* (1.779)
<i>Sales_growth</i>	-0.086*** (-6.021)	-0.023 (-1.537)
<i>ROA</i>	-0.007*** (-6.480)	-0.004*** (-4.672)
<i>MTB</i>	-0.000*** (-5.747)	-0.000*** (-2.301)
<i>Cash_holding</i>	-0.018 (-0.318)	-0.025 (-0.382)
<i>PPE</i>	-0.031 (-1.420)	-0.030 (-1.037)
<i>AbsDA_PA-MJM</i>	0.092* (1.827)	-0.004 (-0.072)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	2,293	2,139
Adjusted R-squared	0.124	0.076

This table presents the results of the baseline OLS regressions. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 4.4

External AC members and tax avoidance: Instrumental variable approach

Panel A: Number of listed firms in the same province as the instrument

	First stage		Second stage	
	<i>External_AC_%</i>	<i>CashETR1</i>	<i>CashETR3</i>	
	(1)	(2)	(3)	
<i>Listed_firms_prov, t-1</i>	-0.006** (-2.210)			
<i>External_AC_%</i>		-1.919** (-2.521)	-1.672** (-2.191)	
<i>AC_size</i>	-0.007 (-0.157)	0.018 (0.369)	0.054 (1.246)	
<i>Board_indep</i>	-0.077*** (-3.474)	-0.184** (-2.353)	-0.134* (-1.763)	
<i>Largest_SH</i>	-0.000 (-1.249)	-0.000 (-0.400)	-0.000 (-0.457)	
<i>Family</i>	0.000 (0.060)	-0.034** (-2.441)	-0.010 (-0.765)	
<i>Firm_size</i>	-0.005 (-1.551)	-0.018* (-1.902)	-0.011 (-1.284)	
<i>AltmanZ</i>	0.001 (1.629)	0.009*** (3.496)	0.006** (2.367)	
<i>Leverage</i>	0.000 (0.149)	0.000*** (4.281)	0.000*** (3.532)	
<i>Sales_growth</i>	-0.000 (-0.019)	-0.062** (-2.544)	-0.015 (-0.752)	
<i>ROA</i>	-0.000 (-0.825)	-0.008*** (-8.021)	-0.005*** (-4.766)	
<i>MTB</i>	-0.000*** (-12.150)	-0.000** (-2.092)	-0.000* (-1.731)	
<i>Cash_holding</i>	0.021 (0.795)	0.010 (0.124)	0.037 (0.525)	
<i>PPE</i>	0.004 (0.392)	-0.002 (-0.084)	0.009 (0.355)	
<i>AbsDA_PA-MJM</i>	0.006 (0.280)	0.046 (0.625)	-0.002 (-0.028)	
Year fixed effects	Yes	Yes	Yes	
Industry fixed effects	Yes	Yes	Yes	
Observations	2,108	1,928	1,793	
Adjusted R-squared	0.037	0.124	0.076	

This table presents the results of the instrumental variable approach, using the number of listed firms in the same province as a firm's headquarter from the previous year as the instrument. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Number of professional workers with a Bachelor's degree or higher in the same province as the instrument

	First stage		Second stage	
	<i>External_AC_%</i>		<i>CashETRI</i>	<i>CashETR3</i>
	(1)	(2)	(3)	
<i>Prof_workers_prov, t-1</i>	0.006** (2.093)			
<i>External_AC_%</i>		-2.033** (-2.411)	-1.729* (-1.902)	
<i>AC_size</i>	-0.007 (-0.162)	0.022 (0.441)	0.043 (0.955)	
<i>Board_indep</i>	-0.077*** (-3.472)	-0.191** (-2.256)	-0.138 (-1.584)	
<i>Largest_SH</i>	-0.000 (-1.227)	-0.000 (-0.379)	-0.000 (-0.426)	
<i>Family</i>	0.000 (0.031)	-0.031** (-2.126)	-0.004 (-0.264)	
<i>Firm_size</i>	-0.005 (-1.526)	-0.018* (-1.853)	-0.010 (-1.112)	
<i>AltmanZ</i>	0.001 (1.632)	0.009*** (3.263)	0.005* (1.935)	
<i>Leverage</i>	0.000 (0.148)	0.000*** (3.915)	0.000*** (2.999)	
<i>Sales_growth</i>	-0.000 (-0.007)	-0.061** (-2.497)	-0.014 (-0.751)	
<i>ROA</i>	-0.000 (-0.818)	-0.009*** (-8.187)	-0.005*** (-4.867)	
<i>MTB</i>	-0.000*** (-12.180)	-0.000** (-2.201)	-0.000* (-1.688)	
<i>Cash_holding</i>	0.022 (0.803)	0.004 (0.053)	0.044 (0.600)	
<i>PPE</i>	0.004 (0.381)	0.000 (0.000)	0.020 (0.703)	
<i>AbsDA_PA-MJM</i>	0.006 (0.266)	0.060 (0.799)	0.015 (0.243)	
Year fixed effects	Yes	Yes	Yes	
Industry fixed effects	Yes	Yes	Yes	
Observations	2,108	1,928	1,793	
Adjusted R-squared	0.037	0.124	0.076	

This table presents the results of the instrumental variable approach, using the number of professional workers with a Bachelor's degree or higher in the same province as a firm's headquarter from the previous year, matched with the number of listed firms in that province, as the instrument. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel C: Tests of endogeneity and weak instruments

	<i>Listed_firms_prov, t-1</i>		<i>Prof_workers_prov, t-1</i>	
	<i>CashETR1</i>	<i>CashETR3</i>	<i>CashETR1</i>	<i>CashETR3</i>
Endogeneity tests				
Durbin (score) chi-squared	14.804	15.936	14.992	14.313
<i>p</i> -value	(0.000)	(0.000)	(0.000)	(0.000)
Wu-Hausman <i>F</i> -statistic	14.632	15.747	14.819	14.130
<i>p</i> -value	(0.000)	(0.000)	(0.000)	(0.000)
Instrument tests				
Cragg-Donald Wald <i>F</i> -statistic	10.801	10.003	10.311	9.799
<i>p</i> -value	(0.001)	(0.002)	(0.001)	(0.002)
Stock-Yogo test critical value	8.96	8.96	8.96	8.96
Under-identification tests				
Kleibergen-Paap rk LM statistic	16.114	15.144	13.764	13.350
<i>p</i> -value	(0.000)	(0.000)	(0.000)	(0.000)

Table 4.5

Channels through which external AC members affect tax avoidance

Panel A: Accounting expertise of external AC members

	<i>CashETR3</i>	
	<i>Higher accounting expertise</i>	<i>Lower accounting expertise</i>
	(1)	(2)
<i>External_AC_%</i>	-0.138* (-1.720)	-0.097 (-1.576)
<i>AC_size</i>	-0.077 (-1.118)	0.106** (2.194)
<i>Board_indep</i>	-0.069 (-0.787)	0.002 (0.049)
<i>Largest_SH</i>	-0.001 (-1.246)	0.000 (0.934)
<i>Family</i>	-0.0237 (-1.034)	0.013 (0.721)
<i>Firm_size</i>	0.004 (0.424)	-0.001 (-0.070)
<i>AltmanZ</i>	0.001 (0.452)	0.002 (0.687)
<i>Leverage</i>	0.000 (0.859)	0.000* (1.678)
<i>Sales_growth</i>	-0.012 (-0.345)	-0.038** (-2.084)
<i>ROA</i>	-0.005*** (-3.489)	-0.003*** (-3.503)
<i>MTB</i>	-0.000*** (-2.614)	-0.000 (-0.128)
<i>Cash_holding</i>	-0.110 (-1.005)	-0.018 (-0.248)
<i>PPE</i>	-0.129** (-2.207)	-0.019 (-0.619)
<i>AbsDA_PA-MJM</i>	0.150** (2.062)	-0.053 (-0.805)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	650	1,478
Adjusted R-squared	0.072	0.075
Difference in <i>External_AC_%</i> (Chow test)		Higher vs. lower (1) vs. (2) 0.54

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the accounting expertise of external AC members. An observation is deemed having a higher level of accounting expertise when the proportion of external AC members with accounting expertise is above the median. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Presence of accounting academics as external AC members

	<i>CashETR3</i>	
	<i>Firms with the presence of accounting academics</i>	<i>Firms without the presence of accounting academics</i>
	(1)	(2)
<i>External_AC_%</i>	-0.391** (-2.217)	-0.056 (-0.895)
<i>AC_size</i>	-0.045 (-0.391)	0.078 (1.601)
<i>Board_indep</i>	-0.242** (-2.295)	-0.002 (-0.035)
<i>Largest_SH</i>	-0.000 (-0.073)	0.000 (0.995)
<i>Family</i>	-0.035 (-0.995)	0.018 (1.108)
<i>Firm_size</i>	0.001 (0.043)	-0.003 (-0.423)
<i>AltmanZ</i>	0.011 (1.588)	-0.000 (-0.004)
<i>Leverage</i>	0.000 (0.035)	0.000* (1.930)
<i>Sales_growth</i>	-0.024 (-0.477)	-0.019 (-1.062)
<i>ROA</i>	-0.008*** (-2.885)	-0.003*** (-4.384)
<i>MTB</i>	0.001 (0.358)	-0.000 (-1.137)
<i>Cash_holding</i>	-0.078 (-0.623)	-0.030 (-0.441)
<i>PPE</i>	-0.062 (-1.035)	-0.024 (-0.805)
<i>AbsDA_PA-MJM</i>	0.0831 (0.617)	-0.017 (-0.294)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	323	1,805
Adjusted R-squared	0.162	0.071
Difference in <i>External_AC_%</i> (Chow test)	Presence vs. non-presence (1) vs. (2) 0.69	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of accounting academics appointed as external AC members. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel C: Government control

	<i>CashETR3</i>	
	<i>Government-controlled firms</i>	<i>Non-government-controlled firms</i>
	(1)	(2)
<i>External_AC_%</i>	-0.454** (-1.984)	-0.134** (-2.144)
<i>AC_size</i>	0.010 (0.097)	0.078 (1.427)
<i>Board_indep</i>	-0.236 (-0.998)	-0.016 (-0.374)
<i>Largest_SH</i>	-0.002 (-0.544)	0.000 (0.586)
<i>Firm_size</i>	-0.015 (-0.281)	-0.006 (-1.051)
<i>AltmanZ</i>	-0.019 (-0.886)	0.001 (0.312)
<i>Leverage</i>	-0.000 (-0.523)	0.000* (1.847)
<i>Sales_growth</i>	0.043 (0.657)	-0.028 (-1.628)
<i>ROA</i>	-0.004 (-0.638)	-0.004*** (-4.604)
<i>MTB</i>	0.007 (0.449)	-0.000** (-2.237)
<i>Cash_holding</i>	0.311 (1.283)	-0.063 (-0.965)
<i>PPE</i>	-0.181** (-2.484)	-0.021 (-0.713)
<i>AbsDA_PA-MJM</i>	-0.229 (-0.868)	0.003 (0.047)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	138	2,001
Adjusted R-squared	0.103	0.082
Difference in <i>External_AC_%</i> (Chow test)	Government-controlled vs. non-government-controlled (1) vs. (2) 2.34*	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of the Indonesian government's control. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel D: Political connections

	<i>CashETR3</i>	
	<i>Politically-connected firms</i>	<i>Non-politically-connected firms</i>
	(1)	(2)
<i>External_AC_%</i>	-0.245** (-2.473)	-0.139* (-1.887)
<i>AC_size</i>	0.082 (1.339)	0.065 (1.175)
<i>Board_indep</i>	0.018 (0.258)	-0.030 (-0.586)
<i>Largest_SH</i>	0.000 (0.650)	0.001 (1.461)
<i>Firm_size</i>	0.025 (1.144)	0.001 (0.035)
<i>AltmanZ</i>	-0.011 (-1.039)	-0.002 (-0.248)
<i>Leverage</i>	-0.000 (-0.043)	0.001 (0.380)
<i>Sales_growth</i>	0.000 (1.223)	0.000* (1.681)
<i>ROA</i>	-0.052 (-1.226)	-0.024 (-1.231)
<i>MTB</i>	-0.002 (-1.348)	-0.004*** (-4.393)
<i>Cash_holding</i>	0.002 (0.641)	-0.000** (-2.215)
<i>PPE</i>	-0.087 (-0.588)	0.007 (0.102)
<i>AbsDA_PA-MJM</i>	-0.070 (-1.353)	-0.034 (-1.063)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	457	1,682
Adjusted R-squared	0.112	0.080
Difference in <i>External_AC_%</i> (Chow test)	Politically-connected vs. non-politically-connected (1) vs. (2) 3.01**	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of political connections. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel E: Co-option of external AC members

	<i>CashETR3</i>	
	<i>Firms with full co-option</i>	<i>Firms with partial or no co-option</i>
	(1)	(2)
<i>External_AC_%</i>	-0.184** (-2.561)	-0.077 (-1.195)
<i>AC_size</i>	0.044 (0.594)	0.053 (1.044)
<i>Board_indep</i>	-0.039 (-0.666)	-0.046 (-0.822)
<i>Largest_SH</i>	0.000 (0.352)	0.001 (1.161)
<i>Family</i>	-0.012 (-0.700)	0.021 (1.077)
<i>Firm_size</i>	0.008 (1.247)	-0.007 (-0.889)
<i>AltmanZ</i>	0.006** (2.389)	-0.000 (-0.092)
<i>Leverage</i>	0.000 (1.408)	0.000 (1.441)
<i>Sales_growth</i>	-0.0440 (-1.401)	-0.027 (-1.302)
<i>ROA</i>	-0.006*** (-5.146)	-0.003*** (-2.793)
<i>MTB</i>	-0.000 (-0.185)	-0.000 (-0.827)
<i>Cash_holding</i>	-0.181** (-2.492)	0.011 (0.135)
<i>PPE</i>	-0.064* (-1.692)	-0.0280 (-0.787)
<i>AbsDA_PA-MJM</i>	0.012 (0.171)	-0.130* (-1.666)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	951	1,177
Adjusted R-squared	0.081	0.082
Difference in <i>External_AC_%</i> (Chow test)	Full co-option vs. partial/no co-option (1) vs. (2) 0.37	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the co-option of external AC members. A firm is considered having a full co-option of external AC members when all external AC members were appointed after the firm's current CEO assumed office. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 4.6
Cross-sectional analysis

Panel A: Higher versus lower independence of the supervisory board

	<i>CashETR3</i>	
	<i>Higher board independence</i>	<i>Lower board independence</i>
	(1)	(2)
<i>External_AC_%</i>	-0.104 (-1.575)	-0.212** (-2.168)
<i>AC_size</i>	0.100 (1.583)	0.071 (1.188)
<i>Board_indep</i>	0.001 (1.185)	-0.000 (-0.415)
<i>Largest_SH</i>	0.013 (0.779)	0.014 (0.678)
<i>Family</i>	-0.020** (-2.355)	0.013* (1.718)
<i>Firm_size</i>	0.002 (0.760)	-0.002 (-0.589)
<i>AltmanZ</i>	0.000 (1.640)	0.000 (0.716)
<i>Leverage</i>	-0.030 (-1.096)	-0.022 (-0.926)
<i>Sales_growth</i>	-0.003** (-2.538)	-0.004*** (-3.779)
<i>ROA</i>	0.000 (0.165)	-0.000 (-1.238)
<i>MTB</i>	-0.003 (-0.034)	-0.115 (-1.440)
<i>Cash_holding</i>	0.018 (0.386)	-0.081** (-2.101)
<i>PPE</i>	-0.104 (-1.575)	-0.212** (-2.168)
<i>AbsDA_PA-MJM</i>	0.100 (1.583)	0.071 (1.188)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	1,081	1,058
Adjusted R-squared	0.069	0.116
Difference in <i>External_AC_%</i> (Chow test)		Higher vs. lower (1) vs. (2) 0.83

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the independence of the supervisory board. An observation is deemed having a higher level of board independence when the proportion of independent supervisory board members is above the median. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel B: Presence versus non-presence of foreign institutional blockholders

	<i>CashETR3</i>	
	<i>Firms with foreign institutional blockholders</i>	<i>Firms without foreign institutional blockholders</i>
	(1)	(2)
<i>External_AC_%</i>	-0.057 (-0.448)	-0.162*** (-2.601)
<i>AC_size</i>	0.020 (0.204)	0.093* (1.835)
<i>Board_indep</i>	0.016 (0.182)	-0.030 (-0.659)
<i>Largest_SH</i>	0.001 (1.054)	-0.000 (-0.080)
<i>Family</i>	0.006 (0.241)	0.003 (0.143)
<i>Firm_size</i>	0.004 (0.365)	-0.003 (-0.448)
<i>AltmanZ</i>	-0.003 (-0.555)	0.002 (1.169)
<i>Leverage</i>	-0.000 (-0.667)	0.000** (2.417)
<i>Sales_growth</i>	-0.036 (-0.760)	-0.030 (-1.591)
<i>ROA</i>	-0.003** (-2.393)	-0.004*** (-4.920)
<i>MTB</i>	-0.000 (-0.093)	-0.001 (-1.234)
<i>Cash_holding</i>	-0.177 (-1.517)	0.0340 (0.572)
<i>PPE</i>	-0.036 (-0.653)	-0.035 (-1.159)
<i>AbsDA_PA-MJM</i>	-0.037 (-0.296)	-0.019 (-0.327)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	416	1,714
Adjusted R-squared	0.044	0.086
Difference in <i>External_AC_%</i> (Chow test)	Presence vs. non-presence (1) vs. (2) 0.71	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of foreign institutional blockholders (i.e., foreign institutional shareholders that own at least 5 percent of the firm's outstanding shares). Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel C: Big-4-audited versus non-Big-4-audited firms

	<i>CashETR3</i>	
	<i>Big-4-audited</i>	<i>Non-Big-4-audited</i>
	(1)	(2)
<i>External_AC_%</i>	-0.033 (-0.392)	-0.258*** (-3.401)
<i>AC_size</i>	0.078 (1.556)	0.047 (0.618)
<i>Board_indep</i>	-0.075* (-1.714)	0.0215 (0.334)
<i>Largest_SH</i>	0.001 (1.065)	0.000 (0.073)
<i>Family</i>	0.016 (0.814)	0.002 (0.111)
<i>Firm_size</i>	-0.013 (-1.509)	-0.005 (-0.689)
<i>AltmanZ</i>	0.003 (1.066)	0.002 (0.510)
<i>Leverage</i>	0.000 (0.022)	0.000** (2.333)
<i>Sales_growth</i>	0.005 (0.227)	-0.033 (-1.570)
<i>ROA</i>	-0.006*** (-5.399)	-0.003*** (-3.182)
<i>MTB</i>	-0.000** (-2.341)	-0.005* (-1.687)
<i>Cash_holding</i>	0.087 (1.221)	-0.082 (-0.930)
<i>PPE</i>	-0.063 (-1.610)	0.012 (0.341)
<i>AbsDA_PA-MJM</i>	0.097 (1.524)	-0.091 (-1.325)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	932	1,179
Adjusted R-squared	0.068	0.103
Difference in <i>External_AC_%</i> (Chow test)	Big-4-audited vs. non-Big-4-audited (1) vs. (2) 5.46***	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on external auditor size (Big-4 versus non-Big-4 audit firms). Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel D: Industry-expert-audited versus non-industry-expert-audited firms

	<i>CashETR3</i>	
	<i>Industry-expert-audited</i>	<i>Non-industry-expert-audited</i>
	(1)	(2)
<i>External_AC_%</i>	-0.111	-0.160**
	(-1.014)	(-2.338)
<i>AC_size</i>	0.086	0.056
	(1.552)	(0.985)
<i>Board_indep</i>	0.072	-0.007
	(-1.323)	(-0.127)
<i>Largest_SH</i>	0.001	0.000
	(1.161)	(0.294)
<i>Family</i>	0.012	0.006
	(0.449)	(0.365)
<i>Firm_size</i>	-0.007	-0.003
	(-0.519)	(-0.516)
<i>AltmanZ</i>	0.000	0.000
	(0.135)	(0.175)
<i>Leverage</i>	0.000	0.000*
	(0.568)	(1.740)
<i>Sales_growth</i>	-0.018	-0.030
	(-0.473)	(-1.551)
<i>ROA</i>	-0.004***	-0.003***
	(-3.133)	(-3.876)
<i>MTB</i>	-0.000	-0.000
	(-1.331)	(-0.847)
<i>Cash_holding</i>	0.134	-0.084
	(1.343)	(-1.124)
<i>PPE</i>	-0.080**	0.003
	(-2.021)	(0.077)
<i>AbsDA_PA-MJM</i>	0.122	-0.038
	(1.327)	(-0.612)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	540	1,575
Adjusted R-squared	0.067	0.095
Difference in <i>External_AC_%</i> (Chow test)	Industry-expert-audited vs. non-industry-expert-audited (1) vs. (2) 3.50**	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the industry expertise of the firm's external auditor. An observation is considered being audited by an industry-expert auditor if its auditor has a market share of over 30 percent of all listed firms' sales revenue in a given industry and year. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel E: Higher versus lower ownership concentration

	<i>CashETR3</i>	
	<i>Higher ownership concentration</i>	<i>Lower ownership concentration</i>
	(1)	(2)
<i>External_AC_%</i>	-0.121 (-1.526)	-0.186** (-2.253)
<i>AC_size</i>	0.030 (0.691)	0.043 (0.445)
<i>Board_indep</i>	0.030 (0.565)	-0.074 (-1.108)
<i>Largest_SH</i>	-0.001 (-0.743)	0.002** (2.087)
<i>Family</i>	-0.017 (-0.923)	0.005 (0.225)
<i>Firm_size</i>	0.002 (0.252)	-0.017* (-1.740)
<i>AltmanZ</i>	0.003 (1.062)	-0.004 (-1.257)
<i>Leverage</i>	0.000* (1.851)	0.000 (0.374)
<i>Sales_growth</i>	-0.052** (-2.368)	-0.004 (-0.161)
<i>ROA</i>	-0.004*** (-3.554)	-0.004*** (-3.322)
<i>MTB</i>	-0.000** (-2.471)	0.001 (1.233)
<i>Cash_holding</i>	0.085 (1.064)	-0.137 (-1.637)
<i>PPE</i>	-0.055 (-1.306)	-0.030 (-0.726)
<i>AbsDA_PA-MJM</i>	0.064 (0.899)	-0.061 (-0.859)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	1,156	983
Adjusted R-squared	0.089	0.075
Difference in <i>External_AC_%</i> (Chow test)		Higher vs. lower (1) vs. (2) 2.31*

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the extent of ownership concentration. An observation is deemed having a higher ownership concentration when the proportion of shares held by the largest shareholder is greater than or equal to 50 percent. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel F: Family-controlled versus non-family-controlled firms

	<i>CashETR3</i>	
	<i>Family-controlled</i>	<i>Non-family-controlled</i>
	(1)	(2)
<i>External_AC_%</i>	-0.086 (-1.128)	-0.242*** (-3.515)
<i>AC_size</i>	0.014 (0.187)	0.056 (0.995)
<i>Board_indep</i>	-0.011 (-0.171)	-0.066 (-1.206)
<i>Largest_SH</i>	0.000 (0.704)	0.000 (0.419)
<i>Firm_size</i>	-0.004 (-0.566)	-0.007 (-0.812)
<i>AltmanZ</i>	0.002 (0.663)	0.000 (0.027)
<i>Leverage</i>	0.000*** (2.791)	-0.000 (-0.146)
<i>Sales_growth</i>	-0.037 (-1.485)	-0.015 (-0.629)
<i>ROA</i>	-0.005*** (-4.484)	-0.003*** (-3.195)
<i>MTB</i>	-0.001 (-1.212)	-0.000** (-2.417)
<i>Cash_holding</i>	0.029 (0.299)	-0.082 (-1.115)
<i>PPE</i>	-0.014 (-0.368)	-0.054 (-1.135)
<i>AbsDA_PA-MJM</i>	0.072 (1.108)	-0.063 (-0.792)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	1,232	907
Adjusted R-squared	0.113	0.062
Difference in <i>External_AC_%</i> (Chow test)	Family-controlled vs. non-family-controlled (1) vs. (2) 2.15	

This table presents the results of the OLS regressions, dividing the sample into two subsamples based on the presence of family control. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Table 4.7

Robustness checks and sensitivity analysis

Panel A: Omitted variable analysis – impact of unobservable confounding variables, based on Frank (2000)

	<i>CashETR1</i>			<i>CashETR3</i>		
	ITCV	Impact (raw)	Impact (partial)	ITCV	Impact (raw)	Impact (partial)
	(1)	(2)	(3)	(4)	(5)	(6)
<i>External_AC_%</i>	-0.0710			-0.0920		
<i>AC_size</i>		0.0002	0.0001		-0.0008	-0.0003
<i>Board_indep</i>		0.0041	0.0036		0.0024	0.0026
<i>Largest_SH</i>		-0.0008	-0.0023		-0.0021	-0.0028
<i>Family</i>		0.0016	0.0030		-0.0003	0.0002
<i>Firm_size</i>		0.0012	-0.0004		0.0001	0.0004
<i>AltmanZ</i>		-0.0028	0.0029		-0.0005	0.0025
<i>Leverage</i>		0.0023	0.0054		0.0027	0.0056
<i>Sales_growth</i>		-0.0066	-0.0049		-0.0030	-0.0018
<i>ROA</i>		-0.0043	-0.0023		-0.0022	-0.0014
<i>MTB</i>		-0.0001	0.0005		-0.0002	0.0002
<i>Cash_holding</i>		-0.0006	-0.0001		-0.0011	-0.0001
<i>PPE</i>		0.0011	0.0001		0.0019	0.0006
<i>AbsDA_PA-MJM</i>		-0.0006	-0.0002		-0.0006	0.0002

This table reports the results of the omitted variable analysis, specifically analysing the impact of unobservable confounding variables based on the approach developed by Frank (2000). Columns (1) and (4) report the impact threshold for a confounding variable (ITCV) for *External_AC_%*, which indicates the minimum impact of a confounding variable required to overturn the significant effect of *External_AC_%*. Columns (2) and (5) report the raw impact of including a control variable on the coefficient of *External_AC_%*, while Columns (3) and (6) report the partial impact. A negative impact indicates that the inclusion of a control variable makes the effect of *External_AC_%* less negative.

Panel B: Omitted variable analysis – coefficient robustness to unobservable variables, based on Oster (2019)

	<i>CashETR1</i>		<i>CashETR3</i>	
	No controls	With controls	No controls	With controls
	(1)	(2)	(3)	(4)
<i>External_AC_%</i>	-0.100	-0.102	-0.145	-0.165
R-squared	0.003	0.137	0.006	0.092
δ		3.445		-1.545

This table presents the coefficient robustness to unobservable variables based on the approach developed by Oster (2019). Columns (1) and (3) report estimates from regressions of *CashETR1* and *CashETR3*, respectively, on the proportion of external AC members without control variables. Columns (2) and (4) add control variables. The table also reports the estimated δ with $R_{\max} = 1.3$ times the R-squared in the respective column. The estimated δ indicates the proportional degree of the selection of unobservable variables necessary to make $\beta = 0$.

Panel C: Using alternative measures of tax avoidance

	CashflowETR	BTD
	(1)	(2)
<i>External_AC_%</i>	-0.215* (-1.650)	0.023** (2.063)
<i>AC_size</i>	0.153 (1.339)	-0.022** (-2.342)
<i>Board_indep</i>	-0.064 (-0.648)	0.010 (0.900)
<i>Largest_SH</i>	0.001 (0.875)	0.000 (0.036)
<i>Family</i>	0.009 (0.324)	-0.008 (-1.132)
<i>Firm_size</i>	0.009 (0.846)	-0.005 (-1.335)
<i>AltmanZ</i>	0.000 (0.047)	-0.004** (-2.437)
<i>Leverage</i>	-0.000 (-1.040)	-0.000** (-2.347)
<i>Sales_growth</i>	0.055 (1.299)	-0.008 (-1.029)
<i>ROA</i>	0.002 (0.828)	0.006*** (3.746)
<i>MTB</i>	0.000*** (2.585)	0.000** (2.016)
<i>Cash_holding</i>	0.095 (0.565)	-0.076** (-2.250)
<i>PPE</i>	-0.045 (-0.731)	0.002 (0.330)
<i>AbsDA_PA-MJM</i>	-0.171** (-2.550)	0.060*** (3.008)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	2,539	2,539
Adjusted R-squared	0.012	0.219

This table presents the results of the OLS regressions, using alternative proxy measures of tax avoidance. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel D: Using alternative measures of the representation of external AC members

	<i>CashETR1</i>	<i>CashETR3</i>	<i>CashETR1</i>	<i>CashETR3</i>	<i>CashETR1</i>	<i>CashETR3</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>External_AC_#</i>	-0.045** (-2.000)	-0.044** (-2.157)				
<i>ExternalAC_Dum50</i>			-0.026** (-1.994)	-0.037** (-2.116)		
<i>ExternalAC_Dum67</i>					-0.002 (-0.074)	-0.042* (-1.673)
<i>AC_size</i>	0.049 (1.085)	0.050 (1.384)	0.010 (0.258)	0.047 (1.051)	0.015 (0.357)	0.064 (1.376)
<i>Board_indep</i>	-0.038 (-0.875)	-0.022 (-0.608)	-0.018 (-0.515)	-0.016 (-0.394)	-0.012 (-0.331)	-0.014 (-0.313)
<i>Largest_SH</i>	0.000 (1.240)	0.001* (1.703)	0.000 (1.644)	0.000 (0.775)	0.000 (1.616)	0.000 (0.676)
<i>Family</i>	-0.0174 (-1.455)	0.006 (0.588)	-0.013 (-1.225)	0.009 (0.560)	-0.012 (-1.189)	0.010 (0.641)
<i>Firm_size</i>	-0.002 (-0.376)	0.000 (0.020)	-0.004 (-0.898)	-0.003 (-0.547)	-0.003 (-0.629)	-0.005 (-0.077)
<i>AltmanZ</i>	0.005** (2.377)	0.002 (1.247)	0.000 (0.081)	0.001 (0.279)	-0.003 (-1.495)	-0.002 (-1.248)
<i>Leverage</i>	0.000** (2.484)	0.000*** (3.725)	0.000** (2.120)	0.000* (1.785)	-0.000** (-2.083)	-0.000*** (-2.880)
<i>Sales_growth</i>	-0.029 (-1.253)	-0.050** (-2.253)	-0.086*** (-5.999)	-0.023 (-1.535)	-0.087*** (-6.311)	-0.022 (-1.496)
<i>ROA</i>	-0.010*** (-8.260)	-0.004*** (-5.310)	-0.007*** (-6.478)	-0.004*** (-4.682)	-0.007*** (-6.318)	-0.004*** (-4.729)
<i>MTB</i>	-0.000*** (-6.295)	-0.000*** (-3.583)	-0.000*** (-5.739)	-0.000** (-2.356)	0.006** (1.964)	0.005 (1.342)
<i>Cash_holding</i>	-0.051 (-0.758)	-0.051 (-0.890)	-0.018 (-0.309)	-0.024 (-0.369)	0.000** (2.127)	-0.000*** (-10.800)
<i>PPE</i>	-0.021 (-0.844)	-0.027 (-1.083)	-0.031 (-1.427)	-0.031 (-1.047)	0.000 (0.540)	0.000*** (8.476)
<i>AbsDA_PA-MJM</i>	0.128** (2.151)	0.011 (0.282)	0.093* (1.833)	-0.004 (-0.064)	0.095* (1.880)	-0.005 (-0.084)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,293	2,139	2,293	2,139	2,293	2,139
Adjusted R-squared	0.121	0.125	0.122	0.074	0.120	0.066

This table presents the results of the OLS regressions, using alternative measures of the representation of external AC members. *External_AC_#* is the number of external AC members. *ExternalAC_Dum50* is dichotomous, which equals to 1 if the proportion of external AC members is larger than 50 percent and 0 otherwise. *ExternalAC_Dum67* is dichotomous, which equals to 1 if the proportion of external AC members is larger than 66.67 percent and 0 otherwise. Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Panel E: Excluding the period of the global financial crisis

	<i>CashETR1</i>	<i>CashETR3</i>
	(1)	(2)
<i>External_AC_%</i>	-0.093** (-2.110)	-0.148** (-2.562)
<i>AC_size</i>	0.014 (0.336)	0.057 (1.223)
<i>Board_indep</i>	-0.021 (-0.570)	-0.025 (-0.592)
<i>Largest_SH</i>	0.001* (1.760)	0.000 (0.753)
<i>Family</i>	-0.013 (-1.203)	0.017 (1.096)
<i>Firm_size</i>	-0.004 (-0.924)	-0.004 (-0.636)
<i>AltmanZ</i>	0.001 (0.711)	0.002 (1.236)
<i>Leverage</i>	0.000* (1.938)	0.000** (2.019)
<i>Sales_growth</i>	-0.087*** (-5.791)	-0.026* (-1.737)
<i>ROA</i>	-0.009*** (-8.794)	-0.005*** (-6.177)
<i>MTB</i>	-0.000*** (-6.239)	-0.000*** (-3.053)
<i>Cash_holding</i>	0.007 (0.114)	0.014 (0.216)
<i>PPE</i>	-0.029 (-1.270)	-0.017 (-0.559)
<i>AbsDA_PA-MJM</i>	0.093* (1.787)	0.004 (0.072)
Year fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Observations	2,179	2,032
Adjusted R-squared	0.131	0.084

This table presents the results of the OLS regressions, excluding the period of the global financial crisis (i.e., the financial years 2007 and 2008). Definitions of the variables are provided in Appendix 4.A. All continuous variables are winsorised at the 1 percent level at both tails of their distributions. Standard errors are clustered at the firm level and *t*-statistics are reported in the parentheses. ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.

Appendix 4.A

Definitions of variables

Variable	Definition
Dependent variables	
<i>CashETR1</i>	Cash income taxes paid divided by pre-tax accounting income
<i>CashETR3</i>	The three-year sum (from year $t-2$ to year t) of cash income taxes paid divided by the three-year sum of pre-tax accounting income
<i>External_AC_%</i>	The number of external AC members divided by the total number of AC members
<i>CashflowETR</i>	Income tax expense less the change in deferred income taxes divided by net cashflows from operations
<i>BTB</i>	Pre-tax accounting income less taxable income divided by total assets, with taxable income calculated as income tax expense divided by the statutory corporate income tax rate
Independent variables	
<i>External_AC_%</i>	The number of external AC members divided by the total number of AC members
<i>External_AC_#</i>	The number of external AC members
<i>ExternalAC_Dum50</i>	An indicator variable, coded 1 if the proportion of external AC members is larger than 50 percent and 0 otherwise
<i>ExternalAC_Dum67</i>	An indicator variable, coded 1 if the proportion of external AC members is larger than 66.67 percent and 0 otherwise
<i>AC_size</i>	The natural logarithm of the total number of AC members
<i>Board_indep</i>	The number of independent supervisory board (SB) members divided by the total number of SB members
<i>Largest_SH</i>	The proportion of shares held by the largest shareholder
<i>Family</i>	An indicator variable, coded 1 if the firm is family-controlled and 0 otherwise
<i>Firm_size</i>	The natural logarithm of total assets
<i>AltmanZ</i>	The Altman's Z-score, measuring the chances of bankruptcy (Altman, 1993), computed using the following formula:
	$Z = 1.2 (WC) + 1.4 (Ret_earn) + 3.3 (EBIT) + 0.6 (MVE/TL) + 1.0 (Sales)$
	where Z is the Altman's Z-score; WC is working capital divided by total assets; Ret_earn is retained earnings divided by total assets; $EBIT$ is earnings before interest and taxes divided by total assets; MVE/TL is the market value of equity divided by total liabilities; and $Sales$ is sales revenue divided by total assets. The lower the Z-score, the higher the probability of going bankrupt.
<i>Leverage</i>	The ratio of total liabilities to total equity
<i>Sales_growth</i>	The growth of sales revenue compared to the prior year
<i>ROA</i>	Net income before extraordinary items and discontinued operations divided by total assets
<i>MTB</i>	The market value of equity divided by the book value of equity
<i>Cash_holding</i>	The ratio of cash and cash equivalents to total assets
<i>PPE</i>	The ratio of property, plant, and equipment to total assets
<i>AbsDA_PA-MJM</i>	The absolute value of discretionary accruals based on the performance-adjusted modified Jones model as suggested by Kothari et al. (2005)

<i>Listed_firm_prov_t-1</i>	The number of listed firms in the same province as a firm's headquarter from the previous year
<i>Prof_workers_prov, t-1</i>	The number of professional workers with a Bachelor's degree or higher in the same province as a firm's headquarter from the previous year, divided by the number of listed firms in that province

Chapter 5

Conclusion

5.1 Conclusion

This thesis examines the economic consequences of externally-appointed audit committee (AC) members using the context of a developing economy where the AC composition requirement is very different from that in many other jurisdictions globally. Indonesia's AC regime has mandated that AC members should consist of two elements, namely independent supervisory board (SB) members and independent, externally-appointed members. In this thesis, I exploit such a unique feature of AC composition and investigate the effects of externally-appointed AC members on two economic outcomes, namely financial reporting quality and tax avoidance.

In Chapter 2, I highlight the institutional environment of the Indonesian market. The chapter exhibits a series of distinctive features in the Indonesian legal, economic, and financial landscapes, particularly those related to the corporate governance and AC regimes. The concept of inviting external members (i.e., non-board members) to serve on the AC has been introduced in the country since the early 2000s, when Indonesia's corporate governance reforms were in an infant stage of development. The regulatory policies mandating the presence of external members on the ACs of listed firms were influenced by, among others, the country's fragile institutional environment and its nature of corporate governance reforms post-Asian financial crisis.

Addressing the "traditional" core duties and responsibilities of the AC, Chapter 3 examines the effects of external AC members on financial reporting quality. The results show that the proportion of external AC members is negatively associated with earnings management, suggesting that such external members confer benefits to financial reporting quality. Addressing endogeneity issues through the difference-in-differences and instrumental variable approaches, the results remain consistent. Furthermore, the positive link between external AC

members and financial reporting quality is more pronounced in firms with higher levels of external AC members' expertise and tenure, lower agency costs, stronger external monitors, lesser governmental or political connections, and lower external auditor quality. I also provide further evidence that there is a negative association between external AC members and audit fees, suggesting that a stronger representation of external members on the AC leads to reducing demands for greater audit scope and effort. The results presented in Chapter 3 overall suggests that external AC members are likely to become an effective oversight mechanism over the financial reporting process, thereby promoting higher-quality financial reporting.

Looking beyond the traditional core duties and responsibilities of the AC, Chapter 4 investigates the role of external AC members in corporate tax planning. The results demonstrate that the representation of external members on the AC has a significant positive association with the likelihood of tax avoidance. The results remain unchanged after addressing endogeneity concerns through the instrumental variable approach, as well as after employing alternative measures of tax avoidance. External AC members' accounting expertise and lack of "real" independence, as well as the firm's governmental or political connections, are found to be important channels through which they positively affect tax avoidance. Additionally, the positive association is more prominent for firms with poorer corporate governance mechanisms, lower external auditor quality, and lesser agency issues. The results provided in Chapter 4 suggest that external AC members are inclined to effectively serve advising roles, rather than monitoring ones, in terms of corporate tax planning.

Overall, this thesis presents evidence that externally-appointed members on the ACs of the Indonesian listed companies contribute to strengthening the committee's oversight function, but only to a certain extent. They seem to put particular emphasis on exerting effective monitoring of the financial reporting process, which is the traditional core duties and

responsibilities of the AC. On the contrary, when it comes to tax planning (i.e., beyond the committee's traditional core duties and responsibilities), they are inclined to effectively serve advising roles in pursuing the aggressive tax planning agenda. Furthermore, my empirical findings also provide some insights on the important roles of strong corporate governance mechanisms (e.g., SB independence and institutional ownership) in enhancing the monitoring effectiveness of external AC members.

5.2 Practical implications

In addition to their contributions to the academic literature, the results of empirical essays in this thesis also provide meaningful insights for the Indonesian capital market regulator. On the one hand, given the favourable effects of external AC members on financial reporting quality, my evidence provides some support to the AC composition requirement applicable in the Indonesian market (i.e., mandating the presence of externally-appointed members on the AC). While The World Bank (2010) through its *2010 Report on the Observance of Standards and Codes* (ROSC) has recommended that the AC should be comprised mostly of independent SB members, it seems that the country's institutional environment has not been ready to adopt such a fundamental change. External AC members, bringing in their assumedly greater independence and expertise, could be expected to exert effective oversight over the financial reporting process. Further, their presence on the AC is needed to address the market's scepticism that SB members could play an effective role on board committees without assistance from outside experts (The World Bank, 2010).

On the other hand, it is also important to note that a stronger presence of external members on the AC does not come without costs. When it comes to areas other than financial reporting, particularly in corporate tax planning, my results suggest that they could not be expected to

maintain such an effective monitoring function. Their expertise, complemented by their lack of real independence, leads them to more effectively serve advising roles in the firm's endeavour to reduce tax burdens. A higher likelihood of tax avoidance, which is not in the best interests of the government, seems to be an unintended consequence of establishing a stronger presence of external members on the AC.

Provided the results of the two essays, the regulator might need to carefully review the benefits and costs of the stronger representation of external AC members in listed firms. Such a review would be a useful consideration in regulating and overseeing the listed firms. Stakeholders, including the regulator, could expect a stronger presence of external AC members to carry out an effective oversight function when it comes to the committee's traditional core duties and responsibilities. However, such an effective monitoring role by the stronger representation of external AC members would no longer be the case when it comes to areas beyond the traditional core functions, especially tax planning.

In addition, the empirical results of this thesis, especially those reported in Chapter 4, also provide insights for the tax authority in detecting possible tax avoidance activities. The chapter presents evidence of firm-level attributes that are significantly and positively linked to tax avoidance, including the representation of external AC members. As such, the results might assist the tax authority in identifying firms to focus on for the purpose of tax audits and enforcement.

5.3 Limitations and suggestions for future research

The empirical essays of this thesis are subject to some limitations. *First*, this thesis is primarily focused on two economic consequences of external AC members, namely financial reporting

quality and tax avoidance. It does not address areas outside the two aspects, which might be relevant to stakeholders. Further, this thesis also does not address career consequences and other characteristics of external AC members. *Second*, due to the distinctive features of the Indonesian market and AC regime, the results of this thesis might not be generalisable to other jurisdictions. To the best of my knowledge, Indonesia is the only jurisdiction adopting such a unique AC composition requirement.

Third, another limitation might lie in the proxy measures of dependent variables. In Chapter 3, addressing the effects of external AC members on financial reporting quality, I employ earnings management, as measured by the absolute value of discretionary accruals, as the dependent variable. The chapter does not utilise other measures of financial reporting quality, such as financial restatements, modified audit opinions, and other accounting irregularities, because the data are not readily available. Meanwhile in Chapter 4, I rely on financial statement data to construct proxy measures of tax avoidance. It should be noted that the accuracy of such a construction method might be questioned (Hanlon & Heitzman, 2010; Plesko, 2003), so that the results need to be interpreted with caution.

The empirical studies of this thesis appear to be the first to address the economic consequences of external AC members. Hence, there are a wide array of potential avenues worth investigation, exploiting such a distinctive feature of AC composition requirements. Future studies could explore the monitoring effectiveness related to other aspects, such as compliance with applicable regulations, engagement with the external auditor, and relations with other monitoring elements. With regard to the external AC members' job market, future research might wish to explore their career prospects and employment turnover. Additionally, the roles of other attributes of external AC members (e.g., busyness, demographic characteristics, legal

expertise, industry expertise, and information technology expertise) in strengthening the committee's monitoring function have not been investigated.

With regard to tax-related issues, there are a wide range of avenues that are interesting to be explored by future studies, such as other tax planning strategies exploited by external AC members, career consequences post-tax-related enforcements, and monitoring by the tax authority. Finally, in terms of the advising roles of external AC members, future research might wish to explore other areas in line with the expanding scope of the committee's duties, including disclosure practices, risk management, information technology, and the ethical aspects of business operations.

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